



Quality Standard Proposal Draft (03/04/12) for the implementation of professional driver training in Europe in the framework of directive 2003/59/EC

These standards are recommendations vocational education and training of professional drivers (freight transport) in the framework of directive 2003/59/EC. They refer to the ideas of relevant stakeholders, but also to the actual developments in European policy such as the European Qualifications Framework (EQF) and ECVET, focusing on learning outcomes and the three dimensions of learning: knowledge, skills and competences defined within the EQF. Based on the research results of the European project ProfDRV (see www.project-profdrv.eu for further information) a number of quality standards have been drafted. All in all, the standards address the following questions:

- (1) How should directive 2003/59/EC be embedded into national VET systems?
- (2) Which entry requirements should future profession professional driver show before entering into the profession?
- (3) Which training/ learning methods are adequate within initial qualification and periodic training of professional drivers?
- (4) What are the requirements on trainers conducting training for professional drivers?
- (5) What are the requirements on assessment & validation within initial qualification and periodic training?
- (6) How is the recognition of non-/informal learning integrated?
- (7) How should professional driver qualification be adaptable and adapted to changing skills needs?
- (8) How can quality within periodic and initial training for professional drivers be assured?

In addition to these standards, the ProfDRV project suggests an *EQF compatible core profile for professional drivers (freight transport)* defined in learning outcomes as an additional and complete area of standardization. The profile is available for download at www.project-profdrv.eu. Furthermore, this paper also contains a glossary of terms applied within the proposed standards in order to ensure a similar use and interpretation of terms used within these proposed quality standards.



Standard 1:

Embedding directive 2003/59/EC into national VET systems

Guideline for standard:

The implementation of directive 2003/59/EC is interconnected with and embedded into the national vocational education and training systems of the participating countries.

Key questions	Aspired target situation	Adequate shaping measure	Stakeholders concerned
(1.1) Is the driver CPC ¹ interconnected with the national qualification system and/or the national qualifications framework (NQF)?	The driver CPC is part of the public national vocational education and training system and has been referenced to the NQF directly or via a Sectoral Qualifications Framework (SQF).	<ul style="list-style-type: none"> - Description of the driver CPC in learning outcomes compatible with the NQF and referencing of the driver CPC to the NQF based on the defined learning outcomes - Treatment of the driver CPC as a public VET scheme/programme with the related consequences for the specific national context 	Public bodies and decision makers in charge of the legal basis for the national implementation of directive 2003/59/EC
(1.2) Are there interfaces existing between the driver CPC and possibly existing other initial VET ² schemes for professional drivers?	If applicable, the driver CPC is integral part of similar public IVET schemes that are referenced to a higher NQF-level and it is possible to “upgrade” the driver CPC via additional training courses and/or recognition of non- and informal learning to this higher IVET degree without the need to proof the abilities proven for the driver CPC again.	<ul style="list-style-type: none"> - Description of the possibly existing alternative IVET schemes for professional drivers in terms of learning outcomes and possibly units of learning outcomes that allow the integration of the driver CPC - Description of the driver CPC in terms of learning outcomes and units of learning outcomes corresponding to those of possibly existing alternative IVET schemes - Integration of all (units of) learning outcomes associated with the driver CPC into possibly existing alternative IVET schemes 	Public bodies and decision makers in charge of the legal basis for the national implementation of directive 2003/59/EC and possibly existing alternative IVET schemes

¹ Driver CPC ... certificate of professional competence for professional drivers, in this context exclusively used with regard to the initial qualification certificate required by directive 2003/59/EC

² Initial vocational education and training ... vocational education and training carried out in the initial education system, usually before entering into working life (see also CEDEFOP, 2008)

Key questions	Aspired target situation	Adequate shaping measure	Stakeholders concerned
		<ul style="list-style-type: none"> - Recognition of the learning outcomes already proven within the driver CPC within possibly existing alternative higher qualified IVET schemes for professional drivers 	
(1.3) Are certificates related to directive 2003/59/EC interconnected with related vocational training programmes in order to allow vocational flexibility?	<p> Holders of the driver CPC receive recognition of their knowledge, skills and competences proven within initial qualification and/or periodic training in order to change easier into closely related vocational fields and occupations.</p>	<ul style="list-style-type: none"> - Identification which sets of learning outcomes achieved and proven in the framework of the driver CPC are also existing in other related VET programmes. - Description of related VET schemes for professional drivers in terms of learning outcomes and possibly units of learning outcomes that contain similar sets of learning outcomes - Description of the driver CPC in terms of learning outcomes and units of learning outcomes corresponding to those of possibly existing related VET schemes - Recognition of the learning outcomes already proven within the driver CPC within possibly existing related VET schemes 	<p>Public bodies and decision makers in charge of the legal basis for the national implementation of directive 2003/59/EC and possibly existing alternative IVET schemes</p>
(1.4) Does/did the implementation of directive 2003/59/EC follow same or very similar processes, structures and responsibilities as comparable I/ CVET schemes/ programmes?	<p>The implementation of directive 2003/59/EC is treated similarly to comparable I/ CVET schemes in the national context with regard to processes (such as set up, renewing), structures (such as involvement of social partners) and responsibilities (such as administration and examination bodies).</p>	<ul style="list-style-type: none"> - Similar processes, structures and responsibilities are applied/ in place within the implementation of directive 2003/59/EC as in comparable national I/ CVET schemes 	<p>Public bodies and decision makers in charge of the legal basis for the national implementation of directive 2003/59/EC</p>
(1.5) Do holders of the driver CPC have equal access to	<p>The driver CPC is connected to further education pathways related professional driving and is considered</p>	<ul style="list-style-type: none"> - The driver CPC enables access to continuous/further education opportunities in order to obtain higher qualified certificates related 	<p>Public bodies and decision makers in</p>

Key questions	Aspired target situation	Adequate shaping measure	Stakeholders concerned
possibly existing further education ³ pathways ⁴ ?	as a possible entry qualification for learners and workers in order to start their individual education pathways within the transport sector.	to the transport and logistics sector - Availability of learning opportunities related to possible further education pathways of professional drivers	charge of further education VET provider
(1.6) Is periodic training ⁵ integrated into the general national continuous/ further education and training system?	National regulations for periodic training recognise participation in regular employer provided continuous training ⁶ activities for professional drivers as part of periodic training required by directive 2003/59/EC. Furthermore periodic training can, if aspired by the driver, contribute to the acquisition of further education certificates related to the transport and logistics sector.	- The thematic portfolio of courses recognised within periodic training allows drivers and employers to choose from a variety of courses according to their specific CVET needs - The thematic portfolio of courses recognised within periodic training contains courses that contribute to the acquisition of further education certificates related to the transport and logistics sector	Public bodies and decision makers in charge of the legal basis for the national implementation of directive 2003/59/EC VET providers
(1.7) Are there measures in place in order to bridge different areas of legislation (such as education, transport and traffic legislation) involved into training for professional drivers and related areas?	Interconnections are established between the different areas of legislation concerned with professional driver training and related areas. These interconnections allow permeability in between these different areas of legislation and therefore facilitate professional drivers continuous and further vocational education and training.	- Interconnections between the different areas of legislation concerned by professional driver training and related areas are established - Legislation implementing directive 2003/59/EC supports the embedding of training for professional drivers that is governed by other areas of legislation into periodic training	Public bodies from different legal areas concerned with professional driver training

³ Further education (and training) ... Education and training after initial education and training – or after entry into working life aimed at helping individuals to acquire new skills, knowledge and competences for a career moves (based on CEDEFOP, 2008)

⁴ Education (and training) pathway ... a set of related education and training programmes provided by schools, training centres, higher education institutions or VET providers, and that facilitates individuals' progression within or between activity sectors (CEDEFOP, 2008)

⁵ Periodic training ... mandatory training for professional drivers after entry into the profession in the framework of directive 2003/59/EC

⁶ Continuous education (and training) ... Education and training after initial education and training – or after entry into working life aimed at helping individuals to improve or update their knowledge, skills and competences (based on CEDEFOP, 2008)

Further information on and reasoning of this standard:

The ProfDRV project results show that the embedding of directive 2003/59/EC into the overall national VET systems is a crucial factor not only for a successful implementation of the directive in the different European countries, but also for serving as a measure against the shortage of professional drivers (but also the generally increasing shortage of qualified workers in the overall transport and logistics sector) and a possible image raise of the driving profession through related education and training. In these cases the directive can only unfold its full potential for the driving profession if the connectivity to the national VET systems is ensured with adequate means as they are outlined above. Further information on these aspects are available in the ProfDRV project publications mentioned below.

Current situation:

See Bacher and Nindl (2012) and Ball, Konings and van Rijn (2012) for further information.



Standard 2:

Entry requirements

Guideline for standard:

Professional driving is perceived as an occupation that requires certain life abilities and affinities before entering into initial training for professional drivers and therefore before entering into the profession as such. It is therefore considered as an occupation that cannot be performed by anybody.

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
(2.1) Is it widely communicated and understood that professional driving is an occupation that requires certain life abilities ⁷ and/ or affinities to certain subjects that should already be brought in by newcomers before entering into initial training?	<p>It is widely understood that professional driving requires certain life abilities and affinities that should be brought in by those intending to enter into professional driving. These abilities are among others:</p> <ul style="list-style-type: none"> - Good abilities with regard to literacy in order to read and understand official and legal texts and to write task related notes and reports. - Good communication skills (both oral and written) to interact in a wide range of professional, social and cultural contexts. - Good abilities in and/or an affinity to mathematics and technology to solve a wide range of problems in daily situations. - Good abilities in and/or an affinity to the usage of information & communication technologies (ICT) for 	<ul style="list-style-type: none"> - There are awareness raising activities implemented in order to inform potential job starters and changers about the abilities and/or affinities recommended in order to enter into professional driving. - Schools as well as career guidance and counselling and employment services are informed about professional driving as a career option that requires certain life abilities and/or affinities. - Vocational schools and VET providers inform/ select participants about/ based on these life abilities and/or affinities before entering into initial training. - Companies employing apprentices for professional driving use these life abilities and/or affinities as reference during their recruitment and selection process of future apprentices for professional driving. 	<p>Transport associations</p> <p>Career guidance and counselling as well as employment services</p> <p>General schools</p> <p>Vocational school/ VET providers</p> <p>Employers</p>

⁷ Life abilities ... Knowledge, skills and competences a learner should usually bring to a vocational training programme and/or which are usually acquired through life or general education rather than training

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
	<p>work, share information, communication and social issues.</p> <ul style="list-style-type: none"> - A high level of reliability and self-responsibility as well as willingness and trustworthiness to take on a high level of responsibility. - Ability to work independently and without supervision. - Interpersonal, intercultural and social competences in order to interact with a variety of different persons. - Basic communication skills in other languages, especially English. - 'Learning to learn' or ability to organise their own learning paths. 		
(2.2) Is it possible to access initial training without the driving license?	The time in which prospective professional drivers obtain their driving license does not penalize their opportunities to enter into initial training.	<ul style="list-style-type: none"> - Driving license is not considered as a precondition for entering into initial training for professional drivers, but to work as a professional driver. - Initial training and driving license can be obtained simultaneously. 	Public Bodies in charge of the certification and recognition of the professional competence, as well as the National Qualification System.
(2.3) Is it widely communicated and understood that professional driving is an occupation that has certain requirements with regard to physical abilities and health?	It is widely understood that professional driving is a demanding profession with regard to physical fitness and health risks.	<ul style="list-style-type: none"> - There are awareness raising activities implemented in order to inform relevant groups such as potential job starters and changers, employers, vocational schools, career guidance and counselling about necessary physical abilities and health risks. 	<p>Transport associations</p> <p>Career guidance and counselling as well as employment services</p> <p>General schools;</p> <p>Vocational school/ VET</p>

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
			providers
			Employers
(2.4) Are abilities recognised that have been acquired by job migrants in other occupations and/or occupational fields?	There are systems in place to recognize in- and non-formal learning and/or the abilities gained in other occupations.	See standard 6 on "Recognition of non-/informal learning"	

Further information on and reasoning of this standard:

To become a professional driver involves the acquisition of specific abilities and competences to be able to perform (under quality criteria) the specific tasks and work of the profession. These competences should be developed through a specialised training which must take in consideration how to develop a practical skills and experience related to drivers work. However, developing these abilities requires previous abilities and/or affinities in precise fields such as as communication, ICT, interpersonal relationships, etc.. The key competences for lifelong learning defined by the European Union are a essential reference in this ambit as well. Professional driving involves a certain level of abilities and knowledge. These abilities are closely related with those personal and life skills needed to perform all the activities and tasks of a driver, as well as to complete successfully initial and continuous training and find an employment afterwards.

A complete analysis of key competences and exhaustive definitions can be found on the following document: *Recommendation of the European Parliament and of the Council on key competences for lifelong learning* COM(2005) 548 final.

Current situation:

Directive 2003/59 EC is not focused in skills, abilities and competences, but in knowledge, as it is gathering in Del 08 of ProfDRV project (European findings on VET for professional drivers): *"Brussels focuses on knowledge, skills and competences, but the Directive is only paying attention to knowledge"*. Also we can read in Del 22 about *"the rather low level of professional qualification and a missing "learning" culture in the branch, which characterises this occupation nearly all over Europe and leads, together with a mostly negative image of the sector, already today to an alarming shortage of qualified drivers who possess the qualifications required by employers"*. It must be noticed the perception among some sector of the society about the image of the professional drivers. This negative image is, in some way, related with the unawareness about the abilities and competences needed to become a professional driver. Besides this, the researching activities carried out along the different stages of ProfDRV project match up in some key points. One of these points is the fact that the current training does not necessary lead to more professionalization and does not always fit the real needs of the professional drivers and the companies.



Standard 3:

Training design and choice of methods within initial qualification and periodic training

Guideline for standard:

Choice of training design and methods within professional driver training reflect all kind of learning outcomes related to the training, the specific needs of the target group and the needs of heterogeneous groups. They incorporate a high level of practical relevance and reflect the state of the art of training possibilities for professional drivers.

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
(3.1) Are methods oriented on previously defined learning outcomes and therefore adequate to equally develop knowledge, skills and competences assigned to the training?	<p>The learning outcomes assigned to the training are the guiding criterion for the choice of methods and the overall training design seeks to facilitate the acquisition of the learning outcomes defined in the EQF descriptors knowledge, skills and competences.</p> <p>The learning outcomes assigned to a training are based on European/ national regulations with regard to professional driver training.</p>	<ul style="list-style-type: none"> - Learning outcomes for every training are previously defined in terms of the EQF descriptors knowledge, skills and competences. - European/ national regulations on professional driver training are expressed in terms of learning outcomes as defined in the EQF. - Training methods and the overall training design are chosen based on the knowledge, skills and competences defined for/ assigned to the specific training. - Training methods for professional driver training are continuously further developed in order to better address the different kinds of learning outcomes especially skills and competences. 	<p>Bodies in charge of the legal basis for professional driver training</p> <p>Training providers</p> <p>Trainers</p>
(3.2) Do training design and choice of methods consider the specific needs of the target group professional	<p>It is understood that professional drivers are a group of learners with specific needs with regard to training. These special needs primarily result from the low status learning often has within this target group. Therefore training for</p>	<ul style="list-style-type: none"> - Didactical principles and methods that highlight learner- and practice orientation as well as task-based and active learning are applied within training for professional drivers. - Specialised training for trainers that enables trainers to address 	<p>Training providers</p> <p>Trainers</p>

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
drivers?	professional drivers is characterised by a strong learner- and practice-orientation. This can e.g. be realised by applying task-based and active learning approaches within training in order to bridge the learners often existing distance to formal and especially school based learning.	<p>professional drivers special needs within training is offered.</p> <ul style="list-style-type: none"> - Training methods for professional driver training are continuously further developed in order to better address professional drivers special needs. 	
(3.3) Do teaching/learning methods and training design enable a work oriented training process?	Training design and choice of methods within professional driver training incorporate a high level of work and practice orientation and facilitate the transfer of the obtained knowledge, skills and competences into work practice.	<ul style="list-style-type: none"> - The learning outcomes defined for professional driver training are closely related to the work processes/ tasks performed by professional drivers. - Parts of initial qualification can take place in companies in order to facilitate the future drivers work abilities and employability. - Initial qualification related to directive 2003/59/EC can be connected to apprenticeships in companies. - Training design and methods reflect the work process and facilitate the transfer of learning outcomes into practice. - Especially further/ periodic training is highly responsive to individual drivers and companies training needs. - Professional driver trainers adjust their classroom courses to the needs of a specific training group. 	<p>Training providers</p> <p>Training developers</p> <p>Trainers</p> <p>Employers</p> <p>Bodies in charge of regulating the implementation of directive 2003/59/EC at national level</p>
(3.4) Do training design and choice of methods consider the often very heterogeneous groups of participants within professional driver training?	<p>It is understood that professional driver training groups are often very heterogeneous in terms of factors such as intellectual abilities, experience with formal learning settings, age, abilities to learn and especially motivation.</p> <p>Therefore the training design enables a careful balance in order to reach differently characterised learners.</p>	<ul style="list-style-type: none"> - Training courses/ programmes for professional drivers incorporate a high level of flexibility in order to respond to different learners needs. - Trainers see themselves not only as trainers and experts, but primarily as moderators and coaches for the learners and learning processes. - Training environments that are adaptable to individual learners needs are favoured within professional driver training. 	<p>Training providers</p> <p>Instructional designers/ Developers of training material</p> <p>Trainers</p> <p>Bodies in charge of regulating the</p>

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
		<ul style="list-style-type: none"> - Training methods for professional driver training are continuously further developed in order to better address the individual learning/ training needs of professional drivers. 	implementation of directive 2003/59/EC at national level
(3.5) Does the choice of method, training design and overall methodical approach within classroom-based professional driver training incorporate the conscious use of different training methods?	<p>Professional driver training is characterised by a mix of methods in order to facilitate individual learning processes, the different kind of aspired learning outcomes and the target groups' special needs.</p> <p>Trainers choose among a variety of training methods and material in order to facilitate the learning/ training process and reach the aspired learning outcome. For this purpose trainers have access to a variety of methods and material and are able to apply them.</p>	<ul style="list-style-type: none"> - There is a variety of training material and methods available for professional driver training. - Trainers are trained in applying the different kind of methods and material competently in their training for professional drivers. - Trainers are free to decide about the choice of method in order to reach the aspired learning outcomes. 	<p>Training providers</p> <p>Developers/ Publishers of training material</p> <p>Trainers</p> <p>Bodies in charge of regulating the implementation of directive 2003/59/EC at national level</p>
(3.6) Are <i>web based</i> (WBT), <i>computer based training</i> (CBT) as well as simulator-based training efficiently integrated into professional driver training?	<p>WBT / CBT and simulators are integral parts of professional driver training. This form of learning accompanies and replaces traditional classroom-based training where appropriate and possible in order to make training more responsive to professional drivers work organisation.</p>	<ul style="list-style-type: none"> - WBT / CBTs and simulators are available. They fulfil quality criteria like a consistent and defined course structure with tuition guides and debrief processes. - Research on the key requirements for making WBT / CBT and simulators successful (content, format, availability, interactivity and ease of use) is done and used to further develop the integration of WBT/ CBT and simulators into professional driver training. - The criteria and method of e-course evaluation/ accreditation are defined in order to monitor the effectiveness. - Content needs to have the ability to be produced in several formats so that it is compatible with tablet computers, mobile phones and other handhelds. 	<p>Developers/ Publishers of training material</p> <p>Bodies in charge of regulating the implementation of directive 2003/59/EC at national level</p>

Further information on and reasoning of this standard:

Professional drivers are a group of learners that require a number of considerations with regard to the applied methodical approach, training design and choice of method. This need results from the special needs professional drivers have with regard to training, from the heterogeneity of groups in professional driver training, the kind of learning outcomes to be achieved as well as their transfer into practice and finally the difficult organisation of work within the driving profession and especially within long-distance driving. Relevant publications in the field of vocational/ adult education make a number of suggestions how to cope with these needs in order to facilitate successful learning processes of individuals that provide the most promising framework to achieve the aspired learning outcomes.

At the same time it needs to be kept in mind, that the EQFs learning outcomes approach requires the attainment of knowledge, skills and competences that are very close to the work processes and tasks practically performed by professional drivers in their daily work practice. This has strong influences on current education practice and requires in many cases in Europe a rethinking of training providers, developers and trainers in order to address all three kinds of learning outcomes: knowledge, skills and competences.

Current situation:

Directive 2003/59/EC states that transport professional driving is subjected to a compulsory initial qualification (course attendance + test; test only) and compulsory periodic training. It provides a list of subjects to be taken into account when establishing drivers' initial qualification and periodic training, specifying that trainee drivers must *reach the level of knowledge and practical competence* necessary to *drive* in all safety vehicle of the relevant licence category. No more reference to training methods is mentioned apart from course duration, test requirements and the fact that basically theory hours amount to be provided is more than practice hours amount. However, there are different national regulations in place with regard to the integration of computer-/ web-based learning and simulator use within training.

ProfDRV project results show that basically the investigated countries performed the content of the directive implementing methodical aspects in quite different ways, with special regard to the practical training: initial training is usually a combination of theory and practice (even if more theory, less practice); also in the periodic training most reviewed countries prefer a combination although the practical part might be very low or is not provided at all.

Training methods need in fact to be further investigated and elaborated in order to assure more connections with the sectors/ learners real needs and assure that not only knowledge but also professional (and personal) skills and competences are enhanced.



Standard 4:

Requirements on trainers

Guideline for standard:

Training for professional drivers is implemented by well qualified and accredited trainers that possess the necessary professional abilities in terms of expert knowledge, skills and competences within the subject they teach and the necessary pedagogical knowledge, skills and competences in order to implement high quality training for professional drivers.

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
(4.1) Do trainers have a specialised pedagogical and didactical training in order to cope with the different requirements of training for professional drivers?	All trainers implementing/ facilitating professional driver training have solid pedagogical and didactic abilities and are able to cope with the different requirements on professional driver training as outlined in standard 3 "Training design and choice of methods within initial qualification and periodic training".	<ul style="list-style-type: none"> - There is a set of learning outcomes (in terms of knowledge, skills and competences) defined for professional driver trainers implementing directive 2003/59/EC that reflects the requirements on training defined in standard 3. - There are basic requirements for professional driver trainers defined to proof their knowledge, skills and competences in terms of pedagogy and didactics and as previously defined (see above) as entry requirement for working as a professional driver trainer. - There are training for trainer courses offered for new professional driver trainers in order to obtain the previously defined knowledge, skills and competences. 	<p>Authority in charge of setting standards for and accreditation of trainers</p> <p>Trainers</p> <p>Training providers</p> <p>In-company training/ HRD departments</p>
(4.2) Do trainers have the appropriate professional background in order to implement professional driver training?	Professional driver trainers possess the necessary professional background in order to implement professional driver training with high expertise and a high level of practical relevance.	<ul style="list-style-type: none"> - Trainers need to proof the appropriate professional background before working as professional driver trainer. - There are recruitment campaigns and further education opportunities offered for professional drivers to become 	<p>Training providers</p> <p>In-company training/ HRD departments</p> <p>Transport associations</p>

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
	Professional driver trainers are therefore primarily recruited from (previous) professional drivers. Training clearly related to specialised topics such as driving as such is also implemented by e.g. driving instructors with the appropriate licenses or other specialists in the respective field.	professional driver trainers.	Authority in charge of setting standards for and accreditation of trainers
(4.3) Do trainers update and improve their professional knowledge, skills and competences in terms of professional driving and pedagogy on a regular basis?	All professional driver trainers participate regularly in compulsory continuous training programmes. The attended training includes besides training on specialised professional driving topics primarily on the improvement of trainers pedagogical abilities, in order to improve their performance within training.	<ul style="list-style-type: none"> - There are continuous training offers provided for professional driver trainers with regard to their professional skills in terms of pedagogy and professional driving. - The requirement to regularly update and improve their abilities within continuous training is introduced for professional driver trainers. 	<p>Authority in charge of setting standards for and accreditation of trainers</p> <p>Training providers</p> <p>In-company training/HRD departments</p> <p>Trainers</p>
(4.4) Are training providers accredited to implement professional driver training required to ensure continuous training of professional driver trainers?	It is a requirement on training providers that want to be accredited to implement professional driver training to ensure the continuous training of professional driver trainers.	<ul style="list-style-type: none"> - It is defined as a binding requirement that training providers involved in professional driver training are required to ensure continuous training for their trainers. 	<p>Training providers</p> <p>In-company training/HRD departments</p> <p>Trainers</p>

Further information on and reasoning of this standard:

Professional drivers were so far not used to receive a regular training and often have a low level of literacy. Efforts for a successful transfer of learning into practice consequently have to be significantly higher than for other groups of learners and require specialised abilities from trainers. This implies a need for very good didactic and pedagogical abilities of trainers in order to let them

choose the right methodological approach and “right tone” for their trainees. At the same time trainers need to internalise the perspective of a learning outcome oriented training instead of a pure reproducing of what is given in the training materials.

Current situation:

Huge differences with regard to requirements on trainers have to be stated among the different EU-member states. In countries that chose the “test only” option only, there are sometimes no requirements on trainers defined at all and also no accreditation of trainers. Independently from that, trainers are still much more seen as experts in their field, than as teachers. A clear lack of didactical and pedagogical abilities therefore has to be stated, which in the view of the target group of learners with a rather low level of literacy is of particular importance. Training usually is seen and done as lecturing. A learning outcome oriented approach of training is therefore more or less completely missing and the trainer plays a key role in this overall process of a changing paradigm from input to outcome orientation within training.



Standard 5:

Assessment & validation in initial qualification and periodic training

Guideline for standard:

Assessment & validation in initial qualification and periodic training are oriented on learning outcomes, and allow the assessment of learning outcomes achieved within initial training / qualification or elsewhere.

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
(5.1) Do assessment & validation procedures assess <i>pre-defined learning outcomes</i> to be achieved through initial qualification and periodic training?	Assessment & validation standards in initial qualification and periodic training for professional drivers assess pre-defined learning outcomes, which are related to core work tasks of drivers and focus on the demonstration of the application of knowledge, skills and competences achieved.	<ul style="list-style-type: none"> - A robust system is created that measures the effectiveness of the training delivered, whether it is classroom-based or distance learning. - Assessment & validation procedures assess pre-defined learning outcomes - Learning outcomes to be assessed and validated reflect the working reality of professional drivers - Assessment & validation focuses on the demonstration of the application of knowledge, skills and competences - Assessment & validation incorporates a longer-term dimension in order to assess & validate also the transfer of knowledge, skills and abilities acquired within formal training 	Bodies in charge of assessing and validating learning outcomes; Policy makers and industry experts
(5.2) Are training demands assessed <i>before</i> training?	Through assessing and validating the learner's actual training needs (self-assessment), the actual state of knowledge, skills and competences of a learner as well as the learning demand is revealed, which facilitates tailor-made training for professional drivers.	<ul style="list-style-type: none"> - Assessment & validation procedures include self-assessment of knowledge, skills and competence before the training to examine the actual learning need / demand - Training is tailored to the actual training needs and the ability of the individual 	Bodies in charge of assessing and validating learning outcomes Training providers/

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
			Trainers, drivers
(5.3) Is assessment conducted in an adequate way?	Assessment fulfils quality criteria like objectivity, transparency, participative approach and fairness.	<ul style="list-style-type: none"> - Assessment procedures are clearly related to pre-defined learning outcomes which are oriented on work tasks traceable in reality - An independent examination body is in charge. This body is an expert for the field. - There is a structured way of examination procedures. - There are different and adequate methods used for assessing either knowledge, skills or competence. - Practical abilities are tested with a practical approach. - Assessment & validation procedures allow an assessment of the overarching abilities and attitudes (e.g. discussion of exemplary cases). - Assessment results are used to improve the training. - In case that e-learning is accepted, it is assured that the outcomes of the trainee are really his or her outcomes - There is EU wide uniformity and transparency on examination and certification. 	Bodies in charge of assessing and validating learning outcomes
(5.4) Does formal training incorporate evaluation of the learners learning progress?	Especially within initial training programmes formative evaluation is introduced into the programme in order to monitor and reflect the learners learning progress.	<ul style="list-style-type: none"> - Integration of formative evaluation into formal training programmes. - Training of trainers in order to integrate and conduct formal evaluation into/ within training programmes. 	Training providers In-company training/ HRD departments Trainers

Further information on and reasoning of this standard:

Assessment of learning outcomes is described in the Recommendation on the establishment of a European Qualifications Framework for lifelong learning as “methods and processes used to establish the extent to which a learner has in fact attained particular knowledge, skills and competence” (Recommendation on EQF, Annex I). Whereas the concept of validation within the EQF refers mainly to the validation of formal and informal learning (Recommendation on the establishment of a European Qualifications Framework for lifelong learning; p. 2).

Current situation:

The current practice of assessment & validation for initial and periodic training for professional drivers is based either on training and a test, just a test or a confirmation of participation. Since the directive 2003/59 on the initial qualification and periodic training of drivers does not provide a learning outcome based description of the knowledge, skills and competences to be achieved through initial qualification and periodic training it is currently not possible to assess driver training / qualification along the EQF-descriptors, therefore a shift from input-orientation (pre-defined subjects) to out-put-orientation (pre-defined learning outcomes) should be aimed for.



Standard 6:

Recognition of non-/informal learning

Guideline for standard:

In- and non-formal learning is equally accepted and recognised as form of learning within initial and continuous/ periodic training for professional drivers that lead to the same certificates/ proofs as those acquired within formal learning environments.

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
(6.1) Is it possible to <i>replace formal learning attendance</i> by proving in- and non-formally acquired abilities?	The different kinds of proofs and certificates relevant within professional drivers vocational education and training can also be achieved by proving the abilities assigned to the corresponding formal learning scheme, but without attending the actual formal learning scheme.	<ul style="list-style-type: none"> - all certificates/ proofs related to professional driver qualification are expressed in learning outcomes - the way how learning outcomes have been achieved is not of relevance for issuing/ receiving the proof/ certificate - issuing proofs/ certificates is exclusively based on the demonstration of the learning outcomes assigned to the proof/ certificate 	Bodies in charge of issuing/ recognising certificates and proofs relevant for professional driver qualification, training providers
(6.2) Do <i>assessment procedures</i> equally treat the assessment of abilities acquired in formal, in- and non-formal learning situations?	Assessment procedures applied in order to assess learning outcomes / abilities assigned to a certificate/ proof do not favour learning outcomes achieved within formal learning settings, but are equally responsive to abilities achieved within formal, in- and non-formal learning.	<ul style="list-style-type: none"> - assessment procedures are clearly related to the learning outcomes assigned to the certificate/ proof they lead to - assessment procedures support/ are qualified to assess different kind of learning outcomes such as those used within the EQF "knowledge", "skills" and "competences" - assessment procedures support/ are qualified to assess learning outcomes obtained in formal, non-formal and informal learning environments/ settings 	Bodies in charge of assessing and validating learning outcomes

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
(6.3) Is it possible to receive equal certificates/ proofs/ rights through the validation of non- and informal learning?	It is recognised that learning outcomes can be achieved through a variety of means.	<ul style="list-style-type: none"> - certificates/ proofs are exclusively bound to/ expressed in terms of learning outcomes and have no reference to "input" variables such as hours of course attendance 	<p>Bodies in charge of issuing/ recognising certificates and proofs relevant for professional driver qualification</p> <p>Bodies in charge of assessing and validating learning outcomes</p>
(6.4) Is it possible to fill <i>gaps</i> in the own abilities obtained through non- and informal learning through attending formal learning offers without the necessity to follow a complete programme?	Drivers are able to fill gaps in their abilities (knowledge, skills and competences) necessary to receive the aspired certificate/ proof based on their individual learning needs and supported by corresponding training offers.	<ul style="list-style-type: none"> - availability of assessment tools and procedures that also allow the re-assessment of specific (sets of) abilities being part of an overall set of abilities related to a certificate/ proof - availability of formal learning opportunities that refer to parts of an overall set of abilities connected to a certificate/ proof only, rather than to the whole set of abilities 	<p>Bodies in charge of issuing/ recognising certificates and proofs relevant for professional driver qualification</p> <p>Bodies in charge of assessing and validating learning outcomes</p> <p>VET providers</p>
(6.5) Is recognition of non-/ informal learning <i>accessible</i> for professional drivers?	<p>Professional drivers are aware of the opportunity to have their abilities obtained in non-/informal learning recognised with the same certificates as those acquired after completion of formal learning.</p> <p>Professional drivers know how they can proof their abilities obtained in non-/informal learning in order to obtain related certificates.</p>	<ul style="list-style-type: none"> - the possibility and the way how to receive certificates through recognition of non-/informal learning is actively promoted by the stakeholders concerned - there are consultation opportunities offered to professional drivers on the opportunity to receive recognition of non-/informal learning outcomes - in-/non-formal learning assessment is open to everybody seeking 	All stakeholders involved in / concerned by professional driver qualification, drivers

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
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recognition of his/her abilities with regard to professional driving

Further information on and reasoning of this standard:

The recognition of non- and informal learning is one of the key elements of the European Qualifications Framework and the EQFs learning outcomes approach strongly supports the recognition of learning outcomes regardless of the context they were obtained in. However, this has major implications on education practice as the standard elements above show with regard to information of users, definition of learning outcomes, assessment and validation procedures, etc.. This is especially the case in otherwise and so far rather input oriented education systems as it is the case in many European countries. Special attention needs to be paid to the way how and what kind of learning outcomes are assessed because assessment often tends to disadvantage learners having obtained their learning outcomes outside formal learning settings due to their tendency to focus on knowledge rather than on skills and competences as they are rather developed for instance on the work place or in other non-/informal settings. Therefore the consideration of learning outcomes that refer to all three EQF descriptors (knowledge, skills and competences) and the application of appropriate assessment procedures are of major importance in order to ensure equal opportunities for learners who obtained their abilities within non-, informal or formal learning settings. The recognition of non- and informal learning is of major relevance when it comes to professional drivers because it opens up new perspectives for this group of workers that so far suffered from a rather low level of formal qualification, but requires a lot of abilities from workers that they gain in the course of their work without receiving certification for the abilities they obtained over the years. It therefore enables drivers to receive official recognition for the abilities they obtained in their daily work. This allows drivers to proof these abilities towards employers who would otherwise need to hire a driver without actually knowing what her/his abilities actually are, but also with regard to access to further education opportunities for their individual career pathways. At the same time recognition of non- and informal learning opens up new opportunities with regard to ensuring continuous/ periodical update of professional drivers knowledge, skills and competences with other approaches than learning in formal (usually class-room based) settings.

Current situation:

Directive 2003/59/EC already foresees the opportunity for recognition of non- and informal learning with regard to initial qualification by introducing the "test only" option. However, the ProfDRV project results indicate that the investigated country handle this opportunity rather differently, some countries exclusively work with the "test only" option (UK, AT, NL, HU) while others do not offer it at all (IT, ES). Only Germany offers both opportunities ("test only" and "training & test") with different assessment procedures. It nevertheless requires additional research to what extend the implementation approaches of the "test only" option meet the requirements as outlined above.⁸ Recognition of non- and informal learning is so far not considered within continuous/ periodic training.

⁸ Will be further investigated in the course of the ProfDRV project and will be published in a separate report on „Non- and informal learning of professional drivers“.



Standard 7:

Adapting content and training approaches to changing skills needs

Guideline for standard:

Vocational education and training for professional drivers is responsive to changing skill needs and can be adapted without losing relevance, transparency and comparability of the driver CPC in Europe.

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
(7.1) Are there procedures in place to continuously adjust learning material and assessment tools/ procedures to changing skill needs?	<p>Learning/ training material and assessment tool/ procedures are regularly updated to the continuously changing qualification requirements.</p> <p>This updating is done in close cooperation with subject matter experts and the industry in order to ensure a strong labour market orientation.</p>	<ul style="list-style-type: none"> - Publishers and training providers have procedures in place to regularly review and update their training material in cooperation with subject matter experts and industry. - Bodies in charge of assessment and validation have procedures in place in order to regularly review and update their assessment procedures and tools in cooperation with subject matter experts and industry. 	<p>Bodies in charge of assessing and validating learning outcomes</p> <p>Publishers</p> <p>Training providers</p>
(7.2) Are pre-defined learning outcomes as basis of all training and assessment activities adaptable in order to meet the changing demands of the European transport industry without losing the European dimension of the driver CPC?	<p>The learning outcomes associated with the driver CPC can be altered to meet the needs of the industry without losing relevance, transparency and comparability in Europe.</p>	<ul style="list-style-type: none"> - Learning outcomes and/or related training content can be adapted for different sectors and job roles within a framework that retains the core subject matter (a core profile for professional drivers) without losing impact. - There are regular evaluation moments about the contents, methods, assessment and organization of the training taking place in order to make just in time adjustments, if needed. 	<p>Bodies involved in the dialogue about VET and the implementation of directive 2003/59/EC</p> <p>Research institutes</p>

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
(7.3) Are training methods open for adaptation to the changing state of the art, new technologies and developments in this field?	Professional driver training is regularly improved and further developed in terms of methods applied in order to make professional driver training more effective and responsive with regard to related learning outcomes and the learners needs. Limitations with regard to the integration of new technologies are exclusively based on pedagogical considerations and research.	<ul style="list-style-type: none"> - There is continuously research implemented in order to further develop and research training methods and their effectiveness and usability within professional driver training. - There are procedures and regulations in place that approve the use of especially new technologies/media within professional driver training exclusively based on considerations related to pedagogical quality and effectiveness. 	<p>Bodies in charge of implementing and administrating directive 2003/59/EC</p> <p>Research institutions</p> <p>Training providers</p>
(7.4) Does training support the acquisition of abilities that are transferable to other work situations and areas as well as the ability to learn?	<p>Professional driver training facilitates the transfer of abilities gained within training from one area of work to others such as abilities gained with regard to driving physics can be applied with regard to driving as well as to load security, but also besides professional driving such as when working in a warehouse.</p> <p>Furthermore professional driver training facilitates the ability to learn self-regulated in order to ensure that drivers continuously extend and improve their abilities also outside the class-room proactively.</p>	<ul style="list-style-type: none"> - The legal framework of professional driver training allows the recognition of learning outcomes proven within professional driver training also within other areas of vocational education and training. - The training design and chosen methods actively facilitate the transfer of gained abilities also into other contexts of work. - The training design and chosen methods actively facilitate the acquisition of the ability to learn. - It is integral part of professional driver training to encourage and provide professional drivers with the necessary abilities to continuously extend and improve their abilities also outside the classroom. 	<p>Training providers</p> <p>In-company training/ HRD departments</p> <p>Trainers</p> <p>Bodies in charge of VET in general and of the legal framework of directive 2003/59/EC</p>

Further information on and reasoning of this standard:

Just as many other occupations also professional driving is subject to fast changes in terms knowledge, skills and competences required in order to perform a professional drivers tasks competently. These changes are one of the reasons for the increasing shortage of professional drivers all over Europe. It is therefore indispensable that professional driver training of any kind is continuously adapted to changing work requirements in order to ensure that VET meets the needs of the industry and of the workers.

Current situation:

The "input" to be addressed within training and assessment for initial qualification is defined in annex 1 of directive 2003/59/EC. There are no measures foreseen in order to adapt this annex to changing needs. Training and assessment in the member states varies dependent on the different countries, regions or even organisations approach and it is up to the organisation in charge to adapt the training content/ assessment to changing skill needs to the extend possible within the given scope of action. However, periodic training already has the clear purpose to update professional drivers knowledge, skills and competences regularly to changing work requirements. This is, nevertheless, treated very differently in the different European countries.



Standard 8:

Quality assurance (in periodic and initial training)

Guideline for standard:

Quality assurance systems and measures are put in place for the implementation of professional driver training in the framework of directive 2003/59/EC. Quality assurance is primarily based on pedagogical considerations in order to ensure a high pedagogical quality within professional driver training.

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
(8.1) Is there a European advisory body in place that monitors and guides the definition and compliance with pedagogical quality standards within professional driver training?	<p>There is a European advisory body put in place that regularly monitors and guides the implementation of directive 2003/59/EC. It has the aim to ensure quality, transparency and comparability of professional driver qualification in Europe as well as the compliance of this directives implementation with other European initiatives especially with regard to vocational education and training for professional drivers and in general but also other policy areas.</p> <p>Among others this advisory body provides the institutional framework for the definition of standards that ensure especially the pedagogical quality of professional driver training.</p>	<ul style="list-style-type: none"> - Introduction, composition and facilitation of an European advisory body on professional driver training 	<p>European and national bodies in charge of the legal framework for the implementation of directive 2003/59/EC</p> <p>Stakeholders involved in professional driver training in the implementing countries</p>
(8.2) Is there a system in place in order to define the	There is a system developed, implemented and regularly reviewed and renewed in order to ensure the pedagogical	<ul style="list-style-type: none"> - There are pedagogical quality criteria defined and published for: _the accreditation of training courses and programmes 	Bodies in charge of the administration and

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
pedagogical quality of professional driver training in the framework of directive 2003/59/EC?	quality of professional driver training. This system contains quality criteria that are primarily based on pedagogical considerations and implemented by competent and independent accreditation bodies.	<ul style="list-style-type: none"> _the accreditation of trainers _the accreditation of assessment and validation measures _the accreditation of training providers. <p>The criteria strongly consider the previously defined standards 1-7.</p> <ul style="list-style-type: none"> - Competent bodies for the implementation and supervision of these quality criteria are put in place. These competent bodies have the necessary pedagogical knowledge, skills and competences in order to apply and assess the defined pedagogical criteria competently and on a regular basis. - There us a European advisory body to support the quality of driver training. 	<p>implementation of directive 2003/59/EC</p> <p>Competent bodies</p>
(8.3) Is evaluation used in order to improve the training?	Evaluation is used to improve the quality of the training.	<ul style="list-style-type: none"> - Drivers were asked for their opinion. - They were asked after the test period, not before, so they have a better overview of the course. - The evaluation uses not only questionnaires, but also encourages the drivers to talk about the training. - The evaluation results were used by the trainer/ company in order to improve the training. 	<p>Trainers, training institutions, drivers</p>
(8.4) Does professional driver training based on directive 2003/59/EC follow procedures as described in the European Quality Assurance Reference	Professional driver qualification based on directive 2003/59/EC follows the criteria as defined in the European Quality Assurance Reference Framework for Vocational Education and Training.	<ul style="list-style-type: none"> - (See Recommendation of the European Parliament and of the Council on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training) 	<p>Bodies involved in the implementation of EQAVET</p>

Key questions	Aspired target situation	Adequate shaping measures	Stakeholders concerned
Framework for VET?			
(8.4) Are the previously defined standards 1-7 implemented?	The standards 1-7 are widely implemented within professional driver training.	- Implementation of the shaping measures described within standard 1-7	See standard 1-7

Further information on and reasoning of this standard:

The assurance of quality within vocational education and training is one of the major aspects in order to ensure comparability and transparency of qualifications in Europe. The European Quality Assurance Reference Framework for Vocational Education and Training provides a general framework for quality assurance within VET systems in different national contexts. At the same time these standards (incl. standard 1-7) propose a set of aspired target situations and shaping measures that should be subject of further quality assurance considerations in order to meet the aims of directive 2003/59/EC to increase road safety and to ensure that professional driver training meets the needs of the labour market and of professional drivers.

Current situation

Quality assurance is treated very differently in the different EU member states implementing directive 2003/59EC. The directive itself contains only very limited information with regard to quality criteria.



Glossary of terms

Assessment of learning outcomes ... The process of appraising knowledge, know-how, skills and/or competences of an individual against predefined criteria (learning expectations, measurements of learning outcomes). Assessment is typically followed by validation and certification. (CEDEFOP, 2008)

Continuous education (and training) ... Education and training after initial education and training – or after entry into working life aimed at helping individuals to improve or update their knowledge, skills and competences (based on CEDEFOP, 2008)

Competence ... The proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy (CEDEFOP, 2008).

Curriculum ... The inventory of activities implemented to design, organize and plan an education or training action, including the definition of learning objectives, content, methods (including assessment) and material, as well as arrangements for training teachers and trainers. (CEDEFOP, 2008).

Education (and training) pathway ... a set of related education and training programmes provided by schools, training centres, higher education institutions or VET providers, and that facilitates individuals' progression within or between activity sectors (CEDEFOP, 2008)

Further education (and training) ... Education and training after initial education and training – or after entry into working life aimed at helping individuals to acquire new skills, knowledge and competences for a career moves (based on CEDEFOP, 2008)

Informal learning ... Learning results from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning support. Informal learning is in most cases unintentional from the learners perspective. Informal learning outcomes do not usually lead to certification but may be validated and certified in the framework of recognition of prior learning schemes. (CEDEFOP, 2008)

Knowledge ... The outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual (CEDEFOP, 2008)

Learning outcomes ... Statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence (The European Qualification Framework for Life Long Learning (EQF), p. 11)

Life abilities ... Knowledge, skills and competences a learner should usually bring to a vocational training programme and/or which are usually acquired through life or general education rather than training

Non-formal learning ... Learning which is embedded in planned activities not explicitly designated as learning (in terms of learning objectives, learning time or learning support). Non-formal learning is intentional from the learner's point of view. Non-formal learning outcomes may be validated and lead to certification. (CEDEFOP, 2008)

Periodic training ... mandatory training for professional drivers after entry into the profession in the framework of directive 2003/59/EC

Programme of education or training: an inventory of activities, content and/or methods implemented to achieve education or training objectives (acquiring knowledge, skills and/or competences), organized in a logical sequence over a specified period of time. (CEDEFOP, 2008)

Recognition of learning outcomes ... (a) formal recognition: the process of granting official status to skills and competences either through award of qualifications (certificates, diploma or titles) or grant of equivalence, credit units or waivers, validation of gained skills and/ or competences and/or (b) social recognition: the acknowledgement of the value of skills and/or competences by economic and social stakeholders (CEDEFOP, 2008)

Skills: The ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments) (CEDEFOP, 2008)

Trainer ... anyone who fulfills one or more activities linked to the (theoretical or practical) training function, either in an institution for education or training, or at the workplace.

Training course planning and design ... a set of consistent methodological activities employed in designing and planning training initiatives and schemes against objectives set. Training course planning and design includes analysis of training demand and needs, project design, coordination and implementation monitoring as well as assessment of training impact. (CEDEFOP, 2008)

Validation of learning outcomes ... Confirmation by a competent body that learning outcomes (knowledge, skills and/or competences) acquired by an individual in a formal, non-formal or informal setting have been assessed against predefined criteria and are compliant with the requirements of a validation standard. Validation typically leads to certification. (CEDEFOP, 2008)

Vocational Education and Training (VET) ... Education and training which aims to equip people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly on the labour market. (CEDEFOP, 2008)



References

- Bacher, T. & Nindl, S. (2012). *2003/59/EC – standardised Europe-wide initial and continuous vocational education and training for professional drivers: Strategies, consequences, opportunities and threats*. Online available at: http://www.project-profdrv.eu/fileadmin/Dateien/Downloads_front/WP6_Draft_Case_Study_20120127.pdf (24/02/2012)
- Ball, C. (2011). *Vocational education and training means to approach the shortage of professional drivers in Europe*. Online available at: http://www.project-profdrv.eu/fileadmin/Dateien/WP2_training_schemes/ProfDRV_WP2_del09_VETmeansshortage_v2.2.pdf (24/02/12)
- Ball, C., Konings, H. & van Rijn, J. (2012). *VET schemes for professional drivers in Europe*. Online available at: http://www.project-profdrv.eu/fileadmin/Dateien/Downloads_front/ProfDRV_WP2_del06_12_01_CB.pdf (24/02/12)
- Burchert, J. & Petermann, N. (2011). *Methods and Assessment in Training for Professional Drivers*. Online available at: http://www.project-profdrv.eu/fileadmin/Dateien/WP2_training_schemes/ProfDRV_WP2_del10_111215_v1.1.pdf (24/02/12)
- CEDEFOP (2008). *Terminology of European education and training policy: A selection of 100 key terms*. Luxembourg: Office for Official Publications of the European Communities
- European Parliament and the Council (2003). *Directive 2003/59/EC of the European Parliament and 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/EEC*. Online available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:226:0004:0017:EN:PDF> (24/02/2012)
- European Parliament and the Council (2008). *Recommendation of the European Parliament and of the Council on the establishment of the European Qualifications Framework for lifelong learning*. Online available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF> (24/02/2012)
- European Parliament and the Council (2009). *Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training*. Online available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:155:0001:0010:EN:PDF> (24/02/2012)
- Konings, H. & van Rijn, J. (2011). *European findings on VET for professional drivers*. Online available at: http://www.project-profdrv.eu/fileadmin/Dateien/Downloads_front/ProfDRV_WP2_del08_prel.pdf (24/02/12)