



The implementation of Directive 2006/126/EC on driving licences

Final report

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Abstract:

As European drivers are increasingly crossing borders within the European Union for personal or professional purposes or changing residence to other Member States, the need for harmonised rules that facilitate the freedom of movement and improve road

safety has increased. The third Directive on driving licences entered into force in January 2013. It provides harmonised rules aimed at enhancing drivers' freedom to move, reducing the possibility of driving licence fraud and improving road safety in the EU.

The study explores the implementation of the third Directive on driving licences in Member States four years after implementation and assesses whether the introduced novelties contributed to achieving the objectives set by the Directive. An assessment of the effects of the novelties introduced by the Directive was performed by combining the findings of desk research, expert interviews and stakeholders consultation. Given the scarcity of available literature, the assessment of effects is based in large extent on expert interviews and stakeholder consultations.

At the same time, the study seeks to identify the most important policy recommendations that should be addressed in order to further achieve the main objectives of the Directive and to support the overall effort to establish a common transport policy in the EU.

Key words: Driving licence, 3rd Driving Licence Directive, New Union Model Licence, RESPER, driving examiners, validity periods, driving licence categories, progressive access.

Résumé:

Alors que les conducteurs européens franchissent de plus en plus les frontières de l'Union européenne pour raison personnelle ou professionnelle ou changent de résidence pour un autre Etat de l'Union de plus en plus souvent, harmoniser les règles qui facilitent la liberté de mouvement et améliorent la sécurité routière est devenu plus important. La 3^{ème} Directive sur les permis de conduire est entrée en vigueur en janvier 2013. Elle prévoit des règles harmonisées visant à améliorer la liberté de circulation des conducteurs, à réduire les possibilités de fraude et à contribuer à l'amélioration de la sécurité routière dans l'Union européenne.

Le présent rapport explore la mise en œuvre de la troisième directive sur les permis de conduire dans les États membres quatre ans après son entrée en vigueur et évalue si les nouveautés introduites ont contribué à la réalisation des objectifs fixés par la directive. Une évaluation des effets des nouveautés introduites par la directive a été réalisée, en combinant les résultats de la recherche documentaire, les entretiens d'experts et le cycle de consultation des parties prenantes. Compte tenu de la rareté de la littérature disponible, l'évaluation des effets repose en grande partie sur les entretiens d'experts et les consultations avec les parties prenantes.

Dans le même temps, l'étude vise à identifier les recommandations politiques les plus importantes qui devraient être abordées afin d'atteindre les objectifs principaux de la directive et de soutenir les efforts globaux visant à établir une politique commune des transports dans l'UE.

Mots-clés: Permis de conduire, 3^{ème} directive sur les permis de conduire, nouveau modèle de permis de conduire, RESPER, examinateurs, périodes de validité, catégories de permis de conduire, accès progressif.

Management summary

Around 60% of the population of the European Union holds a valid driving licence, representing more than 300 million citizens. Many European drivers make cross-

border trips within the Union for private or professional purposes or change their country of residence. In this context, the EU has sought to establish a common transport policy that would facilitate the freedom of movement and improve road safety by means of driving licence directives.

Directive 2006/126/EC, also known as the third Directive on driving licences (3rd DLD), entered into force in January 2013, bringing a series of novelties. It provides harmonised EU wide rules on driving licences with the objective to facilitate greater freedom of movement to EU drivers, reduce the possibility of driving licence fraud and improve road safety in Europe.

Among other things, the following novelties were introduced by the Directive

- The New Union Model Licence;
- Harmonised administrative validity periods;
- Modifications of driving licence categories (including new categories and changes to existing categories);
- Harmonised rules on driving examiners;
- EU driving licence network (RESPER).

A European driving licence was introduced as part of the entry into force of the 3rd DLD. The new rules intended to guarantee a true freedom of movement to EU drivers, reinforce safety on European roads and reduce possibilities of fraud.

More than 110 different driving licence models with different entitlements and validity periods will be gradually replaced by a standard European credit card format having tougher security protection features. All driving licences issued in the European Union after 19 January 2013 have to have the required format. All existing paper driving licences in circulation need to be changed to the new format by 2033 the latest.

Four years after the entry into force of the Directive, this study 'Implementation of Directive 2006/126/EC' contracted by the European Commission DG MOVE aims to provide an overview of the implementation of the Directive in the Member States and in particular to assess whether the introduced novelties contribute in achieving the objectives of the Directive. An assessment of the effects of the novelties introduced by the Directive was performed by combining the findings of desk research, expert interviews and stakeholders consultation. Given the scarcity of available literature, the assessment of effects is based in large extent on expert interviews and stakeholder consultations.

The study also seeks to identify the most important policy recommendations that should be addressed in order to further achieve the main objectives of the Directive and to support the overall effort to establish a common transport policy in Europe.

The study found that while the Directive has achieved significant progress in harmonising the rules on driving licences, facilitating greater freedom of movement to EU drivers, reducing the possibility of driving licence fraud and improving road safety in Europe, there is still room for improvement.

1. The New Union Model Licence

The introduction of the new Union Model Licence and the organisational changes brought about were met with positive reactions from Member States. Many countries used credit card licences already before the 3rd DLD. The mandatory use started in January 2013 which is also the time at which the majority of the countries started issuing it.

The New Union Licence Model did not bring about significant changes in the organisation of the licensing system. While most European citizens have to visit a public administration office to apply for a driving license, some Member States offer this service on a web platform. The duration of issuing a licence did not change significantly, with Member States experiencing changes of up to one week compared to the period prior to the implementation.

While the cost for the citizens seems to have increased slightly, some administrative burden was reduced for the citizens. For the issuing authorities, administration was simplified, mainly by use of digital tools. The New Union Model Licence received a very positive feedback in terms of security and practicability.

Recommendations

1. Work on the interoperability of non-physical driving licences.

Stakeholders urged the European Commission to work on a common standard and conditions for non-physical driving licences as a matter of urgency, as several Member States start to consider non-physical driving licences. The EU should take note of the work of the ISO working group 10 'Motor vehicle driver licence and related documents' on a standard to allow cross-border and cross-jurisdictional recognition of mobile driving licence (mDL).

2. Implement a common standard on verification of applicants' identities.

As the security of the new union model licence increased, illegal applicants are now trying to introduce a normal licencing process instead of obtaining forged licences. Stakeholders therefore called for a EU common way to verify applicants' identities in order to prevent intrusion of illegal applicants into the licensing process. The driving licence can indeed be used in various circumstances as a proof of identity and a failure to properly check the identity can have serious negative consequences.

3. Intensify work on counter-falsification technologies (including false identities).

To further reduce fraud and falsification, besides the state-of-the-art security features for physical documents, security could be improved by developing digital counter-falsification measures, such as a digitally signed barcode. The digital credentials should be verified on a trusted verifier device (e.g. dedicated to law enforcement).

2. Harmonised administrative validity periods and medical checks

Another novelty introduced by the Directive were harmonised administrative validity periods for all driving licence categories. The introduction of harmonised administrative validity periods aimed to reduce fraud by allowing regular updates of the security features, facilitate freedom of movement of EU citizens and improve road safety by introducing mandatory medical checks upon renewal for holders of licences C and D and allowing Member States to introduce regular medical checks for licences A and B.

The vast majority of Member States is not able to indicate whether the introduction of harmonised administrative validity periods facilitated the freedom of movement of EU citizens. The majority of the participants stated that the introduction of mandatory periodical medical checks for holders of driving licences C and D improved road safety. Some stakeholders suggested to further harmonise administrative validity periods for licence A and B, as the Directive allows validity periods of 10 and 15 years. The requirement of medical examinations for categories A and B upon renewal seemed to divide Member States.

Recommendations

1. Work on a uniform procedure to check normal residence.

The establishment of normal residence is a major factor in the combat against fraud and driving licence tourism. Member States and stakeholders urged the European Commission to define EU common procedures for determining normal residence in order to avoid abuse, while at the same time not damage the freedom of movement. This proof should not be based on self-declaration but on an official document, such as a common population register for instance.

2. Link driving licence renewal medical checks with national health system.

Self-declaration of medical conditions is risky. Medical checks for driving licence renewal could be linked with the national health systems, as cross checking drivers' medical records upon driving licence renewal could avoid bureaucracy and speed up the renewal process.

3. Standards on Alcohol and Drugs and Medicinal Products (Annex III) could be more precise.

Annex III of the 3rd DLD includes the health requirements a candidate has to comply with. The results of the questionnaire indicated that, in some cases, the requirements were found not to be clear enough. In particular the provisions of Annex III on alcohol addiction should be more precise by providing a definition for the "proven period of abstinence". Additionally Annex III could foresee an exception for volunteers, provided they have promised not to drink and drive again, in order for them to participate in a rehabilitation programme, under a strict medical supervision, with the right to drive limited to a vehicle equipped with an in-car breathalyser (so called alcohol interlock).

The standards for Obstructive Sleep Apnoea Syndrome (Section 11.2) should be extended to other reasons for increased sleepiness which is a highly relevant factor in traffic accidents. The standards for Cardiovascular Diseases (Section 9) have a different classification system compared to the other sections of Annex III, making it difficult to implement it in national regulations.

The possibility to further harmonise the health requirements should be discussed.

3. Modifications of driving licence categories

The introduction of a new EU category AM was perceived positively by the Member States and the respondents. Some Member States used this introduction as an opportunity to strengthen their licencing requirements for riding a moped, some introduced a practical test, others a theoretical training, or a practical training on top of the mandatory theoretical test.

One of the biggest changes brought by the 3rd DLD was the graduated access system for motorcycles, as all Member States had to adapt their systems to implement the new rules. The options provided by the Directive led to a large variation in the access requirements, and to a lesser extent also regarding the minimum age.

The new system appears to have improved road safety and driver education. However, acceptance among drivers seems to be low, as direct access is more popular than graduated access. The number of category A licences decreased in some countries. Influences on the vehicle market are hard to determine, but one trend that can be identified is that the number of A2 vehicles sold is increasing.

The graduated access system appears more complex and expensive than the previous system, and the additional costs and efforts implied seem to discourage people from acquiring motorcycle licences in some countries. Some practical problems with the definitions of various categories were revealed. Also, the results of the study regarding electrically powered or other alternatively fuelled vehicles show that countries would welcome a modification of the Directive.

Recommendations

1. Explore whether and how the graduated access system for motorcycles could be improved and made more attractive without making it more complicated.

An area to further explore is whether and how the graduated access system for motorcycles could be improved and made more attractive. At the same time, high quality training is important for motorcycling and some core skills such as risk awareness, self-awareness, personal attitudes and dealing with potential risks such as distraction are difficult to test. At the moment only testing is mandatory while training remains optional. Keeping in mind that some countries only use test-based access schemes, the possibility of mandatory training and minimum training standards could be explored.

2. Remove obstacles to the deployment of electric vehicles, vehicles with alternative propulsions and vehicles with advanced driver assistance systems.

Removing obstacles to the deployment of electric vehicles, vehicles with alternative propulsions and vehicles with advanced driver assistance systems is an important factor in the current climate of new technologies entering the market. The driver training and tests should include topics such as electromobility, alternative fuels and advanced driver assistance systems.

3. Make sure that all definitions are clear and correspond to practical needs and the vehicle market. Re-assess the equivalences between the categories.

There seem to be several definitions and equivalence rules in the Directive that could be improved. This concerns all categories, but the most important issues seem to be a re-definition of A2 test vehicles and a clarification of the definitions and adaption of the equivalences concerning categories C1/C1E, C/CE, D1/D1E, D/DE.

4. Harmonised rules on driving examiners

Before introducing the 3rd DLD, there was no suggested set of standards on the training and education of driving examiners across Member States, varying widely throughout the EU. In some EU countries, driving examiners had almost no specific education or did not even hold the driving licence for the category that they were examining.

The 3rd DLD sets minimum standards for driving examiners (Annex IV), including initial qualification and training and periodic training. The majority of Member States agreed that the Directive has had a positive effect on road safety. They expressed the need for further improvement for the future. Communication and rhetorical skills were the examiners' weakest points. Stakeholders agreed to the need for a harmonised assessment of the competences required by a driving examiner, a harmonised implementation of driving examination audits, a minimum educational level.

Recommendations

1. Knowledge of modern driver assistant systems by driving examiners and inclusion of (semi-) autonomous driving in the examination procedure.

The driving task is rapidly changing due to new technologies. Safe and adequate use of these systems need to be learned during basic driver training, and if possible, be tested. Theory and practical tests for driving instructors should include testing of knowledge of educational methods and the skills to apply these methods.

2. Improve harmonised high quality periodic training of driving examiners.

The Directive should be revised to require stricter educational level for driving examiners, as well as high quality periodic training, including hazard perception training, for driving examiners. Member States did not however asked for fully harmonised training and quality assurance of driving examiners as there are differences between EU countries that should be kept, but it is essential to share best practices between countries.

3. Psychological knowledge of test execution and candidate motivation by driving examiners.

The majority of the participants agreed that communication and rhetorical skills seem to be the examiner's weakest point and these skills are some of the most demanding to improve and to achieve a higher level. Issues like examination

anxiety for instance are considered as important and driving examiners should be able to deal with it.

5. EU driving licence network (RESPER)

RESPER (RESeau PERmis de conduire), the EU network for the exchange of driving licence information was established by the 3rd DLD. This network acts as a EU-wide hub for information exchange between the Member States' driving licence issuing authorities. All Member States are obliged to connect and to use RESPER. The main purpose of this platform is to ensure the 'one person one licence' principle, ensuring that drivers only drive vehicles in categories they are qualified for and assisting in combating document fraud by allowing Member States to verify the validity of licences issued by other countries.

RESPER simplified the administration processes for checking driving licence validity since it allows for a quick exchange of information between Member States. The vast majority of Member States indicate that RESPER facilitated the application of the 'one person one licence' principle. RESPER has made it easier to detect if one person has more than one driving licence. However, the benefits of RESPER could be better exploited since most Member States mostly use it to check for licences presented for exchange and not for the first issuing of driving licences. Additionally, identity fraud is not prevented by RESPER as Member States do not exchange the image of the driving licence holder stored in the driving licence registers. Also, RESPER cannot yet be used for enforcement purposes, the exchanged information is not always reliable, reasons for invalidity are sometimes unclear and some Member States do not always respond to requests sent by RESPER.

Recommendations

1. Improve the technical issues of RESPER.

Server errors, long response times, time outs and the non-user-friendly software interface undermine the use of RESPER. Unfortunately, the results of the questionnaire did not allow to specify the nature of these problems (connection or application/use problem) and whether the problem is related to the HUB server or the servers of the Member States. As a first step, the European Commission should encourage more research into this area in order to establish the nature of these technical issues and to identify which technical aspects need to be improved. If these problems can be assigned to the way that some Member States have developed their interface to RESPER, then the Member States themselves need to undertake action to remedy these issues.

2. Strengthen the use and extend the functionality of RESPER.

As a first step, the use of RESPER should be strengthened by encouraging Member States to use secure messages and respond to them in order to decrease uncertainties and delays in the information exchange process. Furthermore, Member States should also be encouraged to use RESPER to check licences presented for all procedures and not only for exchange in order to facilitate the one person one licence principle. Finally, the exchange of data should be made exclusively through RESPER. The information accessed through RESPER should be reliable, accurate and up-to-date. The EU should also monitor the use of RESPER (i.e. that Member States respond to sent requests).

A second step should be to extend the functionalities of RESPER with the aim to strengthen the information exchange between Member States in the future regarding the following aspects:

- Exchange of driving licence information for enforcement purposes
- Exchange of driving licence information on professional drivers' training (Directive 2003/59/EG¹)
- Exchange of information on demerit points
- Exchange of information regarding national codes
- Exchange of information on normal residence

3. Encourage Member States to follow the recommendations presented in the Business Common rules document in order to ensure a uniform information exchange through RESPER.

The information which the Member States exchange through RESPER should be presented in a more uniform way. Terms like 'driving licence', 'holder' of a driving licence, 'entitlement', 'validity', a 'valid' driving licence, document, 'first issue', 'calendar year', 'suspension', 'driving ban', 'disqualification' and 'withdrawal' are sometimes used with different meanings between Member States. To avoid these discrepancies in used terms, the European Commission has developed the Business Common Rules document² which provides an overview of the different procedures and correct interpretations of the common rules and terms that should be used to exchange driving licence information through RESPER. However, not every Member State is aware of this document, nor follows the recommendations described in this document. A starting point could therefore be to make Member States more aware of the existence of the Business Common Rules Document. Additionally, the use of the Business Common Rules document by the Member States should be monitored by the European Commission in order to avoid interpretation issues regarding the exchanged information on driving licences

6. General policy recommendations

Based on the study results, some general recommendations for EU and national levels regarding the implementation of the 3rd DLD were identified, underlining the necessity of further action for achieving the goal of a common transport policy.

1. Better knowledge exchange and mutual recognition between the Member States.

The interpretation of the Directive still creates some confusion between Member States. Among the recurrent problematic aspects that need to be further looked into are the national categories and codes, mutual recognition for categories not regulated at EU level, and recognition of driving licences issued under exemptions allowed by the Directive. These actions should be applied both at national and EU level.

¹ Directive 2003/59/EC of the European Parliament and of the Council of 15 July 2003 on the initial qualification and periodic training of drivers of certain road vehicles for the carriage of goods or passengers, amending Council Regulation (EEC) No 3820/85 and Council Directive 91/439/EEC and repealing Council Directive 76/914/EE

² DG-MOVE. (2016a). Common rules concerning the interconnection of national electronic register on driving licences. Brussels, Belgium: DG-MOVE

2. Monitor current and future challenges of the implementation of the Directive.

In order to establish a common transport policy in Europe, the EU needs to continue monitoring the effects of the Directive in order to ensure that it keeps pace with future trends and to intervene in case the implementation results in adverse effects. This type of action lies in the field of monitoring and should be applied at EU level.

Résumé analytique

Environ 60% de la population de l'Union européenne détient un permis de conduire valide, représentant plus de 300 millions de citoyens. Beaucoup de conducteurs européens passent la frontière au sein de l'Union à des fins privées ou professionnelles ou changent leur pays de résidence. Dans ce contexte, l'UE a cherché à établir une politique commune des transports qui faciliterait la libre circulation et améliorerait la sécurité routière au moyen de directives sur les permis de conduire. La directive 2006/126/CE, également connue sous le nom de troisième directive sur les permis de conduire, est entrée en vigueur en janvier 2013, apportant une série de nouveautés. Elle garantit des règles harmonisées à l'échelle de l'UE sur les permis de conduire dans le but de faciliter une plus grande liberté de circulation des conducteurs de l'UE, de réduire la possibilité de fraude et d'améliorer la sécurité routière en Europe. Entre autres, les nouveautés suivantes ont été introduites par la directive:

- Un modèle de permis de conduire européen;
- Des périodes de validité administrative harmonisées;
- Une modification des catégories de permis de conduire (y compris de nouvelles catégories et des modifications apportées aux catégories existantes);
- Des normes minimales concernant l'accès à la profession d'examineurs et leur formation continue;
- Un Réseau de permis de conduire de l'UE (RESPER).

Un permis de conduire européen a été introduit dans le cadre de l'entrée en vigueur de la troisième directive de permis de conduire de l'UE. Les nouvelles règles visent à garantir une véritable liberté de circulation aux conducteurs de l'UE, à renforcer la sécurité sur les routes européennes et à réduire les possibilités de fraude.

Plus de 110 modèles de permis de conduire différents avec différents droits et périodes de validité seront progressivement remplacés par un modèle européen harmonisé au format de carte bancaire doté de fonctionnalités de protection de sécurité plus strictes. Tous les permis de conduire délivrés dans l'Union européenne après le 19 janvier 2013 doivent respecter le format requis. Tous les permis de conduire en papier en circulation devront être remplacés par le nouveau format au plus tard d'ici 2033.

Quatre ans après l'entrée en vigueur de la directive, cette étude «Mise en œuvre de la directive 2006/126/CE» commandée par la DG MOVE de la Commission européenne, vise à donner un aperçu de la mise en œuvre de la directive dans les États membres et, en particulier, à évaluer si les nouveautés introduites contribuent à la réalisation des objectifs de la directive. Une évaluation des effets des nouveautés introduites par la directive a été réalisée en combinant les résultats de la recherche documentaire, les entretiens d'experts et le cycle de consultation des parties prenantes. Compte tenu de la rareté de la littérature disponible, l'évaluation des effets repose en grande partie sur les entretiens d'experts et les consultations avec les parties prenantes.

L'étude vise également à identifier les recommandations politiques les plus importantes qui devraient être abordées afin de poursuivre les objectifs principaux de la directive et de soutenir l'effort global visant à établir une politique commune des transports en Europe.

L'étude a révélé que, bien que la directive ait réalisé des progrès significatifs dans l'harmonisation des règles relatives aux permis de conduire, facilitant une plus grande liberté de circulation pour les conducteurs de l'UE, réduisant la possibilité de fraude et

contribuant à l'amélioration de la sécurité routière en Europe, de nombreuses améliorations sont possibles.

1. Le nouveau modèle de permis de conduire

L'ensemble des Etats membres considèrent l'introduction du nouveau modèle de permis de conduire européen et les changements organisationnels apportés comme bénéfiques. De nombreux pays utilisaient déjà le format de carte bancaire avant l'entrée en vigueur de la troisième directive sur le permis de conduire. Janvier 2013 marque le début de son utilisation obligatoire, date à laquelle la majorité des pays ont commencé à l'émettre.

Le nouveau modèle de permis de conduire n'a pas entraîné de changements importants dans l'organisation du système d'émission du permis de conduire. Si la plupart des citoyens européens doivent se rendre à un bureau de l'administration publique pour demander un permis de conduire, certains États membres offrent la possibilité de faire la demande en ligne. Le délai pour la délivrance d'un permis n'a pas été allongé de manière significative, la plupart des États membres déclarant un délai plus long d'une semaine en moyenne pour un permis de conduire format carte bancaire comparé au format papier.

Si le coût pour les citoyens a pu légèrement augmenter, certaines démarches administratives ont été simplifiées. Pour les autorités émettrices, l'administration a été simplifiée, principalement par l'utilisation d'outils numériques. Les Etats membres se sont déclarés très satisfaits du niveau de sécurité du nouveau permis de conduire et de sa facilité d'utilisation.

Recommandations

1. Travailler sur l'interopérabilité des permis de conduire non physiques.

Les parties prenantes ont demandé à la Commission européenne de travailler sur une norme commune et les conditions pour les permis de conduire non physiques d'urgence, car plusieurs États membres commencent à envisager des permis de conduire non physiques. L'UE devrait prendre note des travaux du groupe de travail ISO 10 «Permis de conduire de véhicule à moteur et documents connexes» sur une norme permettant une reconnaissance transfrontalière et interjuridictionnelle du permis de conduire mobile.

2. Mettre en œuvre une procédure commune de vérification de l'identité des candidats.

Produire des faux permis de conduire étant devenus plus difficile avec l'amélioration de la sécurité du nouveau modèle européen format carte bancaire, les demandeurs illégaux tentent maintenant de s'introduire dans la procédure légale de demande de permis. Les parties prenantes ont donc appelé à une procédure commune de vérification de l'identité des demandeurs au sein de l'UE afin d'empêcher l'intrusion de candidats illégaux dans le processus d'octroi de permis. Le permis de conduire pouvant effectivement être utilisé dans diverses circonstances comme une preuve d'identité, le fait de ne pas vérifier correctement l'identité du demandeur peut avoir de graves conséquences négatives.

3. Intensifier le travail sur les technologies de contre-falsification (y compris les fausses identités).

Afin de réduire davantage la fraude et la falsification, outre la modernisation des fonctionnalités de sécurité pour les documents physiques, la sécurité pourrait être améliorée en développant des mesures de contre-falsification numériques, comme un code-barres signé numériquement. Les informations d'identification numériques devraient être vérifiées sur un dispositif vérificateur de confiance (par exemple, dédié à l'application de la loi).

2. Périodes de validité administrative harmonisées et contrôles médicaux

Une autre nouveauté introduite par la directive était des périodes de validité administrative harmonisées pour toutes les catégories de permis de conduire. L'introduction de périodes de validité administratives harmonisées visait à réduire la fraude en permettant des mises à jour régulières des dispositifs de sécurité, de faciliter la libre circulation des citoyens de l'UE et d'améliorer la sécurité routière en introduisant des contrôles médicaux obligatoires lors du renouvellement pour les titulaires des permis C et D et en permettant aux États membres d'introduire des contrôles médicaux réguliers pour les permis A et B.

La grande majorité des États membres n'est pas en mesure d'indiquer si l'introduction de périodes de validité administrative harmonisées a facilité la liberté de circulation des citoyens de l'UE. La majorité des participants ont déclaré que l'introduction de contrôles médicaux périodiques obligatoires pour les détenteurs de permis de conduire C et D améliorerait la sécurité routière. Certaines parties prenantes ont suggéré d'harmoniser davantage la période de validité administrative pour les permis A et B, la directive prévoyant des périodes de validité de 10 et 15 ans. Les États membres étaient divisés sur la question de rendre obligatoire le passage d'un examen médical pour les permis A et B lors du renouvellement administratif.

Recommandations

1. Travailler sur une procédure uniforme de vérification de la résidence normale.

L'établissement d'une résidence normale est un facteur majeur dans la lutte contre la fraude et le tourisme du permis de conduire. Les États membres et les parties prenantes ont exhorté la Commission européenne à définir les procédures communes de l'UE pour déterminer la résidence normale afin d'éviter les abus, tout en ne nuisant pas à la liberté de circulation. Cette preuve ne doit pas être basée sur une auto-déclaration, mais sur un document officiel, tel qu'un registre de population commun par exemple.

2. Lier les examens médicaux de renouvellement de permis de conduire avec le système national de santé.

L'auto-déclaration des conditions médicales est considérée comme risquée. Les contrôles médicaux pour le renouvellement du permis de conduire pourraient être liés aux systèmes nationaux de santé, car le contrôle croisé des dossiers médicaux des conducteurs lors du renouvellement de la licence de conduire pourrait éviter la bureaucratie et accélérer le processus de renouvellement.

3. Les normes sur l'alcool, les drogues et les médicaments (annexe III) pourraient être plus précises.

L'annexe III de la 3^{ème} directive sur les permis de conduire définit les normes minimales concernant l'aptitude physique et mentale qu'un candidat devrait satisfaire. Les résultats du questionnaire ont indiqué que les dispositions relatives à la dépendance à l'alcool devraient être clarifiées concernant la « période prouvée d'abstinence ». L'Annexe III pourrait prévoir une exception pour des volontaires, sous réserve de s'être engagés à ne plus conduire après avoir bu, afin qu'ils puissent participer à un programme de réhabilitation, sous surveillance médicale stricte, incluant un droit limité de conduire uniquement un véhicule équipé d'un éthylotest anti-démarrage (EAD).

Les normes pour le syndrome d'apnée obstructive du sommeil devraient être étendues à d'autres raisons d'augmentation de la somnolence, qui est un facteur très important dans les accidents de la circulation (section 11.2). Les normes relatives aux maladies cardiovasculaires ont un système de classification différent par rapport aux autres sections de l'Annexe III, ce qui rend difficile la mise en œuvre dans les réglementations nationales (section 9). La possibilité d'augmenter ou d'harmoniser davantage les normes minimales concernant l'aptitude physique et mentale devrait être discutée.

3. Modifications des catégories de permis de conduire

Les Etats membres et les personnes interrogées ont souligné les bénéfices de l'introduction d'une nouvelle catégorie AM. Certains États membres ont profité de cette introduction pour renforcer les conditions pour la conduite d'un cyclomoteur : au test théorique obligatoire certains ont ajouté l'obligation de passer un test pratique, d'autres une formation théorique ou une formation pratique.

L'un des principaux changements apportés par la troisième directive sur les permis de conduire fut le système d'accès progressif pour les motos, tous les États membres ayant dû adapter leurs systèmes pour mettre en œuvre les nouvelles règles européennes. Les options prévues par la directive ont cependant conduit à une grande variation des exigences d'accès et, dans une moindre mesure, des âges minimum.

Il semble que le nouveau système a contribué à l'amélioration de la sécurité routière et de l'éducation des conducteurs. Cependant, les conducteurs de motos préfèrent l'accès direct à l'accès progressif. Le nombre de permis de catégorie A a ainsi diminué dans certains pays. Il est difficile d'évaluer l'impact de ces mesures sur le marché des motos, mais on constate que la vente des motos relevant du permis A2 a augmenté sur le marché européen.

Le système d'accès progressif semble plus complexe et plus coûteux que le système précédent, et les coûts et les efforts supplémentaires impliqués semblent dissuader les gens d'acquérir des licences de moto dans certains pays. Certains problèmes pratiques concernant les définitions de diverses catégories ont été soulevés. En outre, les résultats de l'étude concernant les véhicules alimentés en énergie électrique ou autres véhicules à carburant alternatif montrent que les Etats membres souhaitent une modification de la directive.

Recommandations

1. Explorer si et comment le système d'accès progressif pour les motos pourrait être amélioré et rendu plus attrayant sans le rendre plus compliqué.

La question posée est de savoir si et comment le système d'accès progressif pour les motos pourrait être amélioré et rendu plus attrayant tout en préservant une formation de qualité. En effet, une formation de haute qualité est importante pour le motocyclisme et certaines compétences de base telles que la sensibilisation aux risques, la conscience de soi, les attitudes personnelles et les risques potentiels tels que la distraction sont difficiles à tester. Actuellement, les tests sont obligatoires, tandis que la formation demeure facultative. Gardant à l'esprit que certains pays utilisent uniquement des systèmes d'accès basés sur des tests, la possibilité d'une formation obligatoire et des normes minimales de formation pourrait être explorée.

2. Supprimer les obstacles au déploiement de véhicules électriques, de véhicules avec propulsion alternative et de véhicules équipés de systèmes avancés d'assistance au conducteur.

L'élimination des obstacles au déploiement de véhicules électriques, de véhicules avec propulsion alternative et de véhicules avec des systèmes avancés d'assistance au conducteur est un facteur important dans le climat actuel des nouvelles technologies entrant sur le marché. La formation et les tests du conducteur devraient inclure des sujets tels que l'électromobilité, les carburants de remplacement et les systèmes avancés d'assistance au conducteur.

3. S'assurer que toutes les définitions sont claires et correspondent aux besoins pratiques et au marché des véhicules. Réévaluer les équivalences entre les catégories.

Quelques définitions et règles d'équivalence dans la directive semblent pouvoir être améliorées. Si toutes les catégories sont concernées, la définition des motos utilisés pour les tests A2 semble la plus problématique. Les définitions et équivalences concernant les catégories C1/C1E, C/CE, D1/D1E, D/DE devraient également être clarifiées.

4. Règles harmonisées pour les examinateurs

Avant la directive 2006/126/CE, il n'y avait pas de normes minimales concernant l'accès à la profession d'examineur, les conditions variant largement d'un pays à l'autre. Dans certains pays de l'UE, l'accès à la profession d'examineur n'était pas soumis à des conditions en matière de formation ni à l'obligation de détenir le permis de conduire pour la catégorie qu'ils examinaient.

La 3^{ème} directive sur les permis de conduire établit des normes minimales en terme de formation initiale, continue et d'assurance de la qualité (annexe IV). La grande majorité des États membres ont convenu que la directive a eu un effet positif sur la sécurité routière. Ils ont exprimé le souhait de réviser la directive pour rendre les normes minimales communes plus strictes, notamment pour améliorer les compétences de communication et d'empathie, reconnus comme les points faibles de nombreux examinateurs. Les parties prenantes ont convenu de la nécessité d'harmoniser les procédures d'évaluation des compétences requises par un

examineur, des dispositions relatives à l'assurance de la qualité et de définir un niveau de formation initiale minimum pour accéder à la profession.

Recommandations

1. Former les examinateurs aux systèmes avancés d'assistance aux conducteurs et inclure la conduite de véhicules (semi)-autonomes dans la procédure d'examen.

La conduite d'un véhicule évolue rapidement en raison des nouvelles technologies. La formation initiale du candidat devrait permettre une utilisation sûre et adéquate de ces systèmes et, le test devrait dans la mesure du possible également être adapté aux nouvelles technologies. Les contrôles théoriques et pratiques annuels des examinateurs devraient également évaluer leurs connaissances des méthodes éducatives et s'assurer que les examinateurs possèdent les compétences nécessaires pour appliquer ces méthodes.

2. Garantir une formation continue de haute qualité des examinateurs.

La directive devrait être révisée pour exiger un niveau d'instruction plus strict des examinateurs, ainsi qu'une formation continue de haute qualité, y compris une formation sur la perception des dangers. Les États membres n'ont cependant pas demandé une harmonisation complète des règles minimales de formation, ni de l'assurance de la qualité des examinateurs, estimant que certaines différences entre pays de l'UE doivent être conservées. Les États membres souhaitent en revanche intensifier les échanges de bonnes pratiques entre pays.

3. Connaissance psychologique de l'exécution du test et de la motivation des candidats.

La majorité des participants ont convenu que les compétences en matière de communication et d'empathie représentaient des points faibles chez beaucoup d'examineurs, ces compétences étant parmi les plus difficiles à améliorer. Les examinateurs doivent apprendre notamment à faire face à des candidats éprouvant des difficultés, la peur de l'examen étant la plus fréquente.

5. Réseau de permis de conduire de l'UE (RESPER)

RESPER (RESeau PERmis de conduire), le réseau de l'UE pour l'échange d'informations sur les permis de conduire, a été établi par la troisième directive sur les permis de conduire. Ce réseau sert de plate-forme d'échange d'informations entre les autorités émettrices de permis de conduire des États membres. Tous les États membres sont obligés d'utiliser et de se connecter à RESPER. L'objectif principal de cette plate-forme est d'assurer le principe « une personne, un permis », de veiller à ce que les conducteurs ne conduisent que les véhicules pour lesquels ils possèdent un permis, et de lutter contre la fraude en permettant aux États membres de vérifier la validité des permis délivrés par d'autres pays.

RESPER a simplifié les procédures administratives de vérification de la validité des permis de conduire, en permettant un échange rapide d'informations entre les États membres. La grande majorité des États membres indiquent que RESPER a facilité l'application du principe « une personne, un permis ». L'utilisation de RESPER pourrait toutefois être améliorée : en effet les États membres l'utilisent principalement pour

vérifier la validité des permis lors d'un échange, mais pas quand ils délivrent un permis pour la première fois. De plus, les États membres ne s'échangent pas le photo numérique récente du détenteur de permis de conduite par RESPER, il ne peut être un outil efficace dans la lutte contre la fraude. En outre, RESPER ne peut pas encore être utilisé à des fins de contrôle de la loi, les informations échangées n'étant pas toujours fiables et les raisons de l'invalidité parfois peu claires. Enfin, certains États membres ne répondent pas toujours aux demandes envoyées par l'intermédiaire de RESPER.

Recommandations

1. Améliorer les problèmes techniques de RESPER.

Des erreurs de serveur, des temps de réponse trop longs, des délais et une interface logicielle non conviviale menacent l'utilisation de RESPER. Malheureusement les résultats du questionnaire ne permettaient pas de préciser la nature de ces problèmes (problème de connexion ou problème d'utilisation de l'application) et si le problème est lié au serveur HUB ou les serveurs des États membres. Dans un premier temps, la Commission européenne devrait encourager la recherche dans ce domaine afin d'établir la nature de ces problèmes techniques et d'identifier les aspects techniques qui doivent être améliorés. Les États membres eux-mêmes doivent résoudre ces difficultés quand celles-ci découlent de la façon dont l'interface a été développée par l'État membre en question.

2. Renforcer l'utilisation et étendre la fonctionnalité de RESPER.

Dans un premier temps, l'utilisation de RESPER devrait être renforcée en encourageant les États membres à utiliser les messages sécurisés et à y répondre afin de diminuer les incertitudes et les retards dans le processus d'échange d'informations. En outre, les États membres devraient également être encouragés à utiliser RESPER lors de la délivrance d'un nouveau permis et non seulement pour l'échange afin de faciliter le principe « une personne, un permis ». Enfin, les informations échangées via RESPER devraient être suffisantes pour les États membres (les États membres ne devraient pas avoir besoin d'une autre source d'information, comme par exemple avoir à demander des informations supplémentaires via email). Pour ce faire, les informations échangées via RESPER devraient être fiables, précises et à jour. L'UE devrait également contrôler la bonne utilisation de RESPER (entre autres, que les États membres répondent aux demandes envoyées par d'autres pays).

Une deuxième étape devrait être d'étendre les fonctionnalités de RESPER dans le but de renforcer l'échange d'informations entre les États membres afin:

- De faire appliquer la loi,
- D'échanger des informations sur le statut d'un permis de conduire en cas d'échange
- D'échanger des informations sur les points perdus lors d'infraction commises à l'étranger ;
- D'échanger des informations relatives à la formation des conducteurs professionnels (Directive 2003/59/EC)³

³Directive 2003/59/EC of the European Parliament and of the Council of 15 July 2003 on the initial qualification and periodic training of drivers of certain road vehicles for the carriage of goods or passengers, amending Council Regulation (EEC) No 3820/85 and Council Directive 91/439/EEC and repealing Council Directive 76/914/EE

- D'échanger des informations concernant les codes nationaux;
- D'échanger des informations concernant la résidence normale.

3. Encourager les Etats membres à suivre les recommandations du document « Règles Communes d'Echange » afin de favoriser l'échange d'informations uniformes via RESPER

L'information que les États membres échangent via RESPER devrait être présentée de manière plus uniforme. Par exemple, des termes comme 'permis de conduire', 'titulaire d'un permis de conduire', 'droit de conduire', 'validité', 'permis de conduire valide', 'document', 'première délivrance', 'année civile', 'suspension', 'interdiction' de conduire, 'révocation', 'retrait', entre autres, sont parfois utilisés avec des interprétations différentes d'un pays à l'autre. Pour remédier à ces obstacles, la Commission européenne a développé un document « Les Règles Communes d'Echange » (Business Common Rules)⁴ contenant un aperçu des différentes procédures et la définition correcte commune des règles et des termes qui devraient être utilisés pour l'échange d'information sur les permis de conduire via RESPER. Il semble que ces recommandations ne soient pas suivies par tous les Etats membres, et que l'existence de ce document n'ait pas été portée à la connaissance de tous les Etats membres. Il serait donc souhaitable comme point de départ que les Etats membres soient mieux informés de l'existence de ces « Règles communes d'Echange ». L'utilisation de ces Règles communes d'Echange par les Etats membres devrait également faire l'objet d'un suivi par la Commission européenne afin d'éviter des différences d'interprétation concernant l'échange d'information sur les permis de conduire.

6. Recommandations de politique générale

Sur la base des résultats de l'étude, certaines recommandations générales à l'échelle de l'UE et nationale concernant la mise en œuvre de la troisième directive sur les permis de conduire ont été identifiées, soulignant la nécessité d'actions supplémentaires pour atteindre l'objectif d'une politique commune des transports.

1. Intensifier les échanges de connaissances et la reconnaissance mutuelle entre les États membres.

Des différences d'interprétation de la directive peuvent encore parfois être à l'origine de confusion entre États membres. Les quelques aspects problématiques concernent les catégories nationales et les codes nationaux, la reconnaissance mutuelle pour les catégories non réglementées au niveau de l'UE et la reconnaissance des permis de conduire délivrés en vertu des exemptions autorisées par la directive. Ces actions devraient être appliquées tant au niveau national qu'au niveau de l'UE.

⁴DG-MOVE. (2016a). Common rules concerning the interconnection of national electronic register on driving licences. Brussels, Belgium: DG-MOVE

2. Suivre les défis actuels et futurs de la mise en œuvre de la directive.

Afin d'établir une politique commune des transports en Europe, l'UE doit continuer de surveiller les effets de la directive afin de s'assurer qu'elle suit les tendances futures et qu'elle intervienne dans le cas où la mise en œuvre entraîne des effets néfastes. Ce type d'action devrait être appliqué au niveau de l'UE.

List of abbreviations

2 nd DLD	Second Directive on Driving Licences (91/739/EEC)
3 rd DLD	Third Directive on Driving Licences (2006/126/EC)
ADAS	Advanced Driver-Assistance Systems
AVERE	The European Association for Electromobility
Categories A-B	Driving licences of categories AM, A1, A2, A, B1, B, BE
Categories C-D	Driving licences of categories C1, C, C1E, CE, D1, D, D1E, DE
CIECA	International Commission for Driver Testing
CPC	Certificate of Professional Competence
DG-MOVE	Directorate-General for Mobility and Transport
DMVs	Departments of Motor Vehicles
DOVIDs	Diffraction Optically Variable Image Device
DSM	Diagnostic and Statistical Manual of Mental Disorders
DUI	Driving Under Influence
EEA	European Economic Area
eID	Electronic Identity Card
EReg	Association of European Vehicle and Driver Registration Authorities
ERRU	European Register of Road Transport Undertakings
ERSO	European Road Safety Observatory
EU	European Union
EUCARIS	EUropean CAR and driving licence Information System
GDL D	Get Driving Licence Details
ICAO PKD	International Civil Aviation Organization Public Key Directory
ICD	International Classification of Diseases
ID	Identity
ISO	International Organization for Standardization

mDL	Mobile Driving Licence
NDLS	Notify Driving Licence Status
NFC	Near Field Communication
NIST	National Institute of Standards and Technology
PTW	Powered Two-Wheelers
RESPER	RESeau PERmis de conduire
SDLN	Search Driving Licence by Name
USA	United States of America
VIP	Very Important Person
WG	Working group

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1 Introduction

1.1 Background and scope

The European Union has harmonized rules on driving licences in the view of establishing a common transport policy. The purpose of this common policy is to improve road safety and to facilitate the freedom of movement for citizens moving inside the whole area of the Union by introducing a New Union Model Licence which is mutually recognized by all Member States as well as common standards for acquiring a licence.

The first Directive was introduced in December 1980 (Directive 80/1263/EEC) followed by the second Directive (91/739/EEC) of July 1991 which was amended several times. On the 20th of December 2006 Directive 2006/126/EC was published. This Directive is also known as the third Directive on driving licences (3rd Driving Licence Directive, 3rd DLD) and entered into full force as of the 19th of January 2013. It has already been amended several times.

The 3rd DLD provides harmonised EU wide rules on driving licences with the objective to facilitate greater freedom of movement to EU drivers, reduce the possibility of driving licence fraud and improve road safety in Europe. All Member States have transposed the Directive into national law. It is therefore necessary to assess the effects of the 3rd DLD.

Consequently, this evaluation study is commissioned by DG-MOVE in order to assess the impact of the Directive. The main objectives of this study are therefore:

1. To provide a comprehensive overview and better insight on the different aspects of Directive 2006/126/EC on driving licences and in particular the novelties introduced by the Directive.
2. To assess to what extent the information available makes it possible to draw relevant conclusions on the effects of the implementation.
3. To come up with recommendations for future measures of improvement which could serve as a basis for the Commission to assess where possible future EU initiatives could provide an added value.

1.2 The objectives of Directive 2006/126/EC

The 3rd DLD is part of the overall effort to establish a common transport policy in Europe. The purpose of the 3rd DLD is to provide harmonised EU wide rules on driving licences with the objective to facilitate greater freedom of movement to EU drivers, reduce the possibility of driving licence fraud and improve road safety in Europe.

The 3rd DLD prescribes the rules for replacing the 110 different driving licence formats circulating in the EU by a standard European credit card format characterized by tougher security protection features (the "New Union Model Licence"). This new format is compulsory for all licences issued in the EU as from 19 January 2013. All existing paper driving licences in circulation must be changed to the new format by 2033 at the latest. Besides a Union model driving licence, the 3rd DLD also introduced harmonised validity periods for licences (from 10 to 15 years, depending on the Member State, for motorcycles and cars and five years for lorries and buses), further harmonization of categories, reinforcement of progressive access to categories (age, dimensions) and harmonised minimum requirements for driving examiners. Furthermore, it establishes an EU network for the exchange of driving licence information (RESPER – RESeau PERmis de conduire).

1.3 Structure of this document

The overall structure of this report takes the form of four chapters, including this introductory chapter. Chapter two is concerned with the methodology used for this study. The third chapter presents the effects of the 3rd DLD by presenting an overview and assessment of the current situation for each of the following aspects: Union Model Licence, harmonised rules on administrative validity, regular medical checks upon renewal, modifications of driving licence categories, minimum standards on driving examiners, and RESPER. The fourth chapter begins with the selection of recommendations and identifies suitable policy actions for each application area of the 3rd DLD. Finally, this final report is complemented by an Annex report which contains all additional information, tables and figures referred to in this report.

2 Methodology

Various methodologies have been applied to provide a qualitative evaluation of the implementation of Directive 2006/126/EC on driving licences. Since different methods were applied, the collected information was checked for consistency and relevance.

The following sections provide an overview of the adopted methodology.

2.1 Desk research

A literature review was carried out in order to provide an overview of the available information and to identify previously completed studies relating to Directive 2006/126/EC. The documentation obtained from the Commission and other publicly available sources were analysed in order to extend the consortium's understanding of the 3rd DLD and its context and to assist in preparing the stakeholders consultation process.

The literature review focused on the implementation of the 3rd DLD in the Member States and in particular on the effects of the novelties introduced with the 3rd DLD: the new Union Model Licence, harmonised administrative validity periods, modifications of driving licence categories (including new categories and changes to existing categories), harmonised rules on driving examiners and the EU driving licence network (RESPER).

A complete list of consulted resources can be found in the bibliography section of this report.

2.2 Expert interviews

Targeted interviews were carried out with the aim to fill the knowledge gaps left by the questionnaires, supplement the information obtained through other methods and to obtain more in-depth information concerning certain topics. Expert interviews were organised among a number of relevant professionals ranging from public entities to relevant transport organisations and representatives of the industry.

2.3 Stakeholders consultation

The consultation round was divided into two phases: an online questionnaire (phase 1) was launched that prepared the ground for a physical stakeholders meeting (phase 2) in Brussels on May 30th, 2017. The purpose of this consultation process was to consult main stakeholders in order to gather relevant inputs. This process was an important tool for the study in providing and receiving valuable information regarding the implementation of Directive 2006/126/EC especially since the available literature on this very particular topic is rather scarce. Both the results of the online questionnaires and of the stakeholders workshop were included in a consultation report (ETSC, 2017) submitted to the European Commission.

The described results need to be interpreted with caution since it can be assumed that the person who filled in the questionnaires or participated in the workshop may not be an expert in (each of) the topics addressed. Furthermore, due to the complexity of certain topics, the number of answers do not always reflect that the issue has been fully covered or has been covered in a homogeneous way by the questionnaire or at the workshop. Consequently, it is important to bear in mind possible bias in the reported results based on the output of the questionnaires and workshop.

2.3.1 Questionnaire

The consortium launched six online questionnaires between March 28th and June 21st 2017, targeted at several relevant stakeholders across Europe such as members of the driving licence committee, RESPER national contact points, EReg-members and CIECA-members. The purpose of these questionnaires was to identify the Member States' point of view and level of implementation regarding the following aspects of Directive 2006/126/EC:

- The implementation of the New Union Model Licence;
- The effect on driving licence falsification & enforcement;
- The implementation of harmonised administrative validity periods and medical checks;
- The implementation of the modifications of driving licence categories;
- The implementation of harmonised rules on driving examiners;
- The implementation of the RESPER network.

The questionnaires were sent out to the 28 Member States of the EU, Norway, Iceland and Liechtenstein – in other words, all members of the European Economic Area (31 countries). Reminders were sent out to encourage Member States to participate in the questionnaires. The majority of the Member State representatives gave complete answers to the addressed questions. However, not all Member States possessed enough information to answer all questions. The most frequently incurred missing information was related to the effects on freedom of movement and the administrative burden and costs for national authorities and citizens. This limitation made it difficult to assess the effects of the Directive on these objectives. An overview of the response rates is provided in Table 1.

Because of the occurrence of incomplete answers, the consortium applied the following approach in order to retrieve as much information as possible from the questionnaire:

- Not every respondent answered the questionnaire until the last question. Respondents that only provided name or personal background data without answering any of the questions related to the content of the questionnaire were excluded from the analysis. From the moment respondents replied to content related questions (even in case they answered only to just a few of those questions) those answers were included for analysis.
- Some respondents did not enter their name or country when they filled in the questionnaire. These answers were omitted from the analysis.
- If multiple persons answered the same questionnaire for the same Member State, both answers were included in the analysis. If the same person answered the same questionnaire twice, the most recent complete version of questionnaire results was included in the analysis.

Table 1: Overview of the response rate for each questionnaire

Questionnaire	Nr. complete responses	Nr. incomplete responses	Nr. of double responses	Total nr. of responses included in analysis
New Union Model Licence	39	2	2	29
Driving licence falsification and enforcement	39	2	2	29
Harmonised administrative validity periods and medical checks	25	0	0	25
Modifications of driving licence categories	22	20	5	32
Harmonised rules on driving examiners	20	0	0	20
RESPER	24	0	1	25

2.3.2 Workshop

A physical stakeholders consultation workshop was organised in Brussels on Tuesday May 30th 2017. In total 29 participants representing stakeholder organisations across 16 Member States participated in the workshop (see Annex 2 for an overview). The purpose of the workshop, was to report the preliminary findings of the stakeholders questionnaires and to validate these results, to gather valuable information on specific topics for which additional information was needed, and to discuss possible future measures for improvement regarding the implementation of Directive 2006/126/EC.

The workshop consisted of six thematic sessions and an introductory session. The six thematic sessions addressed the following aspects:

- The effect of the introduction of a New Union Model Licence
- The effects of harmonised administrative validity and medical checks
- The effects of the modification of the driving licences categories
- The effects of the new model of driving licence on falsification and enforcement
- The effects of the RESPER network
- The effects of the minimum standards on driving examiners

Based on the first draft results of the questionnaires, the consortium formulated several statements to start the discussion with the participants. Each session consisted out of two parts:

- A plenary voting session in which participants were asked to vote - by means of a user-friendly voting application - on the presented statements;

- A smaller group discussion in which the participants were divided into five groups of six people to further discuss four statements selected from the plenary voting session and to discuss possible recommendations.

At the end of the workshop, the consortium leader presented the results of the smaller group discussions to the entire group to obtain additional views and opinions. Discussion notes were disseminated among the stakeholders prior to the workshop. These discussion notes included first draft results of the questionnaires, together with potential questions for discussion to provide background to the workshop participants and give directions to the discussions.

2.4 Synthesis and concrete actions

In this step, the final recommendations for each application area were based on a synthesis of the results from the literature review, expert interviews and stakeholders consultation round. In the respective chapters related to the specific application areas of the Directive, the areas for improvement and possible recommendations are listed. Subsequently, the final recommendations and outline for concrete actions are presented in chapter 4.

2.4.1 Analysis and selection of recommendations

The list of final recommendations was obtained by structuring, comparing and ranking the proposed recommendations through application of the Delphi technique. Linstone and Turoff (2002) define the Delphi technique as “a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem.” In this study, the Delphi technique is used as a decision-making instrument for selection of the final recommendations. The consortium members fulfil the role of experts to score the recommendations on four predefined criteria:

- Importance: the urgency of the problem as considered by the stakeholders
- Easiness of implementation: the extent to which a solution can be implemented swiftly and without difficulties (for example it is easier to perform research on a certain topic than to amend a Directive)
- Acceptability: public support for the measure
- Impact: the extent to which a proposed solution is capable to reduce the problem/issue

The Delphi technique applied in this study consisted of two phases in order to obtain consensus about the selection of the final recommendations. In the first phase, each consortium member scored the proposed list of recommendations for each application area of the Directive on these four criteria by means of a 3 point-scoring method (high = 3; medium = 2; low = 1). Every consortium member based the scoring - of the four criteria - on the views of the consulted stakeholders within this study.

After this first phase, the individual consortium member scores were averaged in order to obtain a composite score for each recommendation. This composite score represented the group response and was distributed among the consortium members. Strong deviating scores between the consortium members were internally discussed in order to make sure that each consortium member interpreted the scoring criteria uniformly in the second scoring round.

In the second phase, each consortium member received the opportunity to re-evaluate the original scoring for each recommendation based upon examination of the group

response. After this second phase, the final composite score for each recommendation was calculated by averaging the individual consortium member scores. For each application area, the top 3 of best scoring recommendations was selected as the final recommendations.

The calculations with respect to the recommendation scoring can be consulted in Annex 1 (Annex report) while the final outcome of the scoring process is discussed in chapter 4. Finally, the necessary requirements to achieve the recommendation are indicated in terms of (Table 9.1 in Annex 9):

- The type of required action (i.e. legislative, monitoring/support, research)
- The responsible actor (i.e. actor which needs to undertake action in terms of EU - national authorities - research – industry)

3 Findings and analysis

This chapter provides a comprehensive overview and assessment of the effects relating to the implementation of Directive 2006/126/EC on driving licences. The assessment is structured according to the novelties introduced by the Directive:

- New Union Model Licence
- Harmonised administrative validity periods & medical checks
- Modifications of driving licence categories
- Harmonised rules on driving examiners
- EU driving licence network (RESPER)

The assessment is performed by combing the findings of the desk research, expert interviews and stakeholders consultation which complement each other. Given the very particular nature of this topic, the available literature and number of previous evaluation studies appeared to be rather scarce. Consequently, the majority of the assessment is based on the results obtained from the expert interviews and stakeholders consultation. At the end of each assessment, a high-level synthesis is provided describing areas for improvement and suggested recommendations.

3.1 Union Model Licence

This chapter deals with the impact of the implementation of the New Union Model Licence and with its security features. If within this chapter any “before” or “after” is mentioned and there is no explicit reference to something else, this means before and after the implementation of the New Union Model Licence, regardless of when exactly it was implemented in the respective Member State. Likewise, terms like “change”, “increase”, “decrease” in all grammatical forms are used to compare the situation before and after the implementation of the New Union Model Licence as introduced by the 3rd DLD.

As will be shown later in this chapter, many Member States used credit card licences already before the 3rd DLD. The new credit card licence as introduced by the 3rd DLD was allowed to be issued from January 19, 2009. The mandatory use started on January 19, 2013 which is also the day most of the Member States started using it. Nevertheless, most of the provisions within the 3rd DLD became mandatory on the same day. Interviewees and respondents were repeatedly reminded to concentrate solely on the changes triggered by the new credit card licence; nevertheless, it remained difficult to isolate the impact of changing the licence model. However, there are a couple of indicators suggesting that the credit card model had a certain share in triggering changes to the licencing process. These issues will be discussed in the following chapter.

With regards to terminology, it has to be mentioned that “Driving Licence” is a twofold term. On the one hand, it determines the right of a citizen to drive a motorised vehicle of a particular category, in many cases including a particular period this right is granted for and additional conditions (e.g. wearing glasses during driving). On the other hand, the term also describes a sheet of paper or plastic card which is the official proof for having acquired the right to drive. Other European languages differentiate between the driving right granted and the document, like “Lenkberechtigung” (Austria) or “Fahrerlaubnis” (Germany) for the right and “Führerschein” (Austria, Germany) for the paper or plastic card.

3.1.1 Data description

The information in this chapter is mainly based on the answers of the respondents on a questionnaire that was one of the key activities of the evaluation of the 3rd DLD. Hence, if this report mentions “questions” or “answers”, one question or a group of questions in the respective part of the questionnaire and the respondents’ answers are meant.

41 respondents answered this questionnaire. Two anonymous, incomplete records had to be deleted. The questionnaires had been issued to authorities and other relevant entities from all 31 countries members of the European Economic Area.

There were answers from 29 countries; answers from Romania and Liechtenstein are missing. There was a maximum of three answers per Member State (Ireland, Lithuania and Spain); for Italy, Malta, Luxemburg and the Netherlands two sets of answers were received. With respect to the nature of the questions – predominantly it is about facts and not opinions – the total number of answers is rather irrelevant and the analysis was carried out using only one answer per Member State. The later answer was considered to be the correct one. A full list of all respondents can be found in Table 3.1 in Annex 3.

Further information was gathered via the stakeholders workshop, the expert interviews and the results of desk research.

3.1.2 Overview and assessment of the impact of implementation

18 Member States started issuing New Union Model Licences in January 2013. The respondent from one Member State did not answer and the remaining Member States answered as follows:

Table 2: Date of Implementation of the New Union Licence Model by Member States

When did you start issuing New Union Model Licences?	
Finland	01.01.1998
Norway	01.01.1998
Lithuania	01.11.2005
Greece	19.01.2009
Belgium	01.05.2013
Iceland	03.06.2013
Croatia	01.07.2013
France	16.09.2013
Malta	01.12.2013
Cyprus	29.06.2015

There is some discrepancy in that, since the 3rd DLD was published in 2006 and, hence, answers from Finland, Norway and Lithuania cannot be correct. However, these could be the dates for the implementation of the earlier union licence model, which was introduced by Directive 96/47/EC in 1996.

The majority of Member States had already used credit card licences before starting with the New Union Model Licence. Please note that the list in the next paragraph does not include all the (more than 100 different) models which were circulating prior to the implementation of the new union model. These licences are still in use and will continue to be used until 2033. The list indicates which kind of licences were issued by the authorities right before the implementation of the New Union Model Licence in the respective Member State, either for new licences or as replacement for older licences in case of renewal.

Only Malta had issued both paper and credit card licences based on citizens' choice. 19 Member States (Austria, Bulgaria, Czech Republic, Estonia, Finland, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom) had issued only credit card licences. In Belgium, Croatia, Cyprus, France, Greece, Ireland, Lithuania, Luxembourg and Norway (nine Member States) only paper licences were available prior to the New Union Model Licence. From Denmark, there was no valid answer to this question.

3.1.2.1 Filing

24 out of the 29 responding Member States had their driving licence administration organised in a centralised database system providing all necessary functionalities before the implementation of the New Union Model Licence and continue using their centralised system. Two Member States were and are still using decentralised databases. Denmark privatised the system and now has decentralised databases.

It is supposed that a central file providing all necessary functionalities is the most efficient way to administer millions of driving licences; a vast majority of Member States had already taken the step towards most modern administration. Privatisation may also be considered a step towards more efficiency. There are some Member States where the licencing system is privatised to a certain extent. Nevertheless, concerning the organisation of the licencing system, the New Union Licence Model did not bring about significant changes.

3.1.2.2 Filing Media

There were no answers to this part of the questionnaire by 14 Member States. There were questions on how and where Member States store their licencing data and who administers the process.

In two Member States (Spain, Sweden), there are only digital files before and after the implementation of the New Union Model Licence; in one Member State, there are only paper files used before and after (Croatia). Seven Member States are using both paper and digital files both before and after.

Three Member States changed from paper to paper plus digital files. Malta is an exceptional case, since there were both paper and digital files before and the system was privatised. In Denmark, it was vice versa.

Table 3: Data storage and processing before & after implementation of the 3rd DLD

	Number of electronic databases		Number of paper file databases		Data base(s)		filing		operator	
	Before	After	Before	After	central	decentralised	on paper	digital	private	public
Austria	1	1	0	0	before & after		before & after	before & after		before & after
Belgium	0	0	0	0	before & after		before & after	before & after		before & after
Bulgaria	28	28	0	0		before & after				
Croatia	1	1	117	117	before & after		before & after			before & after
Cyprus	0	0	0	0	before & after					before & after
Czech Republic	don't know	don't know	don't know	don't know	before & after		before & after	before & after		before & after
Denmark	don't know	don't know	don't know	don't know		after	after	after		after
Estonia	don't know	don't know	don't know	don't know	before & after					
Finland	N/A	N/A	N/A	N/A	before & after				after	before & after
France	1	1	don't know	0	before & after		before	after		before & after
Germany	don't know	don't know	don't know	don't know		before & after	before & after	before & after		before & after
Greece	no	no	no	no	before & after		before & after	before & after		before & after
Hungary	0	0	0	0	before & after		before & after	before & after		before & after
Iceland	1	1	0	0	before & after					before & after
Ireland					before & after		before	after	after	before & after
Italy	0	0	0	0	before & after					
Latvia	0	0	0	0	before & after					
Lithuania	don't know	1	don't know	don't know	after	before	before	before & after		before & after
Luxembourg	0	0	0	0	before & after					before & after
Malta	don't know	don't know	don't know	don't know	before	before	before	before	after	before
Netherlands	0	0	0	0	before & after					before & after
Norway	1	1	0	0	before & after					before & after
Poland	1	1	360	360	before & after		before & after	before & after		before & after
Portugal	none	none	none	none	before & after					
Slovakia	0	0	0	0	before & after					
Slovenia	1	1	0	0	before & after					before & after
Spain	1	1	0	0	before & after			before & after		before & after
Sweden	0	0	0	0	before & after			before & after		before & after
United Kingdom	N/A	N/A	N/A	N/A	before & after					

The questions referring to this issue were included in the questionnaire supposing that digital storage of information is modern and more efficient than the ancient method of writing all information on paper and storing it. The New Union Model Licence requires some digital storage, but all storage can be implemented temporarily – which would be the explanation why a few Member States still do not have a central digital licence file. The answers to this question in the questionnaire are, to a certain extent, contradicting the answers to the previous one. However, all these answers do not indicate that the implementation of the New Union Model Licence had strong impact to the way how Member States store their licence holders' data; it is mainly due to the fact that in most Member States the necessary steps had already been taken earlier.

3.1.2.3 Administration

In 20 out of 29 Member States the licencing system and its administration were run by public administration before the implementation of the New Union Licence Model and they still are. Seven Member States did not answer this question. Malta privatised its licencing administration at the same time as they implemented the New Union Licence Model. Ireland and Finland had their licence system solely run by public administration, but involved private bodies afterwards.

It would have reduced the administrative efforts if the number of paper file databases had been reduced. That was the case for France, Lithuania and Ireland where paper files have not been kept any more since the implementation of the New Union Model Licence.

In a clear majority of the Member States citizens have to visit the responsible public administration office to apply for a new driving licence. In nine of the 29 Member States, the access point changed at the time the 3rd DLD was implemented. Most common changes were either to provide web-based services (three Member States) or to privatise administration (two Member States).

It is most common that licence holders have to apply for renewal of their licences at public administration offices. However, five Member States took the occasion of implementation of the 3rd DLD and added a web-based service platform, of which one exclusively offers web-based service. Three Member States already had web-based services earlier, so eight Member States today offer their citizens to apply for a licence renewal via internet.

The access points for application for a new licence and for licence renewal differ in 16 of the 29 Member States. Renewal is most commonly administered by a public administration office. For new licences, many Member States offer a kind of one-stop-shopping at the driving school. The results indicate that the implementation of the New Union Licence Model prompted some Member States to take steps towards more innovative, modern administration.

Table 4: Locations for applications

Country	Where do citizens of any category apply for a new driving licence		Where do licence holders of any category apply for renewal?	
	before	after	before	after
Austria	Driving school	Driving school	Public administration office	Public administration office
Belgium	Public administration office	Public administration office	Public administration office	Public administration office
Bulgaria	Public administration office	Public administration office	Ministry of Interior	Ministry of Interior
Croatia	Public administration office	Public administration office	Public administration office	Public administration office
Cyprus	Public administration office	Public administration office	Public administration office	Public administration office
Czech Republic	Driving school or public administration office	Driving school or public administration office	Public administration office	Public administration office
Denmark	don't know	Driving school or public administration office or private service provider	don't know	Public administration office
Estonia	Public administration office or Web-based service platform	Public administration office or Web-based service platform	Public administration office or Web-based service platform	Public administration office or Web-based service platform
Finland	Driving school or public administration office	Driving school or public administration office	Public administration office	Public administration office or private service provider
France	Driving school or public administration office	Driving school or web-based service platform	Public administration office	Web-based service platform
Germany	Driving school or public administration office	Driving school or public administration office	Public administration office	Public administration office
Greece	Driving school or public administration office	Driving school or public administration office	Public administration office	Public administration office
Hungary	Driving school or public administration office	Driving school or public administration office	Public administration office	Public administration office
Iceland	Public administration office	Public administration office	Public administration office	Public administration office
Ireland	Public administration office	Private service provider	Public administration office	Private service provider
Italy	Driving school or public administration office	Driving school or public administration office	Public administration office	Public administration office
Latvia	Public administration office	Public administration office	Public administration office	Public administration office
Lithuania	Public administration office	Private service provider	Public administration office	Public administration office
Luxembourg	Public administration office	Public administration office	no answer	no answer
Malta	Driving school or private service provider	Driving school or private service provider	Public administration office	Public administration office or Web-based service platform
Netherlands	Public administration office	Public administration office	Public administration office	Public administration office
Norway	Public administration office	Public administration office or Web-based service platform	Public administration office	Public administration office or Web-based service platform
Poland	Driving school	Public administration office or web-based service platform	Public administration office	Public administration office or Web-based service platform
Portugal	Public administration office	Public administration office	Public administration office	Public administration office or Web-based service platform
Slovakia	Public administration office	Public administration office	Public administration office	Public administration office
Slovenia	Public administration office	Public administration office	Public administration office	Public administration office
Spain	Public administration office	Public administration office	Public administration office or private service provider	Public administration office or private service provider
Sweden	Public administration office or Web-based service platform	Public administration office or Web-based service platform	Public administration office or Web-based service platform	Public administration office or Web-based service platform
United Kingdom	Public administration office or Web-based service platform	Public administration office or Web-based service platform	Public administration office or Web-based service platform	Public administration office or Web-based service platform

3.1.2.4 Duration of Administrative Processes

Paper licences, in general, can be issued immediately, while this is not possible for a hi-tech credit card, which is produced by only one provider in a Member State. The decentralised production of credit card licences – as an alternative to that – would be possible, but that would mean the blank forms would have to be stored at all the places where cards are produced. That would gradually compromise security with every single additional place of storage and personalisation of licences. I.e. centralised personalisation seems inevitable.

Within this group of questions in the questionnaire, only one Member State did not answer. In 17 Member States, no changes took place. For the majority of the remaining Member States, the duration of licence delivery (from practical test to receiving a licence) decreased after implementation of the New Union Model Licence. On an average, this duration after the implementation of the New Union Model Licence is about one week, which is probably the period needed to produce and deliver a credit card licence. This would be in line with experiences for other types of cards, e.g. bank cards, credit cards or membership cards that are typically issued within a week. Assuming that earlier licence models would have been issued right after the driving test, this duration would have to be added to the total duration of the process. Since this total duration remained the same or decreased in most of the Member States, this assumption cannot be correct. This leaves two possibilities: Either production and delivery of earlier licences (regardless of whether these were paper or earlier credit card models) took longer than production and delivery of a New Union Model Licence, or the Member States have implemented other measures to shorten the process. The following changes identified in the survey might have had an influence on the changes in the duration.

Three Member States reduced the number of contacts that are required for a citizen to get a licence, however in Cyprus this number increased from one to two. On an average, this indicates a reduction of the administrative burden for the individual citizen.

In three Member States, the duration for acquiring a licence increased by about one week. It is likely that these Member States issued fully prepared paper or credit card licences which were delivered by the examiner. Some Member States had provisional licences before and still have them, i.e. the candidate receives a sheet of paper which proves the successful test and entitles him/her to drive until the delivery of the credit card licence.

In some Member States (Hungary, Ireland, Portugal, Poland), the duration decreased by two or more weeks. The survey did not provide evidence on the causes for these changes. It may be argued that the implementation of the 3rd DLD triggered a radical change of the administrative procedures that goes far beyond just issuing credit card licences. However, according to the questionnaire results, those Member States (except for Ireland) do not appear to have changed the organisational framework (database, filing, administration).

Summarising, the duration needed to acquire a first issue driving licence or get a driving licence renewed could have increased by the time needed to order, produce and deliver the credit card licence. This appears to be true for only three Member States, however, the average duration decreased slightly due to other countries speeding up the process or parts of it.

What can be learned from this questionnaire in addition: The differences in the duration needed for the issuing of the driving licence document is probably not solely

caused by the organisation and the duration of the administrative procedures. We presume that there might be different points of access to the procedure, i.e. in some Member States the application process might start right after the driver education, while in other Member States driver training and administrative procedures might run in parallel. Detailed figures can be found in Table 3.2 in Annex 3.

3.1.2.5 Cost for Citizens

For this part of the questionnaire, the respondents were asked to only consider the costs for the administrative process and the document, and not to include driving school costs, test fees, costs for medical checks and a first aid course. In the majority of the Member States (18), the cost for getting a driving licence remained the same after the implementation of the New Union Model Licence. Eight Member States increased their fees by amounts between a few eurocents and about €25. In some Member States, the fees were even reduced. Table 3.3 in Annex 3 provides all the details on the fees collected by the Member States, an overview is provided in the following:

For a regular licence of category B, 18 Member States did not change the fees, whereas Slovenia changed the price by 1 cent, which is probably just an issue of conversion rate; this was counted a “no change”. The cheapest Member States to acquire a category B licence are France and Spain where no fees are collected at all. In France, all renewals are for free as well, whereas Spain collects €23,50.

Belgium changed the fees from €16 to €20; municipalities are now entitled to collect additional fees up to €20. Croatia changed from about €10 to €22. Greece had already been the most expensive Member State before (€68) and increased the fees to 98 €. Ireland raised the fees from €35 to €55. Lithuania increased the fees from about one to €15, Norway and Poland raised the fees by about €6.

Fees for the professionally used licences are treated differently in three Member States. There are several reasons to do so, e.g. longer driving tests, stricter rules for the health check and the professional use of the licence. However, renewals for categories C and D are about €4 cheaper than for categories A and B, the difference in Malta is €70, in Sweden the professional categories are about €20 more expensive.

Summarising, the average fee for a category-B-licence in the EEC Member States increased by about €4 after the implementation of the Union Model Licence with 7 out of 29 responding Member States increasing their fees. For renewal, the average of the fees increased by about €5. Fees for renewal are somewhat lower than for new licences, but only for the professional categories C and D. Some Member States have a range of fees, e.g. Belgium, due to varying local fees. The previously mentioned averages were calculated based on the respective average between lower and upper limits in these Member States. Table 3.3 in the Annex 3 shows all details.

With respect to the research question: The administrative burden concerning costs for the citizen changed slightly after the implementation of the New Union Model Licence. However, these changes are not consistent throughout the Member States. Only Norway and Poland increased the fees by an amount which could reasonably refer to the production cost of the credit card licence. All other changes seem to be caused by other unidentified reasons.

3.1.2.6 Administrative burden for public administration: storage and delivery

It is difficult to determine the amount of money or work which the administration of driving licences requires in a Member State by a single parameter. Hence, we tried to

estimate changes by certain indicators. Among others, the way of data storage and transfer may be considered indicators for the administrative burden. This analysis builds on the assumption that anything digital is easy and anything analogue (in particular, anything that uses paper) causes more efforts.

14 out of 29 Member States did not change anything within their system. It comes as no surprise that all of these Member States already issued credit card licences before January 2013. For the remaining Member States, there is an obvious trend towards digitalisation. Most typically, photos had been either used as they are and a copy was stored at the local administration or they had to be provided upon application and were scanned and stored digitally. Today, the photos are almost exclusively taken at the point of application. This means that these are digital photos that are stored digitally in a database.

For the signatures, there is a very similar trend. Prior to the implementation of the New Union Model Licence, the signatures were collected on paper, and, in case they were needed in digital format, scanned – including all the difficulties of such a procedure, e.g. the simple issue of making people use a suitable pen. If signatures were scanned, they were predominantly stored both on paper and digitally. Today, only six Member States are still keeping paper copies of signatures.

Slightly more than half of the responding Member States still collect signatures on paper and scan them for the driving licence. However, ten Member States already offer or exclusively apply capturing signatures with a signature pad.

Four Member States abolished paper files. Eight Member States quit transferring paper documents and now exchange information within the licencing process exclusively digitally.

As an issue of both burden for public administration and the citizen, it may be considered much easier for the administration to have new licences run through a printer, an enveloping machine, a stamping machine and have it picked up by mail service than to have someone sit around in an office and wait for citizens to come by and pick up their licences. Three Member States took that step, only one of which sends registered mail whereas the others consider simple mails safe enough. Table 3.4 in the Annex 3 provides the detailed analysis on how photos and signatures are captured, stored and processed in the responding Member States.

Table 5 discovers some discrepancy. If the time needed to process one application strongly increases, an increasing number of employees would have to be expected – which is, however, not the case. On the contrary, three Member States indicate a light decrease whereas three Member States indicate a strong decrease in the number of employees.

Table 5: Estimated change of administrative efforts

	Strong increase	Slight increase	No change	Slight decrease	Strong decrease	don't know
Did the time, it typically takes your staff to process an application for a new driving licence (first issue) for one applicant of category B change after implementation of the Union licence model?	5	1	21	4	0	1
Did the number of employees concerned with processing of driving licences change after implementation of the Union licence model?	0	2	20	3	3	4

Summarising the findings on administrative burden for public administration, the results of the questionnaire indicated a strong trend towards digitisation of data storage and transfer as well as a decrease of paperwork. The assumption that this

decreases the administrative burden is supported by a decreasing number of employees occupied with processing driver licence applications.

3.1.2.7 Phasing out old licence models

As of 19 January 2033, there should be one harmonised EEA Driving Licence. Member States are obliged to phase out all of the currently more than 100 different driving licence models by that day. The respondents from 14 Member States indicated that there are already measures in place that make sure that all old licences are replaced by the New Union Model Licences before that deadline. In nine Member States, such measures are planned, for five Member States, no answers were provided to this question.

Respondents from some Member States pointed out that their Member State never issued licences with unlimited validity, which means that this question is not relevant to them. In two Member States, campaigns are planned. In one Member State, fines might be collected for not changing the licence in time.

3.1.2.8 Overall Assessment

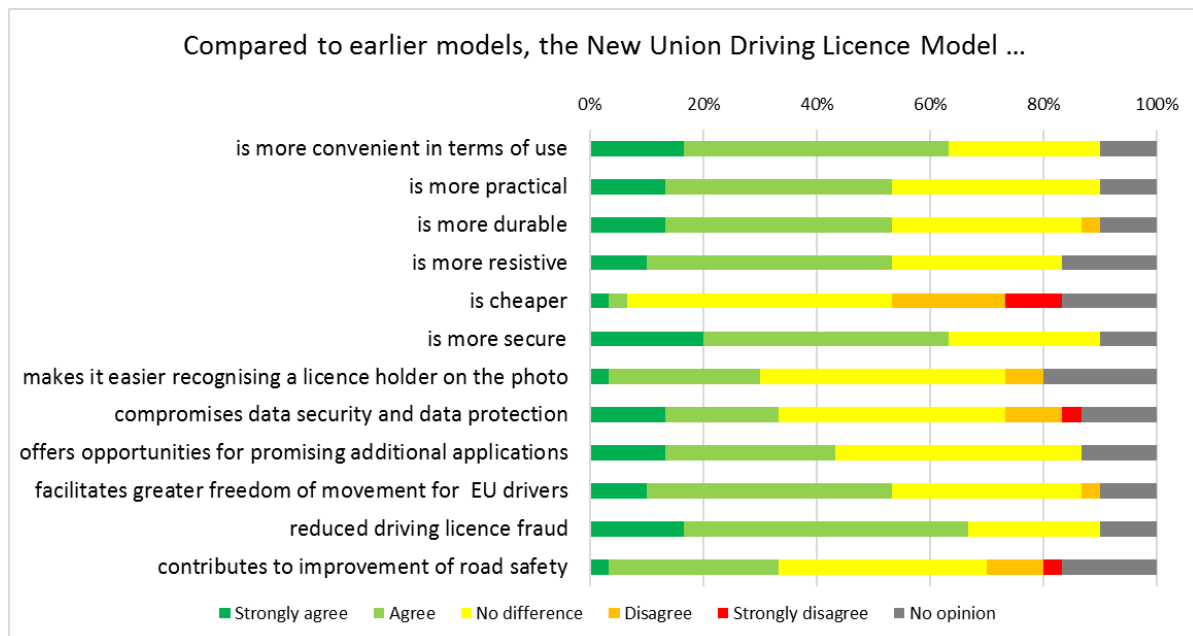


Figure 1: Overall Assessment of the New Union Model Licence

In the questionnaire, the New Union Model Licence received a very positive feedback in terms of security and practicability (Figure 1). There are only three questions where some concerns appear: the New Union Model Licence is definitely not cheaper than a sheet of paper or the previous credit card models with (much) weaker security standards. However, this is somewhat misleading, since the savings in the whole process of licencing – according to the answers to other questions – have compensated for this increase in costs.

It is most unlikely that the implementation of another medium for the driving licence has had a measurable impact on road safety, which is reflected in the answers.

A small number of interviewees were slightly concerned about the security of the data. They probably consider it to be more prone to cyber-attacks now because there is more data stored digitally and more Member States are using digital systems.

Despite these three issues (and all the other concerns mentioned during the consultation process) the New Union Model Licence and the changes it brought about received very good feedback by the respondents.

3.1.3 Overview and assessment of advanced and future functionalities and reliability

Basically, there are three kinds of falsified licences:

- Fake licences may be produced starting from scratch.
- Existing licences may be altered, e.g. by changing dates or exchanging the photo.
- Persons may try to acquire a licence by using a fake of another person’s identity and run through a regular licencing process.

A fourth kind of fake licence would be to use a licence legally acquired by another person. That is an important issue, but it cannot be considered as a kind of falsification. The following paragraphs address all these issues. Please take note that there is some confidential information, which – for security reasons – cannot be disclosed in this report.

3.1.3.1 Advanced anti-fraud features

The results demonstrate the increase of security features mentioned in the chapter before. Through the technologies used to produce credit card licences, new security methods like variable laser images can be integrated into the licences.

Table 6: Optional Safety Features Implemented

Which optional elements are implemented in your Member State?	Before	After	Before, After
Colour-shifting inks	0	5	11
Thermochromic ink	0	1	3
Custom holograms	2	4	12
Variable laser images	0	5	11
Ultraviolet fluorescent ink, visible and transparent	0	3	18
Iridescent printing	1	2	9
Digital watermark in the background	2	1	5
Infrared or phosphorescent pigments	0	2	9
Tactile characters, symbols or patterns	0	5	13
Other features (please specify)	0	1	8
Don't know	2	1	7

According to the interviews and discussions with the experts on design and manufacturing of ID documents, there are no official statistics on falsified driving licences that are found all over Europe. Available figures and data are subject to secrecy, they were not even disclosed within the official interviews for this report. In general, the exchange of information on such issues, if it takes place, is only bilateral and only between individual police authorities and not at the highest level of crime fighting organizations.

There are also no databases for the detailed exchange of information regarding counterfeiting of documents and fraud attempts as well as the use of somebody else's or falsified documents. Most of the information is kept confidential although police forces could benefit within their daily work. Current counterfeiting trends and/or information on currently more frequently accessed documents are exchanged in Working Groups of the Council of the European Union or in the context of Frontex expert meetings. These meetings and working groups as well as their results do not have their focus solely on driving licences but on all kinds of documents – European and other Member States' documents, for example Syrian Passports – and are also not available to the public due to security reasons.

The most common type of fraud is using someone else's document. This modus operandi does not need any manipulations to the document. This so-called "look-alike" attack is relatively easy to attempt because one only needs a document whose owner looks similar to the fraudster. The falsification of documents (change of image, change of data, etc.) is also a common method of fraud, since the effort to produce a falsified document, where the material is altered, still means less effort than the production of false cards.

According to the experts' feedback, there are some measures to improve the security of the overall driving licence system. For the use of someone else's document:

- Improvement of the recognisability of the photo, for example through enlargement or quality increase.
- Intensify the training of the employees at the driving licence authorities in order to better identify fraudsters.

In order to be able to better recognize falsifications:

- Further development of "level 1 security features" (i.e. those visible without any technical aid) to enable the police forces to detect fraud in the course of (roadside) checks. According to all feedback and technical evidence, the following elements are preferable:
 - Tactile laser engraving
Laser engraving is already mandatory, tactile elements are among the optional ones. This feature is easy to manufacture and simple to detect. It may be considered a most efficient level 1 safety feature.
 - Protection of photographs by "DOVIDs" (Diffractive Optically Variable Image Device)
These are also among the mandatory features. They can be improved by a tilting effect, which is a strong benefit to security, relatively cheap and easy to implement and very well recognisable.

The introduction of a non-physical driving licence also offers an opportunity for additional security, since in the case of an online system, checks are carried out directly against the register (national and EU-wide), so the police officer has a second source of information and has not only to rely on the (potentially old or outdated) information (e.g. photograph) of the physical document.

Measures against the application for a driving licence under a false name and, thus, the issuance of a genuine document are only to a limited extent possible at an EU-wide level. This is due to the different processes in the various Member States. Measures can for example include:

- More intensive identity checks by the authority when applicants are registering for driving licence education programs; this requires of course training for the authorities' employees.
- More intensive identity checks by the authority when applicants are applying for the driving licence itself (after passing all the tests); this requires additional training for the authorities' employees as well.
- Implementation of live enrolment of the photograph during the application process.

The topic of live enrolment is also discussed for the application of different documents such as passports, ID cards, residence permit and visa on a national and European level (e.g. A6C for visa and residence permit). Several Member States have live enrolment already in place, whereas others think about it just now. The implementation of live enrolment systems makes it harder to get a genuine document by bringing in a third-party photograph (look-alike) when applying for a driving licence.

In conclusion, we summarize that there are a lot of threats regarding the falsification of driving licences and the associated attacks, but they can be encountered by improvements in different areas:

- Application process
- Security of the physical document
- Implementation of a non-physical driving licence
- Stronger support for police forces performing (traffic) checks

3.1.3.2 Personalisation of Credit Card Licences

The data (Table 7) shows a strong trend away from decentralized personalisation to centralized personalisation. As mentioned before, there are concerns that every added place or step (e.g. places of storage of blank cards or transfer of data from storage to production) within the process decreases the security of the licence production. By centralizing the personalisation, these risks are mitigated.

Table 7: Personalisation of Licences

How is the personalisation process organized?	Before	After	Before, After
Centralized personalisation	0	6	16
Decentralised personalisation	4	0	4
Don't know	1	0	4

The trend towards centralized personalization is obvious and does not only concern the driving licence. Other documents like passports, ID-cards or the EU residence permit follow the same trend. There are some collateral benefits: The marginal cost of adding functionalities is rather low once a secure environment is set up. Operating costs can be shared among the relevant stakeholders (i.e. the authorities, which are clients of the secure environment). By bundling forces and resources, the level of security can also be improved.

3.1.3.3 Acceptance of driving licences as ID document

The answers (Table 8) show that the driving licence is widely accepted as an ID document throughout the European Union. The acceptance of driving licences as an ID document also increases from paper documents through old ID-1 documents to the current driving licences according to the 3rd DLD. In general, the acceptance of foreign licences compared to domestic ones is considerably lower. However, this is moderated by the increasing quality of the documents.

Table 8: Acceptance of Driving Licences as ID

Do public and private entities accept a as an identity card, e.g. to check age, open bank account, enter into a mobile phone contract, pick up registered mail)	Always	Normally yes	Sometimes	Normally no	Never	Don't know
Domestic paper driving	3	5	6	5	8	3
Domestic old credit card	6	10	1	2	6	5
Domestic new Union Model	8	12	3	4	2	1
Foreign paper driving licence	0	4	2	10	6	7
Foreign old credit card licence	0	4	2	13	4	7
Foreign New Union Model Licence	0	8	3	10	2	7

Considering the acceptance of the driving licence as an ID is a matter of national legislation and national or even local habits. Two main trends can be derived from this part of the questionnaire:

- The improvement of document quality and document security led to an increasing acceptance of the driving licence as an ID in general.
- The improvement of document quality and document security led to an increasing acceptance of driving licences issued in other EU Member States as an ID.

This indicates an additional trust of citizens in the security of the driving licence and is an indication for an improved freedom of movement of citizens. However, for the latter, there is still much potential for improvement.

3.1.3.4 Implementation of the microchip

Five out of 24 Member States have a microchip implemented on their driving licences (Table 9). The use of it varies from a simple storage of parts of the licence visual data (Ireland) up to use cases for different public services (Estonia, Hungary). Eight Member States consider implementing a microchip in the long run, whereas eleven Member States do not have any plans to implement it.

Table 9: Status of implementation of the microchip

What is the status of implementation of the microchip on the driving licence in your Member State?	Yes	No	Don't know
Implemented, for public administration use only	3	25	3
Implemented, open for public and private applications	2	26	3
We plan implementation in short course	1	27	3
We consider implementation in the long run	7	17	6
We currently do not consider implementation at all	11	12	8

Reasons for not implementing a microchip vary widely. Many Member States do not recognize any additional advantage (Latvia, Lithuania, Poland, Finland, Malta, Austria). Belgium states that there have to be use cases in place to provide more services to the citizens, like “eID” features. The United Kingdom outlines that advanced technologies enable an online version of a driving licence. Within some of the answers, it seems to be a chicken-or-egg issue. There is not enough motivation to implement the microchip without relevant applications and there is no motivation to develop applications without the microchip being implemented.

Data shows that there is a need for advanced features, which might be delivered through non-physical licences.

Based on all the information gathered, it may be assumed that Member States which have not yet introduced the microchip on the driving licence do not see any particular advantages in its introduction since they consider the microchip as an almost outdated technology. Regarding the future perspective of the driving licence, Member States mainly see a non-physical licence as the most likely scenario. All answers in the questionnaire can be found in Table 3.6 in Annex 3.

3.1.3.5 Potential implementation of non-physical licences

A slight majority of participating Member States indicate a positive attitude towards non-physical licences. A minority has no considerations for non-physical licences at the moment (Table 10).

Table 10: Interest on implementation of non-physical licences

Would you consider the future introduction of non-physical licences (e.g. having the licence on a mobile phone app) in your Member State if the European law provides a legal basis?	Yes	No	Don't know
We would implement non-physical licences as soon as the European law provides a legal basis	9	9	11
We would consider implementation in the long run	12	10	8
From today's perspective, we would not consider implementation	5	19	6

In the questionnaire, two Member States indicated already having launched pilot projects preparing the implementation of non-physical licences. Both the comments and the answers displayed in Table 11 indicate an urgent need for regulations to standardise the format and usage of non-physical driving licences (e.g. ISO), if a transnational validity is required. Four Member States indicated that they would be in favour of smart phones as the technological base.

Table 11: Prerequisites for implementation of non-physical licences

What is considered a prerequisite for implementation of non-physical licences in your Member State (multiple answers possible, tick whatever applies)?	Yes	No	Don't know
Publication of a relevant ISO-standard	12	8	9
Further technical development	10	11	8
Other (please specify)	12	2	15

Although the overall assessment of this part of the questionnaire indicates that Member States are quite positive about the implementation of non-physical licences, they communicate several concerns, such as the necessity of international harmonisation and the adaptation of both national laws and international treaties. By now only few Member States have developed plans or strategies to explore the impact or application of non-physical licences. Some Member States are engaged within the respective ISO group to actively design the future possibilities, whereas others see it as a topic to be solved on EU level. EReg has established a working group addressing this topic (Working Group XIX).

Based on personal communication with experts from some Member States, data security and data privacy was identified as a severe problem – which was not as clear in the questionnaire. On the one hand, a system of non-physical licences should provide all the necessary data when it is needed but on the other hand, Member States have concerns regarding who is allowed to see and use the data – particularly when it comes to cross-border usage. Since the driving licence is accepted as an ID document in several Member States, this has to be taken into account as well.

3.1.4 Areas for improvement and suggested recommendations

The following areas of improvement and suggested recommendations concerning the Union Model Licence have been identified based on a synthesis of the results from the questionnaire and stakeholders workshop. This resulted in the formulation of four general recommendations that are subdivided in several sub-recommendations. Table 9.1 (Annex 9) provides an overview of the most appropriate policy actions for the proposed recommendations.

1. Work on the interoperability of non-physical driving licences

- Settle conditions and standards for non-physical licences quickly. Fast action is required: some Member States already work on the issue, and it is more efficient starting with a common standard instead of trying to harmonise 27 systems at a later stage.
 - Several Member States (e.g. United Kingdom, Finland, Netherlands) are already working on solutions for non-physical driving licences. They have already published respective calls for tender.
 - In the USA, the NIST (National Institute of Standards and Technology) funded four different non-physical driving licence pilots. In various states, legislation was already adjusted to enable non-physical driving licences.
 - New South Wales in Australia announced that a non-physical driving licence would be introduced by 2019.
- ISO/IEC JTC1/SC17 WG10 “Motor vehicle driver licence and related documents” is working on a standard to allow cross-border and cross-jurisdictional recognition of

non-physical driving licences i.e. mobile driving licences (mDL). The standard focuses on interfaces allowing two different combinable approaches – data stored on remote host (online verification model), or data stored on citizen's device – and leaves provisioning and life-cycle management out of scope.

- It is recommended that the EU considers the upcoming standard and observes the development of the ISO WG. Furthermore, it is recommended to set up a European trust list that aggregates document signer certificates of European DMVs (Departments of Motor Vehicles).
- A solution that is based on an online verification model is preferred due to increased interoperability which facilitates adoption. Data transfer between heterogeneous devices via direct transmission technologies (e.g. NFC, Bluetooth) is still challenging and error-prone. Furthermore, data freshness is guaranteed at the time of verification – immediate reflection of status changes in case of revocation (e.g. driving und influence of alcohol or drugs). Hence it is recommended to settle conditions and standards for non-physical licences as soon as possible.

2. Implement a common standard on verification of applicants' identities

- There was a clear statement in the stakeholders' feedback that criminals, refugees and illegal economic migrants rather try to surreptitiously intrude into a normal licencing process instead of trying to get forged licences.
- On the one hand, this gives a very positive testimony to the security of the New Union Model Licence. On the other hand, however, this implies an urgent need to deal with the new weakest link.
- Some stakeholders also stated that a driving licence is a key to many everyday tasks. It provides access to the labour market, to mobile phones and many other activities. In these fields, other people rely on the driving licence to check identity and false IDs can cause a lot of harm.
- Some stakeholders discovered that look-alikes are used to acquire driving licences surreptitiously.
- It was not subject to the investigation in the questionnaire how Member States identify applicants at each stage of the licencing process. As an issue of combatting illegal migration and crime this task has to fulfil the highest possible standards. Hence, the issue should be carefully investigated.

3. Extend the New Union Model Licence to also be an ID for travelling

- For the benefit of European cohesion, the driving licence could be improved to be a travelling document as well.
- The analysis showed that there is a considerable difference in the acceptance of foreign and domestic driving licences as an ID for activities like opening a bank account, setting up a mobile phone contract or picking up registered mail.
- The problem probably is that the driving licence does not provide information on the nationality. However, this circumstance still persists after the implementation of the New Union Driving Licence Model. It may be considered an obstacle to free movement of citizens inside the EU.
- This may also be considered for travelling inside the EU and/or the Schengen area. A driving licence is an ID that almost every citizen takes along all the time. Taking ID or passport along is an extra task for travelling. This makes travelling across an internal frontier of the EU or the Schengen area feel different from travelling inside a Member State.

- European cohesion would be improved by enhancing the status of the driving licence to a European ID, which entitles to travel throughout the EU or at least the Schengen area.

4. Continue work on counter-falsification technologies (including false identities)

- To further reduce fraud and falsification, it is recommended, besides state-of-the-art security features for physical documents (ID1), to improve document security by leveraging digital counter-falsification measures:
 - Non-physical driving licence as mentioned before.
 - Digital features for physical documents (ID1) – e.g. digitally signed barcode.
- A European authority similar to ICAO PKD (ICAO, 2015) providing digital credentials to verify information stored on driving licences would be a first step to enable additional measures for counter-falsification such as non-physical driving licences.
- It is recommended to verify the digital credentials on a trusted verifier device (e.g. dedicated to law enforcement). Information presented on the citizen's device only, is not considered as trustworthy.

3.2 Harmonised administrative validity periods & medical checks

The 3rd DLD introduced harmonised administrative validity periods for all driving licence categories with the aim to reduce fraud by allowing regular updates of the security features, improve freedom of movement by reducing the administrative burden for citizens, and to improve road safety by introducing obligatory medical checks upon renewal for holders of licences in categories C and D and allowing Member States to introduce regular medical checks for licences in categories A and B.

The following paragraphs will provide an overview of the implementation of the harmonised administrative validity periods and medical checks in the EU Member States. This will be followed by an assessment focusing on whether the introduction of these aspects contributed to achieving the objectives of the 3rd DLD. Finally, areas for improvement and suggested recommendations are presented.

3.2.1 Data description

The assessment of the implementation of harmonised administrative validity periods and medical checks is primarily based on results obtained from the questionnaire and stakeholders workshop (ETSC, 2017). In total 25 Member States responded to the questionnaire resulting in 25 complete cases (see Table 4.1 in Annex 4). There were no anonymous or incomplete records that had to be deleted. The following Member States did not respond to the questionnaire: Estonia, Iceland, Italy, Liechtenstein, Norway and Romania. For these Member States, the missing information regarding the validity periods was added by consulting the EU driving licence handbook (European Commission, 2015), CIECA Guide on driver licensing (CIECA, 2017) and the EU driving licence database (European Commission, 2014). Additionally, the results from the questionnaire are enriched with the views of the stakeholders consultation workshop in which 29 participants represented 16 Member States (see Annex 2 for an overview). Furthermore, where possible the results of the consultation process are completed with the results from two previous evaluation studies by EReg focusing on the 3rd DLD (Löytty, 2010) and Normal Residence (Löytty, 2012).

The described results need to be interpreted with caution since it can be assumed that the person who filled in the questionnaire or participated in the workshop may not be an expert in the field of administrative validity periods and/or medical checks. Furthermore, due to the complexity of certain topics, the number of answers does not always reflect that the issue has been fully covered or has been covered in a homogeneous way by the questionnaire or at the workshop. This is, for example the case for the topic 'freedom of movement' since the majority of the respondents indicated that they do not know whether the introduction of harmonised validity periods facilitated freedom of movement. Consequently, it is important to bear in mind a possible bias in these results.

3.2.2 Overview and assessment of current situation

3.2.2.1 Harmonised administrative validity periods

Administrative validity periods for driving licence categories A-B

According to the 3rd DLD (Article 7.2 (a)), issued licences of these categories have an administrative validity of 10 years (European Parliament and European Council, 2006). However, Member States may choose to issue such licences with an administrative validity of up to 15 years. The listed validity periods were collected by means of the questionnaire and the provided information was verified by comparing the answers

with the information in the EU driving licence handbook (European Commission, 2015), CIECA Guide on driver licensing (CIECA, 2017) and the EU driving licence database (European Commission, 2014). Estonia, Iceland, Italy, Liechtenstein, Norway and Romania did not participate in the questionnaire. The missing information regarding these six Member States was also added by consulting the aforementioned documents.

Table 4.2 (Annex 4) provides an overview of the administrative validity periods for driving licence categories A-B. Most Member States (19 out of 31) chose a validity period of 10 years. Eleven Member States (Austria, Cyprus, Germany, Denmark, Finland, France, Greece, Iceland, Norway, Poland, Slovakia) have adopted an administrative validity period of 15 years for driving licence categories A-B. Furthermore, category B1 is not implemented in twelve Member States. These results are confirmed by an earlier study of EReg which focused on consulting the Member States about their intentions regarding the implementation of the Directive (Löytty, 2010).

The main motivation for choosing a validity period of 10 years was to not intervene in the administrative burden for citizens and national authorities. These Member States already had a validity period of 10 years before the Directive and adopting the same validity period after the 3rd DLD has the least impact on the citizens and on the internal processes of the national authorities. Additionally, the renewal of licences is also linked with the renewal of identity documents and medical check certificate (if implemented in the Member State) and these documents also have a validity of 10 years in the respective Member States. Adopting the same validity period for the licence reduces the administrative burden for citizens since they are able to renew several documents at once. The main reasons for choosing an administrative validity of 15 years is to limit the number of renewals in order to avoid unnecessary bureaucratic efforts. A detailed overview of these motivations is provided in Table 4.3 (Annex 4).

In case of a lost or stolen driving licence, about half of the Member States choose to keep the expiry date of the replacement driving licence identical since this driving licence is identical to the one it replaces while the other half decided to provide a new validity period of 10 or 15 years (counting from the date of issue of the replacement driving licence) (See Table 4.4 in Annex 4).

In addition, over half of the participants of the stakeholders workshop reported that the 3rd DLD led to a better harmonization of the administrative validity periods because it prescribes two validity periods from which the Member States can choose. This is an improvement because it reduces variances in validity periods across Member States which occurred in the period before the introduction of the Directive.

Administrative validity periods for driving licences with categories B and C

According to the 3rd DLD (Article 7.2 (b)), issued licences of these categories C-D have an administrative validity of 5 years (European Parliament and European Council, 2006). When the driving licence shows categories B and C, the administrative validity varies a lot between the Member States (Table 4.5 in Annex 4).

13 out of 25 Member States use a validity period of 5 years for both driving licence categories because the validity period of category C has priority over category B. Some Member States also adopt a validity period of 5 years for category C while category B remains valid for 10 or 15 years.

Limited administrative validity periods for first licence issued to novice drivers (categories A-B & categories C-D)

According to the 3rd DLD (Articles 7.3 (2) and 7.3 (3)), Member States may limit the administrative validity period of driving licences issued to novice drivers for licences of category A-B and category C-D (European Parliament and European Council, 2006).

While checking the results of the questionnaire with the information in the EU driving licence handbook (European Commission, 2015), CIECA Guide on driver licensing (CIECA, 2017) and the EU driving licence database (European Commission, 2014), it became clear that there was a discrepancy in the results for this topic. This is probably caused by the fact that the person who replied to the questionnaire was no expert in the field of administrative validity periods. Therefore, the results in this section are entirely based on the information provided in the EU driving licence handbook (European Commission, 2015), CIECA Guide on driver licensing (CIECA, 2017) and the EU driving licence database (European Commission, 2014).

Only three Member States have limited the administrative validity of the first full driving licence of category A-B issued to a novice driver. Lithuania has implemented a limited administrative validity period of 2 years for all first licences of categories A-B issued to novice drivers while Finland has only limited the administrative validity period to 2 years for first licence of category B. Estonia has implemented a limited administrative validity of 2 years for the provisional licence of categories A1, A, B1 and B for novice drivers. With respect to category C-D, only Estonia has decided to implement a limited administrative validity of 2 years for the provisional licence of category C1 for novice drivers. A detailed overview is provided in Table 4.6 (Annex 4).

Limited administrative validity periods for Group 1 and Group 2 drivers

According to the 3rd DLD (Article 7.3 (5)), Member States may reduce the administrative validity period for driving licence holders who have reached the age of 50 in order to apply an increased frequency of medical checks or other specific measures such as refresher courses (European Parliament and European Council, 2006). A detailed overview is provided in Table 4.7 (Annex 4).

While checking the results of the questionnaire with the information in the EU driving licence handbook (European Commission, 2015), CIECA Guide on driver licensing (CIECA, 2017) and the EU driving licence database (European Commission, 2014), it became clear that there was a discrepancy in the results for this topic. This is probably caused by the fact that the person who replied to the questionnaire was no expert in the field of administrative validity periods. Therefore, the results in this section are entirely based on the information provided in the EU driving licence handbook (European Commission, 2015), CIECA Guide on driver licensing (CIECA, 2017) and the EU driving licence database (European Commission, 2014).

20 Member States have reduced the administrative validity period for Group 1 drivers who have reached the age of 50 in order to apply increased medical checks. Hungary and Italy start limiting the administrative validity from the age of 50 while the other 18 Member States have limited the validity periods from the age of 60 or above. The length of the shortened validity period ranges from 2-5 years depending on the age of the Group 1 driver and the category for which the validity period is restricted.

For Group 2 drivers, 15 Member States have reduced the administrative validity period for Group 2 drivers who have reached the age of 50 in order to apply increased medical checks. Only Liechtenstein has limited the administrative validity from the age of 50 while the other 14 Member States have limited the validity periods from the age

of 60 or above. The length of the shortened validity period ranges from 1-4 years depending on the age of the Group 2 driver and the category for which the validity period is restricted. Luxembourg and Portugal have also decided to not renew the driving licence above the age of 75 (for categories C, CE, D, DE, D1, DE) and 65 (for categories D1, D, DE and DE) respectively.

To conclude, the majority of the workshop participants also questioned whether the age of 50 is a correct age limit to apply increased medical checks or other specific measures for both Group 1 and Group 2 drivers. This is probably due to the fact that accident risk starts the increase from the age of 65 due to age-related impairments and illnesses (Polders et al., 2015).

3.2.2.2 Effects of administrative validity periods on freedom of movement

As indicated in Table 4.8 (Annex 4), the vast majority of the Member States is not able to indicate whether the introduction of harmonised administrative validity periods facilitated the freedom of movement of citizens. This is also the case when respondents are asked whether the differences in validity periods between Member States influence freedom of movement. However, seven out of 25 Member States indicate that differences in validity periods between Member States do not influence freedom of movement because they are not connected in such a way that they can influence each other. It is the validity of the driving licence that is important and checked. They also state that all driving licences are acknowledged as long as they are valid. Furthermore, mutual recognition and harmonisation rules for driving licence exchange guarantee that differences in validity periods are not an issue to facilitate freedom of movement.

This uncertainty is also confirmed by the results of the stakeholders workshop. The majority of the participants stated that it can be assumed that the 3rd DLD in general facilitated freedom of movement because it becomes easier to obtain a driving licence in another Member State. It is also argued that this harmonisation is more important for fraud than for freedom of movement. One Member State indicated that the introduction of these harmonised administrative validity periods had no effect on the freedom of movement of citizens since this introduction did not result in a change in legislation nor in the price of the driving licence. Finally, it is stated that the harmonised administrative validity periods did not facilitate freedom of movement since there are still different validity periods (Member States can choose a validity of 10 or 15 years).

Member States were also asked if the harmonisation of administrative validity periods causes problems for freedom of movement when (see Table 4.9 in Annex 4):

- Drivers from other EU Member States are checked by the police in your Member State,
- Drivers from other EU Member States move to your Member State,
- Drivers from your Member State are checked by the police in other EU Member States,
- Citizens from your Member State move to another EU Member State.

Most Member States indicate that the harmonised administrative validity periods do not pose a problem (in the situations listed above) for the freedom of movement of citizens. A detailed overview of the problems related to mutual recognition of driving licences is provided in the next paragraph. Additionally, 21 out of 25 Member States recognize a driving licence issued in another Member State when the original driving licence was issued in a third country (see Table 4.10 in Annex 4).

Mutual recognition of licences

Seven out of 21 Member States stated that they recognise the validity of licences issued in other Member States to drivers under the regular minimum age in some or all cases (twelve stated they do not). The United Kingdom added that they recognise licences issued in other Member States that have a lower minimum age but they do not exchange the licence if it is below the minimum age in the United Kingdom. This mainly applies to category AM.

All Member States except for Finland and Ireland stated that they apply the rules regarding the equivalences between categories of driving licences established by Decision 2016/1945/EU. Finland stated that these rules are not needed while in Ireland, each category is considered on its merits.

Four Member States reported problems with the mutual recognition of licences (Belgium, Sweden, Finland, Denmark). The respondent from Belgium explained that some Member States do not use Decision (EU) 2016/1945 or RESPER and ask the citizen to provide documentation that their driving licence is legitimate. In some cases, the exchange of a licence leads to categories disappearing. In addition, some drivers with old models are apparently fined in France for not having the new model. Sweden also reported problems with other Member States or at least their police forces not complying with the Decision (EU) 2016/1945. Swedish drivers with category B licences have had problems when driving motorhome vehicles outside of Sweden. Finland mentioned problems when Finnish drivers holding a national category for agricultural vehicles want to use it abroad. Denmark mentioned problems with Article 2 (2) of the 3rd DLD (European Parliament and European Council, 2006) in the sense that this Article has been subject to some criticism for drivers from other EU Member States who move to Denmark. At the workshop, the representative of Denmark mentioned that the citizens who are affected feel that this Article discriminates them in their freedom of movement.

3.2.2.3 Normal residence

Table 4.11 (Annex 4) provides an overview of how the normal residence rule is established in each Member State. It is apparent from the table that most Member States have adopted the 185 days-rule (Article 12 of the 3rd DLD) to establish normal residence (European Parliament and European Council, 2006). Some Member States have even transposed the exact wording of this article into national law. The majority of the workshop participants also indicated that establishing normal residence remains a fundamental problem for Member States. This is confirmed by a study of EReg focusing on normal residence (Löytty, 2012). This study revealed that the problem with establishing normal residence is twofold (Löytty, 2012):

- 185-day-rule,
- Situations in which a person does not live in a Member State for at least 185 days per year.

According to this EReg study (Löytty, 2012), indistinct EC-rules regarding permanent residence also further restrict the freedom of movement of EU citizens. The EReg topic group has formulated the following recommendations in order to overcome these issues (Löytty, 2012, p.19):

- Establish a strict 185-day-rule for first driving licence issues for each driving licence category (i.e. applicant first needs to live for 185 days in the Member State) instead of establishing normal residence based on the intention to live permanently at least for 185 days in the Member State. It is recommended that the strict rule shall not be applied to driving licence renewals or exchanges.

- If the Member State cannot issue a driving licence because the 185-day-rule is not yet fulfilled, it is recommended to provide a signed document to the applicant which states that the driving licence is not issued. In that case, another Member State can issue a driving licence to the applicant even if the 185-day-rule is not met.

The analysis of the workshop results also revealed that normal residence still remains a difficult but important topic in the combat against driving licence tourism. Member States need proof of normal residence in order to avoid abuse. However, they indicate that this proof should not be based on self-declaration but on an official document, or contracts, or the population register. It is also mentioned that there is a need for common procedures for how to determine normal residence. A working group could have a look at this and provide recommendations. It is highlighted that the introduction of a common population register would be the best solution for checking normal residence. Furthermore, as normal residence is determined by directive 83/182/EEC (tax directive), any changes regarding the proofs of normal residence should also be applied to this directive. The need for a common procedure to check normal residence is also indicated in Table 4.12 (Annex 4). From this table it is apparent that Member States apply different procedures to check normal residence ranging from a check in the national population register, tax register to applicants who need to provide proof by submitting necessary documents (employment contracts, pay slips, residence permit, utility bill, lease agreement, income tax return, etc.). Furthermore, five Member States (Bulgaria, Denmark, Lithuania, Portugal, United Kingdom) have no procedure in place to check normal residence. The need for a common procedure to check normal residence is also confirmed by the EReg study (Löytty, 2012).

3.2.2.4 Effects of administrative validity periods on administrative burden and costs for citizens

Renewal procedure

There is a lot of variation between the Member States regarding the renewal practice of a driving licence when the administrative validity of a driving licence is expired (Table 4.13 Annex 4). Regarding categories A-B, 14 Member States require no medical examination while seven Member States do require a medical examination upon renewal. Denmark has introduced a time limit of three years and Luxembourg requires a medical examination above the age of 60. For categories C-D, 20 Member States require a medical examination upon renewal while two Member States have a time limit in place. A detailed overview of the conditions that a driver must meet to obtain or renew a driving licence is provided Table 4.14 (Annex 4). The majority of the workshop participants also indicated that there is need to establish common conditions that a driver must meet to obtain or renew a driving licence. This is especially relevant in the fight against driving licence tourism.

Effects on administrative burden and costs for citizens

The effects of introducing harmonised administrative validity periods on the administrative burden and costs for citizens was assessed by the Member States in the case of first issuing, renewal, exchange and replacement of driving licences (Tables 4.15 and 4.16 in Annex 4).

More than half of the Member States state that the administrative validity periods had no effect on the administrative burden for citizens in case of first issuing, exchange and replacement of driving licences. Only a small minority (four Member States), indicates that the administrative burden for citizens is reduced in these three

situations. It is also interesting that ten Member States indicate that the administrative burden has increased in case of driving licence renewal.

Regarding the costs, more than half of the Member States state that the harmonisation of administrative validity periods had no effect on the costs for citizens in case of first issuing, exchange and replacement of driving licences. Only one Member State (Portugal) indicates that the costs are reduced in case of driving licence replacement. It is also interesting that eleven Member States indicate that the costs have increased in case of driving licence renewal.

These views are also shared by the workshop participants. The majority of the participants stated that the shorter validity periods make obtaining a driving licence more expensive for the citizen and increase the administrative burden. This is especially the case in Member States who had paper driving licences with unlimited validity periods before the Directive. After the implementation of the Directive, the citizens residing in these Member States are confronted with increased costs (for example for the photo card) and administrative burden every time they need to renew their licence (every 10 or 15 years). In other words, the workshop participants mentioned that it is not the harmonisation of validity periods but the limitation, of the validity of a driving licence (i.e. in case of lifelong driving licence validity before Directive) that increased the burden and costs for citizens.

3.2.2.5 Medical checks upon renewal

Natural aging generally affects in a negative way mental and physical abilities which are critical for safe driving, including attention, executive functions, visuospatial perception, reaction time, memory as well as visual acuity and motor coordination resulting in elderly drivers being more prone to get involved in a car accident. While at the moment 20% of traffic fatalities is aged >65 in Europe, it is expected that by 2050, the share of elderly road traffic fatalities will increase with 13% (Polders et al., 2015). Older drivers are frequently required to abandon their driving privileges due to this higher risk of at-fault car accidents. However, driving cessation negatively affects older adults' quality of life as well as their own sense of autonomy and self-esteem (Curl, Stowe, Cooney, & Proulx, 2014). Thus, medical checks upon driving licence renewal is a critical topic.

The task of driving requires the ability to receive sensory information, process the information, and make proper, timely judgments and responses (Freund, Gravenstein, Ferris, Burke, & Shaheen, 2005; Waller, 1980). Various motor, visual, cognitive and perceptual deficits can affect the ability to drive. These deficits are either age-related or caused by neurological disorders and may lead to reduced driver fitness and increased crash risk (Charlton et al., 2010; Marshall, 2008). It is crucial to distinguish which medical conditions and which functional impairments are considered to have the most deleterious effect on road safety. However, it is noted by the literature that current evidence for causal relationships between specific medical conditions and increased accident probability is limited (Charlton et al., 2010; Marshall, 2008; Vaa, 2003). The methods capable of assessing these road safety impacts are naturalistic driving experiments, driving simulator experiments, on road experiments, in-depth accident investigations and questionnaires focusing on opinion and stated behaviour.

Within the framework of this project, and after synthesizing the outcome of the questionnaire that was launched and the outcome of the workshop that was organized several interesting results were extracted. Firstly, 92% of the Member States have implemented the minimum standards of physical and mental fitness for driving, as stipulated in Annex III of the 3rd DLD. Denmark and Finland have implemented even stricter requirements. In particular, Denmark claimed that in some cases for example

requirements on sight and hearing, diabetes and neurological diseases the standards are implemented stricter, which typically results in a shorter administrative validity on the licence and Finland claimed that applicants shall undergo a medical examination in Group 1 when applying for a driving licence. When the driving licence is renewed, applicants shall undergo medical examination when she/he is over 70 years old. Applicants shall undergo medical examination in Group 2 when applying for a driving licence. When the driving licence is renewed every five year applicants shall undergo medical examination when they are over 45 years old.

Moreover, 15/25 Member States (60%) agreed that the minimum standards of physical and mental fitness for driving of the Directive are sufficient. On the contrary, Belgium, France, Germany, Slovakia, Sweden and United Kingdom (20%) suggested that there are topics which need improvement. The majority of the suggestions for revision concerned standards on Obstructive Sleep Apnoea Syndrome (Annex III Section 11.2), Alcohol (Annex III Section 14) and Drugs and Medicinal Products (Annex III Section 15).

Driving licence categories A-B

The requirement of medical examinations for categories A-B upon renewal seem to split the Member States, as they are not mandatory. Some Member States claim that there is no need for medical tests, or there is need for just a medical certificate at the age of 70, or if a person suffers from any medical condition which requires additional assessment. The reason may be the administrative and financial burden for citizens. The impact on road safety seems controversial as the medical checks are optional and the effect is small, some Member States had implemented medical checks for these categories before the 3rd DLD. The Member States agree that it is not a matter of age, but of medical condition and of the individualised screening method. There seems to be need for research on predictive/valid screening procedures.

More specifically, regarding the optional medical examinations for categories A-B upon renewal, 10/25 Member States (40%: Belgium, Bulgaria, Finland, Greece, Hungary, Latvia, Lithuania, Luxembourg, Portugal, and Spain) claimed that they require medical examinations upon renewal. Only Finland has an age limit (70). On the contrary 15/25 Member States (60%: Czech Republic, Denmark, France, Germany, Ireland, Malta, Netherlands, Poland, Slovakia, Slovenia, Sweden and United Kingdom) claimed that they do not require medical examinations for categories A-B upon renewal. The main reasons why they chose not to implement medical examinations upon renewal are: administrative and financial burden for citizens, because it is considered preferable to devote the available resources to the priority medical controls, because there is no scientific evidence that such examinations improve traffic safety.

Then, the responders were asked to answer whether the medical examinations for categories A-B upon renewal should be mandatory. This question split the responders. More specifically, 13/25 Member States did not agree with this proposal (52%), 8/25 Member States agreed (32%) and four Member States did not answer (16%). Finally, in line with the previous question the responders were asked to answer whether mandatory medical checks for categories A-B could improve road safety. The main obstacles are the administrative burden of the citizens and the lack of scientific research that mandatory medical checks for categories A-B will improve road safety.

Driving licence categories C-D

Moving on to the mandatory medical examinations for categories C-D upon renewal. Almost all Member States have implemented medical checks according to the minimum requirements of the 3rd DLD. Applicants for these categories evidence that

they comply with the medical standards stipulated in the Directive by undergoing medical examination, or by both undergoing medical examination and self-declaration. Moreover, the majority of the participants claimed that the introduction of mandatory periodical medical checks for holders of these licence categories improved road safety. Probably, periodical checks for professional drivers can only contribute to road safety (although based heavily on personal opinions instead of real evidence) and especially for category D drivers because they are carrying passengers. In some Member States there were already medical checks before implementation of the 3rd DLD. Finally it is indicated that the CPC directive 2003/59/EC⁵ should also be kept in mind since there is also a period in this directive for regular training that is relevant for professional drivers. It might be a possibility to adjust both the 3rd DLD and the CPC directive to one another on this point.

More specifically, all Member States, except for Czech Republic, claimed to have already implemented medical checks for these categories upon driving licence renewal before the implementation of the 3rd DLD. Belgium had even stricter requirements before the 3rd DLD (cardiovascular diseases, sleep apnoea, diabetes). Since then the 3rd DLD has been modified, coming closer towards the Belgian standards.

Moving on to how do applicants (categories C-D) evidence that they comply with the medical standards stipulated in Annex III of the Directive, in 21/25 Member States (84%) they undergo medical examination. The Czech Republic follows a continuous monitoring of medical condition of applicants/drivers, Lithuania follows both self-declaration and medical examination (to some extent), same as Sweden and the United Kingdom which have both self-declaration before the age of 45 and after 45 they must undergo medical examination.

3.2.3 Areas for improvement and suggested recommendations

The following areas of improvement and suggested recommendations concerning harmonised administrative validity periods and medical checks have been identified based on a synthesis of the results from the questionnaire and stakeholders workshop. Results from previous evaluation studies have also been taken into account. This resulted in the formulation of eight general recommendations that are subdivided in several sub-recommendations. Table 9.1 (Annex 9) provides an overview of the most appropriate policy actions for the proposed recommendations.

1. Explore further harmonisation of administrative validity periods of driving licences.

- Explore opportunities to introduce harmonised administrative validity periods for categories A-B in order to introduce a single and uniform validity period across all Member States.
- Encourage Member States to provide clarity about the period of validity. A specific issue are licences issued for less than 10 years counting from the issue date. In case of exchange it is unclear why certain Member States (also third countries) issue licences for a shorter validity period (less than 10 or 15 years). Mostly this has to do with medical checks/issues but this is often not indicated.
- Assess the road safety effects of introducing limited administrative validity periods for first licence issued to novice drivers (categories A-B, C-D).

⁵Directive 2003/59/EC of the European Parliament and of the Council of 15 July 2003 on the initial qualification and periodic training of drivers of certain road vehicles for the carriage of goods or passengers, amending Council Regulation (EEC) No 3820/85 and Council Directive 91/439/EEC and repealing Council Directive 76/914/EE

- Assess the road safety effects of reducing administrative validity period of Group 1 and Group 2 driving licence holders who have reached the age of 50 in order to apply an increased frequency of medical checks or other specific measures such as refresher courses.
- Reevaluate whether the age limit of 50 for Group 1 and Group 2 is a correct and non-discriminatory age limit to apply shortened administrative validity periods in order to apply an increased frequency of medical checks or other specific measures such as refresher courses.

2. Explore possibilities to further facilitate freedom of movement of citizens.

- Monitor that each Member State applies the rules established in Decision 2016/1945 regarding equivalences of driving licences in a uniform way (guarantee mutual recognition).
- Evaluate whether the differences in validity periods for categories A-B (10 years or 15 years) between Member States influence freedom of movement.
- Improve mutual notification of Member States on driver disqualification. There should be an agreement on exchanging information in the national penalty register in case of exchanged licences.

3. Work on a uniform procedure to check normal residence.

- Appoint a working group to explore and establish common procedures on how to determine normal residence and apply these changes to directive 83/182/EEC (i.e. tax directive used to determine normal residence).
- Explore whether the introduction of a common population register would be the best solution to check normal residence.
- Monitor that proof of normal residence is not based solely on self-declaration in order to prevent driving licence tourism.
- Establish a strict 185-day-rule for first driving licence issuing for each driving licence category (i.e. applicant first needs to live for 185 days in the Member State) instead of establishing normal residence based on the intention to live permanently at least for 185 days in the Member State. It is recommended that the strict rule shall not be applied for driving licence renewals or exchanges (Löytty, 2012, p.19).
- If the Member State cannot issue a driving licence because the 185-day-rule is not yet fulfilled, it is recommended to provide a signed document to the applicant which states that the driving licence is not issued. In that case another Member State can issue a driving licence to the applicant even if the 185-day-rule is not met (Löytty, 2012, p.19).

4. Explore opportunities to lower administrative burden and costs for citizens upon driving licence renewal.

- Administrative burden for citizens has increased in case of driving licence renewal. This is especially the case in Member States who had paper driving licences with unlimited validity periods before the Directive.
- Administrative costs for citizens have increased in case of driving licence renewal. This is especially the case in Member States who had paper driving licences with unlimited validity periods before the Directive.

5. Explore more uniform renewal procedures (medical checks, etc.)

- The renewal procedures, concerning the medical checks, varies among Member States. Research is needed to explore more harmonised procedures. A quality management system for medical checks is also required.

6. Link driving licence renewal medical checks with national health system

- Self-declaration of medical condition is risky and the vast majority of Member States avoid it. Data sharing about the medical conditions of drivers and cross checking the medical records of the candidate upon renewal should be an interesting future suggestion in order to avoid bureaucracy and to have faster renewal procedures.

7. Standards on Alcohol and Drugs and Medicinal Products (Annex III) could be more precise

- The Annex III of the 3rd DLD includes the health requirements a candidate should have. The provisions of Annex III on alcohol addiction should be more precise regarding the “proven period of abstinence”. Annex III could foresee an exception for volunteers, providing they have promised not to drink and drive again, in order for them to participate in a rehabilitation programme, under a strict medical supervision, with the right to drive limited to a vehicle equipped with an in-car breathalyser (so called alcohol interlock)
- The standards for Obstructive Sleep Apnoea Syndrome (Section 11.2) should be extended to other reasons for increased sleepiness which is a highly relevant factor in traffic accidents. The standards for Cardiovascular Diseases (Section 9) have a different classification system compared to the other sections of Annex III. This makes it difficult to implement all complex details in national regulations. In total, a possibility to harmonize further the health requirements should be discussed, analysed and revised.

8. Develop faster, more reliable, maybe cheaper periodical medical checks with alternative methods

- The Member States agree that it is not an issue of age, but of medical condition and of the individualised screening method, so there is need for research on predictive/valid screening procedures. An additional aim could be to monitor and improve the driving competences of the elderly through mental-training programs.

3.3 Modification of driving licence categories

The following chapter, together with the tables in Annex 5, provides a comprehensive overview of the implementation of the licence categories and their access requirements in the Member States. It compares the rules before and after the implementation of the 3rd DLD and analyses how Member States made use of the options provided by the 3rd DLD. Next to the overview of the Member States' rules, the chapter also provides an assessment of the effects the 3rd DLD regarding each category. Finally, the recommendations from the stakeholders consultation are summarized and main recommendations are derived.

3.3.1 Data Description

The following analysis is mainly based on the consultation questionnaire carried out within the project and the stakeholders workshop. Since no evaluation studies on the implementation of the 3rd DLD were found, the assessment of the Directive is based on the opinion of the respondents.

In addition to the stakeholders consultation, the following experts were interviewed or provided a written opinion:

- Roland Berger, President, Honda Central Europe
- John Chatterton Ross, Director of Public Affairs, FIM (Fédération Internationale de Motocyclisme)
- Espen Hauge, President, AVERE (European Association for Electromobility)
- Stefan Kerbl, Test Engineer, ÖAMTC (Austrian Automobile Club)
- Antonio Perlot Secretary General, ACEM (European Association of Motorcycle Manufacturers)
- Franz Weinberger, Marketing & Communication, MAN Austria

To assess the influence of the 3rd DLD on the driving licences issued, driving licence statistics were collected. However, this proved to be a difficult task as only 13 Member States provided statistics on the driving licences issued or the tests carried out. The statistics received were difficult to analyse and compare due to several reasons: only few Member States provided complete data; background information on how licence statistics are processed in each Member State is missing, and some Member States provided only statistics on tests carried out or passed or on the total number of valid licences.

Remarks on the analysis of the questionnaire

As a reply to the questionnaire, 42 questionnaires were received. They were analysed as follows:

- Five were excluded because the same person or the same organisation replied twice. In each case, only one version was completed, which was chosen for analysis.
- One was excluded because the respondent and his or her Member State remained anonymous.
- There responses were excluded because the respondents did not reply to any questions except their name and contact details.
- The remaining responses were divided into official answers from the public authorities (26 answers) and non-official answers from other organisations (from the field of driver education and one unknown respondent, six answers). The main analysis was carried out with the official answers only. Where no official answer was

provided, the non-official answers were used (Croatia and Greece). However, for the quantitative assessment of the effects of the Directive (how many Member States saw a certain effect), only the official replies were included. The non-official answers were considered in a second step and comments were included if they provided additional information. However:

- Of the official answers, 7 were only partly completed. Of the non-official answers, three were only partly completed. The answers provided were included.
- No answer was received from Romania.

A detailed overview of the Member States that responded to the questionnaire can be found in Annex 5.

3.3.2 Overview and assessment of current situation

3.3.2.1 Category AM

The new category AM had to be introduced in all Member States. The fact that there is now a harmonized category was perceived positive by the respondents of the questionnaire.

Some kind of driving licence already existed in almost all Member States. The implementation of category AM led to an adaption of the requirements for obtaining the right to ride mopeds in many Member States. The theoretical test that is now mandatory according to the Directive already existed in most Member States, but the influence of the Directive seems to have gone beyond its mandatory rules: some Member States made use of the opportunity to reform their licencing requirements for mopeds. Now 20 instead of 14 Member States require a practical test, 17 instead of 13 require a theoretical training and 19 instead of 10 require a practical training. In some Member States, the test and/or the training became more comprehensive. Five Member States introduced a health examination and the number of Member States requiring a first aid course rose from five to seven. This is confirmed by the assessment of the effects of category AM on road safety and driver education which was positive (13 Member States) or neutral (13 Member States) in the questionnaire. In the stakeholders workshop, most participants confirmed these positive effects. However, an improved driver education also means higher costs for citizens: in eleven Member States, the right to ride vehicles of category AM became more or much more expensive. In 14 Member States, the costs stayed the same and in only one Member State they decreased.

Regarding the minimum age, Member States make use of the large possible span of 14 to 18 years provided by the Directive, making AM the category with the largest variation in minimum age requirements. The majority sets the minimum age at 15 or 16. Changes due to the Directive were only slight with three Member States raising their minimum age.

In most Member States, all other categories are valid for the category AM with only four Member States limiting the right to ride mopeds to categories A1/A2/A. In eleven Member States, there is a distinction between two-wheeled vehicles on the one hand and tricycles and quadricycles on the other hand.

Some Member States reported problems either when implementing the 3rd DLD or when applying the new rules on category AM. Some of these problems concerned national particularities and were due to the fact that AM now requires a driving licence like all other categories (in Austria, for example, the administrative procedure used for all classes sometimes does not fit for AM because there is no practical test; in Greece,

all the files of category AM holders had to be transferred from the traffic police to the regional units). Others concern the transitions from the old to the new rules (Belgium for example reported that there are different approaches in the Member States regarding the date of issuing the licence).

3.3.2.2 Categories A1/A2/A

Implementation in the Member States

Category A1 had to be newly introduced in six out of 27 Member States. The Directive led to a reduction of the minimum age for category A1 vehicles in four Member States, mainly in the Member States that did not have this category before (under the 2nd DLD, no category A1 automatically meant a minimum age of 18). Regarding category A2, the minimum age changed in some Member States compared to the restricted category A licence under the 2nd DLD, with some Member States lowering and others raising their minimum age. Now, most Member States have a minimum age of 18, six Member States a minimum age of 20 and one Member State a minimum age of 19.

While before the 3rd DLD most Member States required a minimum age of 21 for direct access to category A, the minimum age is now 24 in all Member States. Direct access is not possible in France, Luxembourg and Spain, where the previous possession of A2 is mandatory. Cyprus requires at least an A1 licence for acquiring category A. However, the number of Member States allowing only graduated access decreased from 6 to 4 with the implementation of the 3rd DLD. A notable case is France, where direct access to category A was abolished in 2016.

The 3rd DLD allows Member States to require either a training or a test or both when riders upgrade their A1 or A2 licence to A2 and A respectively. There is a large variety in how Member States implemented this option. The reasons why one or the other option was chosen in the Member States vary and are often connected with the national situation and the general approach in the driver education system. Reasons based on road safety were given for both options.

Most Member States require either a test only or both a test and a training, some use a combination by requiring a training for one upgrade and a test for the other. Training only as a requirement is rare. The extent of the training is usually seven hours, some Member States require more. The practical test is usually the same as for direct access in most Member States.

In a few Member States, the rider can choose between a test and a training. In these Member States, training seems to be much more popular. In Slovakia, for example, 206 riders chose the training option in 2016 when upgrading from A1 to A2 whereas 58 riders chose the test option. The difference is even more remarkable with riders upgrading from A2 to A: 812 chose the training option whereas only 93 chose the test option.

In ten out of 24 Member States, holders of an A1 licence are exempt from some requirements that would otherwise apply when acquiring a category A licence, e.g. the test or the training are less comprehensive or no theoretical or practical training or theoretical test is required.

Assessment of the Directive

The respondents were asked to assess the implementation of different aspects of the 3rd DLD on road safety. 21 Member States answered this question. In general, the respondents stated that the changes had either positive or no effects on road safety.

The graduated access system, the definition of category A2 (as opposed to the restricted category A according to the 2nd DLD) and the introduction of category A2 were regarded as positive by almost half of the respondents while no or only one Member State stated that these changes had negative effects. Two Member States stated that there are less fatal accidents or that at least the accidents did not increase even though there are more motorcycles. One Member State reported that the accident statistics do not show any difference. Another Member State stated that the mandatory introduction of category A1 had negative effects because category A1 did not exist before.

Categories A1/A2/A: effects of changes on road safety

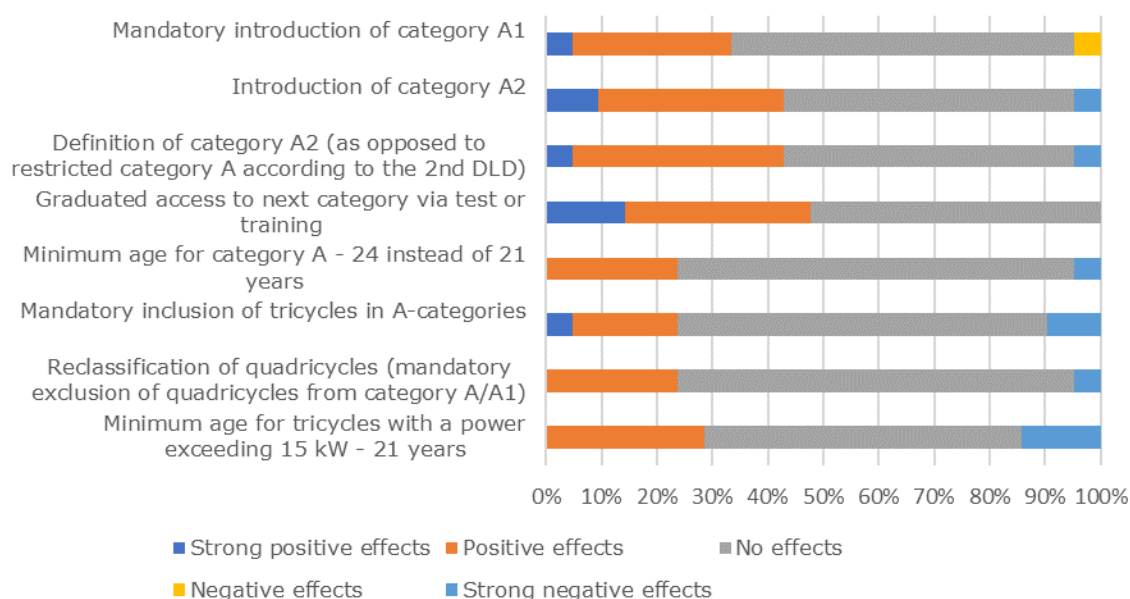


Figure 2: Overview of the effects on road safety for categories A1/A2/A

Despite the generally positive assessment it should be noted that in the stakeholders workshop, there were also discussants who stated that they did not think that graduated access improved road safety and driver education. They criticized that the system is too complicated, the steps between the categories are too small, two categories instead of three would be enough and only one exam is necessary because traffic rules and practical experience is the same for all categories.

Even though the effects on road safety are assessed as positive, it seems that only in about half of the Member States the graduated access system is very well or well accepted by the riders. This is in line with the fact that in most Member States, direct access is more popular than graduated access. In the Netherlands, for example, 95% of category A2 candidates choose direct access. The situation is similar in Slovakia: In 2016, 264 riders chose graduated access to category A2 (905 for category A) whereas 1415 chose direct access (5492 for category A). In Sweden, about 600 persons a year acquire an A1 licence, whereas it is about 1500 a year for A2 and about 7000 a year for A. In Slovenia, the difference between graduated and direct access to category A2 is not so prominent: In 2016, there were 304 candidates choosing direct access and 246 candidates choosing graduated access. However, when it comes to accessing category A, direct access is by far more popular: 356 riders chose graduated access to category A whereas 1876 chose direct access. In the United Kingdom, the difference is even more striking: Only 472 riders accessed category A via graduated access during

the last financial year of the Driver and Vehicle Licensing Agency whereas 40.508 riders acquired an A licence directly.

As a reason for the popularity of direct access, Latvia, the Netherlands, and Sweden reported that A1 is not very popular in their Member States. Latvia reported the same for A2. Belgium stated that the upgrading of A2 to A only concerns riders that hold an A2 licence based on rights dating back to before the implementation of the 3rd DLD Directive and did not upgrade their licence based on transitional provisions.

Respondents from eight out of 19 Member States stated that the new rules on categories A1/A2/A improved driver education. In the remaining eleven Member States, it had no effects. Improved driver education, however, comes at a cost: acquiring a full A licence became more expensive in most Member States.

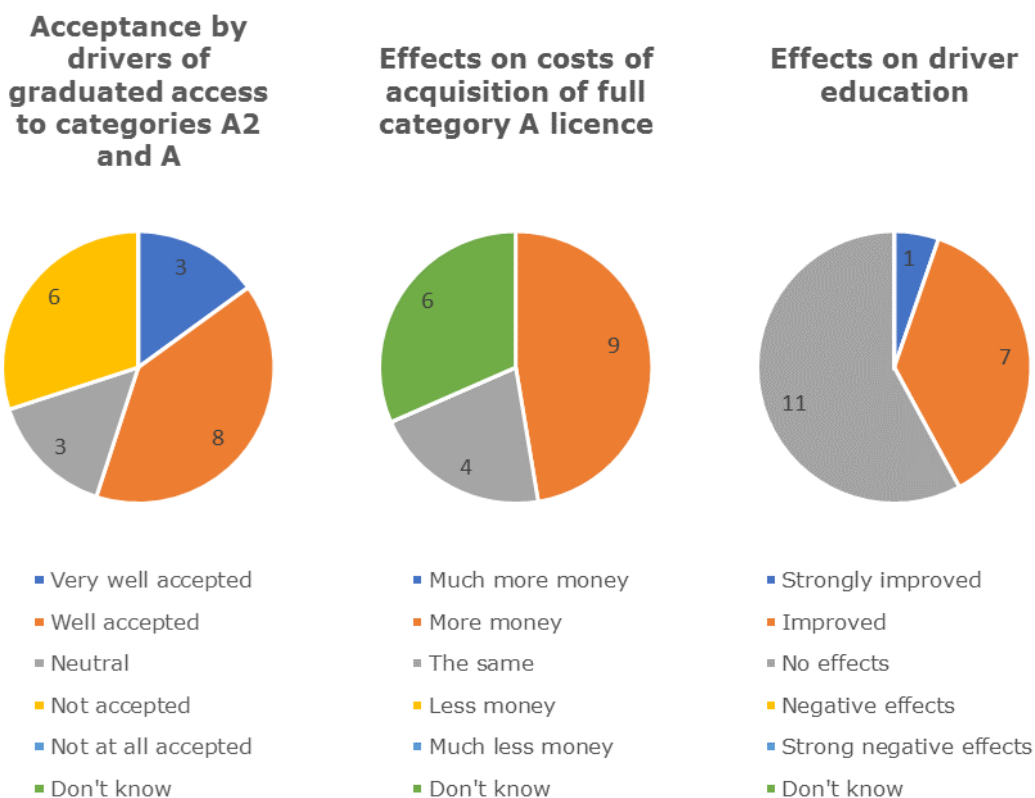


Figure 3: Overview of the effects of the graduate access system

To summarize, it seems that the graduated access system does improve road safety, but graduated access is not attractive to many riders, most likely because it is a lengthy and expensive process. This has also been found by the RIDERSCAN project (Delhaye & Marot, 2015). It can be presumed that keeping riders from riding stronger motorcycles at an age where they are more likely to show risky behaviour improves road safety. However, the system does not seem to encourage riders to acquire more practice on smaller motorcycles before switching to stronger vehicles. They rather seem to wait and go for direct access instead.

Definitions and administrative difficulties

The 3rd DLD also changed the definitions of category A1⁶ and of category A2⁷ (as opposed to the restricted category A licence according to the 2nd DLD).

Most respondents stated that the new definitions are more suitable than before or as suitable. Regarding the new definition of A1, the respondents reasoned that the definition is simple, the power/weight ratio is important in terms of road safety and an appropriate measure for riders with little experience. Regarding the new definition of A2, the respondents stated that the definition is clearer and easier to enforce. It takes into account the specifications of motorcycles on the market and is more suitable for the graduated access. One improvement in both definitions is also that the old definitions needed to be improved, for example the power/weight ratio for electric motorcycles.

Only few reported that the new definitions are less suitable and cause problems. Two Member States criticised the power/weight ratio in the new definition of A1. They stated that it is unnecessarily complicated (power and cc would be sufficient), not obvious for the police carrying out roadside checks and that it is not clear why the threshold is 0,1. Regarding A2, the definition part “not derived from a vehicle of more than double its power” was criticised by five Member States because it causes problems for the licence holder and the police. The fact that motorcycle riders now cannot buy a larger motorcycle and restrict it for the first 2 years was criticised by one Member State. However, restricting a motorcycle is problematic because it may change the handling of the vehicle. Besides, there is the danger of motorcycle riders removing the restriction even though they do not yet hold the required licence. Representatives of the industry are in favour of the new rules.

The respondents from Germany and the United Kingdom brought up the issue that there are problems with the A2 test vehicles as only a limited number of vehicles meet the minimum engine capacity requirement of the Directive (400 cc). The problem seems to exist in Belgium as well.

Seven Member States reported problems when implementing the 3rd DLD or when applying the new rules.

- Germany and Austria stated that changes in the definitions of categories caused severe problems regarding existing rights. The situation becomes extremely complicated even for experts and almost impossible to understand for licence holders.
- The United Kingdom and Austria reported problems with the licence database and IT systems. In the United Kingdom, the changes were costly and staff had to be trained for booking systems and the checking of prior entitlements.
- In the Netherlands, there were problems with a higher number of riders wanting to take the exam due to the changes.

⁶ New definition according to the 3rd Driving Licence Directive: motorcycles with a cylinder capacity not exceeding 125 cubic centimetres, of a power not exceeding 11 kW and with a power/weight ratio not exceeding 0,1 kW/kg.

⁷ New definition according to the 3rd Driving Licence Directive: motorcycles of a power not exceeding 35 kW and with a power/weight ratio not exceeding 0,2 kW/kg and not derived from a vehicle of more than double its power.

Old definition according to the 2nd Driving Licence Directive: motorcycles with a power exceeding 25 kW or a power/weight ratio exceeding 0,16 kW/kg (or motorcycles with sidecars with a power/weight ratio exceeding 0,16 kW/kg).

- Belgium reported that the periods for riders to obtain a new category based on their existing rights varies between Member States which is difficult to communicate to the riders (e.g. the period to exchange a restricted A licence to a full A licence in the new system).

Influence of A1/A2/A on driving licences issued and on the vehicle market

13 Member States provided statistics on the licences issued between 2006 and 2016 (or, alternatively, on the number of tests carried out). Even though the number of Member States and the comparison difficulties allow only a rudimentary analysis, some influence of the 3rd DLD on the number of licences issued can be identified. Most notably, the number of category A licences decreased strongly in some Member States, e.g. by 60 % in Austria since 2007, by 72 % in Finland and Greece, by 46 % in France. In these Member States, 2013 marks the beginning of this development, which can therefore be attributed to the implementation of the 3rd DLD. In France, a strong rise in A2 licences in 2016 combined with a further decrease in A licences can probably be attributed to the fact that direct access to category A was abolished in 2016. The decrease in motorcycle licences was also mentioned in the stakeholders workshop, where some participants raised the issue that the new system seems to discourage young people from acquiring a category A1/A2/A licence. Based on a questionnaire targeting European motorcycle riders, the RIDERSCAN project also came to the conclusion that the cost and length of the licencing scheme encourages young riders to wait till 24 and then acquire an A licence directly (Delhaye & Marot, 2015). However, there are large differences between Member States: in some Member States, no clear trend can be identified. In other Member States the number of A licences actually increased, namely Germany, Lithuania and Malta.

In summary, the statistical data on driving licences indicate that the new graduated system indeed had a substantial influence on the number of licences acquired. An assessment of the development in the EU as a whole was not possible due to the lack of data. Further analysis would require complete and comparable statistics from all EU Member States.

Powered two-wheeler and three-wheeler registrations in EU Member States rose until 2007 and then decreased strongly until 2013 (ACEM, 2015). In 2014, the numbers started to increase again for the first time after the beginning of the economic crisis in 2007, a trend that continued in 2015 and 2016. The rise is due to an increase in motorcycle registrations while moped registrations continue to decline.

It is difficult to identify an influence of the 3rd DLD on the vehicle market because there is a strong impact by the economic crisis. Besides, type-approval rules play a crucial role. According to interviews with representatives of the motorcycle industry and other experts, the number of vehicles in the A2 category (around 300 cc engine displacement) increased strongly in recent years. The European market has a strong focus on scooters, which represent about 75% of the vehicles sold. Most of these fit into the A2 category. Producers now offer a larger product range of medium-sized motorcycles and it seems that more riders continue riding an A2 motorcycle instead of upgrading to larger vehicles. This may be due to the fact that category A2 comprises motorcycles with more power than the old restricted category A.

3.3.2.3 Tricycles

Before the 3rd DLD, tricycles and quadricycles fell into category B1 (B for member states that did not have this category). However, Member States could include tricycles and quadricycles in categories A1 and A. Five Member States included both quadricycles and tricycles in category A, four Member States only tricycles. Now, after

the implementation of the 3rd DLD, tricycles are included in categories A1 and A, but Member States still have the option to include tricycles in category B. Seven member states made use of this option. In none of these Member States there are additional requirements to acquire this right.

The minimum age for driving tricycles with a category A licence is usually 21 years, although in direct access some Member States have a higher minimum age (usually 24). For driving a tricycle with category B, the minimum age is often 18 for tricycles up to 15 kW (21 in some Member States) and always 21 for tricycles above 15 kW.

3.3.2.4 Categories B1, B and BE

Category B1

Category B1 for quadricycles remains the only non-mandatory category in the 3rd DLD. Only seven out of 21 Member States stated that they had category B1 before the 3rd DLD. Two more Member States introduced the category when they implemented the Directive. The minimum age is 16 in most Member States, only the United Kingdom (17) and Cyprus (18) have a higher minimum age. The access requirements are usually the same as for category B.

Member States that did not introduce category B1 argued that the category is not needed and that there is no justification for a costly new exam. In France, the reason for implementing the category was that those wishing to drive heavy quadricycles should be able to do so without passing a category B exam.

When asked for an assessment of the effects of category B1 on road safety and driver education, eight out of the nine Member States where the category exists stated that it has no effects, one (Estonia) stated that it has positive effects. In the United Kingdom, most B1 tests used to be for tricycles, which moved into the A categories. In Slovenia, there was very little interest in this category since it was introduced.

Category B

Category B was not much affected by the 3rd DLD and practically no changes based on the Directive were reported. One interesting aspect, however, is the right to ride category A1 vehicles with a B licence. Out of 23 Member States that replied to this question, 9 Member States allow this by making use of the option provided by Article 6(3)(b) 3rd DLD. Usually this right can be acquired after some years of holding category B. Sometimes there are additional requirements like a training.

Code 96 and category BE

The 3rd DLD introduced the possibility to tow trailers with a maximum weight of 750 kg with a category B licence, provided that the maximum weight of the combination does not exceed 4,250 kg. For this, the licence code 96 must be acquired by completing a test or a training.

Most Member States require a test to acquire code 96. Four Member States require a training only and four Member States require both. In one Member State (Slovakia), the drivers can choose between a training and a test. The training is by far the more popular option there.

In general, code 96 seems to be less popular than a BE licence. While code 96 is well or even very well accepted in five Member States, acceptance is neutral in five Member States and very low in three Member States. There is no clear picture of the influence of code 96 on the number of BE licences. According to the respondents of

the questionnaire, code 96 did not have an influence in most Member States. Licence statistics vary: in some Member States like Austria, Sweden and Slovenia, the number of BE licences decreased from 2013 onwards. In other Member States like Germany, Bulgaria and Slovakia, the numbers actually increased.

The opinion of the respondents on code 96 varies, both in the questionnaire and in the stakeholders workshop. Only a minority of Member States reported positive effects on road safety. These Member States argued that drivers' experience improved or that code 96 offers a training that meets the demands of road safety, but is at the same time more accessible than category BE. One participant stated that people used to tow such trailers illegally before, so code 96 probably improved road safety. However, especially in the stakeholders workshop, most participants had strong negative views on code 96. They stated that it is not well accepted, does not have any practical relevance or purpose and there is little or no demand. One reason for this is that there is hardly any difference between code 96 and category BE, so BE is by far the more popular option. The popularity may depend on the access requirements: if a test is required, there is not much difference between code 96 and a BE licence. One Member State added that the training for a category BE licence was even less than the seven hours required for code 96 and that it was difficult to fill the seven hours with contents. Some participants recommended simply abolishing code 96 as it is not seen as a useful addition to the category system.

The definition of category BE changed to include only trailers or semi-trailers with a maximum authorised mass of 3,500 kg maximum (previously no weight restriction). For trailers with more than 3,500 kg, a category C1 licence is required. Respondents were asked whether the new definition is more or less suitable than before. The majority thinks it is either more suitable (six Member States) or as suitable (six Member States) as before. As a reason, the Member States stated that category C1 is better adapted for trailers above 3,500 kg, that previously category BE was misused because the trailers were too large and heavy for category B drivers and that it is better for road safety. Only two Member States stated that the definition is less suitable than before. The Netherlands reported difficulties in interpreting which vehicles could be driven with B and BE.

When asked for problems regarding the BE category, the respondent from Belgium replied that it is now unclear whether drivers who hold a BE licence since before the 3rd DLD must acquire a CPC (certificate of professional competence) according to Directive 2003/59/EC⁸. The respondent from the Netherlands reported that there is uncertainty regarding a new type of vehicle falling under the category B, where the weight is transferred from the trailer to the vehicle.

3.3.2.5 Categories C1/C1E/C/CE and D1/D1E/D/DE

Before the 3rd DLD, categories C1 and C1+E existed in all but four Member States. In all Member States – except for Croatia which did not have to apply the 2nd DLD –, the minimum age for categories C1 and C1(+)E was 18 before the 3rd DLD and remained the same afterwards. Regarding categories C and CE, there was a greater variation in the minimum age before the 3rd DLD (in some Member States it was 18, in other 21). The 3rd DLD led to a complete harmonisation of the minimum age which is now 21 in

⁸ Directive 2003/59/EC of the European Parliament and of the Council of 15 July 2003 on the initial qualification and periodic training of drivers of certain road vehicles for the carriage of goods or passengers, amending Council Regulation (EEC) No 3820/85 and Council Directive 91/439/EEC and repealing Council Directive 76/914/EE

all Member States. Five Member States have a lower minimum age of 18 for category C for special purposes.

Before the 3rd DLD, categories D1 and D1+E existed in all but six Member States. In all Member States, the minimum age was 21 before the 3rd DLD⁹ and remained the same afterwards. Regarding categories D and DE, the minimum age before the 3rd DLD was 21 in most Member States¹⁰. Now the minimum age is 24 in all Member States. Six Member States have a lower minimum age of 18 for category D for special purposes.

The implementation of the Directive regarding categories C1/C1E and D1/D1E seems to have had a positive influence on driver education and road safety at least in some Member States: three Member States saw positive effects on driver education, four Member States reported positive effects on road safety (two of these Member States did not have categories C1/C1E before, one Member State did not have categories D1/D1E before). Sweden argued that the effects are positive because C1 or D1 are required to drive larger mobile homes. France stated that drivers who do not want to acquire a C or D category or do not have the required minimum age now have the possibility to acquire experience on heavy vehicles which is positive for road safety. No Member State reported negative effects.

In most Member States that provided licence statistics, category D1 is rare. In the Member States that had to introduce the category in 2013, hardly any drivers acquired the category since its implementation (2013-2016): 27 drivers in Austria, 55 drivers in France, 16 in Sweden and 28 in Slovenia. The category seems to have some popularity in Finland, Latvia and Malta. In general, category C1 is more popular, but this varies between Member States: while the category has some popularity in Germany, Finland and Malta, far less or hardly any drivers acquire the category in France or Slovenia.

The changes regarding categories C/CE and D/DE were also deemed to have had some positive influence on driver education and road safety due to the implementation of a higher minimum age. Regarding categories C/CE, three Member States stated that driver education improved, six saw positive effects on road safety. Similarly, four Member States reported that driver education for categories D/DE improved and seven Member States saw positive effects on road safety. No Member State reported negative effects.

The definitions of categories D1 and D1E changed from the 2nd DLD to the 3rd DLD. Regarding category D1, where a max. length of 8 m was included in the definition, four Member States were in favour of the new definition, six were neutral and two stated that it is less suitable. Member States stating that it is less suitable reasoned that the distinction between C1 and D1 is not clear, that the length is difficult to check by the police and that few D1 vehicles are longer than 8 m. One Member State stated that the distinction between categories D1 and D was improved, another reasoned that the technical characteristics of driving depend more on the size than on the number of passengers.

The new definition of category D1E now includes all combinations of vehicles where the tractor vehicle is in category D1 and its trailer has a maximum authorised mass of

⁹ Except for Latvia, where the minimum age for D1E was 22.

¹⁰ Except for Lithuania, where it was 23, and Latvia, where the minimum age for DE was 22.

over 750 kg.¹¹ Three Member States were in favour of the new definition, seven neutral and two against. Two Member States stated that there is no difference because there are very few vehicles of this category exceeding 12 t and no trailers for the transport of persons.

3.3.2.6 National rules outside the scope of the Directive

The 3rd DLD provides possibilities for the Member States to make exceptions from the application of the Directive. Four Member States exclude military vehicles from the application of the Directive. In Germany, armoured vehicles may be driven by holders of a category B driving licence if they have a maximum authorized mass exceeding 3,500 kg but not exceeding 4,100 kg if they are used by the Federal Criminal Police Office or the federal state police forces as vehicles for VIP protection. In Denmark and Greece, power-driven vehicles for disabled persons are excluded.

Some areas of driver licencing are not covered by the Directive and are regulated solely on a national level. National categories usually cover agricultural vehicles and sometimes working machines, trolleybuses or other special vehicles. Germany, Denmark and Sweden have special national permits for two-wheelers that are not covered by the Directive.

Codes modifying licence categories either give the licence holder additional rights like driving A1 vehicles or tricycles with a B licence, driving heavier electric vehicles with a category B licence or driving category C1/C or D1/D vehicles at a younger age in special cases. A frequent example for this is the right to drive buses on domestic line services with a length below 50 km, the exceptions according to Article 4(6) a and b of the 3rd DLD (fire service, public order, road tests) or certain grandfather rights. Other codes restrict the licence. This includes, for example, weight and passenger restrictions or a code for novice drivers.

3.3.2.7 Electromobility and other forms of alternative propulsions

The development of new technologies regarding alternatively fuelled vehicles, advanced driver assistance systems and automated driving raises the question whether the 3rd DLD affects the development in these areas and whether it provides a suitable basis for current and future technologies.

Of the twelve Member States that replied to the question whether the Directive has an influence on the development of new electrically powered vehicles or vehicles with alternative propulsions, six stated that it has a strong or at least some influence, six that it has no influence. The respondents were also asked to assess whether the 3rd DLD provides a suitable basis for electric vehicles or vehicles with alternative propulsions. The results are shown in the chart below.

¹¹ Old definition according to the 2nd DLD: Directive: "Combinations of vehicles where the tractor vehicle is in subcategory D1 and its trailer has a maximum authorized mass of over than 750 kilograms, provided that:

- firstly, the maximum authorized mass of the combination thus formed does not exceed 12,000 kg and the maximum authorized mass of the trailer does not exceed the unladen mass of the tractor vehicle.
- secondly, the trailer is not used for the transport of persons."

Does the Directive provide a suitable basis for the promotion of the following vehicles?

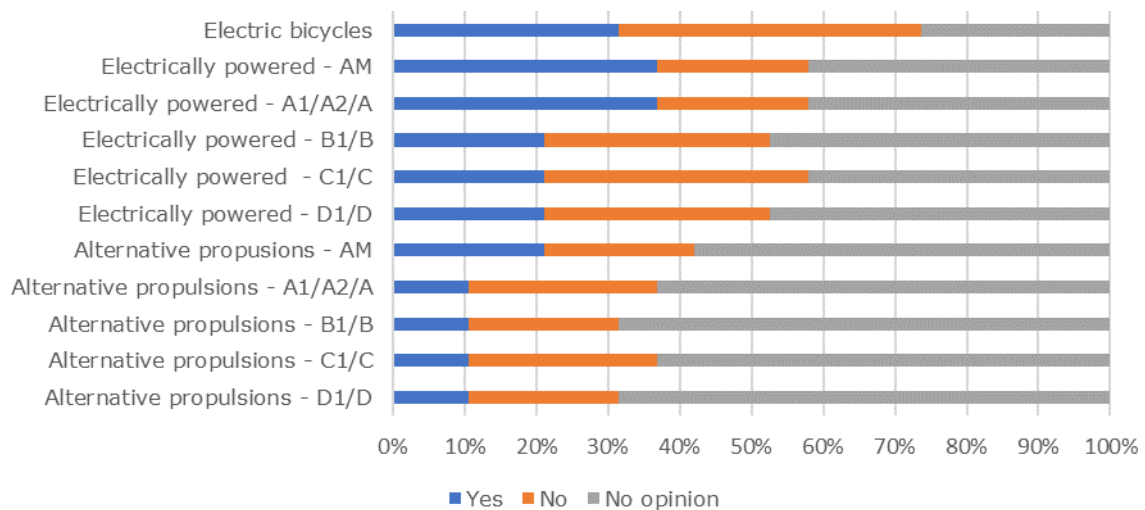


Figure 4: Overview of the results regarding the suitability of the Directive as a basis for electric vehicles or vehicles with alternative propulsions

In general, these results show that many Member States see a need for action regarding electrically powered or other alternatively fuelled vehicles. When asked whether the Directive should be modified regarding electric vehicles and vehicles with alternative propulsion, eight Member States replied that it should. In the stakeholders workshop, the participants mainly stressed the importance of technical developments, namely alternative propulsions and automated driving as well as driver assistance systems. Many considered driver assistance systems, semi-automated and automated driving an important issue for the future development. They asked for a legislation that accepts technological development (truck platooning as an example was mentioned more than once) and stated that the different kinds of vehicles and the changes in the driving task should be taken into account in the category system. But even though new provisions may be needed and several legal problems must be solved, the system should be kept simple (see above).

Several aspects of the 3rd DLD were mentioned that could be changed to provide a better basis for new technologies. On a general level, clear definitions and a careful alignment with the rules on type-approval should be ensured. Most importantly, however, new technologies should become a part of driver education to make sure that new drivers are familiar with them and to promote environment-friendly and safe technologies. Both the driver training and test should therefore include topics like electromobility, alternative fuels and advanced driver assistance systems. At the moment, however, alternatively fuelled vehicles or vehicles with advanced driver assistance systems are rarely used in driver education. An important reason for this is that these vehicles usually have an automatic transmission. If the test is passed on such a vehicle, the licence is therefore restricted to automatic vehicles. This is something that novice drivers tend to avoid. This issue was not only raised by the stakeholders consulted, but also by AVERE, the European Association for Electromobility.

Regarding small electrically powered vehicles, a crucial issue seems to be the large variety of vehicles that range from electric bicycles (sometimes with high power) to Segway's and micro-scooters. At least in some Member States, it seems that there is a

lack of information and awareness of the general public and a lack of enforcement of the existing rules. Currently, electric bicycles with a maximum design speed above 25 km/h require a category AM licence or, depending on the maximum design speed and the maximum continuous rated power, a licence A1/A2/A. The respondents were asked how many riders in their Member States riding such a bicycle hold the correct licence. Only seven countries replied, the answers varied between almost all riders (three Member States), most riders (two Member States) and almost no riders (two Member States). Four Member States – including two who did not give an estimate – added that the public is not well informed. The respondent from another Member State, on the other hand, explained that the electrical bicycle was quite well explained to the public via websites, campaigns, promotion etc. The motorcycle industry is also concerned about the large variety of vehicles, in particular high-power electric bicycles and micro-scooters, which should be either mopeds or even motorcycles, but which are sometimes not treated as such.

The market for electric mopeds, motorcycles and quadricycles is still small, but increasing. In 2016, 1.6 % of motorcycles, mopeds and quadricycles registered were electric vehicles. Of these, 50.5 % were mopeds, 31.9 % were quadricycles, and 15.7% were motorcycles. According to representatives from the industry, there is strong potential for growth in the segment of small powered two-wheelers (mopeds and A1 vehicles). Electric vehicles will probably be most attractive for those using the vehicle for practical transportation, such as delivery services. There is also an increase in the market for tricycles, which can be more easily equipped with a battery than two-wheelers. The potential for stronger motorcycles, often used for recreational purposes, is estimated to be much smaller. In summary, this shows that electric mopeds, motorcycles and tricycles will play a more important role in the future. The industry representatives saw the Directive and the graduated licencing system as a suitable basis for this development and did not suggest any changes.

The market share of electric and hybrid vehicles remains small, with 1.1 % of all registrations in the EU. Even though the 3rd DLD is not a crucial instrument for promoting alternatively-fuelled vehicles, there is one issue that was mentioned by the stakeholders (in addition to the automatic transmission restriction, see above): the weight limit of 3,500 kg for category B sometimes may be an obstacle for electric and other alternatively fuelled vehicles, especially regarding light commercial vehicles. The respondent from the United Kingdom explained that several logistics and freight operators have suggested that the current driver licensing system (which does not take into account the added weight of alternative fuel technology) represents a regulatory barrier to the uptake of cleaner but slightly heavier vehicles. For similar reasons – to include certain vehicles used by post and parcel services in category B – Germany and Austria already introduced an exception: in these Member States, category B is also valid for electric vehicles for the transport of goods of up to 4,250 kg. In Germany, the exception also includes vehicles powered by natural gas or biogas.

3.3.3 Areas for improvement and suggested recommendations

The respondents to the questionnaire, the participants of the stakeholders workshop and the experts interviewed were asked for recommendations to improve the Directive. Their suggestions were collected, summarized and grouped into several topics, leading to six general recommendations that include several sub-recommendations. Results from previous studies were also taken into account (Delhaye & Marot, 2015; Helman et al., 2017). Table 9.1 (Annex 9) provides an overview of the most appropriate policy actions for the proposed recommendations.

1. Keep the category system as well as the licence code system as simple as possible.

- The current system already contains numerous licence categories. Therefore, it was considered important by many participants of the stakeholders workshop to keep the system as simple as possible. The introduction of new categories should be avoided unless strong benefits are found; some participants suggested reducing the number of categories. Technical developments will lead to an increase in the diversity of the vehicles on the market and the role of the driver (e.g. when driving semi-autonomously, for example the middle car or truck in a platoon). However, the legislation will hardly be able to keep up with the pace of technical developments. Therefore, it is important to analyse carefully whether the introduction of a new category based on new technical developments is useful and to avoid fragmentation of the system. The system should be kept simple and flexible to be able to cope with future changes in the vehicle market.
- Code 96 for towing trailers with category B is controversial, with some Member States in favour of abolishing it. Explore further whether code 96 is a successful addition to the category system and has a practical relevance. A possible solution could be to adapt the requirements and increase the practical relevance of the code (in at least one Member State there is a more comprehensive training required for code 96 than there used to be for BE).
- Across the EU, only few drivers seem to acquire category D1. Explore whether category D1 is attractive enough in many Member States to be mandatory.
- Extension instead of restriction: when using codes, explore whether it would be better to extend one category instead of restricting another (e.g. extending category B to tricycles instead of restricting category A by using codes 79.03 and 79.04). This may be easier to understand for road users.
- Explore whether a licence category for agricultural vehicles should be included. Alternatively, mutual recognition for categories that are not regulated at EU level, especially for agricultural vehicles, could be improved (see also below).
- Preserve grandfather rights and additional national entitlements, particularly when there is little or no road safety risk.

2. Explore whether and how the graduated access system for motorcycles could be improved and made more attractive without making it more complicated.

- There are three main issues that were criticised regarding the graduated access system: it is more complex and expensive than the previous system, the costs and efforts implied seem to discourage (young) people from acquiring motorcycle licences in some Member States and graduated access is clearly less popular than direct access. Even though it seems to improve road safety, the system does not seem to encourage riders to acquire more practice on smaller motorcycles before switching to stronger vehicles. Motorcycle riders often seem to be trying to avoid the long and complicated process and go for direct access instead. Since more on-road experience is regarded as crucial for reducing accidents, it should be explored how graduated access could be made more popular. Some stakeholders also suggested going back from the complex three-stage system to a two-stage system. However, the new category A2 seems to lead to the fact that motorcycle riders more often continue using a smaller bike which may have a positive effect on road safety (Delhaye & Marot, 2015).

- High quality training is crucial for safe motorcycling. Some core skills such as risk awareness, self-awareness, personal attitudes, dealing with potential risks such as distraction, peer-pressure and impaired driving are difficult to test. Several studies (Delhayé & Marot, 2015; Helman et al., 2017; OECD/ITF, 2015) have highlighted the importance of training these skills. At the moment, only testing is mandatory while training remains an option. Bearing in mind that some Member States have test-only based systems, it should nevertheless be explored whether the role of mandatory training in the Directive can be strengthened and minimum standards for training can be established. In graduated access, the test may not be an obstacle because the riders are already experienced (Delhayé & Marot, 2015; Helman et al., 2017). On the other hand, the training for graduated access to a higher category may not need to cover all elements of the practical test as the candidate already has experience. It could, for example, instead focus on the high-level skills mentioned above.
- While in favour of more training, the motorcycle industry objects the mandatory application of both test and training that is the case in some Member States.
- The access requirements for the motorcycle categories still vary significantly across the EU especially regarding the minimum ages and the test or training requirement for graduated access. The motorcycle industry suggested further harmonization of these rules.
- One Member State suggested that category A2 could be made more attractive by extending its scope. However, based on the development of A2 motorcycle sales, this may not be necessary because the market for this category is already growing.
- One Member State suggested allowing direct access to category A at 22. However, this is not desirable because a higher minimum age generally has positive effects on road safety (Helman et al., 2017).

3. Remove obstacles to the deployment of electric vehicles, vehicles with alternative propulsions and vehicles with advanced driver assistance systems.

- Ensure clear definitions and a careful alignment with the rules on type-approval.
- New technologies should become a part of driver education to make sure that new drivers are familiar with them and to promote environment-friendly and safe technologies. Both driver training and test should therefore include topics like electromobility, alternative fuels and advanced driver assistance systems. Currently, however, the restriction to automatic vehicles when the test is passed in such a vehicle is an obstacle to the use of alternative-fuelled vehicles and vehicles with advanced driver assistance systems because these vehicles usually have an automatic transmission. Such vehicles are therefore rarely used in driver education. This leads to the problem that new drivers are not educated in vehicles with advanced features. The restriction should therefore be abolished or modified.
- Explore whether the weight limit for category B vehicles could be raised to account for the higher weight of electric vehicles or vehicles with alternative propulsions.
- In some Member States, many riders of small electric vehicles above 25 km/h like e-bikes, Segway's and electro-scooters do not hold the correct licence (AM or A1/A2/A). This seems to be due to a lack of information and awareness and a lack of enforcement. Better information for the general public and increased enforcement of the existing rules could be a solution to this problem. Regarding the question on whether the Directive should be changed to include a licence category for such vehicles, the stakeholders were rather sceptical and did not see a need. One

participant in the workshop though stated that category AM was not designed for pedelecs, so there should be a permit for e-bikes with a speed above 25km/h.

4. Make sure that all definitions are clear and correspond to practical needs and the vehicle market. Re-assess the equivalences between the categories.

There seem to be several definitions and equivalence rules in the 3rd DLD that could be improved. The suggestions by the Member States are listed below.

- Ensure that the categories are well aligned with the rules on type-approval. E.g. change Article 4(3) of the 3rd DLD to correspond with the new type approval Regulation (EU) 168/2013. Since the type approval definitions changed slightly, the 3rd DLD must be adapted.
- Category AM:
 - Explore whether one category (AM) can be suitable for two-, three- and four-wheeled vehicles.
 - Explore whether it has a negative impact on road safety that all licences are valid for AM.
 - Explore whether the maximum speed of 45 km/h for AM vehicles has a negative impact on road safety because these vehicles cannot circulate with the traffic flow and may provoke aggressive behaviour.
- Tricycles: Explore whether the rules on tricycles can be improved, e.g. by a harmonization and re-assessment of age limits or by introducing a separate category, and whether they are better placed in the A categories (3rd DLD) than in categories B1/B (2nd DLD).
- Categories A1/A2/A:
 - Explore whether the regulation to ride A1 vehicles with a B licence still up-to-date and in line with road safety requirements.
 - The category definitions of A1 and A2 sometimes cause problems (power-to-weight ratio for category A1, “not derived from a vehicle of more than double its power” for category A2).
 - Re-define A2 test vehicles to make sure that sufficient A2 vehicles on the market meet the criteria (e.g. by deleting the engine capacity limit or by introducing a lower limit of 245 cc). Explore whether the limit for category A test vehicles of 50 kW is appropriate (until 31 December 2019 vehicles above 40 kW are allowed). In the RIDERSCAN project, one Member State also raised gender issues with women having problems to pass the test on larger vehicles (Delhayé & Marot, 2015).
- Introduce the possibility to tow trailers with category A vehicles (PTW or tricycles) since such combinations are allowed in type approval legislation.
- Explore whether the definitions of code 96 and category BE could be improved to provide more clarity regarding articulated vehicles.
- C and D categories
 - Clarify the definitions of C1/C1E and C/CE as well as categories D1/D1E and D/DE and extend the equivalences between the categories: Distinguish more clearly between categories C1 and D1, e.g. by introducing a passenger limit for category D1. Introduce the following equivalences: Category DE should be valid for C1E (if C1 is held); category CE should be valid for D1E (if D1 is held).

- Explore whether the combination of B tractor vehicles and trailers above 3 500 kg should be removed from category C1.
- Explore whether it should be possible to drive category D vehicles with a category C licence under special circumstances if no passengers are transported.
- Assure that the 3rd DLD is well aligned with Directive 2003/59/EG¹². The rule that the minimum age for the driving licence may only be lowered for professional drivers if they hold a CPC (certificate of professional competence) is problematic because driving licence and CPC must be issued at the same time, leading to contradictions between the Directives.

5. Explore the introduction of additional requirements for obtaining a licence and consider modifications to the test requirements.

- Comprehensive theoretical and practical training is crucial for road safety in all categories. Extended on-road practice has proved to be a lever for reducing novice drivers' accidents. However, training is currently an option for the Member States in all categories. From a road safety perspective, it should therefore be explored if and how the Directive could promote more training, and minimum standards for training could be established. This especially concerns high-level skills such as risk awareness, self-awareness, and dealing with potential risks, and more on-road practice. Some stakeholders mentioned the role of training, but the strongest arguments come from previous studies where the importance of training was shown. To promote more on-road practice through accompanied driving, one Member State suggested allowing a lower minimum age of 16 for category B, at least in the frame of pilot projects on accompanied driving, to allow a longer period of practice (Helman et al., 2017).
- Category AM: Explore whether the introduction of additional requirements like a practical test, a training or a focus on topics that are especially relevant for younger road users are cost-effective measures to further improve road safety, taking into account the additional costs for citizens.
- Explore whether the requirements to obtain a licence should be better aligned between the Member States.
- In the driving test, consider the introduction of or a stronger focus on topics such as hazard perception, distracted driving, driver assistance systems and satellite navigation. Make sure that the test keeps up with changes in the driving task introduced by technical developments such as driver assistance systems and automated driving. The importance of developing the driving test further to include these topics has been confirmed by previous studies (Helman et al., 2017).
- Exclude the test for code 96 and BE from Annex II Point 5.1.2 of the Directive in the same way as the C, CE, D and DE categories are excluded (restriction to automatic vehicles if test is passed in an automatic vehicle).
- Explore whether it is reasonable to require tachograph equipment for category C1E when this has already been checked in previous tests for a higher category or that a driving test for category C1E without tachograph equipment will lead to a restriction (code 97) when the person has one or more higher category without this restriction.

¹² Directive 2003/59/EC of the European Parliament and of the Council of 15 July 2003 on the initial qualification and periodic training of drivers of certain road vehicles for the carriage of goods or passengers, amending Council Regulation (EEC) No 3820/85 and Council Directive 91/439/EEC and repealing Council Directive 76/914/EE

6. Promote better knowledge exchange and mutual recognition between the Member States

- Promote better knowledge exchange on how to interpret the 3rd DLD.
- Consider introducing a database for national categories and codes.
- Improve mutual recognition for categories that are not regulated at EU level, especially for agricultural vehicles.
- Explore whether there is a way that driving licences that were issued under the exemptions specified in the 3rd DLD (e.g. A1 with B, lower minimum age for category C for vehicles with special purposes,) can also be recognized by other Member States which introduced the same exemptions.

7. Other recommendations

- Leave enough time between the implementation in the Member States and the application of new rules. Since there are many options for the Member States, this period is important for the vehicle industry to adjust.
- Validity of category B for vehicles with a maximum authorised mass of more than 3500 kg used by non-commercial bodies for social purposes, provided that the main purpose of the vehicles is to be used only when stationary as an instructional or recreational area (cf. Article 6(4)(b) 3rd DLD): for one Member State, it would be beneficial if the Directive specified what it meant by non-commercial and gave an example in the recitals of driving under these conditions, i.e. for charities and the driver not being paid.
- Explore whether the age limit of 24 for category D leads to a lack of professional drivers in more Member States and whether actions are necessary.
- Monitor the development of licence statistics in the Member States and improve the availability of comparable statistics.

3.4 Standards on driving examiners

3.4.1 Data description

The objective of this application area is firstly the review of the existing standards on driving examiners in Member States in terms of compliance to the 3rd DLD. Afterwards, the effect of their implementation (with focus on road safety) will be analysed in order to identify the possible weaknesses and then recommend appropriate remedial measures. Current standards for driving examiners across Member States were recorded and compared to the minimum standards set in the Annex IV of the 3rd DLD concerning:

- Competences required by a driving examiner including knowledge and understanding of driving and assessment, assessment skills, personal driving skills, quality of service, knowledge about vehicle technique and physics and driving in a fuel efficient and environmentally friendly way
- General conditions including conditions for category B driving examiners, driving examiners for the other categories and equivalences for driving examiners
- Initial qualification including initial training and examinations
- Quality assurance and periodic training

The following analysis is mainly based on:

- The results from the stakeholders questionnaire and workshop;
- Meetings with experts (CIECA Group, International Group, Partners connections).

The results of the review and the questionnaires are synthesized to identify the strengths and weaknesses of the existing conditions concerning the standards for driving examiners. The most appropriate measures will be selected to further improve them and thus, contribute to the improvement of road safety. Future measures will be selected based mainly on the identified effect of the implementation of the 3rd DLD as well as on the feedback of relevant stakeholders and experts obtained through the stakeholders workshop and the on-line questionnaire. The proposed measures will target the achievement of an even better harmonisation of driving examiner standards across Member States and EEA countries and the increase of the positive impact of these standards on road safety.

3.4.2 Overview and assessment of current situation

Before the introduction of the 3rd DLD, there were no specific set standards on the training and education of driving examiners. In fact, they have varied widely throughout the EU. In some EU Member States driving examiners had almost no specific education or did not even hold the driving licence for the category that they were examining. Driving is a task that can seem almost as natural as walking, especially for experienced drivers. It is a task that most of the time experienced drivers execute without significant effort and without much explicit information processing (Mader et al., 2009), however, it is in fact a very complex task that requires a lot of practice (Groeger, 2000). Drivers make decisions and execute tasks that enlarge their safety margin allowing them to take timely evasive actions should the predicted dangerous situations materialise (Groeger, 1999). Thus it is self-evident that instructors need professional support when they acquire these complex skills (Helman et al., 2017).

By synthesizing the outcome of the questionnaire (20 Member States responded in total) and the workshop several interesting findings were extracted. The questions concerned their opinion about what should be added, removed or changed in the several topics of the Annex IV of the 3rd DLD. Then, the questions concerned which specific topic has been implemented in a different way, in which way this specific topic (if any) has been implemented partially or differently, why it has not been implemented or implemented in a different way and, finally, how these competences are assessed and checked in their Member State.

Firstly, overall, Member States agreed that the requirements regarding the driving examiners were different in their Member State, as a total, before the implementation of the 3rd DLD and the implementation of the harmonized rules regarding the driving examiners improved road safety. Competences required by a driving examiner as stated by the Directive are considered sufficient and have been fully implemented. The majority of the participants agreed that the Directive has had a positive impact on road safety so far, but there is need for further improvement as several future trends are entering in our driving lives which the Directive cannot pass by.

The majority of the participants agreed that communication and rhetorical skills seem to be the examiner's weakest point and these skills are some of the most demanding to improve and to achieve a higher level. They also agreed that there is a need for harmonization of the assessment of the competences required by a driving examiner, there is a need for harmonized implementation of driving examination audits, and that a minimum educational level should be established for the driving examiners. Finally, approximately 25% of the participants disagreed with the statements indicating that the current situation and the current state of implementation of the Directive regarding the driving examiners is sufficient.

Summarizing the most pronounced statements extracted from the workshop discussion, the majority of Member States agree that examiners should maintain a high level of driving skills and this can be established by stricter rules and stricter initial qualification competences. Moreover, the periodical training is a question of content and quality, not only of hours. Another important issue is examination anxiety, which is the most pronounced problem of the candidates and examiners should be able to deal with it, using communication and rhetorical skills of high level. Moving on to the statement claiming that there is a need for harmonization of the assessment of the competences required by a driving examiner, it was agreed that there are big differences between the systems in different Member States (e.g. private or state/centralized). The competencies should be uniform, but there must be differences in how they should be monitored. Finally, the Member States should share

best practices. The main results concerning the different sections of the Annex IV of the 3rd DLD are presented below.

Competences required by a driving examiner

Firstly, regarding the knowledge and understanding of driving and assessment competences suggested by the 3rd DLD, 19/20 Member States claimed that these required competences are sufficient. On the contrary, Germany suggests that in addition to the technical and professional knowledge, knowledge of the examination design, test execution and psychological knowledge (test psychology) are required. Regarding the implementation of these competences 19/20 Member States claimed full implementation. Only Belgium indicated that hazard perception is not included in the training of the examiners yet.

Moving on to the assessment skills suggested by the 3rd DLD, 19/20 Member States claimed that these competences required are sufficient. The only different answer was given by Germany suggesting that knowledge for a professional set-up of the examination and for the professional test execution, psychological knowledge of test execution and candidate motivation are critical parameters to be taken into consideration. Regarding the implementation of these competences all Member States claimed full implementation.

Regarding the personal driving skills and quality of service requirements suggested by the 3rd DLD, 19/20 Member States claimed that these required competences are sufficient. The only different answer was given by Germany suggesting that not only one's own competence to drive a vehicle on a consistently high level is important, but this high level must be equal to all inspectors as much as possible and must not depend on their own special interests. It is not only the competences of the individual examiner that have to be examined and checked, but all the test takers must have the same competency profile as possible. Regarding the implementation of these competences 17/20 Member States claimed full implementation. Denmark answered that the period of implementation of the practical training is not yet expired. France answered that all these skills are required and taken into account during French initial training but they are not all evaluated and assessed during continuing education. The continuous training of inspectors focuses on heavy categories and it would be necessary to emphasize continuing training in the light categories. Finally, Slovenia indicated that all driving examiners have a driving licence for the category or categories for which they are authorised to conduct driving tests but after certain time they lose significant part of their skills in the categories they do not drive vehicles regularly. Current amount of periodical training (few hours every year) seems to be insufficient in Slovenia.

Finally, regarding the knowledge about vehicle technique and physics requirements suggested by the Directive 2006/126/EC, 18/20 Member States claimed that these required competences are sufficient. Denmark suggested to take into consideration and include the modern driver assistant systems into the Directive. Germany claimed that not only the expertise is relevant and important, but also the application of this expertise. Regarding the implementation of these competences 17/20 Member States claimed full implementation. Belgium, Denmark, and Slovenia claimed that these competences have been differently implemented in their Member State. More specifically, Belgium claimed that the courses (programs) specifically for category A, C and D are not validated yet by the authorities. Denmark claimed that the period of implementation of some of the practical training is not yet expired. Finally, Slovenia answered that before implementing the education and training programme for new examiners these topics were not a part of the qualification test. Consequently, all examiners do not have knowledge from these topics.

The way these required competences by a driving examiner are assessed and checked varies among Member States and are analytically presented in the Consultation Report (ETSC, 2017).

General conditions

The second part of the questionnaire includes the general conditions required by a driving examiner of all categories by the 3rd DLD. 18/20 Member States consider the requirements suggested by the Directive sufficient. Out of the other two Member States, the Netherlands suggests that the requested level of education results in difficulties with selecting and hiring new examiners, and Portugal suggests that the candidate must undergo a medical evaluation and also psychological evaluation if he intends to evaluate candidates of C and D categories. Only the medical evaluation and also the psychological evaluation, if necessary, should be included. Regarding the implementation of these competences 19/20 Member States claimed full implementation. Norway has moved the age limit for the examiners for category B to 25 years old, because they think it is necessary to be more experienced.

Initial qualification

The third part of the questionnaire includes the initial training and examination requirements proposed by the 3rd DLD. All Member States claimed that they have fully implemented the requirements. The way the initial qualification required by a driving examiner are assessed and checked varies among Member States and are analytically presented in the Consultation Report (ETSC, 2017).

Quality assurance and periodic training

The next part of the questionnaire concerns the quality assurance requirements suggested by the 3rd DLD. 19/20 Member States claimed that these required competences are sufficient. The only different answer was given by Slovenia suggesting that examiners should be observed at least once a year for each category they are conducting driving tests. Regarding the implementation of these competences 17/20 Member States claimed full implementation. Out of the other three Member States, France indicated that the quality component was not put in place until May 2017, which is why the requirements are currently being partially implemented. Slovenia claimed to have differently implemented reaccreditation, but without indicating the way it is different. Portugal claimed that these requirements have not at all been implemented, but they are in the national legislation. The decree-law already published, needs the publication and support of a regulation.

The next part of the questionnaire concerns the periodic training requirements suggested by the 3rd DLD. 19/20 Member States claimed that these required competences are sufficient. The only different answer was given by Slovenia suggesting that an amount of minimum periodic training of at least five days should be increased. Regarding the implementation of these requirements 17/20 Member States claimed full implementation. Out of the other three Member States, France indicated that the overall volume of continuing training is generally satisfactory (5 days per agent) but poorly distributed and additionally, an examiner who has not driven for 24 months is re-evaluated before being able to resume his activity. The last statement stands for Slovenia as well. Portugal claimed that these requirements have not at all been implemented, but they are in the national legislation. The decree-law already published, needs the publication and support of a regulation. The way the quality assurance and periodic training requirements are implemented varies among Member States and are analytically presented in the Consultation Report (ETSC, 2017).

Impact of the implementation of the 3rd DLD regarding driving examiners

The final part of the questionnaire included the opinion of the responders whether they agree that the implementation of the harmonized rules regarding the driving examiners improved road safety. 11/20 Member States agree with that statement and 9/20 expressed no opinion. Then the responders were asked whether they agree that the requirements regarding the driving examiners were different in their Member State, as a total, before the implementation of the 3rd DLD. 8/20 Member States agree with that statement, 3/20 disagree and 9/20 expressed no opinion.

Finally, the responders were asked to add any other relevant information and two Member States answered. Firstly, Austria claimed that the only significant change in the system was in Austria the implementation of Driving Examiner Audits, and Sweden indicated that some of the requirements in the Directive are far too detailed. Function-based (or goal oriented) requirements should be considered for the future. Many of the current requirements are too far-reaching for the Member States, e.g. supervision must be carried out annually and that every examiner must be observed conducting tests every five years. It is better if the Member States themselves can decide which timeframe is appropriate (for instance it can vary between examiners).

3.4.3 Areas for improvement and suggested recommendations

The following areas of improvement and suggested recommendations concerning the standards on driving examiners have been identified based on a synthesis of the results from the questionnaire, expert consultation and stakeholders workshop. This resulted in the formulation of five general recommendations that are subdivided in several sub-recommendations. Table 9.1 (Annex 9) provides an overview of the most appropriate policy actions for the proposed recommendations.

1. Knowledge of modern driver assistant systems by driving examiners and inclusion of (semi-) autonomous driving in the examination procedure

- An issue that was raised by a vast majority of the responders.
- The driving task is rapidly changing due to new technologies (navigation systems, adaptive cruise control, lane keeping systems, inattention warning systems, semi-autonomous driving systems), and safe and adequate use of these systems needs to be learned during basic driver training, and if possible be tested.
- There is need for introducing a digital protocol and modernizing the exam.

2. Psychological knowledge of test execution and candidate motivation by driving examiners

- Member States should foresee that theory test and practical test for driving instructors include testing of knowledge educational methods and the skills to apply these methods.
- The majority of the participants agreed that communication and rhetorical skills seem to be the examiners' weakest point and these skills are some of the most demanding to improve and to achieve a higher level.

3. Stricter higher educational level requirements for driving examiners

- The majority of the participants agreed that "the higher the better" the educational level is, and a lot of Member States are considering to establish an even higher required educational level than the current in their Member State, consequently a stricter educational level seems to be required for driving examiners.

4. Improve harmonised high quality periodic training of driving examiners

- An issue that was raised by a lot of responders.
- It is an issue of content and quality, not only of hours.
- Many Member States, especially in Eastern Europe and Northern Europe, complain about the poor quality of driver training. The few hours of compulsory training per year has not been done in some Member States until now.
- Ensure that any advantage of professional tuition is maximised.
- Strengthen the hazard perception on the training of examiners.

5. Share best practices between Member States regarding training and quality assurance of driving examiners

- A lot of Member States claimed that training and quality assurance should be national-independent and not fully harmonised among EU, because there are differences between EU Member States, but it is essential to share best practices. One Member State can learn from another.

3.5 RESPER

The 3rd DLD establishes an EU network for the exchange of driving licence information, i.e. RESPER (RESeau PERmis de conduire). This network acts as an EU-wide hub for the information exchange between national driving licence issuing authorities. All Member States are obliged to connect to RESPER and use it appropriately. The principal objective of RESPER is to ensure the 'one person one licence principle' by enabling the exchange of information on issued driving licences between Member States. This efficient and secure way of information exchange assists in ensuring that drivers only drive vehicles in categories for which they are qualified and authorised. Additionally, this network also assists in the combat against document fraud as it allows Member States to verify the validity of a driving licence issued by another Member State. Other key objectives of RESPER are the facilitation of the proper functioning and application of all Community driving licence provisions, the facilitation of freedom of movement and to speed up the driving licence issuing and verification process (DG-MOVE, 2016a).

The European Commission recommends the use of RESPER in the following cases (DG-MOVE, 2016a):

- Declaration of lost or stolen driving licence,
- When a citizen changes Member State of residence or studies abroad,
- When a citizen applies for a driving licence after the end of a disqualification period, to ensure a licence has not been obtained elsewhere,
- Professional drivers (C or D licences bearing a code 95),
- In case of the exchange of foreign driving licences.

The following paragraphs will provide an overview of the implementation and status of RESPER in the EU Member States. This will be followed by an assessment focusing on whether the introduction of RESPER contributed to achieving the objectives of the 3rd DLD. Finally, areas for improvement and suggested recommendations are presented.

3.5.1 Data description

Due to the scarcity of relevant literature, the assessment of the implementation of RESPER is primarily based on results obtained from the questionnaires and stakeholders workshop. For RESPER, two types of questionnaires were launched:

- One focusing on the status and implementation of the network by the Member States. This questionnaire was launched by the European Commission – DG-MOVE in 2016 (DG-MOVE, 2016). All Member States responded to this questionnaire with the exception of Croatia, Cyprus, Iceland, Liechtenstein, Norway, Poland and Portugal. This resulted in 24 complete cases (see Table 7.1 in Annex 7). The representatives of the Netherlands and Estonia participated in this questionnaire but did not respond to any question. In order to avoid confusion all tables presenting the results from this questionnaire are provided in Annex 7.
- The second questionnaire was launched by the consortium and focused on the effects of RESPER on the "one person one licence" principle, driving licence tourism, driving licence fraud, administrative burden and costs for national authorities and citizens and future measures for improvement. All Member States responded to this questionnaire with the exception of the Czech Republic, Italy, Poland and Romania. This resulted in 25 complete cases (see Table 8.1 in Annex 8). For Belgium, two different persons answered the questionnaire. Therefore, it is chosen to include both answers in the discussion of the questionnaire results. It should also be noted that Portugal responded to the questionnaire and that they are in the last phase of

implementing RESPER. As a consequence, the results for Portugal are only presented for reasons of completeness because they do not have experience with RESPER yet. For better readability of this report, all tables including results from this questionnaire are provided in Annex 7 of the Annex Report.

Additionally, the results from the questionnaire are enriched with the views of the stakeholders consultation workshop (ETSC, 2017) in which 29 participants represented 16 Member States (see Annex 2 for an overview). Furthermore, where possible the results of the consultation process are completed with the results from three previous evaluation studies focusing on the 3rd DLD (Löytty, 2010), Normal Residence (Löytty, 2012) and Driving Licence Tourism (Löytty, 2011).

The described results need to be interpreted with caution since it can be assumed that the person who filled in the questionnaire or participated in the workshop may not be an expert in the field RESPER. Furthermore, due to the complexity of certain topics, the number of answers does not always reflect that the issue has been fully covered or has been covered in a similar way by the questionnaire or at the workshop. Therefore, the results might provide a distorted perspective. For example, a high share of 'do not know' answers on a certain topic might provide a distorted view. Consequently, it is important to bear in mind the possible bias in these results.

3.5.2 Overview and assessment of current situation

3.5.2.1 Status of the network

Connection to RESPER

The 3rd DLD obliges Member States to connect to RESPER and use it appropriately. The legal basis for the establishment of RESPER is provided in the following Articles (European Parliament and European Council, 2006):

- Article 7 (5) (a) to guaranty that "no person may hold more than one driving licence"
- Article 7 (5) (d) to facilitate the checks "Member States shall use the EU driving licence network (RESPER) once it is operational"
- Article 15 on Mutual Assistance "Member States shall assist one another in the implementation of this Directive and shall exchange information on the licences they have issued, exchanged, replaced, renewed or revoked. They shall use the EU driving licence network set up for these purposes, once this network is operational".

However, the 3rd DLD still leaves room for the Member States regarding the system they can use to connect to the RESPER facilities. Most of the Member States use EUCARIS (the *EU*ropean *CAR* and driving licence *I*nformation *S*ystem) to connect to RESPER (Table 7.2 in Annex 7). The Member States who connect through EUCARIS mostly do so for reasons of convenience since they were already connected to EUCARIS before the introduction of RESPER. The following four Member States are directly connected to RESPER through the central hub: Austria, France, Greece and Spain. Furthermore, RESPER is mostly used by national authorities. RESPER is used by local authorities in France, Germany, Greece and Croatia (Table 8.2 in Annex 8).

Advantages and disadvantages

Member States were asked to indicate the most important advantages and disadvantages of RESPER. The answers indicate that the most important advantage of RESPER lies in the fact that RESPER simplified the administrative processes for checking driving licence validity since it allows for a quick exchange of information between the Member States. The Member States also mention the following disadvantages: RESPER cannot be used for enforcement purposes, information accessed through RESPER is not yet reliable, reasons for invalidity of a driving licence are sometimes unclear, some Member States are still not connected to RESPER and there are Member States who do not respond to messages or requests sent by RESPER. An overview of the detailed answers by Member State is provided in Table 8.2 in Annex 8.

3.5.2.2 Scope of use

Business Common Rules

The document "Common rules concerning the interconnection of national electronic registers on driving licences" describes the business processes which allow Member States to exchange messages, for a variety of driving licence requests, with other Member States in RESPER (DG-MOVE, 2016a).

This section of the questionnaire required the respondents to provide information on their awareness of the Common Rules document, whether they follow the recommendations described in this document, whether the document needs to be reviewed, whether their interface is developed according to the guidelines and if they use the unique identifier when sending messages through RESPER.

Table 7.3 (Annex 7) provides an overview of the Member States' awareness of the Business Common Rules document. 17 of the 24 Member States indicate that they are aware of the Business Common Rules document. Of these 17 Member States, nine Member States indicate that they follow the recommendations described in the Business Common Rules document, seven Member States only partially follow these recommendations while one Member State (United Kingdom) does not follow these recommendations. Additionally, Belgium, Czech Republic, Hungary, Slovakia and Spain state that they are not aware of the existence of the Business Common Rules document.

There is a lot of variation between the Member States with respect to the revision of the Business Common Rules document. The majority of the Member States is unable to indicate whether the Business Common Rules document needs revision. According to six Member States (Austria, Bulgaria, Ireland, Italy, Sweden and the United Kingdom), the document should be revised in order to ensure that each Member State uses the RESPER system and interprets the information in RESPER in a similar manner. At the moment, Member States appear to have a different interpretation and usage of the driving licence statuses listed in RESPER. The document should be revised in order to ensure more uniformity in the use of the different driving licence statuses (Table 7.4 in Annex 7).

13 out of 24 Member States indicate that they have developed the interface of the RESPER system according to the Business Common Rules document. Nine Member States are unable to indicate how the interface of the system is developed while two Member States (Lithuania and the United Kingdom) applied a different approach for the interface development (Table 7.5 in Annex 7).

RESPER service: Search Driving Licence by Name (SDLN)

Through the RESPER Service 'Search Driving Licence by Name' or SDLN, a Member State can search if a Driving Licence has been issued for an applicant by any other Member State(s). This RESPER service is invoked with the driver's name and date of birth details and returns the list of matching drivers with minimal driving licence information. The service can also be used to retrieve minimal details of a lost/stolen driving licence (DG-MOVE, 2016b, 2016a). An overview of the average number of monthly sent SDLN requests through RESPER is provided in Table 7.6 in Annex 7.

The majority of the Member States (15 out of 24) indicates that the SDLN service fulfils their needs. Seven Member States indicate that the service could be improved by obliging Member States to respond to requests, reducing the time out value, minimizing server error and by ensuring a uniform information input (gender, hyphen between the two first names) for every Member State. A detailed overview of the response per Member State is provided in Table 7.7 (Annex 7).

Most Member States also send SDLN requests to several or all Member States at once in case they suspect that the person has more than one licence or an unclear driving licence history (Table 7.8 in Annex 7). A lot of Member States also report issues with other Member States that do not respond to sent SDLN requests. Member States connected through EUCARIS appear to have difficulties with retrieving information from Member States that are connected through the central HUB and often receive a timeout. Spain (connected through the hub) also indicates that they have problems to get a response from the hub to their requests (Table 7.9 in Annex 7).

RESPER service: Get Driving Licence Details (GDLD)

Through the RESPER service 'Get Driving Licence Details' or GDLD, a Member State can request the complete details of an applicant's driving licence from the issuing Member State. This service retrieves the details from the targeted Member State's Driving Licence register and provides a response message with the complete details of the driving licence to the requesting Member State (DG-MOVE, 2016b, 2016a). An overview of the average number of monthly sent GDLD requests through RESPER is provided in Table 7.6 in Annex 7.

The majority of the Member States (18 out of 24) indicates that the GDLD service fulfils their needs. Four Member States indicate that the service could be improved by allowing to search for driving licence details based only on the driving licence number as the licence number is unique in every Member State and by ensuring a uniform information input. According to Finland, some Member States show driving licence information in a different way than the information has been printed on a physical driving licence (e.g. the date of issue can be the date when a right to drive was given, not the date when the physical driving licence was issued. However, the latter date is shown on a driving licence). Additionally, there is a need for common guidelines on how to insert a driving licence number consisting of digits, hyphens and/or spaces. A detailed overview of the response per Member State is provided in Table 7.10 in Annex 7.

Most Member States do not use GDLD requests for other processes than for driving licence exchange (Table 7.11 in Annex 7). Sweden and the Czech Republic report that they also use the GDLD service to check the validity of a driving licence in case the information received from the SDLN request is insufficient.

A lot of Member States also report issues with other Member States that do not respond to sent GDLD requests. Member States connected through EUCARIS appear to

have difficulties with retrieving information from Member States that are connected through the central HUB and often receive a timeout. France also indicates that several Member States do not distinguish between the document number and the administrative/personal number leading to untreatable SDLN and GDLN queries. As a consequence, the query needs to be completed by email. Germany also reports that some Member States expect national characters in the information input. This creates problems in situations when only one character is different as the search then returns no response (Table 7.12 in Annex 7).

RESPER Service: Notify Driving Licence Status (NDLS)

Through the RESPER service 'Notify Driving Licence Status' or NDLS, a Member State can notify the issuing Member State that the status of the driving licence has changed. The notification process is split into two parts. Firstly, a notification is sent to the Member State which issued the licence and this is confirmed with an automatic acknowledgement (sent by the system). Secondly, after the status of the driving licence has been updated in the national system a response message is sent to the notifying Member State and this is also confirmed with an automatic acknowledgement (DG-MOVE, 2016b, 2016a). An overview of the average number of monthly sent and received NDLS requests through RESPER is provided in Table 7.6 in Annex 7.

Eleven out of 24 Member States indicate that the NDLS service fulfils their needs. Eight Member States are unable to indicate whether the service is sufficient. Again, four Member States indicate that the consistency of the service could be improved by ensuring an uniform use of the service by each Member States. Furthermore Luxembourg adds that the provided possibilities to respond are quite limited and that Member States should be able to provide more detailed feedback. A detailed overview of the response per Member State is provided in Table 7.13 in Annex 7.

There is a lot of variation between the Member States regarding the occurrence of issues with other Member States that do not respond to sent NDLS requests. The majority of the Member States is not able to indicate whether there are problems while seven Member States do report issues (Table 7.14 in Annex 7). France reports that some Member States (mostly using EUCARIS) do not comply with the latest version of the .xml messaging guide and the business process guide (in exchange / exchanged) specifications. Furthermore, Greece indicates that some Member States do not reply to NDLS requests, either due to technical issues or because they have implemented RESPER in such a way so as they do not need a NDLS request when exchanging foreign driving licences. Finally, Hungary reports that it is unnecessary to send a notification in every case, especially when the licence is valid. In that case, the licence can be exchanged without any notifications since the status of the licence is not altered until the exchanged licences are received by post.

RESPER Service: Secure Message

The Secure message service of RESPER can be used by Member States to follow-up on previous requests sent to other Member States. Additionally, the service can also be used to send secure messages to another Member State for any type of communication (DG-MOVE, 2016b, 2016a). An overview of the average number of monthly sent and received secure messages through RESPER is provided in Table 7.6 in Annex 7 of the Annex Report.

Most Member States (17 out of 24) have implemented the secure messages service in their system and twelve of the Member States that have implemented this service also use it to communicate with other Member States (Table 7.15 in Annex 7). Greece and

Denmark report that they partly use the service because it is not yet fully implemented. At the moment, they are mainly focusing on answering received messages. Finland reports that they use email to communicate with other Member States because they did not receive response when sending secure messages. Finally, 15 (out of 24) Member States also indicate that they respond to secure messages made by other Member States. Luxembourg does not reply because they were not aware that they had access to this service and the United Kingdom does not reply for security reasons (awaiting EUCARIS update).

Eleven out of 24 Member States indicate that the secure messages service fulfils their needs. The Member States that indicate that the service does not correspond to their needs mention that not all Member States use the service and that it would be beneficial if every Member State used the service. A detailed overview of the response per Member State is provided in Table 7.16 in Annex 7).

There is a lot of variation between the Member States regarding the occurrence of issues with other Member States that do not respond to sent secured messages. The majority of the Member States is not able to indicate whether there are problems while six Member States do report issues (Table 7.17 in Annex 7). Again these issues are related to the fact that not all Member States use the service.

RESPER Driving Licences status and additional status

Driving licences can have two different statuses in RESPER: Valid and Invalid. The validity is related to the fact that the driving licence in question can be exchanged (Valid) or not (Invalid). In case a driving licence is Invalid, additional statuses are used to indicate the specific reason for invalidity (DG-MOVE, 2016b, 2016a).

Table 12: Overview of driving licence status and additional status in RESPER (DG-MOVE, 2016b, 2016a)

Status	Additional status code	Additional status name
Valid	-	-
Invalid	0	Cancelled
Invalid	1	Suspended
Invalid	2	Withdrawn
Invalid	3	Disqualified
Invalid	4	Expired
Invalid	5	Confiscated
Invalid	6	Stolen
Invalid	7	Lost
Invalid	8	In Exchange
Invalid	9	Exchanged

Fifteen out of 24 Member States indicate that they use the driving licence status and additional status combination described in Table 12. A detailed overview of the response per Member State is provided in Table 7.18 in Annex 7.

3.5.2.3 Effects of RESPER on 'one person one licence' principle

Table 8.3 (Annex 8) provides an overview of the effects of RESPER on the 'one person one licence' principle. Most Member States indicate that RESPER facilitated the application of the 'one person one licence' principle. The main motivation for this is that RESPER allows for a swift and simultaneous check of the driving licence information of one person in all European Member States. As a consequence, RESPER has made it easier to detect if one person has more than one driving licence. Only Luxembourg indicated that RESPER had no effect on the facilitation of this principle since RESPER has not changed their procedure to check driving licence information. In

the stakeholders workshop, most participants confirmed these positive effects. However, there is room for improvement since most Member States mostly use RESPER to check for licences presented for exchange and not for the first issuing of driving licences or check for all Member States. Additionally, identity fraud is not prevented by RESPER as Member States do not exchange the image of the driving licence holder stored in the driving licence registers. Finally, some Member States do not always appear to respond to requests and this non-response entails implications for the facilitation of 'the one person one licence' principle and combat against driving licence fraud and tourism.

3.5.2.4 Effects of RESPER on driving licence fraud

A detailed overview of the influence of RESPER on the combat against driving licence fraud can be found in Table 8.4 (Annex 8). Most Member States state that RESPER facilitated the combat against driving licence fraud in their Member State because RESPER is much more efficient and faster to check the authenticity of a driving licence. Germany even indicates that the number of detected fraudulent driving licences has doubled since they are connected to RESPER. Two Member States indicated that there is no effect on the combat against driving licence fraud. Luxemburg again mentions that RESPER has not changed their procedure to check driving licence information while Sweden argues that they already had a routine in place to always check the validity of a driving licence with the issuing authority.

Member States were also asked if RESPER facilitated the combat against driving licence fraud in the following situations (see Table 8.5 in Annex 8):

- Requests for obtaining a driving licence for vehicle categories for which drivers are not qualified and/or authorised to drive,
- Requests of drivers holding a licence issued in another Member State than the one where s/he is currently having her/his normal residence that is not valid (anymore).

Most Member States indicate that RESPER facilitated the combat against driving licence fraud (in the situations listed above). Additionally, the results in Table 8.6 (Annex 8) also indicate that RESPER has contributed to the update and verification of driving licence information. However, according to seven Member States, RESPER had no effect on the update of driving licence information. For instance, Belgium argues that the information on Belgian licences is not updated via RESPER. Finland also states that in case of driving licence exchange only the status of the previous driving licence is updated while the information of the issued foreign driving licence is not recorded.

Procedure to check driving licence fraud

Member States were also asked to shortly describe the procedure that they use to check the validity of an applicants' request in case of first issuing, renewal, exchange and replacement of lost/stolen driving licences for both before and after the introduction of RESPER. Tables 8.7 and 8.8 (Annex 8) provide a detailed overview of the procedures that each Member State uses. Before the introduction of RESPER, Member States contacted each other mostly by e-mail, phone or letter and the applicant had to provide additional driving licence information. After the introduction of RESPER, the majority of the checks occur through RESPER and only in case of suspicion is the issuing authority contacted to verify the driving licence information.

3.5.2.5 Effects of RESPER on freedom of movement

As indicated in Table 8.9 (Annex 8), about half of the Member States agree that RESPER facilitated the freedom of movement for EU citizens because the administrative simplification entailed by RESPER allows a more swift exchange or

replacement of EU driving licences. However, two Member States indicate that RESPER did not facilitate freedom of movement since freedom of movement was already guaranteed by law before the introduction of RESPER. Six Member States state that they do not know whether RESPER facilitated freedom of movement. Approximately, half of the Member States also state that RESPER facilitated freedom of movement when drivers from other EU Member States move to their Member State and when citizens from their Member State move to another EU Member State. The vast majority of the Member States does not know whether RESPER will further facilitate freedom of movement in the future. The uncertainty regarding the effects of RESPER on the facilitation of freedom of movement is also raised by the participants of the stakeholders workshop. On the one hand, RESPER facilitated freedom of movement by simplifying the driving licence renewal check and replacement of lost driving licences. On the other hand, the establishment of normal residence still remains a big issue in the facilitation of freedom of movement, despite the introduction of RESPER.

3.5.2.6 Effects of RESPER on administrative burden and costs for national authorities

Administrative burden

The effects of introducing RESPER on the administrative burden for national authorities was assessed by the Member States in the case of first issuing, renewal, exchange and replacement of driving licences and in terms of reporting confiscated driving licences (Table 8.10 in Annex 8).

There is a lot of variation between the Member States. Approximately half of the Member States state that the introduction of RESPER has reduced the administrative burden for national authorities in case of driving licence exchange and renewal. In case of first issuing, replacement and reporting of confiscated driving licences, about one third of the Member States indicate that RESPER had no effect on the administrative burden. However, for these cases one third of the Member States also indicate that RESPER reduced the administrative burden. Five Member States do not know the effect of RESPER on the administrative burden. The participants of the stakeholders workshop shared a more positive view. They stated that RESPER had a positive effect on reducing administrative burden for national authorities since it is much easier and faster to exchange information between Member States and check the authenticity of driving licences. Additionally, RESPER also reduces the paperwork. However, it is also reported that it remains a problem that a lot of Member States do not react to requests from other Member States.

Costs

The effects of RESPER on the costs for national authorities was assessed by the Member States in the case of first issuing, renewal, exchange and replacement of driving licences and in terms of reporting confiscated driving licences (Table 8.11 in Annex 8).

Ten Member States indicate that RESPER had no effect on the costs in case of first issuing, replacement and reporting of confiscated driving licences. Additionally, nine Member States reported a cost reduction for the renewal and exchange of driving licences. Five Member States do not know the effect of RESPER on the costs. As shown in Table 8.12 (Annex 8), most Member States are unable to indicate how much they had to pay to connect to and use RESPER. The Member States that connect to RESPER through EUCARIS indicated that the costs did not decrease since RESPER runs on an expensive data infrastructure and is regarded as a duplicate of EUCARIS. In that respect, they believe that they have to pay twice for the same tool because they have

to pay a yearly connection fee to EUCARIS and an additional cost to use the RESPER facilities.

3.5.2.7 Effects of RESPER on administrative burden and costs for citizens

Administrative burden

The effects of introducing RESPER on the administrative burden for citizens was assessed by the Member States in the case of first issuing, renewal, exchange and replacement of driving licences and in terms of reporting confiscated driving licences (Table 8.13 in Annex 8).

Approximately half of the Member States state that the introduction of RESPER has no effect on the administrative burden for citizens in case of first issuing, renewal, exchange, replacement and reporting of confiscated driving licences. In case of first issuing, replacement and reporting of confiscated driving licences, about one third of the Member States indicate that RESPER had no effect on the administrative burden. Twelve Member States report that RESPER lead to a reduction of the administrative burden in case of driving licence exchange and renewal. In case of first issuing, reporting and replacement only five Member States indicate a reduction. The effects on administrative burdens for citizens are also assessed by enquiring if the citizens still need to provide information that is not enclosed in RESPER. The detailed results are provided in Table 8.14 (Annex 8). As is apparent from the table, eleven Member States still request information from citizens which cannot be accessed through RESPER. This is mostly the case when applying for driving licence renewal, exchange and replacement. This additional information is mostly evidence regarding normal residence, proof of identity, information about medical condition and the physical driving licence. The participants of the stakeholders workshop confirm that RESPER did not reduce the administrative burden for citizens. It is stated that in some cases citizens still need to provide information such as the physical confirmation of driver CPC entitlements, information on normal residence, information concerning the right to drive etc. Additionally, it is indicated that the information accessed through RESPER is not always dependable, due to different views on equivalences between old and current driving licence categories (grandfather rights). In such a case the citizen also still needs to provide additional information.

Costs

The effects of RESPER on the costs for citizens was assessed by the Member States in the case of first issuing, renewal, exchange and replacement of driving licences and in terms of reporting confiscated driving licences. As shown in Table 8.15 (Annex 8 of the Annex Report), there is a lot of consensus between the Member States as the vast majority (14 out of 24 Member States) reports that RESPER had no effect on the costs in case of first issuing, renewal, exchange and replacement of driving licences and in terms of reporting confiscated driving licences.

3.5.3 Areas for improvement and suggested recommendations

The following areas of improvement and suggested recommendations concerning RESPER have been identified based on a synthesis of the results from the questionnaire and stakeholders workshop. Results from previous evaluation studies have also been taken into account. This resulted in the formulation of five general recommendations that are subdivided in several sub-recommendations. Table 9.1 (Annex 9) provides an overview of the most appropriate policy actions for the proposed recommendations.

1. Improve the technical issues of RESPER.

- RESPER suffers from server errors from time to time. Unfortunately, the results of the questionnaire did not allow to specify the nature of these problems (connection or application/use problem) and whether the problem is related to the HUB server or the servers of the Member States. As a first step, the European Commission should encourage more research into this area in order to establish the nature of these technical issues and to identify which technical aspects need to be improved. If these problems can be assigned to the way that some Member States have developed their interface to RESPER, then the Member States themselves need to undertake action to remedy these issues.
- Member States should explore possibilities to develop a user-friendly software interface.
- Explore possibilities to reduce the response time.

2. Strengthen the use and extend the functionality of RESPER.

- Encourage that every Member State is connected to RESPER.
- Encourage Member States to use secure messages and respond to them in order to decrease uncertainties and delays in the information exchange process.
- Monitor that Member States respond to sent requests.
- Encourage Member States to also use RESPER to check licences presented for all procedures and not only for exchange in order to facilitate the one person one licence principle.
- It should be able to rely exclusively on the data accessed through RESPER. The information accessed through RESPER should be reliable, accurate and up-to-date.
- Exchange information on normal residence through RESPER.
- Exchange information about vehicle insurance through RESPER.
- Exchange information about drivers' medical conditions through RESPER.
- Exchange more detailed information regarding the authenticity and (in)validity of the different driving categories a person holds through RESPER. The reason for restrictions to driving licences (e.g. alcohol - per mil, drugs) and conditions for renewal of a driving licence (e.g. medical or psychological examinations or tests) should be included in the exchanged information.
- Use RESPER to exchange information for enforcement purposes. Most Member States (16) indicate that RESPER should also be used for enforcement purposes in the future and that enforcers should have access to RESPER. In order to make this possible, Member States indicate that the following information should also be able to be accessed through RESPER:
 - Information on driving bans and penalty points;

- Disqualification information (reasons for driving licence restrictions) and conditions for renewal of a driving licence (e.g. medical or psychological examinations or tests).
 - Digital photo of the driving licence holder in order to prevent identity fraud (Löytty, 2011).
 - Information concerning the authenticity and (in)validity of the different driving licence categories a person holds.
- Explore opportunities to use RESPER for the exchange of driving licence information on 3rd country driving licences. Include a list of third countries whose driving licences can be exchanged without theoretical and/or practical test for all participating countries.
 - Use RESPER to exchange information on professional drivers' training (CPC). Most Member States (14) state that RESPER should be used to exchange information on professional drivers' training. In order to make this possible, information exchange concerning the initial qualification and periodic training of these drivers should be made available through RESPER.
 - Explore the opportunities of combining information exchange through RESPER with other fields of legislation, ERRU, TACHOnet, tax system, the population register and others.
 - Explore opportunities to use RESPER for the exchange of driving licence information as an addition for physical driving licences. Member States are divided on this question. Some Member States (7) indicate that RESPER can already be used to confirm entitlement to drive in case of a lost/stolen driving licence. In such a case, the information accessed through RESPER could also be used directly instead of replacing the driving licence, thus no document would need to be issued. Member States (7) who are opposed to this measure argue that the physical driving licence is an official document and should always be issued. Consequently, RESPER could only be used to exchange driving licence information as an addition for physical driving licences if a photo of every driving licence holder is included in the information exchange through RESPER in order to confirm the identity. Furthermore, in case RESPER is temporally unavailable due to server or network errors, it would be still desirable to have the physical driving licence. In that respect, RESPER could be used as an addition to physical driving licences and not as an alternative to exchange driving licence information.

3. Encourage Member States to follow the recommendations presented in the Business Common Rules document in order to ensure a uniform information exchange through RESPER.

- Create Member States' awareness concerning the existence of the Business Common Rules Document.
- Monitor that Member States follow the recommendations described in the Business Common Rules document.

4. Explore opportunities to further lower administrative burden and costs for national authorities.

- The costs did not decrease for Member States connecting to REPSEr through EUCARIS since they have to pay a yearly connection fee to EUCARIS and an additional cost to use the RESPER facilities.

- RESPER had a positive effect on reducing administrative burden for national authorities since it is much easier and faster to exchange information between Member States and check the authenticity of driving licences. However, it remains a problem that a lot of Member States do not react to requests from other Member States.

5. Explore opportunities to lower the administrative burden and costs for citizens.

- RESPER did not appear to reduce the administrative burden and cost for citizens since in some cases citizens still need to provide information that is not accessible via RESPER.

4 Synthesis and concrete actions

The 3rd DLD provides harmonised EU wide rules on driving licences with the objective to facilitate greater freedom of movement to EU drivers, reduce the possibility of driving licence fraud and improve road safety in Europe. All Member States have transposed the 3rd DLD into national law. In order to accomplish this objective, the Directive introduced the following novelties: the New Union Model Licence, harmonised administrative validity periods, modifications of driving licence categories (including new categories and changes to existing categories), harmonised rules on driving examiners and the EU driving licence network (RESPER).

In light of these changes, this study sought to provide an overview of the implementation of the Directive in the Member States and in particular to assess whether the introduced novelties contribute to achieving the objectives of the Directive. It also attempted to identify important policy recommendations that should be addressed in order to further accomplish the main objectives of the Directive and to support the overall effort to establish a common transport policy in Europe.

On this basis, the following synthesis highlights the main findings regarding the impact of the novelties introduced by the Directive (section 4.1) and the most important policy recommendations (section 4.2).

4.1 Effect of the novelties introduced by the Directive

4.1.1 Union Model Licence

Concerning the **organisational issues of the licencing systems** and changes the New Union Model Licence brought about, the feedback given in the questionnaire was very good. The general assessment was very positive; the New Model was considered more practical, durable, resistive, more convenient in terms of use and it facilitates a greater freedom of movement for licence holders by improving the transnational acceptance of the driving licences as what it is as well as an ID for other purposes. Beyond that, the questionnaire tried to pin the changes to particular issues that may indicate positive or negative development. The questionnaire asked for parameters like costs, durations as well as organisational and technical features of the process.

It appears that in particular in those Member States where credit card licences were already used prior to the implementation of the New Union Model Licence, hardly anything was changed. Nevertheless, some Member States took the occasion and moved towards a modern, paperless, customer-friendly setup of the administrative part of the licencing process. Modern technology was implemented like digital cameras at the application site and signature pads.

The exchanging of information between the stakeholders was subjected to a major transformation towards more digital traffic. The **issuing of the licences** got faster to a certain extent (considering issuing of provisional licences and discounting the production time for credit cards).

The **costs** for the citizen slightly increased, but at the same time, some administrative burden was taken from the citizen (e.g. application via internet instead of personal appearance). For the authorities, there are indications that the change has made administration less complicated, mainly by use of digital tools. This is a necessary condition for being able to issue modern credit card licences.

The New Union Model Driving Licence is also considered to be **more secure** and more promising in terms of additional applications. Its best feature, according to the questionnaire, is its resistance against fraud and the contribution to reduce driving licence falsification. However, there were some concerns in terms of data protection.

On average, the **optional safety features** determined by the 3rd DLD are already implemented in about half of the Member States. The microchip is hardly ever implemented, the Member States do not perceive relevant advantages compared to the efforts of implementing the microchip.

Official quantitative information on all kinds of licences fraud is not available. However, it seems that the credit card is very difficult to forge and falsified licences can be detected very accurately. According to the experts' feedback, people rather try to run through an official (legal) licencing process using an illegal ID than trying to produce false licence cards. Licence use by other (look-alike) persons than the owner is an issue as well.

Member States are quite positive about **modern technologies** for the driving licence, non-physical licences seem to be the logical alternative to the current system. According to the stakeholders feedback, quick action is required to set up a common European technical standard, take care of internal (European) and external (global) interoperability and respectively address all issues of data security and data protection.

4.1.2 Harmonised administrative validity periods and medical checks

The Directive introduced **harmonised administrative validity periods** for driving licences (from 10 to 15 years, depending on the Member State, for driving licences of category A-B and five years for driving licences of category C-D). The results revealed that most Member States chose to adopt a validity period of ten years. Only nine Member States (Austria, Cyprus, Germany, Denmark, Finland, France, Greece, Poland, Slovakia) have adopted an administrative validity period of 15 years for driving licence category A-B. The main motivation for adopting the chosen validity period was to reduce the administrative burden for citizens and national authorities since most Member States choose to link the renewal period of the driving licence with the renewal of identification documents or medical check certificates (if implemented in the Member State).

The effects of the introduction of harmonised administrative validity periods on **freedom of movement** of citizens are unclear. From an international perspective, this harmonisation seems to increase freedom of movement because it becomes easier to obtain a driving licence in another Member State. It is also argued that this harmonisation is more important for fraud than for freedom of movement. Additionally, several Member States also mentioned problems regarding the mutual recognition of driving licences as some Member States do not apply Decision (EU) 2016/1945¹³ or RESPER and ask the citizen to provide documentation that their driving licence is legitimate. Furthermore, the indistinct interpretation regarding the establishment of **normal residence** and the lack of common procedures to check normal residence also further restrict freedom of movement.

From a national perspective, it is argued that the shorter validity periods make obtaining a driving licence more expensive for the citizen and increase the administrative burden. This is especially the case in Member States who had paper

¹³ Commission Decision (EU) 2016/1945 of 14 October 2016 on equivalences between categories of driving licences

driving licences with unlimited validity periods before the Directive. After the implementation of the Directive, the citizens residing in these Member States are confronted with **increased costs** (for example for the photo card) **and administrative burden** every time they need to renew their licence (every 10 or 15 years). In contrast, the workshop participants mentioned that it is not the harmonised validity periods but the limited validity of a driving licence (i.e. in case of lifelong driving licence validity before Directive) that increased the burden and costs for citizens. Finally, it is stated that the harmonised administrative validity periods did not facilitate freedom of movement since there are still different validity periods (Member States can choose for a validity of 10 or 15 years).

Summarizing the synthesis of the questionnaire, the workshop, the literature review and the meeting with national experts regarding the medical checks upon driving licence renewal, 92% of the Member States have implemented the **minimum standards of physical and mental fitness for driving**, as stipulated in Annex III of the 3rd DLD. Denmark and Finland have implemented even stricter requirements. Moreover, 60% of the Member States consider the minimum standards of physical and mental fitness for driving of the Directive sufficient. On the contrary, Belgium, France, Germany, Slovakia, Sweden and United Kingdom suggested that there are topics which need improvement. The majority of the suggestions for revision concerned standards on Obstructive Sleep Apnoea Syndrome (Annex III Section 11.2), Alcohol (Annex III Section 14) and Drugs and Medicinal Products (Annex III Section 15).

Overall, regarding medical checks, almost all Member States have implemented **medical checks for categories C-D upon driving licence renewal** according to the minimum requirements of the 3rd DLD. Applicants for these categories evidence that they comply with the medical standards stipulated in the Directive. 84% of the Member States undergo medical examination. Czech Republic follows a continuous monitoring of medical condition of applicants/drivers, Lithuania follows both self-declaration and medical examination (to some extent), same as Sweden and the United Kingdom which have both self-declaration before the age of 45 and after 45 they must undergo medical examination.

The requirement of **medical examinations for categories A-B upon renewal** seem to split the Member States, as they are not mandatory. Some Member States claim that there is no need for medical tests, or there is need for just a medical certificate at the age of 70, or if a person suffers from any medical condition which requires additional assessment. The main reasons why they chose not to implement medical examinations upon renewal are: administrative and financial burden for citizens, because it is considered preferable to devote the available resources to the priority medical controls, because there is no scientific evidence that such examinations improve traffic safety. The impact on road safety seems controversial as the medical checks are optional and the effect is small, some Member States had implemented medical checks for these categories before the 3rd DLD. The Member States agree that it is not a matter of age, but of medical condition and of the individualised screening method. There seems to be need for research on predictive/valid screening procedures.

4.1.3 Modification of driving licence categories

The **new category AM** had to be introduced in all Member States. The fact that there is now a harmonized category was seen positive by the respondents of the questionnaire. Member States make use of the large possible span of 14 to 18 years provided by the Directive, making AM the category with the largest variation in minimum age requirements. Overall, category AM also seems to have improved road safety because many Member States introduced additional requirements for obtaining

a moped licence. However, in many Member States acquiring a licence also became more expensive.

The **graduated access system for motorcycles** was one of the largest changes in the 3rd DLD. All Member States had to adapt their systems to implement the new rules. The options provided by the Directive led to a large variation in the access requirements, and to a lesser extent also regarding the minimum age.

Representatives of many Member States believe the new system has **improved road safety and driver education**. However, acceptance among drivers seems to be low: in most Member States, direct access is more or even much more popular than graduated access. The system as a whole also has an effect on the driving licences issued. Most notably, the number of category A licences decreased strongly in some Member States. Influences on the vehicle market are hard to determine, but one trend that can be identified is that the number of A2 vehicles sold is strongly increasing.

There are **three main issues** that were criticised regarding the **graduated access system**: it is more complex and expensive than the previous system, the costs and efforts implied seem to discourage (young) people from acquiring motorcycle licences in some Member States, and graduated access is clearly less popular than direct access. Motorcycle riders seem to be trying to avoid the long and complicated process and go for direct access instead. This is still a safety benefit since they do not ride at an age where they are more likely to show risky behaviour. Another benefit is that motorcycle riders more often seem to continue using a smaller bike which is shown by the increase of A2 vehicles in the market. However, the system does not seem to strongly encourage riders to gain experience on smaller motorcycles before upgrading to stronger ones.

The main change in the B category was the **introduction of code 96** for trailers. Most Member States require a test to acquire code 96. Opinions about the introduction of code 96 vary: in general, it seems to be less popular than category BE (in some Member States to an extent that they questioned the code's practical relevance), but the popularity may depend on the access requirements. If a test is required, there is not much difference between code 96 and a BE licence.

The main changes regarding the C1/C/C1E/CE and D1/D/D1E/DE categories were the mandatory inclusion of C1/C1E and D1/D1E and higher minimum ages. Especially category D1 seems to have little practical relevance in most Member States. The higher minimum age was generally viewed as positive because it improves road safety.

Some Member States reported **practical problems with the definitions of various categories**. In general, the results of the study regarding electrically powered or other alternatively fuelled vehicles show that many Member States see a need for action in the Directive. Several aspects of the 3rd DLD were mentioned that could be changed to provide a better basis for new technologies, ranging from modifications to the test to the abolishment or modification of the restriction to automatic vehicles (if the test is passed on such a vehicle) and a higher weight limit for category B.

4.1.4 Driving examiners

Summarizing the synthesis of the questionnaire, the workshop, the literature review and the meeting with national experts regarding the analysis of the **standards on driving examiners**, several significant results were extracted. Overall, Member States claim that the requirements regarding the driving examiners were different in their Member State, as a total, before the implementation of the 3rd DLD and the

implementation of the harmonized rules regarding the driving examiners had a positive impact on road safety so far, but there is need for further improvement as several future trends are entering in our driving lives which the Directive cannot pass by.

Firstly, regarding the **knowledge and understanding of driving and assessment competences** suggested by the 3rd DLD, all Member States claimed that these required competences are sufficient, except for Germany suggesting that in addition to the technical and professional knowledge, knowledge of the examination design, test execution and psychological knowledge (test psychology) are required. Regarding the implementation of these competences all Member States claimed full implementation except for Belgium indicating that hazard perception is not included in the training of the examiners yet.

In France **personal driving skills and quality of service requirements** suggested by the 3rd DLD are required and taken into account during French initial training but they are not all evaluated and assessed during continuing education. The continuous training of inspectors focuses on heavy categories and it would be necessary to emphasize continuing training in the light categories. Slovenia indicated that all driving examiners have a driving licence for the category or categories for which they are authorised to conduct driving tests but after certain time they lose significant part of their skills in the categories they do not drive vehicles regularly. Current amount of periodical training (few hours every year) seems to be insufficient in Slovenia.

Regarding the **knowledge about vehicle technique and physics requirements** suggested by the 3rd DLD, 18/20 Member States claimed that these required competences are sufficient. Denmark suggested to take into consideration and include into the Directive the modern driver assistant systems. Germany claimed that not only the expertise is relevant and important, but also the application of this expertise. Regarding the implementation of these competences 17/20 Member States claimed full implementation. Belgium, Denmark, and Slovenia claimed that these competences have been differently implemented in their Member State. More specifically, Belgium claimed that the courses (programs) specifically for category A, C and D are not validated yet by the authorities. Denmark claimed that the period of implementation of some of the practical training is not yet expired. Finally, in Slovenia, before implementing the education and training programme for new examiners, these topics were not a part of the qualification test. Consequently, all examiners do not have knowledge from these topics.

Regarding the **general conditions required by a driving examiner** of all categories by the 3rd DLD Netherlands suggests that requested level of education results in difficulties with selecting and hiring new examiners, and Portugal suggests that the candidate must undergo a medical evaluation and also psychological evaluation if he intends to evaluate candidates of C and D categories. Only the medical evaluation and also the psychological evaluation, if necessary, should be included. Regarding the implementation of these competences 19/20 Member States claimed full implementation. Norway has moved the age limit for the examiners for category B to 25 years old, because they think it is necessary to have more experienced driving examiners.

All Member States have fully implemented the **initial training and examination requirements** proposed by the 3rd DLD. The way the initial qualifications required by a driving examiner are assessed and checked varies among Member States and are analytically presented in the Annex 6 of this final report.

Regarding **quality assurance requirements** all Member States claimed that these required competences are sufficient except for Slovenia suggesting that examiners should be observed at least once a year for each category they are conducting driving tests. Regarding the implementation of these competences 17/20 Member States claimed full implementation. Out of the other three Member States, France indicated that the quality component was not put in place until May 2017, which is why the requirements are currently being partially implemented. In Portugal these requirements have not at all been implemented, but they are in the national legislation. The decree-law already published, needs the publication and support of a regulation.

Regarding the **periodic training requirements** suggested by the 3rd DLD all Member States claimed that these required competences are sufficient except for Slovenia suggesting that an amount of minimum periodic training of at least five days should be increased. Regarding the implementation of these requirements 17/20 Member States claimed full implementation. In France the overall volume of continuing training is generally satisfactory (5 days per agent) but poorly distributed and additionally, an examiner who has not driven for 24 months is re-evaluated before being able to resume his activity. The last statement stands for Slovenia as well. In Portugal these requirements have not at all been implemented, but they are in the national legislation. The decree-law already published, needs the publication and support of a regulation. The way the quality assurance and periodic training requirements are implemented varies among Member States and are analytically presented in the Consultation Report (ETSC, 2017).

Summarizing the most pronounced statements extracted, the majority of Member States agree that **examiners should maintain a high level of driving skills** and this can be established by stricter rules and stricter initial qualification required competences. Moreover, the periodical training is a question of content and quality, not only of hours. Another important issue is examination anxiety, which is the most pronounced problem of the candidates and examiners should be able to deal with it, using communication and rhetorical skills of high level. Moving on to the statement claiming that there is a need for harmonization of the assessment of the required competences by a driving examiner, it was agreed that there are significant differences between the systems in different Member States (e.g. private or state/centralized). The competencies should be uniform, but there must be differences in how they should be monitored.

4.1.5 RESPER

The 3rd DLD established an EU network for the exchange of driving licence information, i.e. RESPER (RESeau PERmis de conduire). Regarding the implementation of the RESPER network, it appears that all Member States with the exception of Portugal are connected (Portugal is in the last phase of implementing RESPER). Most Member States are connected to RESPER through EUCARIS. The most important advantage of RESPER lies in the fact that RESPER simplified the administrative processes for checking driving licence validity since it allows for a quick exchange of information between the Member States. However, server errors, time outs, the non-response of certain Member States, different interpretations of the common rules and a non-uniform information input undermine the use of RESPER.

RESPER allows Member States to verify if an applicant already has an EU driving licence issued by another Member State. In that respect RESPER facilitated **the combat against driving licence fraud and tourism**. However, as most Member States mostly use RESPER to check for licences presented for exchange and not for first issuing of driving licences or check for all Member States it is debatable if RESPER

facilitates the “one person one licence” principle. Identity fraud is also not prevented by RESPER.

The licence renewal check is easier with RESPER and lost licences can more easily be replaced by another Member State because of RESPER. In that respect, RESPER facilitated the **freedom of movement**. However, more information is needed in case a licence is revoked. The Member States do not know the reason behind it at the moment. It is also mentioned that the information accessed through RESPER is not always correct or up-to-date. However, in general it is unclear whether the faster and easier exchange of information due to RESPER has facilitated the freedom of movement for citizens. Normal residence also remains a big issue despite the introduction of RESPER.

RESPER has a positive effect on reducing **administrative burden for national authorities** since it is much easier and faster to exchange information between Member States and check the authenticity of driving licences. RESPER also reduces the paperwork. However, it remains a problem that a lot of Member States do not react to requests from other Member States. The **costs** did not reduce for Member States connected through EUCARIS since they have to pay a fee to connect to EUCARIS and an additional fee to make use of the RESPER facilities. In that respect, these Member States believe that they have to pay twice for the same tool.

RESPER did not reduce the **administrative burden and cost for citizens** since in some cases citizens still need to provide information that cannot be accessed through RESPER. For example, in some cases the citizen still needs to provide the following additional information: physical confirmation of driver CPC entitlements, information on normal residence, information concerning the right to drive, etc. The information accessed through RESPER is not always dependable, due to different views on equivalences between old and current driving licence categories (grandfather rights). In such a case, the citizen also still needs to provide additional information.

Finally, the importance of extending the functionalities of RESPER has also been emphasized. The Member States recommend that RESPER should be used for the following purposes:

- The exchange of driving licence information for enforcement purposes
- The exchange driving licence information on professional drivers’ training (Directive 2003/59/EG)
- Exchange of information on demerit points
- Exchange of information regarding national codes
- Exchange of information on normal residence

4.2 Policy recommendations and concrete actions

Four years after the transposition of the 3rd DLD into the Member States' national law, it seems that the Directive is on its way to harmonise the rules on driving licences, to facilitate greater freedom of movement to EU drivers, reduce the possibility of driving licence fraud and improve road safety in Europe. However, there is still room for improvement. The following subsections provide an overview of the final recommendations for each application area addressed by the Directive. The approach for determining the final recommendations can be consulted in Annex 1 of the Annex Report. Finally, the most appropriate policy actions to address these final recommendations are also indicated (see Table 13 for an overview).

4.2.1 General recommendations

Based on the study results, the following general recommendations regarding the implementation of the 3rd DLD on Driving Licences were identified:

1. Promote better knowledge exchange and mutual recognition between the Member States.

Currently, there exists some confusion between the Member States, regarding the interpretation of the Directive. In order to ensure a uniform interpretation and implementation of the Directive it is advised to promote a better knowledge exchange regarding the following aspects: national categories and codes (consider introduction of a common database); mutual recognition for categories that are not regulated at EU level, especially for agricultural vehicles; explore whether there is a way that driving licences that were issued under the exemptions specified in the Directive (e.g. A1 with B, lower minimum age for category C for vehicles with special purposes,) can also be recognized by other Member States which introduced the same exemptions. This type of action is situated in the field of monitoring, should be supported by promotion and should be applied at both EU and national levels.

2. Monitor current and future challenges of the implementation of the Directive.

This study is only a first step towards the evaluation of the implementation of the 3rd DLD on driving licences. It provides an overview of how the Directive is currently implemented, achieves the stated objectives (facilitation of freedom of movement, reduction of driving licence fraud, improvement of road safety) and addresses the current trends. In order to establish a common transport policy in Europe the EU needs to keep monitoring the effects of the Directive in order to ensure that it keeps pace with future trends and to intervene in case the implementation results in adverse effects. This type of action lies in the field of monitoring and should be applied at EU level.

4.2.2 Union Model Licence

The final recommendations concerning the Union Model Licence have been identified based on a synthesis of the results from the questionnaire and stakeholders workshop as well as the expert interviews (single persons, groups) and the research:

3. Work on the interoperability of non-physical driving licences.

Through the high demand of common standards, it is recommended that the EU considers the upcoming ISO standard and observes the development of the ISO WG. Furthermore, it is recommended to set up a European trust list that

aggregates document signer certificates of European authorities responsible for issuing driving licences.

A solution that is based on an online verification model is preferred due to increased interoperability which facilitates adoption. Data transfer between heterogeneous devices via direct transmission technologies (e.g. NFC, Bluetooth) is still challenging and error-prone. Furthermore, data freshness is guaranteed at the time of verification – immediate reflection of status changes in case of revocation (e.g. DUI). Settle conditions and standards for non-physical licences quickly.

This type of action is considered to be legislative should be supported by research and should be applied at EU level with the support of industries specialized in this domain.

4. Implement a common standard on verification of applicants' identities.

Through the usage of driver licences as a proof of ID in many Member States, a strong verification of applicant's IDs throughout the complete process of getting a driving licence is highly recommended. Within this examination the process of ID verification in each Member State was not in scope, but it is strongly recommended to carefully investigate on this matter. As a consequence of improved and standardized ID verification processes, chances are that the abuse of surreptitious IDs, documented by valid driver licences, will decrease.

This type of action is considered legislative and should be applied at EU and Member State level.

5. Intensify work on counter-falsification technologies (including false identities).

Since more and more cases of lookalike attacks take place it is shown that the improved security features of the European Driving Licences provide an increased level of security for the document itself. There are two recommendations for further improvement:

- Further improve the physical security of the driving licence by using state of the art security features,
- Use the advantages of a second way of verification, performed via an online system, provided by a non-physical driving licence including biometrical features.

This will enable additional security possibilities to detect both:

- false identities and
- counterfeited physical documents.

This type of action is research oriented, should be supported by promotion and should be applied at both EU and national levels with the support of industries specialized in this domain.

4.2.3 Harmonised administrative validity periods and medical checks

The final recommendations concerning harmonised administrative validity periods and medical checks have been identified based on a synthesis of the results from the questionnaire and stakeholders workshop:

6. Work on a uniform procedure to check normal residence.

The establishment of normal residence is a major factor in the combat against driving licence fraud. Establishing normal residence appeared to be a fundamental problem for Member States. Furthermore, the indistinct interpretation and the lack of common procedures to check normal residence also further restrict freedom of movement. In order to prevent remaining cases of driving licence tourism, there is a strong need for more details and a common procedure on how to define normal residence. In order to achieve this objective, the EU could appoint a working group to explore and establish common procedures on how to determine normal residence and apply these changes to directive 83/182/EEC¹⁴ (i.e. tax directive used to determine normal residence). For example, it could be examined whether the introduction of a common population register would be the best solution to check normal residence. While waiting for a uniform procedure, it should be monitored that proof of normal residence is not based on self-declaration. An important step in the creation of a uniform procedure is to ensure that this procedure does not restrict freedom of movement. This type of action is considered legislative, should be strengthened by research and monitoring and should be applied at both EU and national levels.

7. Link driving licence renewal medical checks with national health system.

Self-declaration of medical condition is risky and the vast majority of Member States avoid it. Data sharing about the medical conditions of drivers and cross checking the medical records of the candidate upon renewal should be an interesting future suggestion in order to avoid bureaucracy and to have much faster renewal procedures. This type of action is considered legislative, should be strengthened by promotion and should be applied at national level for each Member State separately.

8. Standards on Alcohol and Drugs and Medicinal Products (Annex III) could be more precise.

The Annex III of the 3rd DLD includes the health requirements a candidate should have. The provisions of Annex III on alcohol addiction should be more precise regarding the "proven period of abstinence". Annex III could foresee an exception for volunteers, providing they have promised not to drink and drive again, in order for them to participate in a rehabilitation programme, under a strict medical supervision, with the right to drive limited to a vehicle equipped with an in-car breathalyser (so called alcohol interlock). The standards for Obstructive Sleep Apnoea Syndrome (Section 11.2) should be extended to other reasons for increased sleepiness which is a highly relevant factor in traffic accidents. The standards for Cardiovascular Diseases (Section 9) have a different classification system compared to the other sections of Annex III. This

¹⁴ Council Directive 83/182/EEC of 28 March 1983 on tax exemptions within the Community for certain means of transport temporarily imported into one Member State from another

makes it difficult to implement all complex details in national regulations. In total, a possibility to harmonize further the health requirements should be discussed, analysed and revised. This type of action is considered legislative and should be applied at EU level.

4.2.4 Modification of driving licence categories

The final recommendations concerning the modifications of driving licence categories have been identified based on a synthesis of the results from the questionnaire, previous evaluation studies, expert consultation and stakeholders workshop:

9. Explore whether and how the graduated access system for motorcycles could be improved and made more attractive without making it more complicated.

There are three main issues that were criticised regarding the graduated access system: It is more complex and expensive than the previous system, the costs and efforts implied seem to discourage (young) people from acquiring motorcycle licences in some Member States and graduated access is clearly less popular than direct access. Since more on-road experience is regarded as crucial for reducing accidents, it should be explored how graduated access could be made more popular. Besides, it should be explored how the role of training in the Directive could be strengthened to ensure a stronger focus on core skills that are difficult to test, including risk awareness, self-awareness, personal attitudes, dealing with potential risks including distraction, peer-pressure and impaired driving.

Both measures require a thorough examination by the European Commission on how the system can be improved and on the acceptance of potential changes in the Member States. Major changes should be assessed carefully before their implementation: since grandfather rights have to be preserved, changes in the category system always increase the complexity of its application by authorities.

This type of action is considered to be legislative, should be supported by research and should be applied at both EU and national levels.

10. Remove obstacles to the deployment of electric vehicles, vehicles with alternative propulsions and vehicles with advanced driver assistance systems.

New technologies should become a part of driver education to make sure that new drivers are familiar with them and to promote environment-friendly and safe technologies. Both driver training and test should therefore include topics like electromobility, alternative fuels and advanced driver assistance systems. This can either be done on a national level by including these topics in driver education or by adapting Annex II of the Directive on the driving test.

Additionally, the restriction to automatic vehicles when the test is passed in such a vehicle should be abolished or modified since it is an obstacle to the use of alternative-fuelled vehicles and vehicles with advanced driver assistance systems in driver education. Furthermore, it should be explored whether the weight limit for category B vehicles could be raised to account for the higher weight of electric vehicles or vehicles with alternative propulsions. Both measures require an amendment to the Directive. A different weight limit for category B must be carefully aligned with type-approval legislation.

In some Member States, many riders of small electric vehicles above 25 km/h like e-bikes, Segway's and electro-scooters do not hold the correct licence (AM or A1/A2/A). In these Member States, better information for the general public and increased enforcement of the existing rules could be a solution to the problem.

This type of action is considered to be legislative and should be applied at both EU and national levels.

11. Make sure that all definitions are clear and correspond to practical needs and the vehicle market. Re-assess the equivalences between the categories.

There seem to be several definitions and equivalence rules in the Directive that could be improved. This concerns all categories, but the most important issues seem to be a re-definition of A2 test vehicles and a clarification of the definitions and adaption of the equivalences concerning categories C1/C1E, C/CE, D1/D1E, D/DE. Additionally, the possibility to tow trailers with category A vehicles (PTW or tricycles) should be included in the Directive since such combinations are allowed in type approval legislation. Regarding category AM, Member States suggested to explore whether one category can be suitable for two-, three- and four-wheeled vehicles, whether all licences should continue to be valid for AM and whether the maximum speed of 45 km/h for AM vehicles has a negative impact on road safety because these vehicles cannot circulate with the traffic flow. It could also be assessed whether the possibility to ride A1 vehicles with a B licence is in line with road safety requirements. The categorization and age limits of tricycles could also be re-assessed. This type of action is considered to be legislative, should be supported by monitoring and should be applied at EU level.

4.2.5 Driving examiners

The final recommendations concerning the standards on driving examiners have been identified based on a synthesis of the results from the questionnaire, expert consultation and stakeholders workshop:

12. Knowledge of modern driver assistant systems by driving examiners and inclusion of (semi-) autonomous driving in the examination procedure.

This is a key future trend that was raised by a vast majority of the experts and stakeholders. Advanced driver-assistance systems (ADAS) are systems developed to automate/adapt/enhance vehicle systems for safety and better driving. Safety features are designed to avoid collisions and accidents by offering technologies that alert the driver to potential problems, or to avoid collisions by implementing safeguards and taking over control of the vehicle. It seems essential to receive up to date training on vehicle developments and add assistant and automated systems directives. The driving examiner must be familiar with the future technological challenges (navigation systems, adaptive cruise control, lane keeping systems, inattention warning systems, semi-autonomous driving systems) which are becoming more and more present. Safe and adequate use of these systems needs to be learned during basic driver training. In the same vein, there is need for introducing a digital protocol and modernizing the exam which will change the job of the driving examiner dramatically. This type of action is considered legislative, should be

strengthened by research and should be applied at EU level with the support of industries specialized in this domain.

13. Psychological knowledge of test execution and candidate motivation by driving examiners.

The majority of the participants agreed that communication and rhetorical skills seem to be the examiner's weakest point and these skills are some of the most demanding to improve and to achieve a higher level. Issues like examination anxiety for instance are considered important and driving examiners should be able to deal with it. Moreover, Member States should foresee that theory test and practical test for driving instructors include testing of knowledge educational methods and the skills to apply these methods. The ability to observe the candidate should be trained during the basic practical training. Also, during this practical training, examiner candidates need to show that they can assimilate information during the examination. This type of action is considered as monitoring and should be applied at both EU and national levels.

14. Improve harmonised high quality periodic training of driving examiners.

An issue that was raised by a lot of responders is that periodic training of driving examiners is an issue of content and quality, not only of hours. Many Member States, especially in Eastern Europe and Northern Europe, complain about the poor quality of driver training. The few hours of compulsory training per year has not been done in some Member States until now. Some Member States even requested for a specialized Directive in the training of the examiners. Moreover, a critical topic is to strengthen and improve harmonization regarding the hazard perception on the training of examiners. The weak spots of the experts can be improved within further education with main emphasis on the results of the audits and statistical analysis. This type of action is considered legislative, should be strengthened by monitoring and should be applied at EU level.

4.2.6 RESPER

The final recommendations concerning RESPER have been identified based on a synthesis of the results from the questionnaire, previous evaluation studies and the stakeholders workshop:

15. Improve the technical issues of RESPER.

The most important advantage of RESPER lies in the fact that RESPER simplified the administrative processes for checking driving licence validity since it allows for a quick exchange of information between the Member States. However, server errors, long response times, time outs and the non-user-friendly software interface threaten the use of RESPER. In that respect, possibilities should be explored to remedy these issues. Unfortunately, the results of the questionnaire did not allow to specify the nature of these problems (connection or application/use problem) and whether the problem is related to the HUB server or the servers of the Member States. As a first step, the European Commission should encourage more research into this area in order to establish the nature of these technical issues and to identify which technical aspects need to be improved. If these problems can be assigned to the way that some Member States have developed their interface to RESPER, then the Member States themselves need to undertake action to remedy these

issues. This type of action is considered to be research oriented and should be applied at both EU and Member State level with the support of industries specialized in this domain.

16. Strengthen the use and extend the functionality of RESPER.

As a first step, the use of RESPER should be strengthened by encouraging that Member States use secure messages and respond to them in order to decrease uncertainties and delays in the information exchange process. Furthermore, it should also be encouraged that Member States use RESPER to check licences presented for all procedures and not only for exchange in order to facilitate the one person one licence principle. Finally, it should be possible to rely exclusively on the data of RESPER. The information accessed through RESPER should be reliable, accurate and up-to-date. The EU should also monitor the use of RESPER (i.e. that Member States respond to sent requests).

A second step should be to extend the functionalities of RESPER with the aim to strengthening the information exchange between Member States in the future regarding the following aspects:

- The exchange of driving licence information for enforcement purposes
- The exchange of driving licence information on professional drivers' training (Directive 2003/59/EG¹⁵)
- Exchange of information on demerit points
- Exchange of information regarding national codes
- Exchange of information on normal residence

The results also revealed that RESPER can only be used to exchange driving licence information as an addition for physical driving licences if a photo of every driving licence holder is included in RESPER in order to confirm the identity. Furthermore, in case RESPER is temporally unavailable due to server or network errors, it is still desirable to have the physical driving licence. In that respect, it is recommended to use RESPER as an addition to physical driving licences and not as an alternative to exchange driving licence information. Additionally, possibilities to exchange the following information through RESPER should also be explored: information about vehicle insurance, medical conditions, the reason for restrictions to driving licences (e.g. alcohol - per mil, drugs) and conditions for renewal of a driving licence (e.g. medical or psychological examinations or tests).

Finally, the following aspect should also be explored:

- The use of RESPER for the exchange of driving licence information on 3rd country driving licences. For instance, include a list of third countries whose driving licences can be exchanged without theoretical and/or practical test for all participating countries.
- Combining information exchange through RESPER with other fields of legislation, ERRU, TACHOnet, tax system, the population register, driving licence database (ERSO website), and others.

¹⁵ Directive 2003/59/EC of the European Parliament and of the Council of 15 July 2003 on the initial qualification and periodic training of drivers of certain road vehicles for the carriage of goods or passengers, amending Council Regulation (EEC) No 3820/85 and Council Directive 91/439/EEC and repealing Council Directive 76/914/EE

This type of action is considered to be legislative, should be supported by research and monitoring and should be applied at both EU and national levels.

17. Encourage Member States to follow the recommendations presented in the Business Common Rules document in order to ensure a uniform information exchange through RESPER.

The vast majority of the Member States (21) indicates that the information which the Member States exchange through RESPER should be presented in a more uniform way. For this purpose the European Commission has developed the Business Common Rules document¹⁶. This document describes the business processes which allow Member States to exchange messages for different driving licence requests. It provides an overview of the different procedures and correct interpretations of the common rules and terms that should be used to exchange driving licence information through RESPER in order to avoid misunderstandings and to ensure that the exchanged information is presented uniformly. However, not every Member State appears to be aware of this document or follows the recommendations described in this document to exchange driving licence information. Therefore, Member States should be made more aware about the existence of the Business Common Rules document and should be encouraged to follow the recommendations described in this document in order to avoid interpretation issues regarding the exchanged information on driving licences (i.e. validity, invalidity, first issue, etc.).

This type of action is considered to be legislative, should be supported by monitoring and should be applied at both EU and national levels.

¹⁶ DG-MOVE. (2016a). *Common rules concerning the interconnection of national electronic register on driving licences*. Brussels, Belgium: DG-MOVE.

Table 13: Identified policy actions for the final recommendations

Recommendations	Application area	Type of action				Responsible actor		
		Legislative	Monitoring	Research	Promotion	EU	National authorities	Industry
Work on the interoperability of non-physical driving licences	Union Model Licence	X		X		X		X
Implement a common standard on verification of applicants' identities	Union Model Licence	X				X	X	
Intensify work of counter-falsification technologies (including false identities)	Union Model Licence			X	X	X	X	X
Work on a uniform procedure to check normal residence	Validity periods	X		X		X	X	
Link driving licence renewal medical checks with national health system	Medical checks	X			X		X	
Standards on Alcohol and Drugs and Medicinal Products (Annex III) could be more precise	Medical checks	X				X		
Explore whether and how the graduated access system for motorcycles could be improved and made more attractive without making it more complicated	Categories	X		X		X	X	
Remove obstacles to the deployment of electric vehicles, vehicles with alternative propulsions and vehicles with advanced driver assistance systems	Categories	X				X	X	
Make sure that all definitions are clear and correspond to practical needs and the vehicle market. Re-assess the equivalences between the categories	Categories	X	X			X		
Knowledge of modern driver assistant systems by driving examiners and inclusion of (semi-) autonomous driving in the examination procedure	Examiners	X		X		X		X
Psychological knowledge of test execution and candidate motivation by driving examiners	Examiners		X			X	X	
Improve harmonised high quality periodic training of driving examiners	Examiners	X	X			X		
Improve the technical issues of RESPER	RESPER			X		X	X	X
Strengthen the use and extend the functionality of RESPER	RESPER	X	X		X	X	X	
Encourage Member States to follow the recommendations presented in the Business Common rules document in order to ensure a uniform information exchange through RESPER	RESPER	X	X			X	X	
Promote better knowledge exchange and mutual recognition between the Member States	All		X		X	X	X	
Monitor current and future challenges of the implementation of the Directive	All		X			X		

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