

TODOR KABLECHKOV UNIVERSITY OF TRANSPORT

**KNOWLEDGE, SKILLS AND COMPETENCIES
NEEDED FOR EUROPEAN ROAD TRANSPORT
MANAGERS**



Mirena Todorova, Anna Dzhaleva-Chonkova

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Abstract

The paper analyses and summarizes the results of the desk and field research performed within KNOW-IN project funded by the EC programme Lifelong Learning Programme/Leonardo Da Vinci (LLP/LDV). The main objectives were to outline the knowledge, skills and competences needed by European Road Transport Managers (EU-RTM) to implement a strategy for future knowledge intensive transport SMEs; to find out barriers and/or incentives, which companies faced when introducing innovative learning methods in the transport sector; the main evidence-based advantages of managing SMEs in a knowledge intensive way; and the possible benefits that could motivate companies to invest in training for improving the staff qualification.

The desk research included a study on the new requirements to the road transport sector in compliance with the EU standards and directives. Furthermore, it accumulated facts showing the benefits of knowledge-intensive management of SMEs in general as well as the effects of the new ICT-based decentralized and independent learning on work place.

The overview on the road transport sector was combined with an “internal” sight through the survey carried out during the field research. The “theoretically-built” concept was checked against the practice of a number of respondents (sufficient and representative enough for the needs of the project) from companies/associations that differ in size, activities, level of operation (national and international), etc.

It turned out that the model of knowledge-intensive management in road transport sector is applied by only a few companies and that there were a lot of difficulties to provide innovative learning. However, there were a number of good practices and good ideas of how to improve knowledge, skills and competences of road transport managers. It was of great help for the KNOW-IN partners who, based on the research results and the European Qualifications Framework (EQF), developed a framework specified for Road Transport Managers and an Info-Training Toolkit as final products of the project.

This report summarizes the transnational findings in order to outline a strategy for knowledge intensive road transport SMEs. It presents the profile of the new European Road Transport Manager (EU-RTM) according to the basic competencies needed to adapt to changing economic and social environments.

Keywords: road transport managers, freight road transport sector, strategy, knowledge, desk research, field research, lifelong learning

Абстракт

В студията се анализират и обобщават резултатите от онлайн и теренно проучване, осъществено в рамките на проекта KNOW-IN, финансиран от програмата LLP/LDV НА Европейския съюз. Основните цели са: очертаването на знанията, уменията и компетентностите, необходими за европейските мениджъри в автомобилния транспорт (ЕС-МВАТ) за изпълнение на стратегията за бъдещи МСП в транспорта, използващи интензивно нови знания; да се открият основните бариери и/или стимули, които фирмите срещат при въвеждане на иновативни методи на обучение в рамките на транспортния сектор; основните доказани предимствата на управлението на малките и средни предприятия с интензивно използване на знания, възможните ползи, които биха могли да мотивират компаниите да инвестират в обучителни дейности с цел подобряване на квалификацията на персонала.

Научните изследвания включват проучване на новите изисквания в сектора на автомобилния транспорт в съответствие с европейските стандарти и директиви. Нещо повече, то събра факти, показващи ползите от стопанисване на МСП с интензифициране на знанията като цяло, както и на въздействието на новото, основано на ИКТ, децентрализирано и независимо обучение на работното място.

Проучването "отвътре" чрез анкета, проведена по време на теренното изследване провери "теоретично изградената" концепция в практиката на анкетираните (достатъчно на брой и като представителност за нуждите на проекта) от фирми/асоциации, които се различават по големина, дейности, ниво на дейност (национални и международни) и т.н.

Оказа се, че моделът на управление чрез интензивно използване на знания в сектора на автомобилния транспорт се прилага само от няколко компании и че има много пречки за иновативно обучение. Въпреки това изследването очерта добри практики, както и добри идеи за подобряване равнището на знанията, уменията и компетенциите на мениджърите в автомобилния транспорт. Това беше от голяма полза за партньорите в проекта KNOW-IN, които въз основа на резултатите от изследванията и Европейската квалификационна рамка (ЕКР) разработиха матрица, специализирана за мениджъри в автомобилния транспорт и Информационно учебно пособие като крайни продукти на проекта.

Тази студия обобщава резултатите от транснационалното проучване, насочено към очертаване на стратегия за интензивно използване на нови знания от МСП в автомобилния транспорт. Тя представя профила на новия европейски мениджър за автомобилен транспорт (EU-RTM) в съответствие с основните компетентности, необходими за адаптирането му към променящата се икономическа и социална среда.

Ключови думи: мениджър в автомобилния транспорт, товарен автомобилен транспорт, стратегия, знания, онлайн проучване, теренно проучване, учене през целия живот

ЗНАНИЯ, УМЕНИЯ И КОМПЕТЕНТНОСТИ, НЕОБХОДИМИ ЗА ЕВРОПЕЙСКИТЕ МЕНИДЖЪРИ В АВТОМОБИЛНИЯ ТРАНСПОРТ

Студия

Автори

Доц. д-р инж. Мирена Миронова Тодорова, mirena_todorova@abv.bg, ВТУ „Тодор Каблешков” – гр.София

д-р Анна Джалева-Чонкова, anna54@abv.bg

Рецензенти

Проф. д-р инж. Тодор Размов, ВТУ „Тодор Каблешков” – гр.София /Prof. Todor Razmov, Ph.D./

Доц. д-р инж. Борислав Дамянов, ТУ – гр.София /Assoc. Prof. Borislav Damianov, Ph.D./

ВТУ „Тодор Каблешков“
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ABBREVIATIONS

ECVET	European Credit system for Vocational Education and Training
EU-RTM	European Road Transport Manager
EQF	European Qualifications Framework
KIRM	Knowledge-Intensive Road Manager
KNOW-IN	Project 517589-LLP-1-2Q11-1-ES-LEONARDO-LMP: Knowledge-Intensive Freight Transport SMEs for a new generation of smart, sustainable and inclusive oriented Road-Managers
LLP/LDV	Lifelong Learning Programme/Leonardo Da Vinci
RPL	Recognition of Prior Learning
SME	Small and Medium Enterprises
VET	Vocational Education and Training

1 Introduction

The research performed under the project KNOW-IN (Knowledge-Intensive Freight Transport SMEs. For a new generation of smart, sustainable and inclusive oriented Road Transport Managers) was aimed to assess the needs of lifelong learning in road transport sector. At the time of project development, in 2012-2013, it was strongly affected by the changing business environment as a result of increasing competition and globalization on the worldwide markets. The existing level of employees' knowledge and skills was studied and analysed in compliance with the EU transport and labour policies and the results were used to develop a number of appropriate tools for improving the qualification of road transport managers in Europe.

The outcomes of the project, which was estimated as one of the most successful in the field of vocational education, were intended to creating a new professional figure: the European road transport manager (EU-RTM) who should possess knowledge, skills and tools appropriate to overcome the challenges faced by the sector in the past few years.

The activities under KNOW-IN project focused on road transport, especially freight road transport because of its increasing significance in the EU and worldwide economy. When the project started, this sector in Europe employed more than 9 million individuals who produced 6.6% of the European GDP.

The companies operating in road transport are different in type but the prevailing one includes a variety of SMEs. Most of them were facing different challenges such as implementation of modern technologies including ICT, climate and demographic changes, globalization, financial crisis and severe competitiveness. That imposed new demands for the staff, namely to continuously improve their professional knowledge and skills. To succeed, each company had to overcome problems related to:

- the changing nature of jobs;
- the demographic profile of workforce (ageing, lack of highly qualified personnel);
- the need to reduce emissions and become environment-friendly;
- the lack of appropriate strategy for lifelong learning and skills development.

The desk research was intended to:

- find out the new skills needed by knowledge-intensive Road Transport managers;
- define observatories/associations at national and EU level;
- determine the main evidence-based advantages of managing SMEs in knowledge intensive way;
- explore four innovative practices of decentralised, self-directed and efficient learning independent in time and space;
- develop the contents of a survey questionnaire.

The field research on road transport SMEs was intended to identify the needs of main skills and kind of support required for staff to become knowledge-based and “future-proof” road transport managers. The questionnaire was developed to enable the project partners to determine what the basic needs of managers employed by road transport companies/associations are and how best to help them improve their knowledge, skills and competences, enabling them to implement company strategies which will aid their competitiveness in the transport market.

2. New skills needed by knowledge-intensive Road Transport Managers

Information was collated using available European sectoral reports related to freight transport and in particular the profiles of Road Managers and considering the challenges the freight transport sector faced and how it would impact labour market requirements in terms of future knowledge and skills. The profile of the European Road Transport Manager (EU-RMT) was described using the terminology of the European Qualification Framework (EQF) based on learning outcomes and reference level descriptors: knowledge, skills, and competences.

2.1 Job Profile of a Road Transport Manager

There are many definitions related to this job but the researchers used Eurostat Glossary - NACE Rev 1.1 Description: 60.24 Freight transport by road; NACE Rev 2 Description: 49.41 Freight transport by road.

The main task of Road Transport Managers (RTM) in freight transportation sector is to ensure that goods will reach the destinations safely, on time and in the most cost-effective way. Within the production chain RTMs take overall responsibility for deliveries. The employers of RTMs vary from small local (even family) businesses to large national and international freight companies and production enterprises in industry. A very large majority of transport companies are of a very small size and are often run by one person, so sometimes the RTM is the owner/employer himself/herself. Consequently, the actual duties of a RTM vary depending on the size and type of business but generally include:

- negotiating with customers and assigners;
- ensuring that vehicles are in good technical condition and meet legal requirements;
- allocating vehicles to drivers;
- supervising drivers and maintenance staff;
- operating within a given budget and targets;

- maintaining accounts;
- making arrangements in case of breakdowns.

It is usual that road transport managers communicate with employees personally but to contact customers they generally use telephones, mobiles, faxes, e-mails and ordinary post. They spend a lot of time in the office working on computers and dealing with paperwork. In some companies, usually SMEs, road transport managers may also be involved in the recruitment and training of staff and the purchase and sale of vehicles. So, RTMs require a lot of knowledge and skills to enable them undertake variety of tasks mentioned above. This may include knowledge of mechanical engineering, marketing and management, accountancy and legal issues, etc. Good written and spoken communications skills are required, which will enable them to explain instructions in a clear and simple way. Since much business is conducted by telephone, they should have a clear speaking voice. They should have good organisational and office management skills as well as ability to use computers.

Road Transport Managers generally work long office hours, but in some cases they may need to work in shifts even at night. Much of their work is office-based, although they may also spend time in depots, garage areas and out on the road. They must be able to do their job even under extreme conditions being blamed for events beyond their control such as bad weather or roadwork's.

There is no formal age limit that prevents entry in this job. It is often a second career following experience in industry, management or similar activities.

2.2 Future trends influencing on the job of RTMs

- *Globalisation and world trade*

Globalisation can be characterised as a development where world trade is growing more rapidly than the world economy due to a more intensive exchange of goods, services and financial flows among very different countries. Due to the financial crisis that began to show its global impact in 2008, global trade began to experience stagnation. Since the time frame is 2020, it is expected that the situation will normalise until then.

- *Prices of natural resources*

The price of oil and other natural resources is highly relevant for developments in the transport sector because oil prices amount to about 30% of transport cost. Since most natural resources are finite, especially fossil fuels, they will become increasingly scarce. Therefore it is likely that their prices will remain rather high or even increase drastically.

- *Ageing and declining workforce*

Due to declining birth rates within most European countries, population growth in Europe is expected to slow down or even decline in the coming decades. At the same time, life expectancy is rising, which in combination with declining birth rates results in ageing of European society and may lead to labour shortages and rising social insurance and medical expenditures. An ageing demographic profile not only poses serious implications for the longer-term sustainability of the industry, but also creates its own set of demands for servicing and managing the workforce. Understanding the retirement intentions of the workforce, better managing an older workforce and recruiting new drivers into the industry will be important challenges.

- *Technology development*

Several new and innovative technological developments in ICT and vehicle technology will have large impacts on the transport sector. These new and innovative technology developments include: (1) ICT and technology for vehicles (e.g. on-board computer, GPS, lane warning systems); (2) ICT and technology for the infrastructure (e.g. dynamic route information panels, satellite navigation); and (3) ICT and technology for the office base of transporters (e.g., advanced planning and routing systems).

- *Use of tachograph*

Regulation and legislation of the road transport sector has and is largely influenced by the EU, with each member state enforcing the applicable rules. Transport of goods and of persons is notably regulated at EU level by Regulation (EC) n° 561/2006, which defines driver and rest hours. Driving time for LGV drivers has been limited for road safety and social reasons. Tachographs are devices which enable driver hours to be recorded, thus providing a record which if requested can be checked by control officers on the roadside as well as in transport companies' premises.

The EU legislator introduced a mandatory fitment of digital tachograph in new large goods vehicles in EU from May 2006 onwards. The tachograph can be a complicated tool to use and the rules regulating driving and resting times of commercial drivers can also be complicated to understand. They are understood and applied in different ways across the EU. As a consequence, part of the tasks and skills of a Road Transport Manager is to know these rules and know how to use a tachograph. Moreover, the digital tachograph will possibly in time be integrated into a more generic 'on-board unit', integrating the tachograph function with other ITS applications.

- *Demand for transport*

The financial crisis that has reached global dimension in 2008 and continued in 2012, has had a negative impact on the freight transport sector, especially on the road freight because less trade and less income means less transport. A fast recovery is not anticipated to

occur quickly but signs of improvement have been seen in some countries. Furthermore many countries are currently investing in modernisation of public infrastructure to create new jobs and stimulate the economy.

- ***Demand for clean and safe transport***

The demand for cleaner and safer transport could clearly influence major developments in the transport sector. More often manufacturers and retailers are asking transport companies to show that their transport is done safely and with a lower CO₂-footprint. But the implementation can be costly and as long companies, especially SMEs, are struggling for survival, investing in eco-friendly technologies may not be a top priority. It is expected, however, that clean and safe transport will remain an important topic. Energy-efficiency can save costs on the long run and a negligence of safety issues can come very expensive.

- ***Growing income per capita***

The growth in the income per capita in the EU countries will have an indirect effect on transport demand. With a higher income the EU citizens will spend more on imported articles delivered by road transport. Within the New-Member States there is considerable potential for growth of income per capita, particularly once the economy becomes more stable.

- ***Environmental regulation***

The EU environmental policies are aimed at reducing CO₂ emissions and other negative effects of transport in Europe. The level of these policies is highly relevant for further developments and modernisation in the transport sector.

- ***Labour market regulation***

Although within EU member states, it is allowed to work in any other member state, the regulations and requirements for non-EU citizens can take different paths or be different within single EU countries. The same applies for the harmonization of training programs and job certifications. Therefore labour and labour market regulations can either be more flexible or stricter, thus influencing the availability of employees and working conditions.

- ***Vehicle legislation***

The national vehicle legislation, especially on the use of trucks and heavy vehicles, can differ. It could become stricter on the EU-level but may remain less strict and optional in many respects.

- ***Safety policies***

Although transport safety plays an important role in national and EU-policy, even stricter regulation is demanded. It concerns the regulations about large and heavy trucks, speed limits and supervision and enforcement of laws regarding the maximum working and resting hours for drivers.

- ***Road tolls***

Some EU member states have road tolls and fees are often dependent on vehicle type and environmental performance. Road tolls especially affect (cross-border) transport by trucks.

- ***New skills requirements***

Due to the changing nature of jobs, technical knowledge will become less significant compared to the ability to adapt and gain knowledge through life-long learning. E-skills will be absolutely necessary for good management. Emerging competences mostly refer to how to learn, communicate, interact and adapt to changing environments in addition to a high quality education. Managers have to focus on quickly picking up new trends, exploring new markets and channels, investing in customer relations, optimising transportation processes and complying with new and stricter environmental and safety regulations.

- ***EU legislative framework***

Within a broader framework of policy and regulatory efforts aiming at improving road safety since the 1960s, the European Union (EU) has developed a number of rules for the professional freight and passenger road transport sector in areas such as working time, driving times and rest periods, training and access to the profession. The goal pursued is threefold: firstly, to ensure that operators do not gain undue competitive advantages from the differences in the application of the rules among Member States; secondly, to increase road safety by mainly combating fatigue of road transport drivers; thirdly, to provide a set of rules which may guarantee correct working times and avoid unbearable working conditions for employees and self-employed persons in the road sector.

2.3 Knowledge, skills and competences necessary for a road transport manager

The definitions of knowledge, skills and competences used for a European Road Transport Manager (EU-RTM) qualification are in compliance with the European Qualifications Framework (EQF), developed by the European Commission.

- Knowledge means 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 EQF, knowledge is described as theoretical and/or factual.
- Skills mean the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the EQF, 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).

- Competence means 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 EQF, competence is described in terms of responsibility and autonomy.

The knowledge, skills and competences necessary for a European Road Transport Manager (EU-RTM) to perform his/her main working tasks are described as follows: Administrative/ compliance; Business management; Planning activities; Dealing with customers; Dealing with staff and drivers; Vehicles maintenance; Communication; Personal skills; Coordination.

3. Definition of the observatories/associations at national and EU levels

The definition of an ‘Observatory’ within this project is described as a company or an association that will be included in the main project activities such as surveys, participation in virtual workshops, training sessions, exploitation conference, etc. They can be both national establishments in the partners’ countries and international companies and associations.

3.1. Types of road transport companies

Prior to starting the search for observatories, the KNOW-IN partners determined the industries they could belong to:

- ***Forwarding/Shipping***

The legal status of the shipper/forwarder and forwarding/shipping contracts is regulated by Commercial Code (CC) of each country. The forwarding contract is defined as an obligation of the forwarder to transport the cargo on behalf of the principal/assigner.

The service operated under the forwarding contract is a set of activities including customs, insurance, management, logistics, warehousing, transportation, etc. The definition clarifies that it is a service for organisation, implementation or maintenance of transport of goods between Member States (respectively for the international transport), which includes the provision of transport service as a major supply and delivery of ancillary supplies in connection with that service as transport processing, document processing, storage and insurance.

- **Logistics**

The activities carried out by logistics company are: transportation, storage, management of stocks (including monitoring, maintenance of seasonal stocks), processing and order fulfilment and transportation. Each activity includes a set of operations. For example, storing includes storage of raw materials, semi-ready and ready products. The logistics companies are close to the distribution ones but do not deal with certain activities on document turnover.

- **Transportation**

Transportation companies generally operate either on a Hire & Reward or own account basis.

- Own Account - transporting goods arising from one's own business Hire & Reward (Third Party);
- Transporting goods on behalf of another business.

International road freight transport can be broken down into three distinct categories:

- bilateral international transport where either the loading or unloading activity takes place in the country where the vehicle is registered;
- crosstrade where loading and unloading take place in two different countries none of which is the country where the vehicle is registered;
- cabotage where loading and unloading take place in the same country which is however not the country where the vehicle is registered.

3.2. Contacts and selection of observatories

The desk research helped to understand what road transport companies and sector associations were operating within each country. This revealed that transport companies were mostly private where SMEs made up the majority. Their business industries covered many roles. In the period of research (2012-2013) many companies experienced tough trading conditions operating in very low margins. A number of trade associations operated in several countries and internationally.

The selection of companies and establishment of contacts with their authorities were made in different ways in different partner countries.

Bulgaria: As some of the VTU's team members do consultancy for transport companies and Road Transport Administration and are active members of two associations (NSBS – Bulgarian Association of Freight Forwarding, Transport and Logistics and BASAT – Bulgarian Association of Road Transport Associations), they knew personally many Road

Transport Managers. Also, they keep contacts with the alumni who work in road transport companies. The university is also in collaboration with a number of companies where students perform internships including incoming Erasmus students from EU countries.

Belgium: The CORTE Membership is currently composed of 82 Members: 51 national authorities/Full Members representing 21 EU countries and 19 non EU countries; 17 associations/Associate Members representing transport companies, road sectors such infrastructure, road safety, road users, manufacturers, freight forwarders, commercial drivers, etc.; 14 observers (the full list of CORTE Members is available at <http://corte.be/MembershipDisplay.asp>). The associations included in KNOW-IN project are CORTE Members and represent key players in road transport by thousands of transport SMEs. The CORTE team believe that they are the best stakeholders to answer the requests of KNOW-IN. Thanks to CORTE; the range of observatories was expanded out of the partner countries including Denmark, Sweden and Switzerland.

Spain: The European Business and Innovation Centre (CEEI) collaborate with many regional and local development bodies, including Albacete Transport association, which hosted a meeting with KNOW-IN project team during the KoM. Being active in different projects CEEI has also wide contacts with government, NGO and business establishments all over the country.

UK: Skills for Logistics (SfL), is the Sector Skills Council for the UK Freight Logistics Sector. SfL has been in operation since 2004. During this time SfL has developed relationships with employers, learning providers and stakeholders with an interest in the Logistics Sector, leading to a contact database of approximately 20,000. SfL also has relationships with key stakeholders (i.e. the trade associations) operating within the Logistics Sector.

3.3 Analysis of observatories

The aim of the research was to provide references and contacts to 20-30 sectoral observatories/ associations at different national and European levels. 29 companies and associations agreed to participate: 5 from Belgium; 6 from Bulgaria; 6 from Italy; 3 from Norway; 5 from Spain and 4 from the UK.

The sectoral observatories presented a wide variety of establishments by type (main activities), range (national and international) and funding (private, associations, NGOs). That was a reliable base to prove the project outcomes (surveys, analysis, trainings, etc.) giving a possibility for a multi-sided opinions, analysis and conclusions.

4. Main evidence-based advantages of managing SMEs in a knowledge intensive way

4.1 Training and High Performance Working

To compete in the global economy and to perform effectively, companies must have a sufficient and appropriate stock of skills and knowledge within their workforce to support its business activities. To ensure that organisations have a quality workforce, employees will need to undertake continuous development and improvement programmes, whether these are on-the-job or off-the-job.

Within the research activities, the preliminarily identified factors, which were likely to influence the freight road transport sector, proved to become even more demanding. Thereby increasing knowledge and skills through continuous learning turned to be a key for road transport managers in order to achieve success of their companies on the market.

Training is a principle method used to embrace information and knowledge and hence enhance competitiveness. For most organisations, training must be present to ensure that all employees understand not only their role, but also the organisational goals, policies and procedures so that they can understand and feel more comfortable in their workplace.

Workplace learning is seen as a flexible form of learning, which enables employees to participate in the regular process of up-dating and continuing professional development. It is often specific to the firm's context and the individual's role and is regarded as particularly effective as it gives individuals realistic, hands on experience and develops the skills relevant to employer needs.

While training is a key, it is also important that the skills in the workforce are utilised effectively in order to further enhance organisational performance. High Performance Working (HPW) is an approach to “managing companies that aims to stimulate more effective employee involvement and commitment to achieve high levels of performance” (Belt and Giles 2009). HPW has the potential to offer benefits to both employers and employees, by ensuring that skills are better used in the workplace. Ultimately better utilisation of skills will contribute to the company's' economic performance.

4.2 Management and leadership

Poor management and leadership capability can negatively impact productivity and inhibit economic performance of companies. As the sector continues to be influenced by exogenous and endogenous drivers, the demands for and on managers continue to

increase. Management in rapidly changing environments requires a range of skills and competencies. But the key question is whether the road transport sector has sufficient managers and leaders of high quality and whether it is sufficiently developing and deploying them to fully optimise its management potential and organisational performance. Evidence shows that the educational levels in road transport across Europe are low (Eurofound 2004), indicating that the management capacity could be improved.

However, organisations maintain an ambiguous position regarding investment in training, implementing other HPW practices and management and leadership training. They generally accept that training is important, but their focus on the bottom line and achieving efficiencies through cutting costs often means that training is perceived to be an investment rather than a business area where costs can be saved. Companies do not understand how investment in training can provide value and that significant benefits can be accrued in providing and undertaking continuous learning in the workplace for both employers and employees.

4.3 The benefits of employer provided training

The following ten benefits that an organisation can be expect if a company invests in knowledge and skills development of the staff:

Providing training can help a business survive (1)

Small businesses fail due to a number of causes. The two main reasons are thought to be inadequate capital and a lack of appropriate human resource skills. If the lack of appropriate skills is addressed than survival chances of businesses can be increased. Data shows that companies that provide train are two and half times more likely to survive than those that do not.

Training increases productivity (2)

There are strong links between skill level and productivity; increasing the level of skills in a firm will raise company productivity. The higher the qualification level the more positive its impact on firm productivity.

Evidence indicates that the trained worker is, on average 23 per cent higher in productivity, than an untrained worker. Furthermore, it has been found that increasing the number of training days per employee by 1 per cent will increase productivity by 3 per cent.

Productivity gains are greater than wage increases (3)

From a company perspective, investment in training could result in employees engaging in wage bargaining if their skills increase. But studies suggest that firms are capturing

returns on investment at a greater rate than the individual in terms of wage increases. It is found that wages of trained workers increased by 12 per cent, with productivity approximately 23 per cent greater than untrained workers.

Findings on UK based data suggest that the overall effect of training on productivity is around twice as large as the effect on wages. Similarly, a study of company training in the Netherlands

Increased staff retention (4)

Employers often raise concerns that trained employees may leave the firm for new positions within other firms, which acts as a disincentive for providing training. However, providing training actually lowers the risk of workers leaving.

It has been shown that employees in Britain who had five or more training days in the previous year were more committed to their employers than those employees who had less than five days of training. It may well be that the provision of training by employers helps to improve the motivation of the workforce and in turn plays a part in persuading employees that they are with a good employer.

Increased job satisfaction, lower rates of absences and labour turnover (5)

Investigating the link between training and employee job satisfaction, Sloane et al (2007), found that certain types of training can improve job satisfaction levels. In turn, higher satisfaction has been found to reduce absenteeism and help reduce labour turnover in businesses.

Recruitment costs can be reduced (6)

Increased staff retention, job satisfaction and lower rates of absenteeism consequently lead to lower turnover rates. This in turn means reduced recruitment costs and increased savings for a company.

Recruitment of staff is estimated to be over £5,000 per hire in the UK. This includes costs, such as advertising, agency fees, staff time to complete the selection process and staffs covers. But many companies do not calculate these costs so remain unaware of how much recruitment can cost the company. But through investment in training, this expense can be reduced.

Training provides skilled workers for the future (7)

The advantage of 'home grown' talent means that the firm is able to create the skilled workers it requires for success, thereby reducing skills shortages and gaps that would have to fill through other means, such as recruitment, which has been shown to be costly.

By offering vocational training, such as apprenticeships, it means that the content of the training provided is directly relevant to the job the individual will fill. Evidence shows

that more than 80 per cent of employers who take on apprentices rely on them to provide skilled workers for the future.

Innovation (8)

Additional skills, particularly higher level skills, support innovation in top performing firms and more sophisticated production processes lead to higher quality products and services.

A workforce with a high proportion of workers with degrees has greater tendencies to innovate. A high percentage of intermediate qualifications have greater productivity, potential to grow, and enhanced profitability and innovation.

Knowledge transfer (9)

It may be the case that not all workers are identified to receive training, but even those not being trained can be positively affected by the provision of training to other workers. By working alongside trained workers, untrained employees benefit through the transfer of knowledge and skills. The interaction of employees in the workplace is therefore important in realising the productivity benefits of training.

Increased reputation of company (10)

Providing staff training can enhance the reputation of the company, aiding recruitment and retention. Offering training, such as apprenticeships signals that the company is committed to training and local employment and values its workforce.

4.4 Value of High Performance Working and Management and Leadership

Enhancing the level of skills in any workplace through training can bring benefits to an organisation. However, this is only one part of the influence needed to achieve greater organisational performance. The management and application of these skills in a way that leads to improved performance is also needed.

Evidence shows the organisations adopting an integrated range of HPW practices are likely to perform better. For example: Companies that set up a greater range of HRM practices can double the profit per employee compared to those that implement relatively few (Guest et al 2003 in Belt & Giles 2009). A 10 per cent increase in business investment in HRM, training and management practices can equate on average to (Tamkin et al 2008):

- An increase in gross profits per employee around £1,200.

- An increase in profit margins per employee of between 1.19 per cent and 3.66 per cent. A positive relationship between the implementation of HPW and company profitability in small firms was found by Stirpe et al (2009 in Belt & Giles 2009).

There is a clear link that higher level skills are essential to support increased performance within organisations. However, for training to achieve the maximum impact and business benefits, like those demonstrated above in terms, training must be effectively targeted and focused on business needs identified in organisational strategies. If training is not aligned then the return is likely to be lower than that demonstrated above. Furthermore the mere presence of skills in an organisation is not sufficient by itself. Human capital must be managed and applied in a way which maximises its potential. To this end HPW and good management and leadership are key tools that companies should adopt.

5. Innovative decentralised and self-directed learning independent in time and space

An essential part of desk research was dedicated to investigation of various learning methods, media and products that support decentralised, self-directed and efficient learning, which can be independent of time and location. The summarized results provided the KNOW-IN partners and stakeholders with an understanding of various options that had potential to help Road Transport Managers cope with the main challenges and changes on the labour market in the future. The findings were based upon practices currently applied in Europe and worldwide.

5.1. New ITC-based methods vs. traditional learning methods

The term “Flexible learning” is used to explain the change in the traditional educational model, related to technology implementation and new methods and forms of learning. In comparison to class-based training it differs by “location of participation”. However, flexibility should not be associated only with distance education. It means there is also an opportunity for the learner to choose courses, types of learning activities, media to support learning, etc.

The contents of flexible learning includes mobile learning, e-learning, distance learning and the relation of them can be presented schematically in the following way:

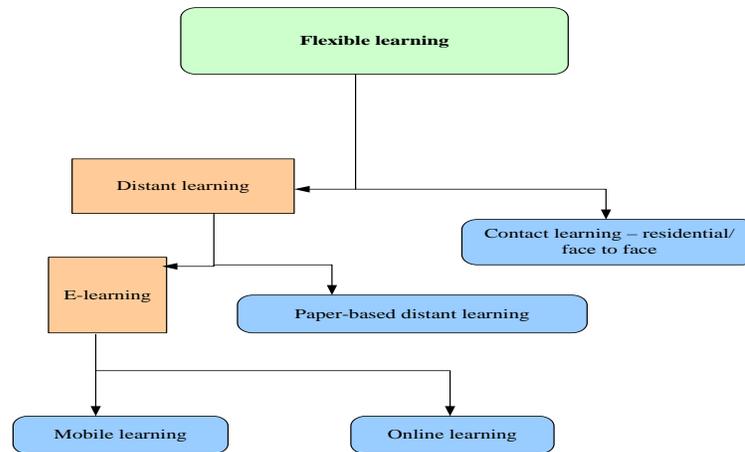


Figure 1. The contents of flexible learning

Distance education is much wider than e-based learning because it includes the availability of print-based study materials and correspondence communication. The media are described as a function of interaction and independence. There have been three milestones of technological innovations in learning with regards to media communications. There are:

- Correspondence generation (since the 1850s)
- Telecommunications or Open University (OU) generation (since the 1960/70s)
- World Wide Web (WWW) generation (since the 1990s)

In distance learning an 'old' generation does not fade out but technological advancements means that new channels of learner support and two-way communications are opened providing even greater flexibility.

The main advantage of distance education is that large numbers of individuals, independent of time and space, can access knowledge/learning materials, at lower costs through economies of scale (mass higher education).

E-learning covers a wide set of applications and processes, including computer-based learning, Web-based learning, virtual classrooms and digital collaboration. E-learning is the macro concept that includes online and mobile learning environments. Online learning facilitates communication and collaboration via networked computers, wireless technologies (including wireless Internet environments and wireless classrooms) and various mobile devices for teaching and learning. A number of pioneer educators around the world have already experimented with mobile technologies in universities and colleges and in commercial training. Their experience with mobile devices, accessibility, pedagogical and institutional change, and current technology has been studied. Mobile learning is assessed as having a huge impact on education: handheld computing. The increased access to mobile technological devices, the availability of support systems and

the need for communication has meant that learning can be made available anytime, everywhere.

Life-long learning demands 'learn while you earn', which has become possible through e-learning. Mobile learning takes it further and makes available to '*learn while you earn on-the-go*'.

5.2. Needs of new methods of lifelong learning for road transport managers

A number of factors within road transport companies make it difficult for managers to undertake any lifelong learning. These factors include: lack of time (the managers need a couple of days to attend courses, seminars, workshops, etc. organised out of the company's headquarters; they will spend a certain time although less if the training events are organised in the offices by special arrangement) lack of funds (road transport companies are mostly SMEs, or even micro-enterprises, which operate on very small margins and cannot afford any additional costs, e.g. for staff training) lack of habits to study (some employees are not inclined to study/psychological barriers to attend formally organised courses).

Having decentralised and self-directed learning methods, independent in time and space could help managers overcome some or all of these factors. Therefore the use of different ICT tools such as online books, tests, Skype, blogs, etc. will become increasingly more important. A challenge when considering developing the qualification for the EU-RTM is the need to develop an appropriate media platform, produce e-books, multimedia and other teaching materials, evaluation tools and communication links. It would be beneficial to establish inter-sectoral and multi-sectoral cooperation to try and offer a possibility of recognition and accreditation of informal learning.

5.3. Examples of good practices

The desk research has shown that a lot of courses suitable for Road Transport Managers are offered online. Most of them have been developed by universities and usually lead to an MSc degree. There are few that result in a BSc degree. There are a number of courses whereby professional certificates can be obtained but there are more informal ones just providing new information and knowledge in different subjects/topics. Related to the lifelong learning concept, the number of universities and colleges offering such short-term courses has been increasing. Below provides some examples of existing practices:

- ***Freight Transport Association***

The Freight Transport Association (FTA) offers the opportunity for Transport Managers to obtain their Certificate of Professional Competence in national/international road haulage via a flexible learning module. The 12 week on-line course is designed to enable flexible learning and fits a business requirement. In addition the course consists of five tutor training days at an FTA venue and one case study workshop, with regular analysis of learning and development to highlight and rectify any areas that need extra work. Online course materials are available for a year to aid study prior to the exam and to act as a refresher and reference material after the exam. There are continuous assessments to examination standards and extra learning time and ability to repeat tests are available.

The potential participants are reassured that they will be able to achieve a return on investment through quality training delivered by leading industry professionals, who are experts in their field. The training can be flexible, and tailored to suit your location, business type or size, with information reflecting the very latest legislation and industry developments.

To meet individual needs, FTA suggests working in partnership to provide a high quality training solution at a wide range of nationwide venues or at a company's premises to meet specific business objectives and get the most out of staff training. The aim is to find the most time-appropriate and cost effective option to train staff in the most convenient location.

<http://www.fta.co.uk/services/training/>

- ***Hotcourses***

The offers of Hotcourses attract the learner's interest not only by the course contents but also by advertising what is required for the particular job role. Before providing details of training courses, they describe the job of a road manager and the knowledge and skills one should have to get a career in the transport sector.

<http://www.hotcourses.com/careers-uk/transport-manager-road-careers/16180339/0/0/1175/rst/zone412/careersadvice.html>

- ***ERIC (DG-TREN)***

The project ERIC (DG-TREN) – “Experiencing Computer Based Training (CBT) Programmes in Road Safety in the European Community” was developed in 2008-2010 funded by the EC, DG TREN. Its aim was to offer new learning tools in the field of road safety and to elaborate good dissemination practices in Austria, Poland, Spain and Germany for the CBTs “Fatigue” and “Driving Physics”. The project partners used CBT as a successful method to support an individual and flexible learning process in road

transport companies. From an economical point of view, CBT proved its applicability in road safety education. Haulage and bus transport companies – often SMEs – were facilitated to meet the requirements of the European Directive in the field of qualification for professional drivers.

The final evaluation of the project ERIC showed that it achieved its ambitious objectives. The partners produced CBTs (courses) ready-to-use, translated and adapted to different cultural environments.

<http://www.uv.es/proeric/>; http://ec.europa.eu/transport/road_safety/

- *Toolboxes*

The courses offered by Toolboxes give a possibility to look at good practices of innovative learning outside of Europe. Toolboxes include topics closely related to road transport, e.g. Transport and Distribution. It provides details of a course that leads to a TDT20202 Certificate II in Transport and Distribution (Road Transport). This course aims to provide an authentic learning experience that relates to the work environment that the learner has or will encounter.

The topics included in the online course are close related to competences needed for road transport managers: load and unload goods/cargo; secure cargo; transfer cargo; carry out basic workplace calculations; estimate/calculate mass, area and quantity dimensions. The online course has been noted (endorsed) by the National Training Quality Council (NTQC) in Australia and is available for purchase.

<http://toolboxes.flexiblelearning.net.au/series7/708.htm> /in 2012 years/

5.4. *Case study: Bulgaria*

In Bulgaria there only a few organisations that provides courses for managers of road transport companies and their drivers. Among them is the Higher School of Transport (VTU) which performs training in cooperation with professional organisations in the transport sector. Two such organisations are NODIS and NSBS.

- **NODIS**

NODIS is a national organisation for vocational training, which was established on the initiative of the Bulgarian Association of Societies in Automobile Transport (BASAT)*. NODIS organises training for managers of transport companies, middle-level administrative and expert staff and shipping agents which can lead to vocational competence certificate. The courses cover all the required topics within Directive 98/76/EO from 1st October, 1998 for access to this profession, transposed by Regulation 11 of the MT for international automobile carriages.

The organisation performs training for ADR certification: a qualification for drivers of vehicles carrying dangerous goods in board automobiles, in tanks, carriage of explosives and radioactive materials. In order to meet the rising demand of companies, courses for staff in the field of logistics and the supply chain are also organised. Among the courses, the most popular is the Certificate of Professional Competence (CPC) for International Carriage by Road. After 5 days of training the learners have to pass an examination carried out by the Executive Agency 'Automobile Administration' and upon successful outcome receive an CPC in accordance with the European Directive 98/76 EU for access to this profession. The certificate is timeless and is the only document issued on the territory of Republic of Bulgaria that is acknowledged by all EU member states.

<http://www.nodis.eu/new/>

*BASAT represents over 60% of the transport industry in Bulgaria and protects the interests of major transport companies, private carriers and professional trucks & buses drivers. In 2009 it signed the European Road Safety Charter and began operation of its professional training centre, which aims to contribute to staff training in road transport and logistics enterprises. BASAT supported the creation of BULGARIAN ASSOCIATION OF STUDY CENTRES aimed to achieve a balanced legal framework in the field of training for enforcement in the interest of society.

- Bulgarian Association for Freight Forwarding, Transport and Logistics (NSBS)

NSBS was founded in 1992. Its membership consists of 76 forwarding companies with Bulgarian and/or foreign capital that perform some two thirds of the international forwarding services in Bulgaria. Since 1994 NSBS represents Bulgaria in the International Federation of Freight Forwarders Associations (FIATA) as well as in the activities of the European Conference of Ministers of Transport (ECMT), the European Commission, the Economic Commission for Europe of the United Nations (ECE-UN), the International Chamber of Commerce (ICC) and other international organisations in the transport field, such as IRU, UIC, IATA, IMO, etc.

In 2003 NSBS became a member of CLECAT (European Association for forwarding, transport, logistics and customs services) and thus has a voice in the transport decisions of the European Commission. NSBS members are the only Bulgarian forwarders officially authorized to issue the FIATA documents universally accepted in the international trade - the Multimodal Transport Bill of Lading (FIATA FBL), the FIATA Forwarder's Certificate of Receipt (FIATAFCR), the FIATA Warehouse Receipt, etc.

NSBS is active in developing legal documents of international transport and forwarding and promoting the transport policy of Bulgaria. An important activity of NSBS is vocational training and capacity development through upgrading and updating the general professional knowledge of the industry professionals to the recognised international

standards and requirements in freight forwarding. NSBS has developed and since 2000 has been managing a comprehensive system for the vocational training conforming to the standards of FIATA, an internationally recognised diploma for professional competence in freight forwarding industry. In 2005 the National Educational Centre for vocational training was accredited with licence by the State Agency with Ministry of Education and Science. NSBS organises courses for all modes of transport which can be classroom based or distant learning. In fact, NSBS is the only organisation to offer training based on media, methods and forms for self-independent and decentralized learning.

<https://whoiswho.logistika.bg/bg/menu/116/whoiswho/11847/NSBS-BULGARIAN-ASSOCIATION-FOR-FREIGHT-FORWARDING-TRANSPORT-AND-LOGISTICS>

5.5. Recommendation for learning tools to be used by RTMs

With regard to the objectives of the KNOW-IN project, it is recommended that any learning provisions for the Road Transport Manager are available that will enable flexible learning. For example, on-line, not necessarily requiring formal lessons in a set location, those that can be self-directed (choose what and when to study) and are efficient, whilst still providing a good level of learning outcomes.

In the USA, the Commission on Technology and Adult Learning has already recognised the importance of creating a broad vision of e-learning for America's workforce. The vision is that e-learning should be geared to the needs and interests of the individual learner and integrated into virtually all aspects of the individual's work and life. New technologies are highly recommended because they make it possible to customise and personalise content and delivery to match individuals' learning styles, experience and skills but shift control of the learning process from institutions to individuals who assume greater responsibility for developing their skills and knowledge.

6. Field research: A strategy for future knowledge-intensive transport SMEs

The field research was performed as a survey in the KNOW-IN project countries and included 74 respondents from different enterprises in the freight road transport sector. The questionnaire was based on the findings of the desk research and its contents were considered with the project objectives.

6.1. Purpose of the field research and methodology of data acquisition

Although the desk research proved the need of continuous training for RTMs, the real condition in the sector could not be understood without direct study carried out in the target groups.

With compiling the set of questions, the project teams of the University of Transport (VTU) and CORTE considered various types of companies operating in road transport (logistics companies, transportation companies, etc.). The survey was intended to investigate staff training demands of managers in the road transport sector. Its specific aims were: to map the existing practices in terms of training of professionals; to identify the necessary knowledge, skills and competences; to examine which main social and technical skills are needed to perform one's job as a knowledge-intensive "road transport manager".

Another purpose of the questionnaire was to reveal the attitude to staff training within the work place and to see if companies have promoted and will further encourage lifelong learning through innovative learning tools.

The partners translated the questionnaire in their national languages – Bulgarian, French (as one of the official languages in Belgium), Italian, Norwegian, and Spanish. However the English text was also available if interviewees preferred the original and where it was appropriate (e.g. international companies and associations).

6.2. Questionnaire design

The questionnaire design was developed by the VTU team assisted by the CORTE partners and with feedback from the other participants. The draft was piloted with a number of companies by the VTU and CORTE teams and as a result a number of slight changes were made in the contents.

The questionnaire enabled the project partners to determine what the basic needs of managers employed by road transport companies/associations were and how best to help them improve their knowledge, skills and competences for implementing the company strategies and increasing their competitiveness on the transport market.

The questionnaire was grouped into 11 sections. Nine of them focused on the main working tasks of EU-RTM identified during the desk research. The first section "Identification" was intended to collect general information about the company (name, size, main field of business, geographical area of operation) and the interviewees (their position and the department they work at). The last section, "Additional comments", was

to give a possibility for respondents to express their opinions, recommendations and suggestions.

Each of the sections contained a number of questions revealing the main knowledge and skills necessary for knowledge-intensive management of SMEs operation in the road transport sector. In addition to multiple choice questions and yes-no answers, the questionnaire included “open questions” to provide an opportunity to gather detailed opinions and suggestions.

The profile of the European Road Transport Manager (EU-RTM) was defined comparing the findings of the desk research and the summarised results of the field research. The analysis revealed both the opportunities and constraints characterising the EU freight road transport sector.

It was found that Road Transport Managers (RTMs) should possess competencies to overcome a number of challenges in their jobs such as:

- adapting to changing environment;
- facing recruitment and retention shortages;
- reducing the harmful emissions and being more environment-friendly.

The results obtained at national level were summarized into a transnational report aimed at outlining a new strategy for knowledge intensive road transport SMEs. The contents of this document were made available for the benefit of sectoral VET associations, consultants, project stakeholders and other interested parties.

6.3. Field research objectives and methodology

6.3.1. Motivation

The desk research provided insight into the job profile of the European Road Transport Manager (EU-RTM). This highlighted the exogenous and endogenous drivers that will influence the sector and will impact the knowledge, skills and competences requirements of the EU-RTM in the near future. It further demonstrated the need for life-long learning, but the nature of the road transport sector can make this difficult to undertake. Therefore further desk research was undertaken to demonstrate innovative ways to undertake life-long learning and to highlight the benefits training can bring to a company.

The findings of the field research facilitated the KNOW-IN partners in creating a sectoral qualification/training programme for the EU-RTM that could be delivered through innovated tools, which helped to promote lifelong learning.

6.3.2. Objectives and methodology

The survey was intended to investigate the training demands of managers in the road transport sector. Its specific aims were to: map the existing practices in terms of training of professionals identify the necessary knowledge, skills and competences examine the main social and technical skills are needed to perform one's job as a knowledge-intensive road transport manager.

The information collected should determine what the basic needs of managers employed by road transport companies/associations are and how to improve their knowledge, skills and competences.

The methodology of data collection included determination of the aims of data collection as a base for the questionnaire development.

6.3.3. Survey as a feasibility activity

Each partner was to obtain a number of questionnaires completed by appropriate respondents. Undertaking the research could be via e-mails and/or using telephone/SKYPE conversations. The partners also agreed that where possible, they would arrange a few face-to-face interviews to gather more qualitative feedback and collect suggestions on how to improve knowledge, skills and competences of road transport managers.

The questionnaire was divided into 11 sections. The first gathered demographic information of the responding companies, and the last section, 11 called "Additional comments", gave an option for respondents to express their opinions, recommendations and suggestions. The main content centred on the 9 main working tasks:

- **Identification**

The first section collected general information about the company and the respondents. The survey was not anonymous, as the name of the company was required. Respondents also confirmed the size of the company, the main field of business, the geographical area of operation of the company. Personal information related only to their current position and the department in which they work.

- **Administrative/Compliance**

The questions in this section aimed to reveal the basic knowledge and skills necessary for the manager working in a road transport company in relation to fiscal issues and foreign languages.

- **Planning Activities**

The information requested in this part concerned necessary knowledge and skills a RTM needs in relation to planning activities, including knowledge of technology and computers and of the relevant legislation applicable in road transport sector.

- **Dealing with customers**

To evaluate the performance of road transport managers in relation to customers, the survey included questions about the skills and most important personal competences necessary for dealing with customers as well it companies provided training to staff. Respondents were asked to identify the top five (out of 17) personal competences they considered essential when dealing with customers.

- **Dealing with Staff and Drivers**

To identify the skills necessary to keep a healthy working climate, questions in this section, considered the abilities of the RTM to handle stressful situations and take criticism, and knowledge of the legislation on alcohol and recognition of drug usage in practice.

- **Vehicle Maintenance**

The questions aimed to check the importance of knowledge of both common technical problems appearing in vehicles and of specific systems such as vehicle and trailer tracking system, onboard communication systems, computerised vehicles routeing and scheduling, satellite navigation systems, etc.

- **Communication**

The demand was to evaluate the communication skills on a four-degree scaled. The respondents have to determine if a road manager needs to learn the techniques of conflict management.

- **Personal Skills**

The respondents were asked to provide details of the average educational achievements of RTMs in their company. It then asked what the respondent considers was the minimum educational level and work experience a RMT should have.

- **Coordination**

This section aimed to find out if the company provided training for road transport managers, the percentage of RTMs who had attended any training in the last five years and whether in the near future it will be necessary to provide additional training to staff in order to increase their competence in freight road transport. The respondents were asked to describe the areas and types of training and what if any benefits were obtained from providing training.

Additional questions were included to find out if the company/association offers internships for students and how many university graduates they expected to employ within 3 periods (a year, 3 years and 5 years).

- **Business management**

The requirement for a road transport worker to acquire knowledge of market relations and business management was investigated. The respondent then had the opportunity to provide further details of what is required in terms of business management.

- **Additional comments**

The last section, 11, called “Additional comments” provided the possibility for the respondents to express any further opinions, recommendations and suggestions, they may have in relation to RTMs and skills and training requirements of the role.

6.4. Analysis of the survey results

6.4.1 Identification

The total number of respondents was 74 (UK-23, IT-18, BG-17, ES-13, NO -3). Most of participants (78%) work in a managerial position. 22% of respondents were owners, but it should be emphasized that in the micro enterprises they perform the tasks of an executive manager (CEO).

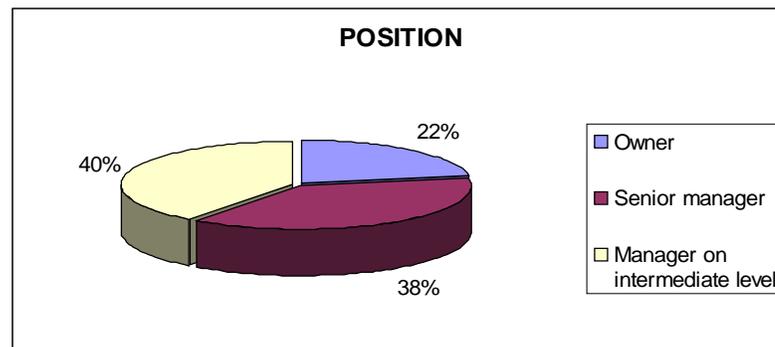


Figure 2. Job Role of Respondents

The analysis has shown that the participants work predominately in domestic and international transport departments. Those working in HR accounted for 7%. In the UK, the line manager would generally have the responsibility of identifying training needs and would then work with HR to source it.

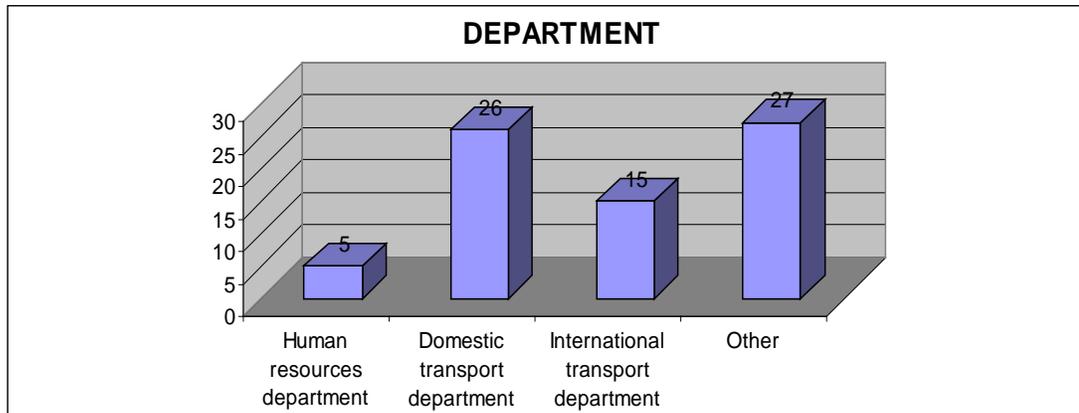


Figure 3 Department individuals worked within

The main features of the companies/associations that participated in this survey can be summarized as follows: 44.5% of respondents described their company as road transport companies and 20% are logistics companies. In addition to their own countries, 28% of respondents reported that they operated in the EU and 14% in European countries outside to the EU. Relatively few operate world-wide. 81% of those responding were SMES's (employing less than 250 employees) which coincides with the aim to outline a strategy for this group leading to knowledge intensive management.

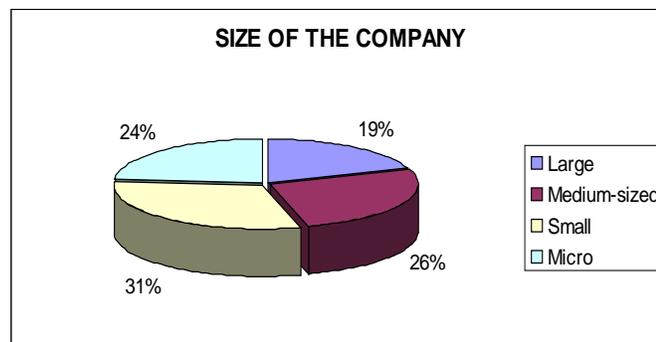


Figure 4 Company size

6.4.2 Administrative/Compliance

Most respondents (84%) think that a Road Transport Manager should have knowledge of fiscal issues. The ability to communicate in other languages than the working language of the company was considered to be necessary by 57% of respondents. Knowledge of English was most frequently reported as being necessary followed by German and French. Spanish and Dutch were also mentioned. This reflects international nature of road transport. However, nearly twice as many companies reported that they did not support training in language acquisition compared to those that do (41 companies compared to 24).

6.4.3 Planning Activities

More than half of the respondents are convinced that computer knowledge is necessary. This includes the ability to use Internet, e-mails, Microsoft Office and other applications. The majority (68%) believe that a RTM should acquire knowledge of relevant legislation applicable to the road transport sector. Regulations regarding the transport industry and market regulations were the top areas to have knowledge of.

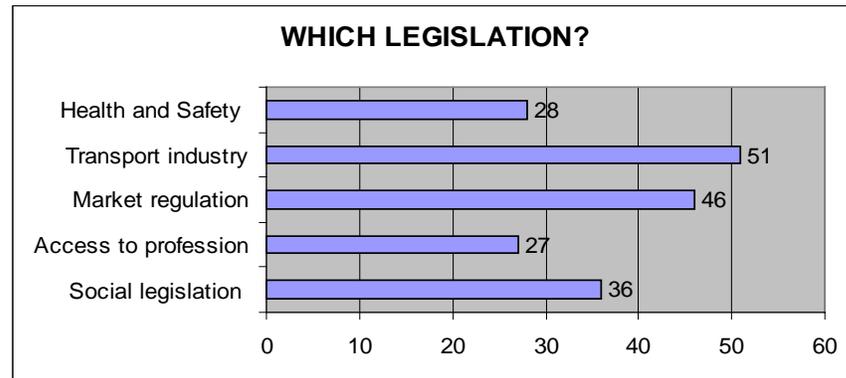


Figure 5 Regulations regarding relevant legislation

6.4.4 Dealing with customers

More than 80% (62 respondents) believed that customer service skills were necessary. The top five personal competences, needed by a road transport worker, are knowledge, adaptability, flexibility, honesty and the ability to be tactful.

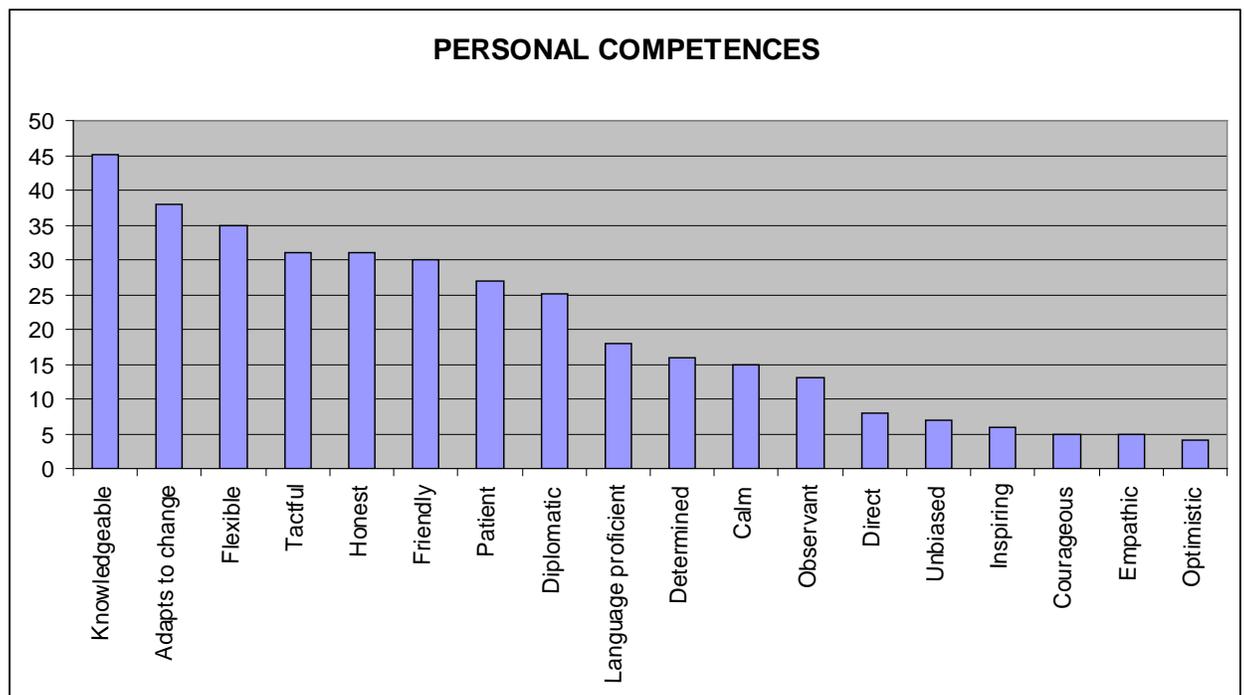


Figure 6 Most important personal competences road transport workers needs to deal with customers

Two thirds (65%) of respondents reported that their companies provided customer service training to their staff. This is greater than language acquisition suggesting that there is a greater emphasis on customer service skills.

The skills anticipated to become more important for a RTM over the next five years, are described with key words such as expertise, flexibility, communication skills, problem solving, “thinking outside the box” and being innovative. Broken down by individual countries anticipated skills are:

Bulgaria: communication, activity, expertise in logistics, ability to define specific needs.

Spain: computers and languages communication; patient, initiative and training; flexible; legislation overall in work contracts; social; training and experience; availability.

UK: common sense approach, understanding of the job and a commitment to getting the job done as trained, good communication skills, flexibility, ability to adapt to and embrace changes and challenges.

Italy: skills focused on customer: “Be Polite and Courteous. Treat others as you would wish to be treated yourself. Remember you are my Ambassador so far as my Customer is concerned”.

The personal skills necessary for RTMs in the future can be summarised as follows:

1. To be ready for change - adaptability
2. To be adaptable/flexible towards staff
3. Keeping abreast of current legislation
4. Better financial understanding and impacts individuals can make on the bottom line
5. Entrepreneurial and able to motivate people at all levels.
6. Keeping customers happy, reliability.

Some of the Italian companies emphasised the need to learn foreign languages and sector legislation, which as mentioned above, are areas of training that can be underestimated by employees.

6.4.5 Dealing with staff and drivers

82% considered the ability to cope with stressful situations to be very important. This answer was expected bearing in mind the dynamic work conditions in the road transport sector.

The participants in the survey are convinced that the RTM should know the legislation on alcohol and drug usage and recognise such usage in practice. The majority of respondents believe that it is very important for the RTM to be able to take criticism.

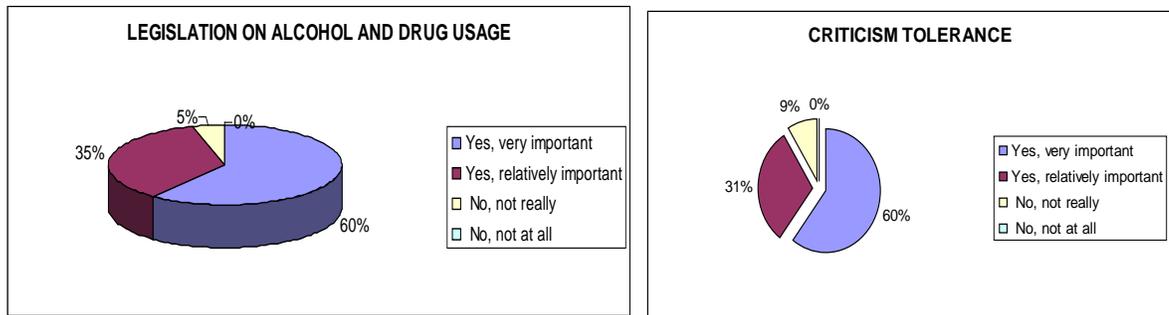


Figure 7 The legislation on alcohol and drug usage

6.4.6 Vehicle Maintenance

More than 75 % of respondents confirmed that a road transport workers have to have good knowledge of the common technical problems appearing in vehicles. Specific expertise knowledge is shown in Figure 5.

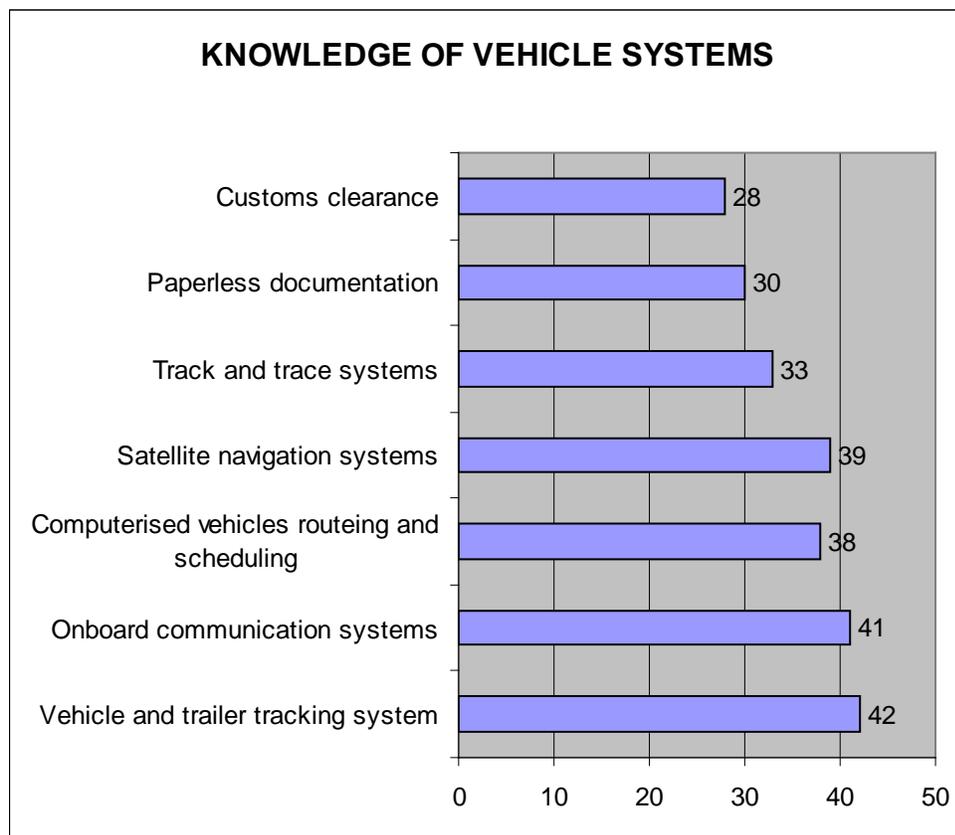


Figure 8 Road transport workers should have knowledge of the following systems

6.4.7 Communication

More than three quarters (77%) considered communications skills to be very important to a road transport manager. However, only half of the companies that completed the questionnaire measured the communication skills of new recruits.

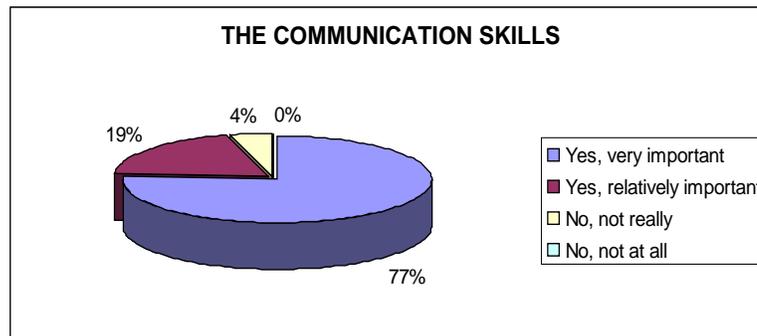


Figure 9 The importance of communication skills

Those companies that measured the communication skills of new recruits were asked how they did so. Respondents reported a variety of means. They included the use of appraisal procedures and pre-employment assessments, job interviews with the candidate, conducting interactive meetings, observation and communication with clients and colleagues, Q&A session at interview, reasoning tests, feedback from customers, psychometric tests as part of the recruitment process, and on-line aptitude tests during initial interviews.

70% respondents believe that it is necessary to know techniques of conflict management (Yes - 53; No -15). This answer was not a surprise due to the nature of the job of road transport manager, which includes working with people with different interests: staff and drivers on the one hand, and on the other customers.

6.4.8 Personal skills

The level of education of the managers in the road transport companies is quite high. 59% of them are holders of higher education qualification and 28% have appropriate vocational training.

Most respondents answered that the ideal RTM should hold a university degree with at least 5 years work experience (55%). The work experience should not be necessarily be international or from foreign countries (Yes - 29; No -37). However, practical experience as a driver within the company or another firm is considered as an additional asset for a road transport manager (Yes- 54; No -13).

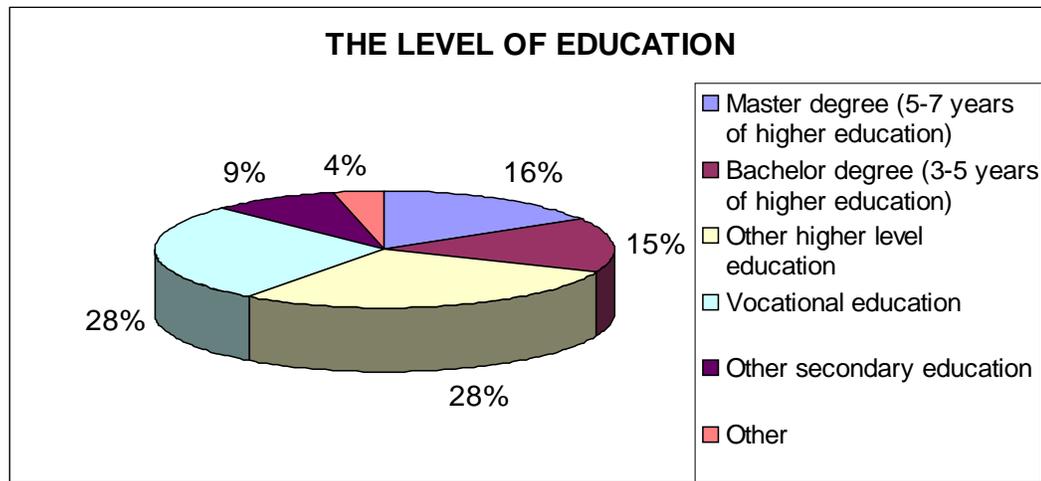


Figure 10 Ideal level of work experience

6.4.9 Coordination

The forms of training that companies provide are most often of traditional type with a prevailing share of workshops. The percentage of “others” is relatively small but the forms specified by the companies from the UK are namely those that should be used preferably in future. They include using ICT technologies, which are the bases of modern flexible training, e-learning and m-learning: CPC training for drivers, email shots/posters/newsletters, driver CPC, SAFED. Some companies apply on-the-job training, practical time and monetary investment towards diploma, which is a stimulus for independent individual learning.

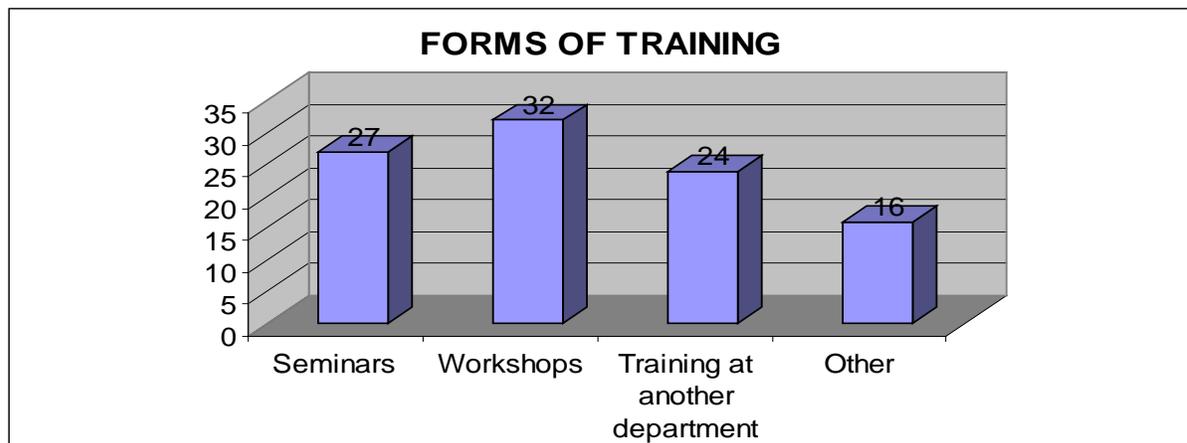


Figure 11 The forms of training

The percentage of road transport managers who have attended any training in the last five years varies per countries: from 5% to 100% for Bulgaria and Spain, from none to 100%

in Italy. The highest percentage of people included in training was reported by the respondents from the UK where half of the interviewed companies have stated 100 % training for the staff, 1 – 95%, 1 – 80% and 5 – 50%, which outlined a steady policy towards knowledge-intensive management.

The question about assessment of the currently available training programmes for freight road transport and logistics is the only one that split the answers in a way that unsatisfactory opinions – 20 and answers “I do not know” – 28 are prevailing. The logical conclusion is that the current training programs do not address the needs of road transport managers. So, the message sent to the companies sounds even more urgent while compared with the answers to the next question. Half of the respondents think that it will be necessary to provide additional training to all the staff or part of them in the near future.

Concerning the form of training, some of the participants confused topics and forms. What they mentioned most often is e-learning, vocational training, academy/QCFquals, training for certificates of competence, licence acquisition, computer skills (SAGE).

The answers related to the areas of further staff/managers training give a possibility to outline a suitable curriculum that will meet their demands of road transport managers on knowledge and skills improvement. Nearly half of respondents confirmed that the most important areas are the new technologies, management and organizational skills.

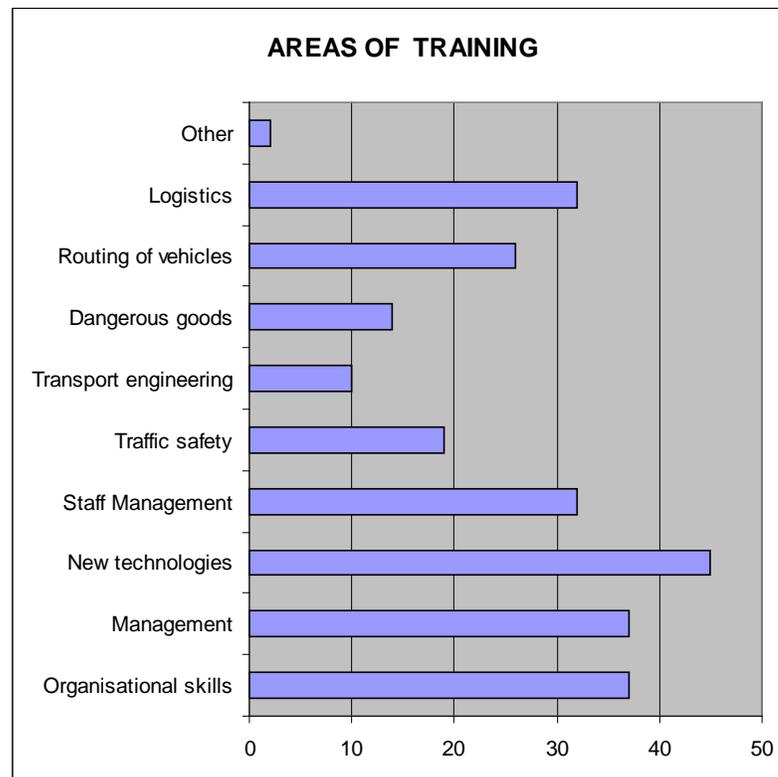


Figure 12 The most important areas of training

The preferences to the type of training are quite balanced. Both traditional (classroom) education and flexible training are accepted as appropriate for road transport managers. However, contact learning is still more popular, which is evident if we sum up the percentages of external courses, evening and weekend classes (totally 54%). The share of distance learning in its pure form is just twice less (27%) but the tendency seems more optimistic in combination with hybrid training. This conclusion is important for further project activities including the development of teaching materials (handbook), which should suit to both classroom and flexible training.

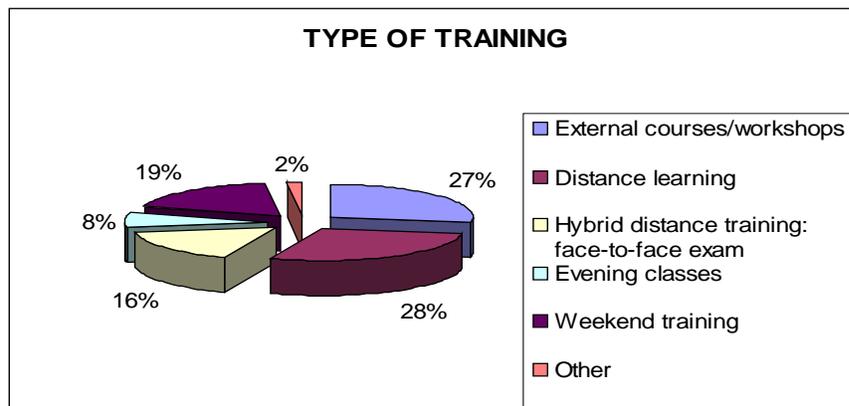


Figure 13 The preferences to the type of training

Those who chose “Other” specified it in two ways: practical training (respondents from Bulgaria) and QCF – Qualifications and Credit Framework, the national credit transfer system for education qualification in England, Northern Ireland and Wales (respondents from the UK).

If the assessments with “very important” are analyzed separately, it can be seen that the respondents who evaluated the training ensured that training was for the purpose of the company, which is higher than the employees’ satisfaction.

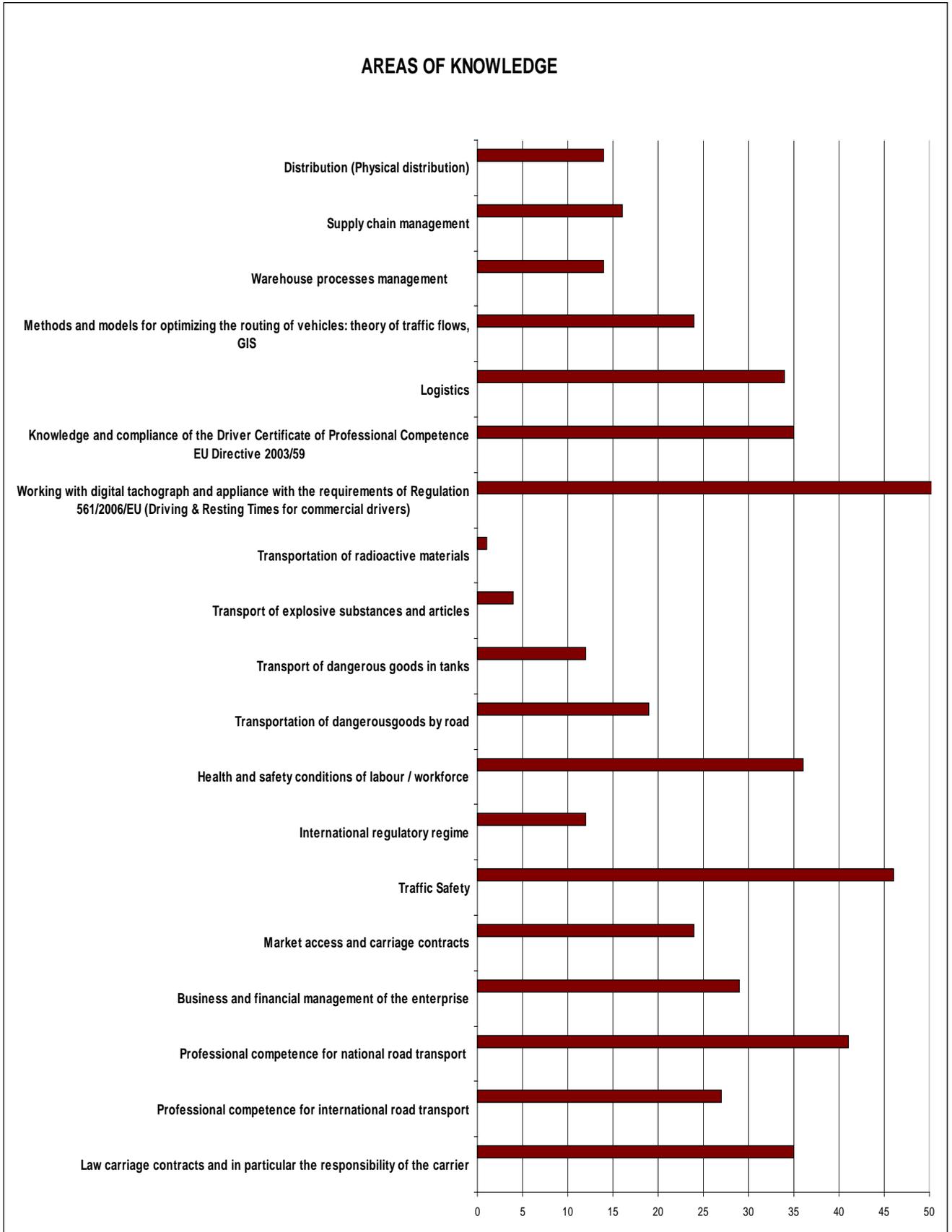


Figure 14 The rating of areas of knowledge

The rating of areas of knowledge was made according to the company specificity but it has a general significance as well /Figure 14/.

The greatest demand on training is related to digital tachographs and EU regulations, road safety, professional competence for national road systems, legal issues, healthy and safety conditions, logistics, business and financial management. The least interest is to transportation of radioactive materials (it happens rarely) and transportation of dangerous goods, which are a specific matter and a priority of training provided by national administrations.

It is clear that training is of employees' interest but staff training is also of certain benefit to road transport companies. Only few do not evaluate the efforts in that aspect while most appreciate the use of training to increase effectiveness, innovations, staff retention, reputation.

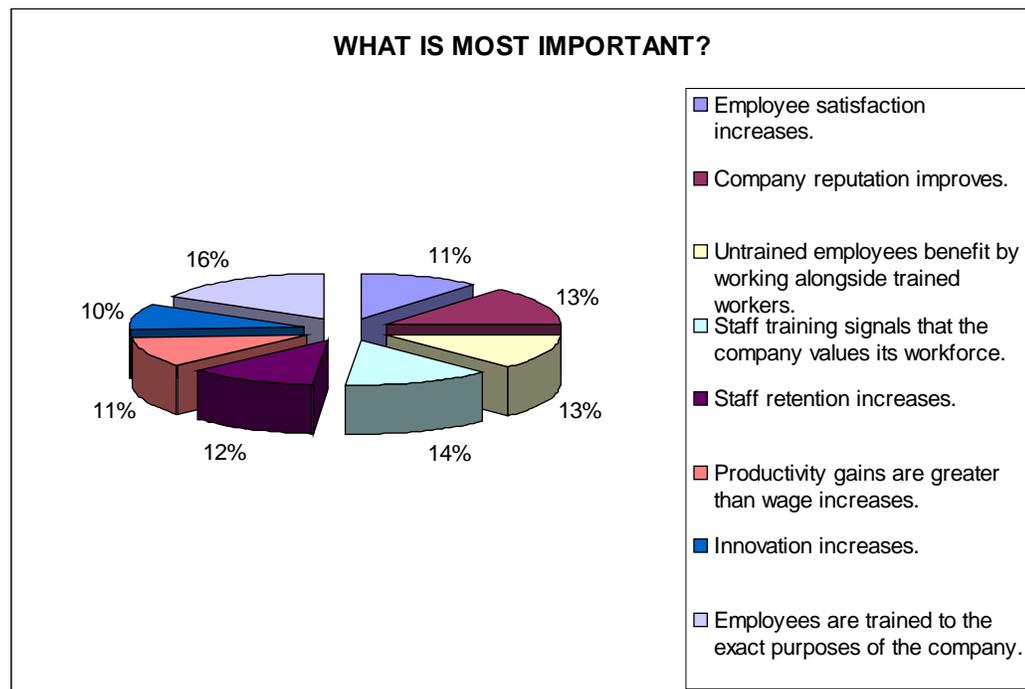


Figure 14 What is most important from company

It should be also emphasized that the exchange of experience by working with trained workers is considered as much as a benefit as the increase in company's reputation. Despite that opinion, only a few companies provide internship possibilities for students (Yes-19; No-53). It seems discouraging for the young people who have chosen the career of the road transport manager as it is difficult to find a placement in the road transport sector.

As for the companies that offer internship, they usually do that under certain programs such as 18-month graduate programme, graduate scheme of Royal Mail Traffic Planners in the UK and Job shadowing, stages and stages for foreign students in Italy. In Norway, trainees and apprentices are part of the Norwegian VET system and are promoted by the social partners as a significant module in VET and as a recruitment instrument for the sector.

Although internships are not often available, the number of university graduates expected to be employed within the next year and in 3 and 5 years respectively is satisfactory for the interviewed establishments. AN average of 2 students will be recruited in each company/association, which seems good considering that most of them are SMEs.

6.4.10 Business Management

The majority of the participants in the survey believed that the road transport manager needs to acquire only basic knowledge of market relations and business management. That should be not evaluated as a lack of ambitions but as a sound realism. What is most often understood under “basic” knowledge is “applied science”, which is enough for the needs of practice.

In terms of what is required from a RTM in terms of business management is highlighted below by individual country:

Bulgaria: competence, adaptability, flexibility, job stress, vision, diplomacy, language, fairness. “The manager must motivate staff to achieve optimal results and to organize effective commercial relationships with clients and to regulate teamwork”.

Italy: knowledge about work safety legislation, road safety, fiscal and contributory knowledge; cooperation - adaptation to company rules; optimisation of distribution processes, warehouse management; knowledge about market opportunities; organisational and trade competencies; coordination aimed at improving company productivity, client idealisation; general management.

Norway: knowledge of market relations and business management will be central in a Road Transport Manager’s future skill profile; some elements were underlined as being central to the sustainability of the sector and its reputation: focus on legislative aspects targeting taxation, VAT regimes, market regulation, health, environment and safety, as well as the basic principles of profitable and responsible operational management.

Spain: organisation in main areas; experience, management, traffic knowledge, logistics, commercial skills, communication, diplomacy; management skills and a knowledge in transport sector.

UK: staff motivation, understanding costs, basic understanding that their actions affect the business as a whole knowledge; understanding of rates and costs and their impact on P&L; the cost effective and profitable operation of the road distribution section including managing maintenance and damage costs; understanding the current economic climate; understanding of drivers and the contract, customers' needs and rules and regulations; total knowledge of the whole operation (start to finish); to be financially aware; to know what the business side of things involve-Financial/Vacancies/Legislation; to be able to treat the business that he or she works for as their own; effective use of budget available; being able to remain competitive.

6.4.11 Additional comments

The initiative (KNOW-IN) is great and we will be happy to participate in it. To pay more attention to intermodal and combined transport. The role of a Good Transport Manager involves a very wide range of skills, including but not limited to:

1. Costing, Pricing and Evaluation.
2. Routing to minimise costs and maximise Revenues.
3. Mechanical Knowledge of Trucks and Trailers.
4. Financial skills of how to read balance sheets and P and L accounts.
5. Ability to do the Job himself.

All of the above skills make-up a competent Transport Manager. Transport Manager CPC is outdated and not relevant as many have passed it too many years ago for it to remain of value; The Transport manager job will not become any easier, and could be subject to a skills shortage in the coming years; To work in the transport sector an employee has to be dedicated to the type of work undertaken and has to be able to keep up with all the legislation changes that take place within the industry. Overall the current transport industry lacks job specific training and development.

6.5 Towards a strategy for Future Knowledge Intensive Transport SMEs

EU legislation, in particular road transport social legislation, is complex and requires road transport managers to have sufficient knowledge to ensure they abide the numerous rules. New regulations are enforced differently across Europe, which can add stress and pressure on managers. To work within a transport operation, the individual needs to be dedicated to the type of work and be able to keep up with all the changes that take place within the industry.

An ideal background of a road transport manager is believed to be a Bachelor degree (3-5 years of higher education), with more than 5 years of working experience. The most important aspects concerning their profile can be summarised as: Language skills: very appreciated, especially English language Computer skills: Microsoft office programs and Internet surfing skills Legislation knowledge: applicable aspects Customer service skills (it is provided very rarely) Technical knowledge: vehicles, vehicle and trailer tracking and track and trace systems Conflict management and criticism tolerance

Although some companies have been applying different forms of lifelong learning, the survey showed that the current transport system lacks job specific training and development. That is why many respondents, especially from micro and small enterprises, are interested in the project outcomes. The areas in which staff/managers require further training include: New technologies, Staff Management, Company Management and Organisational issues, Carriage contracts and in particular the responsibility of the carrier, Working with digital tachograph and compliance with the Regulation 561/2006/EU and Traffic Safety.

The strategy for future knowledge intensive transport SMEs should include not only the learning contents, but also propose innovative learning types based on ICT. However, the novelties have to be introduced step by step. Considering the traditions in vocational education, the most appropriate training type seems to be Hybrid distance training with face-to-face exams. That method has already been successfully applied in practice by some Bulgarian and other associations and vocational training centres.

The need to develop a strategy for increasing the knowledge, skills and competences of road transport managers is not only imposed from “outside” or “top-down” by the EU standards and directives. Companies and associations are recognising that increasing skills and knowledge can help a business remain competitive and bring about a number of other benefits such as better reputation as the company is seen to value its workforce.

However, the establishments in the road transport sector have signalled that they do not need a general type of learning. What will be of great benefit is to train employees for the exact purpose of the company. This should be taken into consideration while developing a strategy for future knowledge intensive transport SMEs. The training concepts should be flexible enough to meet the challenges imposed by the changes of transport market and new technologies both in industry and education.

7. Concluding remarks

The overview on the results of desk research contributed to exchanging of good practices, mutual learning and the development of joint activities amongst stakeholders in the KNOW-IN partner countries.

Most of theoretical statements summarized from different reference were confirmed during the field research. Some companies who took part in the survey got interested in the project and declared their willingness to be involved in its further activities.

The field research clearly outlined the benefits of staff lifelong learning: the company reputation improves; the employees are trained to the exact purposes of the company and innovation potential increases. The transport manager job would not become any easier, and could be subject to a skills shortage in the coming years. Therefore it is imperative to ensure that the sector has a relevant training program for RTMs that will ensure they have the skills necessary for the future.

Another benefit from the desk and field research on staff training needs is the definition of the most important topics and methods of training. Taking into account the attitude of road transport companies to learning on workplace and the qualification an EU-RTM needs to possess, the project consortium developed:

- Information Toolkit, which is an e-handbook, designed for the European road transport manager (EU-RTM) who wants to increase his/her knowledge and skills in the field of road transport and management. It is where managers in road transport can find solutions to many problems they face in their daily work routine such as: civil, commercial, social and financial law; business and financial management of the enterprise; market access; technical standards and technical aspects of operation and road safety;
- EU-RTM European Qualification Framework (EQF) and Recognition of Prior Learning (RPL). The matrix of knowledge, skills and competences necessary for road transport managers (EU-RTM) is based on the idea to link them with learning outcomes. The framework is operationally defined by a system of indicators based on learning outcomes, regardless of how or where these are achieved.

These tools can be applied across the EU road transport sector being available for employers to assess the knowledge and skills of employees against the developed standard framework. If gaps are established, SMEs could organize training using the project outcomes and internet resources.

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The project was aimed at creating a new professional figure: the European road transport manager (EU-RTM) who should possess management skills, tools and actions needed to overcome the challenges faced by the sector. KNOW-IN was coordinated by the European Business and Innovation Centre (CEEI) in Albacete, Spain, and the team consisted of participants from 6 countries including also Belgium, Bulgaria, Italy, Norway and the United Kingdom.

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