



Case Study on

Readiness for the Future of Professional Driving

Country: United Kingdom

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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 the EU member state “United Kingdom” 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 the United Kingdom

As of 2019 there are around 875,000 truck and bus drivers in the UK. Although there is only one formal qualification process for driving a truck or bus it involves 4 tests that make up the Initial Driver CPC qualification (please see below for more information on the UK Driver CPC framework).

There are many driver qualifications that could be considered mandatory when in fact they are not bound by any legislation or regulation. These qualifications tend to be industry-specific but usually address driver skills that can be transferable.

However, the Professional Development Stairway (PDS) was developed by the former sector skills council in the UK (Skills for Logistics) and later adopted by the Logistics Guild and the National Logistics Academy. Although it is not a qualification framework it is a good signpost towards occupations in the sector. It was created by and for employers and is based on the functional and occupational mapping that underpinned National Occupational Standards. It also sets the framework for the logistics sector’s NVQ/SVQ and QCF qualifications.

In addition to the Professional Development Stairway the UK has something called CPD, which stands for Continuing Professional Development. The term is used to describe the learning activities that professionals engage in to develop and enhance their abilities, regardless of the sector or field of work. It enables learning to become conscious and proactive, rather than passive and reactive.

CPD combines different methodologies to learning, such as training workshops, conferences and events, e-learning programs, best practice techniques and ideas sharing, all focused for an individual to improve and have effective professional development. There are over 1000 institutes and professional bodies across the UK that have adopted CPD.

Then there are the sector-specific measures to introduce driver qualifications. The Institute of Couriers has a programme called Trailblazer, which offers level 2 to level 6 qualifications in the express courier sector.

In the passenger sector there is mandatory disability awareness training required for bus and coach drivers which is needed for all new bus drivers and terminal staff who must complete approved training within one month of starting work. Bus drivers and terminal staff must also undertake refresher training at least once every three years, while bus operating companies must consult passenger groups, disability stakeholder groups, trade unions and relevant authorities when developing their approved training for bus drivers and terminal staff.

There are many companies who now require drivers to have certain qualifications or training to work on specific contracts or within certain areas. This is typically within the construction sector but is now spreading out to general haulage and parcels. The training is usually safety-related and often mandated in supplier contracts.

Formal qualification provided for professional drivers

To become a truck, bus or coach driver in the UK you need to have a full car licence and be over the age of 18. You also need to get a professional driving qualification (Driver CPC) which involves making an application for a provisional driving licence, passing 4 tests that make up the Driver CPC qualification and take 35 hours periodic training over a 5 year period. The 4 tests are part 1: theory, part 2: case studies, part 3: driving ability and part 4: practical demonstration.

However, if drivers have something called ‘acquired rights’ it means they do not have to take the Driver CPC initial qualification because of their existing driving experience. Acquired rights is automatically granted if drivers got their vocational licence before the following dates;

- Truck – C, C1, C+E and C1+E – Before 10 September 2009
- Bus or coach – D, D1, D+E, D1+E – Before 10 September 2008
- Bus or coach (not for hire or reward) – D(101) – After 1991
- Minibus (not for hire or reward) – D1(101) – Before 1997

When becoming a truck or bus driver it’s possible to drive professionally for up to 12 months without taking the Driver CPC part 2 and part 4 tests. To do this drivers need to be taking an approved National Vocational Training (NVT) programme and have passed the Driver CPC part 1 and part 3 tests. This is called an NVT concession which can only be used once. The 12-month concession period starts from the start date of the NVT programme you’re taking or the date you passed the Driver CPC part 3 test.

The NVT concession lasts for up to 12 months. It will end sooner if drivers stop taking the NVT programme or complete the NVT programme.

ADR training is required for drivers who transport goods classified as dangerous or hazardous under the ADR framework. The training is normally between 3 and 5 days long and the result is a driver qualification that lasts for 5 years.

In the UK we have the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 which govern the transport of certain classes of material, although drivers do not have to undergo additional training.

Lifelong learning of professional drivers

Lifelong learning of professional drivers in the UK is typically done through the companies that they work for and on a subject that is relevant to their particular tasks with that company, with the exception of Driver CPC.

The training is usually safety-related and designed to raise awareness of risk and how to manage it. However, the FutureDRV profile demonstrates that drivers will need to receive more social skills development in order to work effectively as a future driver, particularly as tasks become more automated and they move from manual tasks to more managerial or administrative tasks.

Clearly there's an opportunity to develop the initial training section of the driver qualification but the focus is on the task of driving or operating a vehicle so it's unlikely that the regulators will want to incorporate any other topic within that framework. That means the only option for ensuring that drivers receive relevant training across Europe is through the periodic element of Driver CPC, and with the UK set to adopt most of the EU legislation there will continue to be parity in the approach to mandatory driver training.

In terms of training delivery it's clear that things will change and rapidly. While the approach to training approvals in the UK is slow to develop (100% e-learning course is still not permitted by the authority responsible for periodic training) the industry is already moving towards more immersive types of training, utilising technology such as augmented and virtual reality as well as more interactive training such as live-action scenarios using actors and props.

The age profile of the average truck and bus driver hasn't changed much over the years and that's helped to maintain the classroom environment because of it's more traditional nature, but as technology evolves and vehicle design adapts to a more connected world then younger people will be more attracted to the role of professional driving, particularly if it involves less driving!

Correlation with neighbouring occupational fields

In the UK it is often the case that drivers work their way up from being in the warehouse to becoming a professional driver, with the training costs paid for by the employer. While that situation is unlikely to change it appears that the evolution of the profession will create parallels with other industries. We've already seen train drivers being recruited from the customer service sector because the process of operating a train has become more autonomous, so the focus has shifted to ensure that customers get the best experience from train staff, including the driver. It has become easier to train a customer service specialist to operate train, rather than train a driver to be better at customer relations.

It's reasonable to suggest that the profile of a professional truck or bus driver will change in the same way, meaning the possibility to recruit will become easier with more choice from more sectors. The issue will be how to train and develop current professional drivers to be more customer focused, particularly as the role is often isolated and customer service is managed by others.

Correlation with other occupational fields

In terms of qualifications it is likely that there will be more transferability of relevant qualifications because the knowledge, skills and competence profile will start to align with other jobs in other industries.

This is because the manual task of driving will become less common, driving hours will potentially become a thing of the past and the core competences will rely on more customer service and cooperation. However, hazard awareness will likely be a key skill for professional drivers as there will be a long period of 'mixed condition' driving, where fully manual vehicles will be used alongside partly automated and fully automated vehicles, putting pressure on the driver to switch from each vehicle type without losing concentration. Drivers will need to be familiar with and acknowledge the technology being used in that vehicle.

In terms of qualification it will be necessary for drivers to understand and evidence competency with technology and hazard perception in the future, both in a practical and academic environment. The easiest way for this to be integrated into the existing qualification framework for the UK is to introduce the subject within the Driver CPC qualification.

“New Learning” within professional driver qualification

Innovation in driver training will change rapidly over the next few years, driven by the availability of new training methods which take advantage of modern technology. This will include 360-degree training using live action footage projected to a headset or screen, augmented reality training, virtual reality training and live action role play using actors and real-life sets.

Distance learning will still be used for certain training but the limitations (lack of a tutor, isolated environment and screen size and / or resolution) will continue to affect the possibilities, while traditional classroom training will become less popular (although it will still be the preferred option for many).

What's clear is that a tutor will be needed regardless of what technology is used; one to one support will remain crucial to a drivers' learning environment. Tutor support will become more flexible, more 'on call' and on more platforms than ever before. This will require greater understanding of the personal preferences for each driver in terms of how they learn, as more choice will lead to better learning as long as the analysis is done before the driver receives any training.

Legislation will need to become more flexible and move with the times. In the UK it is still extremely difficult to receive approval for a pure e-learning course even though the technology has moved on significantly. As we move into an increasingly digitised world the authorities and approvals bodies will need to find a way of recognising the quality of training in a more flexible or interactive way.

Teachers, trainers and tutors within professional driver qualification

In the UK (as with many other places) there is a clear difference between the attitudes of academic tutors and vocational training instructors. Academic tutors focusing on theoretical scenarios in a school, college or university are more willing to adopt and embrace different techniques and use different tools within the learning environment, while VET instructors working in a practical environment are more traditional and are less willing to adapt. Although this is, of course, a generalisation it is a reasonable reflection of the attitudes across the country.

The training landscape will change quite dramatically in the next few years, with the introduction and take-up of new technologies and the 'always-connected' nature of the new world. Academic and vocational learners will expect different experiences from qualifications and on-the-job training and it will no longer be acceptable to deliver 100% of a course within a classroom. There will need to be greater assessment of an individuals' learning capabilities; what they like to achieve, how they like to learn and what they respond best to. As such training instructors will need to embrace change, while training companies looking to recruit training instructors should use the opportunity to attract more trainers into the profession, in the same way that technology gives an opportunity to attract more drivers in the short term.

According to forecasts and based on research within FutureDRV it appears that a more tailored, blended learning experience will be the choice for most within the European road transport profession, and anyone who fails to adapt will likely suffer economic consequences.

In terms of topics it's clear that collaboration, cooperation and customer service will be important for future VET, while hazard perception and technical competency will also feature in many curricula.

Validation of learning and career beyond driving

The development of vehicle autonomy has already started to impact the task of driving. Systems are now common on most vehicles and features such as lane keep, radar guidance and automatic braking prove that the shift from manual to automatic driving tasks has begun.

Today, fully automated (level 5) vehicles are being used on roads around the world, though typically it's in a testing capacity only. Eventually the authorities will pass legislation to permit the use of level 5 autonomy, and once that happens drivers will start to feel the pinch as short distance low skilled driving will be done by autonomous buses and trucks. Forecasts suggest that bus driving will be the first to be approved on public roads because the vehicles can be controlled more easily, with dedicated lanes, slower speeds and better infrastructure. When this happens the bus driver will be at risk of redundancy, although there's a clear possibility for the driver to act as a safety net in case something goes wrong, much in the same way that airline pilots work today. They will also be needed in a customer-facing role, and as they're used to working this way the transition to enhance their skills will be less time-intensive. However, the driver shortage is not quite as bad with bus and coach as it is with trucks, so the impact will not be as great on jobs.

Fully automated trucks will be rolled out more slowly, perhaps first on private 'hub' routes progressing to low speed tasks like waste collection and then eventually to full-scale long distance journeys. On

the face of it the impact on a drivers' role will be devastating but there's some important considerations;

- Unlike most public buses, trucks are privately owned. This means there is less money to spend on a fully automated truck
- For many years we will have mixed driving (manual and automated) on routes across the world, therefore the driver will be needed for some time to come
- Law makers may decide that 'road pilots' will be needed in the short term, to oversee the safety of the vehicle
- Cross border infrastructure will be needed, which will slow the roll-out of fully automated trucks

In any case driver redeployment will be necessary on a large scale, and roles in customer service, consignment management and safety standards may be needed in the future.

Attracting, recruiting and retaining professional drivers

The UK, as with many other parts of the world, is struggling to fill the vacancies for truck drivers and estimates suggest that every day there are 40 new vacancies with no applications. The situation for bus drivers is not so significant, mainly because the job is more flexible with more social interaction and less manual tasks.

The number of self-employed light vehicle drivers is on the increase, and this reflects the changing nature of consumer logistics and the need to use driver resource wherever possible, so the driver shortage is leading to more load consolidation and a greater number of journeys per consignment.

The job of a professional truck driver is still poorly perceived and there continues to be a disparity between salaries, particularly for general goods drivers and dangerous goods drivers. The average salary has not kept up with UK inflation and the influx of cheap labour has meant that companies are able to offer the same salary as 5 years ago.

The qualifications and skills for professional drivers will need to change and develop in the coming years. Not only will there need to be a professionalisation of the light goods driver but we predict a change where customer service and collaboration become more important, mainly due to the gradual automation of trucks and buses but also as companies see that the driver has a more important role than just sitting behind a wheel.

Fields of specialised transports requiring specially trained drivers

For professional drivers who transport and deliver specialised goods the career pathway may take a slightly different direction. While automation may be introduced relatively quickly for palletised / caged goods the risk factors relating to chemical / fuel / explosives may mean that law makers and freight forwarders insist on a driver being behind the wheel.

In any case there will be a low qualified / high qualified driver divide, which will result in low qualified drivers being more at risk of losing their job as automation will take over on simple routes or hub transportation.

However, we should not forget that while automation will no doubt change the landscape of professional driving it will happen in stages. Consideration for the expense of an automated vehicle, combined with a period of trust and familiarity, will mean that manual driving will still be done many years into the future (only on a smaller scale).

Additional fields to be taken into consideration

The way in which goods are transported will change as much as the job of driving. The UK is pressing ahead with vehicle autonomy at great pace, and the changes will be introduced at the same time as the law around drone deliveries. Electric powertrains will arrive very quickly and will become affordable to most within the next 5-10 years, which will lead to a rapid increase in charging points and general infrastructure. Hydrogen mobility will see further changes.

Yet it is important to understand how automation will work with (or alongside) drivers and what effect new power sources will have on transporting goods and people.

The FutureDRV scenarios show that customer service will be an important skill for the future, and that companies will need to focus on developing social (as well as technical) skills.

Summary

In summary there are many changes ahead that will impact the driver workforce in the UK;

Employers

Employers will need to prepare drivers now for a different role in the future. It is important that employers recognise the need to provide training based on what the drivers need rather than what Driver CPC requires.

VET providers

VET providers will need to adapt to different technologies, methodologies and tools. To meet the expectations of drivers and to properly engage with students VET providers will need to move out of the classroom and make course content relevant and forward-thinking. It will need to focus on customer service and collaboration, as well as prepare drivers for the new technologies they will face.

Policy Makers

The easiest way to introduce change that will be needed is to develop Directive 2003/59. As the EU agency, DG Move, recognised back in 2017 'the CPC Directive can play a role in addressing future mobility challenges in the context of action on work-related road safety' therefore hazard perception and concentration when working with an automated vehicle will be essential.

Social Partners

Social partners, particularly associations and trade bodies, will have a responsibility to help prepare companies for future driver training needs. They will need to embrace change and manage expectations from their members and colleagues to ensure that the right type of training is provided (to minimise disruption).