



Case Study on

Readiness for the Future of Professional Driving

Country: Hungary

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The professional driver qualification is one of the most suffering fields of work with regard to shortages of labour today and at the same time faces a very insecure future in the light of digitization and autonomous driving vehicles. This leads to a number of challenges that need to be addressed in order to at the same time tackle current deficits and prepare for a future that cannot be clearly described yet.

The FutureDRV project tried to give an insight view into potential future developments of the overall profession and training in the occupational field in order to prepare stakeholders concerned with professional drivers and their role in the supply chain for potential future scenarios. The case study at hand analysis the current situation for Hungary in the light of the FutureDRV project results and provides concrete recommendations on how to prepare national, industry and other stakeholder structures, initiatives and practices in a way that supports transport industry and professional drivers to get ready for a digitized future of transport. Major emphasis of this case study is given to labour market considerations, ensuring of a well-skilled workforce and employability of professional drivers over time.

Current state of play of professional driver qualification in Hungary

The system of conditions of formation of professional trucks and bus drivers is set in Hungary by the Ministry of Economy and Transport (**24/2005. (IV. 21.)** Regulation of the Ministry of Economy and Transport on the details of training and testing of drivers and road transport professionals).

In accordance with **paragraph 33**, truck and bus driver education (initial and periodic; In Hungary it is named as "**GKI**") must be provided by the one who

- (a) drive a vehicle on the road with a C1, C1E, C, CE, D1, D1E, D, DE or equivalent vehicle license; and
- (aa) a national of a Contracting State to the Agreement on the European Economic Area, hereinafter referred to as the "EEA State", or
- ab) employed by a non-EEA national and a company established in Hungary,
- (b) drivers who are nationals of an EEA State or a non-EEA State who are habitually resident on the road and abrogate Council Regulation (EEC) No 3821/85 on recording equipment in road traffic, and in accordance with Article 26 Regulation (EU) No 165/2014 of the European Parliament and of the Council of 4 February 2014 amending Regulation (EC) No 561/2006 on the harmonization of social legislation (Regulation (EU) No 165/2014) have a C1, C1E, C, CE, D1, D1E, D, DE or equivalent driving license and have not obtained a driving license in accordance with Section 33/B.

Professional Initial Qualifications

33/B. The driver who obtained

(a) his D1, D1E, D, DE driving license **after 9 September 2008**

(b) his C1, C1E, C, CE driving license **after 9 September 2009**

is obligated to have an initial vocational qualification for driving a vehicle on the road.

Initial qualification may be obtained by a driver who:

(a) is a national of an EEA State and has his habitual residence in Hungary as defined in special legislation;

(b) is a non-EEA national and has the right to work or is employed by a company incorporated in Hungary.

Professional Periodic Qualifications

33/C. The driver who obtained his D1, D1E, D, DE license **before 9 September 2008** was exempt from the Professional Initial Qualifications but had to participate on the Professional Periodic Qualifications until 9 September 2013.

The driver who obtained his C1, C1E, C, CE license **before 9 September 2009** was exempted from the Professional Initial Qualifications but had to participate on the Professional Periodic Qualifications until 9 September 2014.

With both initial and periodic qualification, the driver obtains a GKI card to certify successful completion of the exam and participation in the course. The GKI card is valid for five years from the date of issue and must be renewed after another five years.

Formal qualification provided for professional drivers

The legal framework is defined by paragraph 33 of Decree 24/2005 (IV.21) GKM (see above) and its **Annexes 12-13-14 about course topics and exam requirements.**

GKI qualification/periodic training (compulsory driver qualification certificate) can only be completed through a driving school system. The current option is traditional classroom teaching or e-learning. The mandatory duration of classroom training is 30 hours of theoretical instruction + 5 hours of simulated driving experience.

The exam is currently (until 31.12.2019) a paper based test. From January 2020, the same will be done in the form of a touch screen computer.

Students of periodic qualifications receive 3 test sheets with 40-40 questions. In order to pass the exam successfully, a minimum of 30-30 questions must be answered correctly. The exam time is 1 minute per question, ie $3 \times 40 = 120$ minutes. Theme groups:

- rational management based on safety rules (technical issues)

- application of rules (rules on driving times/breaks, rules on transport rights/carriage of passengers, consequences of unlawful conduct, toll system)
- health logistics (accidents, firefighting, healthy lifestyle, cargo securing/passenger transport)

The questions on the test sheets are updated from time to time, but basically unchanged for about 10 years. Unfortunately, the questions are still encrypted (we don't think this is right because they make it difficult to make reasonable suggestions and changes).

The tasks of the basic trainers are more:

- simulation practical exam
- practical driving (same as when we pass a 'grade' exam, eg. for C or D driving license) ie one hour of practical driving
- filling in test sheets (same as in the case of periodic qualification)
- case study

The case study is handwritten, usually around 8 questions should be answered in free text.

Main topics:

- list of "documents to carry" (so what the driver need to present at a roadside check: this is about 15 documents!)
- route planning based on a map (calculate the distance between two given points by marking the major touch points and road numbers)
- application of driving time / break / rest rules
- unit load training / load recording for a specific type of goods
- simpler calculation task (fuel consumption / cost)
- driving technique on flat terrain / mountains, in emergency situations
- electronic systems for driving assistance.

In the case of bus drivers, these include passenger handling, illegal immigration / crime too.

Suggested changes in Professional Initial/Periodic Qualification and exam:

In recent years, vehicles have become technically much more modern. Therefore, we believe that the course topics should be expanded in line with vehicle technology developments.

- 1) The topics of **electronic systems for driving assistance** should be expanded.
- 2) For the **topic "electronic engine"** one should devote a whole complex of topics
- 3) The **topic of "hybrid engine"** should be expanded.

Lifelong learning of professional drivers

A professional driver must first undergo **C1, C1E, C, CE / D1, D1E, D, DE** training and take an exam to obtain a **C1, C1E, C, CE / D1, D1E, D, DE license** - depending on what vehicle he want to drive. Then, as a second step, after completing his newly acquired driving license, the driver has to undergo

Professional Initial Qualification and pass the exam. **Professional Periodic Qualifications** is compulsory after five years. **This should be repeated every 5 years, lifelong.**

There are some other training options available to professional drivers that are not mandatory in Hungary, but the drivers can only comply with the existing rules if they have the relevant expertise. These include the training courses “AETR-tachograph” and “Load securing (VDI 2700)”.

Correlation with neighbouring occupational fields

Freight and passenger transport drivers

The training course “AETR-tachograph” isn’t mandatory in Hungary, but the professional drivers can only comply with the existing rules if they have the relevant expertise. This is useful for all truck and bus drivers – and their employer – who are required to use tachograph.

- For the employer because his liability may be more favorable in the case of infringement proceedings.
- And for the employee, because he will be up to date with the regulations and thus avoid the fine.

In Hungary, the **6/1990. (IV. 12.) KÖHÉM (= Ministry of Transport, Telecommunications and Construction)** decree states who should use the tachograph: drivers of vehicles of categories M2, M3 (vehicles used for passenger transport and having more than eight seats in addition to the driver's seat) and N (vehicles used for the carriage of goods), except where the vehicle is used solely within the country and for the following purposes only:

- agricultural transport
- transport of circus toys
- transport of no more than 17 persons as self-employed persons

Course topics:

- driving time (what is the maximum daily / weekly / monthly driving time?)
- labour law issues
- legal environment (rules applicable in different countries)
- use of tachograph

The course topics cover the requirements of the **AETR Agreement** (about the working conditions of professional drivers from outside the European Union), **Regulation (EC) No 561/2006** (about the working conditions of professional drivers in the European Union) and **Council Regulation (EC) No 165/2014** (including **Council Regulation (EEC) No 3821/85**), which applies to both drivers and operators of the vehicles concerned.

The AETR Agreement was proclaimed in Hungary by Act 2001/IX.

The training course “Load securing (VDI 2700)” isn’t mandatory in Hungary but recommended for all road haulage, loading and handling workers and their employers in order to avoid personal injury, vehicle damage and property damage due to improper load securing.

Course topics:

- fastening of different types of cargo / goods
- transport legislation
- driving technology

The course is based on **Article 47 of Decree 1/1975 BM-KPM** (=Ministry of the Interior and Ministry of Transport and Posts), the **Decree 6/1990 (IV.12)**, the relevant sections of the BTK (Criminal Code) and PTK (Civil Code), and **VDI 2700** about securing cargo in road transport.

In Hungary, neither the AETR-tachograph course nor Load securing (VDI 2700) course is regulated: anyone can organize it in any number of hours. (At DEKRA Akademie Kft., both training courses are 8 hours.)

Correlation with other occupational fields

Drivers of the road transportation of dangerous goods

The following laws of the transportation branch contain **the training requirements of the road transportation of dangerous goods**:

- **179/2011. (IX. 2.) Government Decree** on General rules of training and examinations of vehicle drivers and road traffic specialists;
- **24/2005. (IV. 21.) GKM Decree** (Ministry of Economy and Transport) on Detailed rules of training and examinations of vehicle drivers and road traffic specialists;
- **61/2013. (X. 17.) NFM Decree** (Ministry of National Development) on domestic application of Attachments „A” and „B” of the European Agreement concerning the **International Carriage of Dangerous Goods by Road (ADR)**
- and the regulations of the **25/2014. (IV. 30.) NFM Decree** (Ministry of National Development) on **the Dangerous substance transportation safety**

ADR education can only be organized by driving schools, which are defined in **Decree 24/2005. (IV. 21.)** (Regulation of the Ministry of Economy and Transport on the details of training and testing of drivers and road transport professionals).

Drivers carrying explosives (ADR Class 1), radioactive materials (ADR Class 7), or gas, flammable liquids by tanker vehicles are required to have an ADR Training Certificate. The ADR Training Certificate is valid for 5 years from the date of passing the exam. One year before it expires, its validity can be extended for another 5 years. This requires a refresher course and a successful exam.

Basic course

Completion of the Basic Course (NT2-9) and successful Basic Examination entitles the driver to carry all dangerous goods during normal transport (not whit by tanker vehicles). (excl. explosives and radioactive materials)

Specialized course

After the successful basic exam, the drivers can take the specialization exams. Specialization examinations may be conducted for the carriage of Class 1 material (explosives and objects - NT1), Class 7 material (radioactive material - NT7), and tank type 2, (T2) 3, (T3), 4.1, 4.2, 4.3 (T4.1-4.3) ill. 5.1, 5.2, 6.1, 6.2, 8, 9 (T5.1-9). (Eg: In addition to the basic exam, the driver also need to take the Class 3 Tank Specialization exam to transport diesel fuel in a tank vehicle).

Prerequisites for admission to the ADR course:

- 8 primary school class
- at least 20 years of age
- at least 2 years for category B in the case of non-tanker transport and 2 years for category C in the case of tanker transport.

Not an enrollment requirement, but PAV II eligibility is required to complete the activity.

Subjects include:

For the Basic Course:

- ADR Basics
- ADR specialized knowledge

For NT1 course:

- Explosives and articles and special transport regulations

For NT7 course:

- Radioactive materials and special transport conditions

For T2 course:

- Tank general knowledge
- Specialist proficiency in tanks 2 classes
- Tank Driving Practice

For T3 course:

- Tank general knowledge
- Specialist proficiency in tanks 3 classes
- Tank Driving Practice

For course T4.1-4.3:

- Tank general knowledge
- Specialist Tanks Classes 4.1, 4.2, 4.3
- Tank Driving Practice

For T5.1 - 9 courses:

- Tank general knowledge
- Advanced Tank Specialty Classes 5.1, 5.2, 6.1, 6.2, 8, 9
- Tank Driving Practice

Tanker Driving Practice is an obligation for any tanker specialization driver. Emergency training is also recommended for all drivers who regularly work with tanker conveyors.

Theoretical education:

- automotive management
- special center of gravity shifts for liquid tankers
- critical limit vehicle handling during braking, cornering, changing lanes, reduced traction conditions
- dealing with monotony emergencies on highways

Practical training:

- description of vehicle controls and settings
- after going on a slalom track, bending into a curve
- dynamic center of gravity displacements at various speeds up to the tank car's ascent from critical ground
- continuous-speed bending with multiple (rising) speed values (static center of gravity shift)
- effect of traffic lane change on a liquid tank car

According to the classification of a section, there are 9 classes, and together with the subclasses, 13 categories are distinguished. Class 1 includes explosives and articles containing explosives; gases in Class 2; flammable liquid substances in Class 3; flammable solids, self-reactive substances, non-flammable solid explosives, and self-igniting substances and substances which form flammable gases with water, in Classes 4.1, 4.2 and 4.3. Classes 5.1 and 5.2 contain flammable (oxidizing) substances and organic peroxides. Toxic substances are in Class 6.1 and Infectious substances in Class 6.2. Class 7 is for radioactive materials, 8 is for corrosive substances, and 9 is for various hazardous substances and articles (not listed above).

In Hungary, the education of dangerous goods knowledge is determined by international and domestic legislation. The conditions of each training area operate within the appropriate frameworks as required by law or by the regulations of the competent authorities. The requirements are complete systems from application requirements to examination criteria.

Some of the qualifications according to ADR require government qualifications. E.g:

Dangerous Goods Security Advisor

Course Application Requirements:

- specialized university degree + 2 years work experience, or
- specialized secondary education +10 years work experience.

Specialist qualifications shall be certified by an official document issued by the educational establishment. Traineeships may be certified by the employer.

The structure of the training:

- It consists of 4 main modules covering the road transport sector and one or more sections (2, 3 to 9);
- Grades 1 and 7 (in which case a basic radiation protection course is required) are required;

Prerequisites:

- Appropriate proof of pre-qualification;
- Take the course.

Exam requirements:

- Written exam (tests, case study);
- Oral exam (class exam, case study defense).

The certificate shall be renewed every 5 years. This is possible at any time during the year of expiration, the additional 5 years being added to the original expiration date.

Only written assignments are required for the renewal exam.

Legal background:

In order to make the transport of dangerous goods by road, rail or inland waterway safer, in line with the relevant EU regulations, **Government Decree 2/2002. (I. 11.)** made the introduction of a safety advisory system mandatory and laid down the conditions for obtaining an advisory qualification.

8/2002. (I. 30.) KöViM (Ministry of Transport and Water) and its amendment **39/2005. (VI. 11.) GKM** (Ministry of Economy and Transport) lays down the rules for counseling training and examination.

About 1250 companies* employ a security advisor for the transport of dangerous goods.

* *Source: International Association of Security Consultants (in Hungary: Biztonsági Tanácsadók Nemzetközi Szakmai Egyesülete)*

“New Learning” within professional driver qualification

The ATI (Institute of Road Transport) system (see below) worked relatively well, under a uniformly provided condition system. Privatization brought diversity but also a changing quality on the same time. Regulation **24/2005/GKM** (Ministry of Economy and Transport) introduced uniform regulations. The background development was taken over by the KTI (Institute of Transport Science) from the College in Nyíregyháza. At this time, no new course topics are known in Hungary.

Teachers, trainers and tutors within professional driver qualification

Nowadays driving school courses are organized according to the **Decree 24/2005/GKM** (Ministry of Economy and Transport). Prior to 2012, there was no instructional training for more than 10 years. This means that as older instructors are retiring, fewer and fewer instructors remain. Today there are about 1100* driving schools with 4400* vocational trainers. Vocational instructor training is organized by the "Szent István" University in Győr: it is a 2-year course.

Application requirements:

- 23 years of age or older
- a driving license for category A, B, C obtained for at least two years
- minimum secondary education

Previously, the trainings were organized by ATI (Institute of Road Transport), also within the framework of a 2-year course. Who wanted to become a driving instructor could decide what he wanted to teach.

The following qualifications were selected:

- construction / operation
- traffic sign, practical instructor

Pursuant to **Decree 24/2005/GKM** (Ministry of Economy and Transport), the practice of vocational training is subject to a compulsory once-a-year refresher course + exam. Continuing education is optional in the form of e-learning or classroom training. Classroom training lasts 8 hours.

Topics:

- technical knowledge
- teaching methodology, pedagogy
- changes in legislation
- training statistics
- practice tests for the exam

The exam is a touch screen computer based test: 40 questions / 40 minutes with a minimum of 36 correct answers.

According to the general opinion, the annual compulsory training + exam is unnecessary. The exam questions are mainly B category traffic signs. It might be advisable not to have an annual compulsory exam.

Source: NKH/KAV (in Hungary: National Transport Authority / Transport Competences and Examination Center Nonprofit Ltd.)

Validation of learning and career beyond driving

Professional drivers are outdated in Hungary. Most of the current staff still have a license and there practice in the military. Many of them are no longer healthy. Typically, they learned a profession prior to conscription, but that professional knowledge is now obsolete. In our experience, many of them are looking for a solution in security services or support jobs. In the past, the aging drivers became garage-makers, wrecker drivers, doormans, taxi drivers, and service station operators. The other way was for them to be employed by a company as a delivery man, a material purchaser, or to transport their workers.

In the absence of ambition, continuing education is a difficult question. It would be a good choice, for example, to learn forklift driving or other machine operating.

Attracting, recruiting and retaining professional drivers

There are financially supported training courses for current and future professional drivers in Hungary. For example, "Waberer's" and the Job Centers are organizing such trainings. Our experience is that

there are many professional drivers for whom learning is just a transitional goal: they are not really committed. The reason for this is that professional drivers have a low salary.

For the professional truck drivers, there are actually two ways to work: either they work for a Hungarian company, but they also have to do loading work besides driving, or they choose international transport away from their family. For this reason, Hungarian companies don't provide sufficient support for their drivers because they aren't reliable and dedicated.

For bus drivers, perhaps the situation is a bit better because bus driver days can be calculated.

Fields of specialised transports requiring specially trained drivers

There is an even greater shortage of specially trained drivers. Higher salary and better working conditions could be a solution. Companies should provide their drivers with predictable work schedules and fringe benefits.

Summary

As mentioned in the section "Formal qualification provided for professional drivers", the training contents must be updated. Unfortunately, at the moment, the training of professional drivers and their trainers is far from following the evolution of the automotive industry and hasn't adapted to the new demands. In particular, knowledge about technical developments is missing in Hungary.

According to some experts, the training of the former home and international hauliers was more substantive in several respects. That training courses also included knowledge of freight law and a few foreign language education too, which is completely missing today. Most Hungarian professional drivers don't speak any languages at all. This also means that their training is only possible in Hungarian.

Simulator training with current tools is meaningless (eg, after a few minutes of driving, the drivers will feel sick). The training should remain compulsory but should pass during the working time of the driver and not during his free time.

The most important would be:

- modernizing of the contents of training courses
- modernization of learning materials and equipment
- foreign language teaching
- social appreciation of professional drivers and their trainers
- (financial and working time) support provided by employers to drivers
- separation of the transport professions