

Trainer Handbook

Virtual classroom concept for driver CPC training and beyond

GamingDRV



Strengthening Gamified Digital Learning

for Learners and VET personnel in Professional Driver Training



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1 Introduction and Background

Have you ever wanted the opportunity to train professional drivers in a virtual classroom, in a fun and engaging way? The **GamingDRV project** is dedicated to exploring the possibilities for doing just that. The end result is a comprehensive toolkit with everything you need to get started:



- A virtual classroom (VC) concept with guidance and examples
- A curriculum with 4 modules
- Gamified learning elements (GLE) for the VC
- Online pool of resources for the VC
- A self-paced e-learning module on how to use GLE in a VC

1.1 Overview

The GamingDRV VC concept supports training developers and instructors in developing virtual driver CPC training with gamified learning elements, to host engaging live online training sessions that replicate a traditional classroom experience. The concept includes gamified learning elements (GLE) that create a dynamic and interactive training environment to enhance the learning experience and learning outcomes.

1.2 Why use a VC?

There are several reasons for conducting the driver CPC training in a virtual classroom.

For drivers

The virtual classroom offers convenience and flexibility. Drivers can attend the training from anywhere with an internet connection. Virtual training reduces the need for travel, saving time and money for both drivers and employers. The convenience of virtual training can raise the motivation for attending a compulsory training.

Furthermore, the virtual classroom provides a more interactive and engaging learning experience. With the use of multimedia, animations and engaging tools, drivers can get a better understanding of the concepts and practical applications of the driver CPC training content. Additionally, virtual training allows for real-time communication and collaboration between trainers and participants, making the learning experience more dynamic and effective.

For training providers

Virtual training eliminates the need for physical resources, reducing overhead costs and improving efficiency. This includes the cost of maintaining training facilities, equipment, and supplies. It allows for a wider reach and a larger audience, making it possible to offer training to more drivers regardless of their location.

Virtual training also provides real-time data and analytics that can be used to assess and improve the training programme. This helps the training provider understand what works and what needs to be improved. By leveraging technology, training providers can offer a high-quality, impactful learning experience and at the same time improve their bottom line.

For the environment

Virtual training helps to reduce the impact on the environment and overhead costs by eliminating the need for physical resources such as facility maintenance, training supplies, transportation, and more.

For companies

Besides the cost saving aspect mentioned above, many companies appreciate how virtual training makes it easier to deliver their sustainability goals by reducing the carbon footprint and promoting environmental responsibility.

In conclusion, a virtual classroom offers numerous benefits for drivers and stakeholders which are more environmentally sustainable, reducing the carbon footprint and promoting environmental responsibility. GamingDRV provides a guideline for the implementation of virtual training here.

1.3 Why use gamified learning elements (GLE)?

There are several reasons to include gamified learning elements (GLE) into a virtual classroom.¹

- Increased interaction, collaboration, and community building: Gamification can promote interaction and collaboration among participants as they work together to solve challenges and complete tasks. This helps to foster a sense of community and encourages learners to share their knowledge and experiences.
- Enhanced engagement: Gamified learning elements keep participants actively involved and motivated. Elements of competition, challenge, and reward add to the learning experience, making it more enjoyable and engaging for learners. This helps to maintain the learner's attention and motivation throughout the training and gives them a feeling of ownership over their own learning process.
- **Improved retention:** Gamified learning enhances knowledge retention by adding an element of fun and challenge and creating space for repetition, playful testing, and consolidation of learning content. By linking the learning experience to fun and games, learners are more likely to remember the concepts and apply them in real-life situations. Especially long, text heavy, theoretical parts of the training can be shaken up by introducing interactive game elements.
- Variety in learning: Different learning formats and a wide range of delivery methods cater to diverse learning preferences and abilities.

¹ Consideration of target group, content characteristics and learning objectives are key when making a didactical choice.

- Friendly competition: Points, rewards, leader boards and achievements as a group or individually, foster friendly and respectful competition, a celebration of achievements and encourage participation.
- Cost and time efficiency: Eliminating travel expenses and offering more flexible schedules makes training accessible and efficient.
- Inclusion: Gamified learning elements, especially when customisable, have the potential to contribute to inclusiveness and accessibility, ensuring an effective learning experience for all participants, catering to different learning styles and abilities.

1.4 Background

For many years, the European transport industry has suffered from a major skills shortage and, according to the International Road Union (IRU), the demand for skilled professional drivers will continue to rise in the future. At the same time, it is anticipated that the occupation profile of professional drivers will undergo major changes in the context of digitalisation, autonomous driving and the increasing internationalisation and automation of the sector. The COVID-19 pandemic has clearly been a driver for virtual training, not only in the road sector but in other sectors too. The crisis has highlighted the advantages of digital forms of learning but also the shortfalls that still exist despite the political will to redress them, specifically at European level. It has become apparent that not only is there a lack of infrastructure and resources for the promotion of digital training, but also a lack of competence for all actors involved when it comes to the development and implementation of high-quality, didactically sound, innovative, and integrative digital training offers.

For the group of professional drivers, who are legally required to take part in regular further training, this has been exacerbated by the fact that regulatory frameworks do not have provision for the recognition of virtual training. In addition, this group is characterised by a socially and educationally disadvantaged demographic that makes it even more difficult to cater for in digitalised training. The relatively low participation rates in further training programmes, the high share of migrant workers, a high share of semi-skilled workers, relatively low levels of self-learning competence as well as the obligatory nature of driver CPC training result in a complex set of learning needs requiring more didactically sound approaches than mere frontal training. This is exacerbated in virtual training formats.

1.5 Objectives and target group

The GamingDRV VC concept is mainly targeted at trainers, training developers and training providers who wish to train professional drivers in a virtual classroom, enhanced with interactive and gamified learning elements.

The GamingDRV curriculum includes learning-outcome oriented training contents for 4 relevant, innovative and VC-appropriate driver CPC modules (based on the European Driver CPC's current annex as well as the EU Mobility Package II, focusing on load securing, automation and new assistant systems, customer orientation and communication, safe, defensive and eco driving, CO2 monitoring and reporting of heavy duty vehicles, driving and rest time rules, road charging and electronic tolling, access to the profession for passenger and freight transport operators, posting of workers, as well as cabotage regulation).

The virtual classroom concept identifies specific didactical and pedagogical requirements for this training format and outlines the necessary didactical approaches, methods, and techniques to be applied in this training. It also considers the necessary framework such as digital methods, tools, and skills easily transferrable to a virtual classroom setting.

The concept and curriculum are based on the learning-outcomes approach, considering **ECVET** principles to ensure maximum transferability, usability and connectivity to other qualifications and forming the necessary basis for the envisaged recognition of virtual training at a later stage.



The GamingDRV consortium has conducted elaborated desk research on gamification for educational purpose and game-based learning approaches. This concept is based on the following definition, adapted from Deterding, et al. 2011:

"Gamification is the use of game design elements and game mechanics or the integration of game thinking in non-game contexts."

Examples of gamified learning elements could be such as: rewards, feedback, points / scores, badges, progress bars, customised messages, leader boards, competitions and much more besides.

At the early stages of the project the GamingDRV consortium conducted trainer interviews in Finland, France, Germany, Ireland, Sweden, and the UK. It soon became clear that e-learning with self-study periods did not appear to be a good fit for the target group of professional drivers and their profession. Our analysis shows the need for a high support, learning outcome-oriented structured learning process. Simple language and visual support meet the need for more inclusiveness. Self-explanatory guidance and minimalistic help buttons in the GLEs are one example of how we achieved those requirements.

The modules are available as an OER browser version as well as downloadable as SCORM packages in the Online Pool of Resources. They include material such as PPT slide or checklists that complement the learning content.

In order to be most open and flexible, this concept does not focus on a specific platform or meeting type. Technology is developing rapidly, and furthermore most trainers must comply with the platform and software choices of their employer. Therefore, the GamingDRV VC concept has an open outline and structure that can be applied to different platforms and software.

Prerequisites

If you want to use the GamingDRV VC concept in your training, we recommend you first complete the e-learning **GameTrain**.

After completing the e-learning you will ...

- be able to explain the difference between a classroom and a virtual classroom
- be aware of gamified learning elements (GLE) and the benefits they can bring to the driver learning experience
- be able to prepare and facilitate a virtual classroom session, enhanced with gamified elements (including breaks)
- be able to communicate well in all phases of the virtual training sessions (before, during, after)
- be aware of how to motivate and engage learners in a virtual classroom
- know how to assess and evaluate virtual classroom training

1.6 Key components

Real-time instruction and interactive content

Driver CPC topics will be covered by trainers in live sessions (synchronous virtual classroom). Presentations, multimedia, and game elements enhance engagement and motivation, while the usual meeting software and additional didactical methods and tools are being used to illustrate concepts and learning content effectively (e.g., whiteboards, group discussions etc.).

Structured sessions and learning group activities

Before each session, the trainer should always provide a clear agenda with all topics and activities. Participants should know what to expect and how to prepare. The GamingDRV VC concept provides a variety of ideas, methodical approaches, and tools to compile the perfect learning scenario, based on the trainer's preferences, the learners' needs, and the learning objectives.

Online resources and gamified learning elements

GamingDRV provides several resources for the virtual driver CPC training and beyond. The virtual classroom concept for trainers is complemented by:

- Virtual classroom curriculum with best practice examples (including 4 modules for the driver CPC training)
- five versatile gamified learning elements that can be adapted to the trainers' needs and objectives
- a number of online resources in the GamingDRV Online Pool of Resources
- guidelines for the implementation of virtual training in driver
 CPC and beyond, addressed at different stakeholders



Trainers can draw inspiration from the suggested pedagogical scenarios in the GamingDRV VC concept. They may use it as is or adapt it to suit their needs. The games and online resources can also be used individually.

Conditions

All resources developed by the GamingDRV project are Open Educational Resources (OER) and therefore free of charge. They are GDPR compliant. The links and tools included in the online pool of resources may differ.

Please check the terms and conditions, possible costs and other relevant information before use, and make sure it complies with your employers' policies and CPC training regulations. If in doubt, please contact your manager or IT-department.

1.7 Use of GLE in traditional classroom setting

When discussing the digitalisation of training, it is common to associate it with distance learning. However, digitalisation is not solely limited to online training. A prime example is incorporating gamification into face-to-face training. Online gamified learning elements and multimedia content can be employed or provided to supplement the standard materials. Not only can it improve on conventional materials and methods, but it also has environmental benefits, such as eliminating paper, etc.

Conventional instruction may not always provoke emulation or motivation among participants, especially for those unaccustomed to sitting in class for extended periods. Gamification presents a means of heightening and keeping the learners' interest. It not only includes the playing of games within the classroom, but also the integration of gaming components into an already established teaching programme. It is an intriguing perspective when discussing driver CPC training, given that the current legal framework in numerous European countries does not support virtual training with synchronous live sessions.

From a pedagogical stance, digitisation is aiding the modernisation of learning techniques, whether the instruction is remote or face-to-face. Training development nowadays offers an increasing range of digital learning elements, such as videos, interactive exercises, animations, online games and more. For instance, instead of a traditional question and answer format or monologue, a conversational card game can facilitate debates or discussions.

The aim is to enhance the interaction with the learning content. The GamingDRV project has developed resources to facilitate integration of GLEs. Explore the **GamingDRV resources in the Online Pool!**

2 Examples from the GamingDRV curriculum

Four modules for the driver training | Trainer Handbook for implementation of VC training in driver CPC training

The following chapters will guide you through four modules that exemplify how to effectively deliver Driver CPC training in a virtual classroom environment as "Best Practice." It contains practical tips and examples for creating a learning outcome-oriented curriculum.

The focus is on keeping learners engaged in the virtual class-room. Since much of the content in recurrent mandatory training can be repetitive, it's essential to keep participants—especially those familiar with the material—actively involved. The emphasis is on interaction between drivers and trainers. The driving profession requires extensive practical knowledge, which is so diverse that discussions continually bring new perspectives to familiar topics. Additionally, new experiences gained during work often produce stories worth sharing, as these provide valuable learning opportunities. With technology advancing rapidly, an active exchange of experiences is even more valuable. For instance, while some drivers may still rely on traditional formulas, others may be using a new load-securing calculator app that they can recommend to their peers. These moments present excellent opportunities for peer learning.

Intentions of this concept:1

- increasing interactivity and interaction between learners and trainers in the virtual classroom (live sessions)
- supporting trainers in effectively designing, implementing, and deploying gamification elements as an innovative approach to learning, thereby enriching VC-based training for professional drivers (in addition to the support of VET personnel in applying innovative and integrative gamified training methods in the VC with "GameTrain")
- a concept based on a learning outcome and target group orientation

2.1 The four exemplary modules

The four modules that will be presented by the different partners of the **GamingDRV project** are:

- 1. Module "Load Safety" (from Germany)
- 2. Module "Enforcement of regulation" (from France)
- 3. Module "EcoDriving" (from Finland)
- 4. Module "Health and wellbeing for safe roads" (from Ireland)

The training content in this chapter was developed after carefully analysing its relevance and applicability across different countries participating in the GamingDRV project, considering the needs of the target group and the applicability of the training content in a VC format for 7-hour modules of the compulsory driver CPC training.

It is strongly recommended that you complete the GameTrain eLearning module beforehand to familiarize yourself with the basic concepts, gamified learning elements, and virtual classroom training if you have little or no previous experience.

The design is intentionally flexible to allow trainers to integrate the content into their specific context. For example, no specific virtual meeting software is required, and trainers can independently select and integrate the most suitable elements for their content and circumstances.

The modules are presented concisely in the upcoming sections to encourage practical implementation. Trainers interested in more details can refer to the appendix. Repetitive elements have been omitted to focus on practical examples and implementation.

2.2 Key principles common for all modules

To ensure effective training delivery and learner engagement when transitioning from traditional classroom settings to virtual classrooms, the following principles apply to all four modules:

- Microlearning: Breaking the content into smaller learning units is crucial for the virtual environment. Split the material into bite-sized lessons. Each session should last no longer than 20-30 minutes before introducing an interactive element or a break.
- Interactive Elements: In virtual classrooms, keeping learners engaged is essential. Use a combination of quizzes, polls, gamified exercises, and real-time feedback to maintain active participation.
- Learning Outcomes-Orientation: Always focus on the desired learning outcomes. For example, use a competence matrix, such as the one provided in module 1, to guide the structure of your course.
- Customizing to the Learner's Needs: Ensure the training content is adapted to your specific group.
- Technology Awareness: Make sure learners are familiar with the virtual tools being used.

2.3 Resources referred to

All resources mentioned in the modules are linked for easy access (marked in blue and underlined). They can be found in the **GamingDRV Online Resource Pool**, which also contains links to complementary material. This chapter demonstrates how to use the online pool resources and combine them to create a cohesive virtual classroom approach to Driver CPC topics.



2.4 Overview of material referred to in the Online Resource Pool

PowerPoint Slide Template Library

The GamingDRV PowerPoint Slide Template Library provides pre-designed slide sets that you can freely use and customise for your virtual training sessions, and its different phases. The library includes templates for:



- Introduction
- Netiquette
- Agenda
- and much more

The slides are accompanied by notes and instructions in the Notes section (below the slide).

GLEs

GLE stands for Gamified Learning Elements. The GamingDRV project has developed five small OER² games for use in online training. A **trainer account** can be created. Each game can be customised and filled with your own content. In addition, each game includes a sample set of questions for each module of the GamingDRV curriculum. A trainer's manual explains the GLEs and additional videos give a quick introduction to each game.



Other Learning Material and Media

In addition to the resources developed within the project, the GamingDRV online resource pool contains other external materials, media, and links in different languages. These may be providers of tools or materials made available as OER in other funded projects. It is the responsibility of the user to ensure that they comply with all relevant legal requirements, including copyright legislation, and to check any costs incurred or GDPR compliance with their national requirements and those of their company.

Let's get started!

This concept and the four modules aim to help trainers create engaging, interactive virtual classroom sessions using gamification and learner interaction. By using the tools and resources provided, you'll be well-equipped to deliver engaging, learner-centred Driver CPC training.

Open Educational Resource. The GamingDRV games are free and GDPR compliant.

Example 1: Germany-Module "Load Safety"



Objective

Equip drivers with the ability to load their vehicles safely according to the SFS-EN 12195-1 standard.



Target Group

Professional truck drivers



Training Method

Interactive, synchronous virtual classroom training with gamified learning elements.



Duration

7 hours (45-minute sessions): 3.5 hours in the morning and 3.5 hours after lunch.



Training Content

Includes securing forces during travel, payload calculations, load distribution, overloading effects, lashing techniques, special cargo securing, and vehicle superstructures.

Key topics include:

- Forces acting on the vehicle during travel
- Calculating payload and load distribution
- Overloading effects on axles and stability
- Packaging types and load carriers
- Securing special cargo (e.g., timber, beverages)

Trainer Qualifications

The trainer should be well-versed in the SFS-EN 12195-1 standard, with experience teaching logistics topics or working in traffic authority roles. They should also have basic digital competences and experience with virtual classroom training methods.

Examples for Learning outcomes

(Competence matrix from the LaSiDig project, available in the Online Pool of Resources.)

Competence	Skill	Knowledge
loading or unload-	Can handle typical tools (hand pallet truck, hand truck, ant or forklift etc.)	tween typical load- ing and unloading
	Can select the appropriate loading equipment for the goods to be loaded.	

Implementation in Seven Units



45 minutes each

Welcome and Introduction

What and why?	Creating a welcoming and engaging environment helps set the tone for the training, encouraging participation from the start.
Learning Outcome	Learners feel comfortable with the virtual classroom tools, understand the day's structure, and feel engaged with the content from the beginning.
How?	Introduce yourself, give an overview of the training day, and use an icebreaker to engage participants. Provide technical guidance on using the virtual tools (e.g., chat, show of hands, (un)mute the microphone, and screen sharing) and review netiquette for a productive session.
Recommended GLE options	Wheel of Fortune : Fill the wheel with different questions and spin the wheel. Let your learners respond to the question.
	Pit Stop : Fill the card deck with icebreaker and introductory questions and pictures and let your participants respond and discuss





Resources from the Online Pool Pre-designed **PowerPoint templates** for introductions and icebreakers.

E.g. **Mentimeter**: Use for live polls and introductions are introductions.

teractive questions during introductions. Let your learners vote for an answer or cre-



Unit 1a: Raising Awareness of Load Safety and Legal Regulations

ate a word cloud

What and why?	Load safety is critical to preventing accidents and ensuring cargo security. Understanding regulations reduces risks for both drivers and road users.	
Learning Outcome	Learners can explain why load safety is important and how it relates to their work.	
How?	Start with examples of accidents caused by poor load securing. Discuss the legal framework governing load safety.	
Recommended GLE options	Pit Stop : Use questions about common accidents and load safety regulations.	
Resources from	Game ProLoader	
the Online Pool	 Find the mistake challenge 1 	
	 Find the mistake challenge 2 	
	ICT-DRV ressources: PPT slides Projekt:	



Other Resources

Use the features available in your meeting software for a quick vote or rating about a statistic concerning load safety.

National statistics:

Straßenverkehrsunfälle – Verursacht durch unangemessene Beladung 2019: <u>Statista</u>



EU publications:

Cargo securing for road transport – Publications Office of the EU: europa.eu



Literature:

BERUFSKRAFTFAHRER – Das Portal für Lenkradprofis und Entscheider: <u>berufs-</u> <u>kraftfahrer-zeitung.de</u>



Ladungssicherungshandbuch – Transport Informations Service: <u>tis-gdv.de</u>

YouTube Videos:

Load securing: good practice



<u>Load Securing Introduction – video 1 of 7</u> in series

Unit 1b: Overview of Load Safety

What and why?	Provides an overall understanding of the principles of load safety, covering basics and common violations.
Learning Outcome	The learner Is able to apply the health and safety regulations.

low?	Discuss common mistakes and show examples of both proper and improper load securing examples and its legal implications.
	All GLEs are applicable:
options	Use Quiz Race for a fast-paced quiz round on load safety regulations.
	Use Bingo while you give a lecture/ input.
	Use Wheel of Fortune to pick questions and points randomly.
	Use Route Runner to foster discussions about load safety issues.
	Use Pit Stop to start a conversation about legal load safety topics.
sources from the	Scrabble Word Finder
line Pool	Interacty
	ICT-DRV ressources: Legal regulations video
er Resources	Police reports: Germany
	Offizielle News zu Ladungssicherung 2025
	National statistics: Germany
	Straßenverkehrsunfälle – Verursacht durch unangemessene Beladung 2019
	YouTube Videos:
	Load securing: roles and responsibilities
	Ist der Fahrer für die Ladungssicherung verantwortlich? Mit Beispiel erklärt!
	lst der Fahrer für die Ladungssicherung ve-

Unit 2: Physical Forces and Basics

What and why?	Understanding physical forces is essential to correctly calculating the securing forces needed for safe load securing.
Learning Outcome	The learners can explain/calculate:
	 the various forces that can act on the cargo when driving.
	 the importance of friction and coeffi- cient of friction for cargo securing.
	 the basic calculations to quickly determine the necessary securing force in everyday driving.
How?	Use visuals and graphics to demonstrate physical forces acting on cargo, followed by practical calculation exercises.
	All GLEs are applicable:
options	Quiz Race with questions about physical forces.
	Bingo while you give a lecture/ input
	Wheel of Fortune to pick questions and points randomly.
	Route Runner to foster discussions about physical forces.
	Pit Stop to start a conversation about correct calculations of the securing forces.
Resources from the Online Pool	ICT-DRV ressources: Visuals











Other Resources	YouTube Videos:	
	Logistik-Kanal- deinem Kanal für alles Wis- senswerte rund um die Logistik	
	Specifically this video:	
	<u>Ladungssicherung – Diese Kräfte wirken</u> <u>auf die Ladung!</u>	



Unit 3: Vehicle Superstructures and Load Distribution

What and why?	Different vehicle superstructures affect load distribution and securing, making it important to know their characteristics.		
Learning Outcome	The learners can:		
	 state the basic requirements for vehi- cle bodies. 		
	 name the maximum permissible load that can be carried by commercial vehicles. 		
	 describe the requirements for different types of superstructures. 		
	 discuss the importance of body design in load securing. 		
How?	Provide examples of different superstruc- tures and discuss their specific load secur- ing requirements		

Recommended	GLE
options	

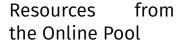
Pit Stop: Discuss experiences with different vehicle superstructures and calculations.

Other GLEs are also applicable, e.g.:

Use **Bingo** while you give a lecture/input.

Use **Wheel of Fortune** to pick questions and points randomly.

Use **Route Runner** to foster discussions in two teams.



Memory game tool - <u>Create memory game</u> - Online, Free and interactive

ICT-DRV ressources: PPT Slide set "super-

structures" - EN

ICT-DRV ressources: Instructions "super-

<u>structures" - DE</u>

Superstructure variations - EN



What and why?	Lashing equipment is key to securing loads. Incorrect use can lead to accidents or cargo damage.	
Learning Outcome	The learners will be able to	
	 name different lashing equipment that 	

- name different lashing equipment that can be used to secure loads.
- explain the optimal use of different lashing equipment depending on the intended use.
- reflect on safety issues when using lashing equipment.









How?	Poll learners on the lashing tools they use, followed by a demonstration of proper lashing techniques.	
	All GLEs are applicable:	
options	Quiz Race with questions about lashing techniques.	
	Bingo while you give a lecture/ input	
	Wheel of Fortune to pick questions and points randomly.	
	Route Runner to foster discussions about different lashing techniques and their appropriate use.	
	Pit Stop to start a conversation about different lashing techniques and their appropriate use.	
Resources from the Online Pool	LaSiDig Quick-Lashing Guide	











Unit 5: Types of Load Securing

	D.W
What and why?	Different load securing methods have ad-
	vantages and disadvantages depending on
	the cargo type and transport conditions.

Learning Outcome	The learners will be able to			
	 explain how to avoid dangerous situations during loading and unloading. 			
	 reason about the advantages and dis- advantages of different load securing methods. 			
	• add more as needed for your context.			
How?	Show visuals comparing force-fit and form-fit load securing methods, and discuss their pros and cons.			
Recommended GLE	Use Bingo while you give a lecture/ input			
options	Use Wheel of Fortune to pick questions and points randomly			
	Use Route Runner to foster discussions in two teams			
	Use Pit Stop to start a conversation about superstructures			
Resources from the Online Pool	Pre-designed PowerPoint templates			











Unit 6: Calculation of Load Securing

What and why?	Correct calculations ensure that the neces-
•	sary securing forces are applied, prevent-
	ing cargo shifts during transport.

Learning Outcome	The learners will be able to			
	 calculate the basic forces that must be applied when securing a load 			
	 apply calculation formulas for different types of load securing (using the algorithms of EN 12195-1:2010.) 			
How?	Provide practice problems using real-world scenarios and formulas from EN 12195-1:2010.			
Recommended GLE options	Route Runner : Use scenarios requiring cargo securing calculations, played in teams.			
Resources from the Online Pool	International Guidelines on Safe Load Securing for Road Transport (IRU)			
	ICT-DRV ressources: 'Calculation of Securing Forces'			



Unit 7: Securing Special Cargo

What and why?	Special cargo, like liquids or timber, requires additional securing techniques to ensure safe transport.
Learning Outcome	Learners can apply load securing techniques for special types of cargo.
How?	Discuss practical examples of securing special cargo, allowing learners to share their experiences.
Recommended GLE options	Route Runner : Use real-world special cargo scenarios for learners to solve.



Resources from the Online Pool	ICT-DRV ressources: Examples and external videos on special cargo securing			
Other Resources	Police reports on accidents with special cargo			

Conclusion and Closing Activities

Closing the session with a summary reinforces the key points covered, and interactive activities ensure that learners have absorbed the material.
Learners can recap the main takeaways from the session and clarify any remaining questions before the training ends.
Use a gamified review activity (e.g., Quiz Race or Route Runner) to test the learners' knowledge. Allow time for final questions, feedback, and provide links to additional resources.
Quiz Race : Summarise the day's key learnings using a competitive quiz format.
Route Runner : If you have more time, play a round of Route Runner to discuss the training content covered during the day.





Resources from the Online Pool	GamingDRV GLEs: Quiz Race and Route Runner to review the learning success.			
Other Resources	Follow-up materials: Provide a list of additional resources, such as articles, videos, or websites, for further study.			





Summary Table for Module "Load Safety"

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Welcome & Intro	Engage learners and in- troduce load safety concepts	Facilitate icebreaker, overview of legal regulations	Share back- ground and load safety practices	Focus on creating a relaxed environment for open communication.	Pit Stop, Mentime- ter, Wheel of Fortune
Unit 1a	Understand importance of load safety and regulations	Discuss unsecured load accidents and legal penalties	Reflect on previous experiences, discuss dangers	Highlight the legal implications and real-world consequences.	Video demon- stration, interactive discussion
Unit 1b	Overview of load safety require- ments	Provide an overall understand- ing of load safety re- quirements	Discuss common mistakes and review proper/ improper securing	Reinforce the importance of adhering to load safety standards through practical examples.	ICT-DRV examples, visual aids
Unit 2	Understand physical forces act- ing on cargo	Explain forces (e.g., friction, inertia)	Perform calculations on load securing re- quirements	Use practical examples to link theory with real-world application.	Visual aids, load force cal- culator

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Unit 3	Learn vehi- cle super- structure types	Show examples of vehicle superstruc- tures	Discuss and compare vehicle types relevant to work	Reinforce learning with case studies and hands- on practice.	Pit Stop, visuals
Unit 4	Master use of lashing and auxil- iary equip- ment	Demon- strate different lashing techniques	Identify correct use of equipment through practice	Use learn- er-driven discussions to promote active learn- ing.	Polls, Pit Stop, visual ex- amples
Unit 5	Compare load secur- ing meth- ods	Discuss advantag- es/disad- vantages of different methods	Analyse different methods used in real-world cases	Encourage learners to share re- al-world examples for better reten- tion.	Visual aids, Pit Stop
Unit 6	Calculate load secur- ing forces	Guide through calculations using EN 12195-1:2010	Practice calculations in teams using Route Runner	Focus on teamwork for problem-solving and knowledge reinforcement.	Route Runner, EN standard work- sheets
Unit 7	Secure spe- cial types of cargo	Discuss techniques for securing special car- go types	Share personal experiences with special loads	Utilise role-playing to practice securing various types of cargo.	Role-play- ing, interactive discussion

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Conclu- sion	Review and close ses- sion	Summarise load safety concepts, answer questions	Participate in final review quiz and discus- sion	Ensure the session ends with clear takeaways and next steps.	Route Runner, Quiz Race

Example 2: France¹-Module "Enforcement of Regulation"



Objective

Ensure drivers are up to date with European and national transport regulations.



Target Group¹

Any driver of a goods vehicle with a maximum permissible weight of more than 3.5 tonnes who holds a valid category C or EC driving licence or a licence recognised as equivalent in accordance with articles R 222-1, R 222-2 and R 222-3 of the highway code, must provide proof that he or she is in compliance with the professional training requirements for drivers.

¹ This example concerns the module "Enforcement of legislation" in the French context. When implementing this module, please replace all French sources with their respective national sources!



Training Method

Interactive virtual classroom training with gamified learning elements.



🚺 Duration

Training consist of two parts. Each part is 7 hours (with each unit being 45 minutes): 3 hours in the morning and 3 hours in the afternoon, with an additional hour dedicated to reception, administration, and assessment.



Training Content

Application of national and European transport regulations, focusing on the practical aspects of compliance for drivers.

We suggest that you divide the module into 2 parts. These parts last 7 hours each. It is up to you to organise this module by choosing subjects from parts 1 and 2. Each of the two parts represent 7 hours of training:

- Part 1. Regulations applicable to the various components of the national and international freight transport sector (7h)
- Part 2. National and European social regulations applicable to road haulage (7h)

Key topics:

- Organisation of the profession
- Access to the profession
- Driver rights and obligations
- National and international road haulage regulations

- Working hours, driving/rest times, and tachograph use
- Legal liability and penalties

Trainer Qualifications

A qualified trainer should have a comprehensive understanding of national and European transport regulations. Ideally, the trainer should have been a professional driver and hold a vocational training qualification. Basic digital competences and experience with virtual classroom delivery are also essential.

Key learning outcomes

- Identify the organisation of the profession (national)
- Knowing how to prepare your assignment
- Knowing how to fill in transport documents
- Knowing how to plan working hours
- Knowing how to manage driving time according to unforeseen circumstances

Implementation of Part 1: Regulations applicable to the various components of the national and international freight transport sector

Welcome and Introduction



30 minutes (All unit durations are indicative and depend mainly on the needs of the drivers)

What and why?	A strong introduction sets the tone for the day, ensuring learners are engaged, aware of the day's agenda, and comfortable with the virtual classroom environment.
Learning Outcome	Learners understand the objectives of the session, know how to use the virtual classroom tools, and feel comfortable contributing to discussions.

How?	Introduce yourself, give an overview of the training day, and use an icebreaker to engage participants. Provide technical guidance on using the virtual tools (e.g., chat, show of hands, (un)mute the microphone, and screen sharing) and review netiquette for a productive session.
Recommended GLE options	Pit Stop : Allow learners to introduce themselves and share experiences related to the enforcement of regulations.
	Mentimeter : Use polls to gather participant feedback or insights at the start.
Resources from the Online Pool	GamingDRV Online Resource Pool: Use pre-designed PowerPoint templates for introductions and icebreakers tailored to regulatory topics.
Other Resources	Use a virtual whiteboard or post-it notes (e.g., via Classroom screen) to visualise the regulatory framework.





Unit 1: Regulatory Framework for Road



What and why?	Understanding the national and European regulations governing the profession is essential for ensuring compliance and legal protection.
Learning Outcome	Learners understand the general regulatory framework governing road haulage, including employment contracts, collective agreements, and driver obligations.

How?	Begin with a theoretical presentation of national and European texts, such as em- ployment contracts, branch agreements, and the Labour Code.	
	Use a drag-and-drop activity to help learners associate key regulations (e.g., Regulation 561/2006 and Directive 2002/15/CE) with topics such as driving times and working hours.	
	Create a summary table or diagram to organise the concepts.	
Recommended GLE options	Pit Stop : Use regulatory scenarios to test learners' knowledge of legal frameworks.	
Resources from the Online Pool	ICT-DRV ressources: <u>Regulations on legal</u> <u>frameworks: Video (DE)</u>	
Other Resources	 National regulation (France): Transport code 	
	• Labour code	
	Collective agreements	
	 Collective branch agreements 	
	• European social regulations:	
	• Regulation (EU) n° 561/2006	
	• Directive 2002/15/CE	
	 Regulation (EU) n° 165/2014 	



Unit 2: Working Hours in Haulage Companies



2 hours

What and why?	Drivers need to understand how working hours and rest periods are regulated to prevent fatigue and ensure road safety.
Learning Outcome	Learners can differentiate between Europe- an social regulations and national labour laws and understand their impact on daily operations.
How?	Present an overview of European social regulations (driving/rest times) and French social regulations (working hours).
	Use a gap-fill text linked to the French Transport Code to review the regulations, especially for different categories of driv- ers.
	Use a quiz (via Quiz Race) to engage learners with questions about the legal working week, maximum daily/weekly working hours, and breaks.
Recommended GLE options	Quiz Race : Fast-paced quiz on working hours and rest periods.
Resources from the Online Pool	Driving and rest times IHK



Other Resources	(France) Regulations on road haulage	
	• <u>Article D3312-36</u>	
	• Article R.3312-2	
	• <u>Article L.3121-1</u>	
	• <u>Labour code</u>	
	• <u>Transport Code</u>	



Unit 3: Training for Road Haulage Drivers



30—40 minutes

What and why?	Periodic training is mandatory, and drivers must understand their obligations and rights regarding Driver CPC renewal.
Learning Outcome	Learners can describe the procedure for obtaining and renewing the Driver CPC card and understand their training obligations.
How?	Ask learners to list the requirements for becoming a lorry driver, focusing on the role of initial qualification and periodic training.
Recommended GLE options	Pit Stop : Discuss Driver CPC renewal steps and processes.
Resources from the Online Pool	Pit Stop
Other Resources	Driver CPC Renewal Procedures



Unit 4: National Road Haulage Regulations



30—40 minutes

Other Resources	France transport regulation documents
Resources from the Online Pool	Bingo:
Recommended GLE options	Bingo : National haulage documents and regulations.
	Create a board with images of different documents (e.g., registration certificates, transport contracts) and ask learners to match these with their correct names and uses.
	Use a crossword puzzle to reinforce concepts such as the conditions for access to the profession.
How?	Start with a bingo game to introduce the organisation of the road haulage profession, covering topics such as third-party transport and own-account transport.
Learning Outcome	Learners can identify the documents required for national road haulage, including vehicle documentation and transport contracts.
What and why?	Compliance with national regulations ensures that drivers can operate safely and avoid penalties within their country.



Unit 5: International Road Haulage Regulations



What and why?	International regulations govern border crossings, travel permits, and haulage, making it critical for drivers operating internationally.
Learning Outcome	Learners can explain the documents needed for international transport and discuss the regulations governing border crossings and travel permits.
How?	Begin with a poll to assess which documents the learners use (e.g., Community licences, bilateral authorisations).
	Use visuals to explain the documents required for international transport.
	Incorporate the Jeopardy game (via Jeopardy Labs) to quiz learners on travel permits and crossing borders.
Recommended GLE options	Jeopardy : Questions on travel permits and border regulations.
Resources from the Online Pool	IRU guidelines on international transport regulations
Other Resources	European Social Regulation : Road Transport

Implementation of Part 2: National and European Social Regulation Applicable to Road Haulage

Unit 1: European Social Regulation Applicable to Road Haulage



2 hours

What and why?	Understanding European social regulations is crucial for drivers to comply with laws related to driving times, rest periods, and work schedules.
Learning Outcome	Learners can manage driving times and rest periods in compliance with European social regulations.

How?	Use a Quiz Race game to assess learners' knowledge of the regulations. Engage learners in a Route Runner game to review complex topics such as rest period combinations and daily driving limits. Finish with a summary using a whiteboard to help learners fill in rest and driving time combinations.
Recommended GLE options	Quiz Race : Assess learners' knowledge of driving/rest time rules.
	Route Runner : Review and apply driving limit regulations in a fun, interactive way.
Resources from the Online Pool	ICT-DRV resources: European social regulation, including PPT slides and games for testing knowledge of social regulation topics.
Other Resources	European Driving Times and Rest Periods (Regulation 561/2006)





Unit 2: Working Hours in Haulage Companies

1 hour	
What and why?	Drivers need to understand how working hours and rest periods are regulated to prevent fatigue and ensure road safety.
Learning Outcome	Learners can differentiate between Europe- an social regulations and national labour laws and understand their impact on daily operations.

How?	Present an overview of European social regulations (driving/rest times) and French social regulations (working hours).
	Use a gap-fill text linked to the French Transport Code to review the regulations, especially for different categories of driv- ers.
	Use a quiz (via Quiz Race) to engage learners with questions about the legal working week, maximum daily/weekly working hours, and breaks.
Recommended GLE options	Quiz Race : Fast-paced quiz on working hours and rest periods.
Resources from the Online Pool	Quiz Race
Other Resources	(France) Regulations on road haulage
	• Article D3312-36
	• Article R.3312-2
	• <u>Article L.3121-1</u>
	• <u>Labour code</u>
	• Transport Code

Unit 3: Digital Tachograph



What and why?	Digital tachographs are mandatory for monitoring driving times, and drivers must understand how to operate them correctly.
Learning Outcome	Learners can handle digital and intelligent tachographs and understand their use in daily operations.
How?	Use a Pit Stop game to review the various tachograph cards (driver, company, controller). Show images of tachographs and ask learners to explain their functions and data. Present a video on intelligent tachographs.
Recommended GLE options	Pit Stop : Use interactive questions about tachograph types and functions.
Resources from the Online Pool	Videos on using digital tachographs. Interactive tachograph operation guides and examples of tachograph cards.
	Especially these videos:
	Intelligenter Tachograph
	Operating the switches on the EC control unit
Other Resources	European Regulation on Tachographs
	Understanding the smart tachograph requirements.





Unit 4: National Road Haulage



What and why?	Compliance with national regulations ensures that drivers can operate safely and avoid penalties within their country.
Learning Outcome	Learners can identify the documents required for national haulage, including vehicle documentation and transport contracts.
How?	Start with a bingo game to introduce the organisation of the road haulage profession, covering topics such as third-party transport and own-account transport.
	Use a crossword puzzle to reinforce concepts such as the conditions for access to the profession.
	Create a board with images of different documents (e.g., registration certificates, transport contracts) and ask learners to match these with their correct names and uses.
Recommended GLE options	Bingo : National haulage documents and regulations.
Resources from the Online Pool	ICT-DRV ressources: Regulations on legal frameworks: Video - DE
Other Resources	France national road haulage regulations



Unit 5: International Road Haulage Regulations



What and why?	International regulations govern border crossings, travel permits, and haulage, making it critical for drivers operating internationally.
Learning Outcome	Learners can explain the documents needed for international transport and discuss the regulations governing border crossings and travel permits.
How?	Begin with a poll to assess which documents the learners use (e.g., Community licences, bilateral authorisations).
	Use visuals to explain the documents required for international transport.
	Incorporate the Jeopardy game (via Jeopardy Labs) to quiz learners on travel permits and crossing borders.
Recommended GLE options	Jeopardy : Questions on travel permits and border regulations.
Resources from the Online Pool	IRU guidelines on international transport regulations
Other Resources	European Social Regulation:
	Regulation 561/2006
	Directive 2002/15



Conclusion and Closing Activities

What and why?	Closing the session ensures that learners review the key points related to regulatory frameworks, social regulations, working hours, and tachographs, while providing an opportunity to clarify any lingering questions.
Learning Outcome	Learners can recap the main takeaways from the entire training, covering national and international regulations, working hours, social regulations, and digital tachographs. Learners clarify any remaining questions before the session ends.
How?	Use a gamified review activity (e.g., Quiz Race or Route Runner) to reinforce learners' understanding of key topics from both parts. Allow time for final questions, feedback, and provide follow-up materials on both regulatory compliance and tachograph operations.
Recommended GLE options	Quiz Race : Summarise the day's learning on both driving/rest regulations and tachograph operations.
	Route Runner : Reinforce understanding of national/international regulations and tachographs through a fun, interactive game.
Other Resources	Links to external resources for further reading on national and international regulations, European social regulations, and tachograph usage, including IRU guidelines and European Commission resources.



Summary Table for Module "Enforcement of Regulation"

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Welcome & Intro	Engage learners and in- troduce regulatory concepts	Facilitate icebreaker, overview of key regulations	Share experiences with regulatory compliance	Create an open environment for sharing experiences and questions	Pit Stop, Mentime- ter, Wheel of Fortune
PART 1					
Unit 1	Understand the regula- tory frame- work gov- erning road haulage	Present key national/EU regulations	Participate in a dis- cussion on regulatory compliance	Encourage active learning by connecting theory to practical tasks	Virtual white- board, post-it exercises
Unit 2	Learn work- ing hours regulations for road haulage	Present working hours and rest period regulations	Engage in practical exercises to calculate rest times	Connect regulations with real-world implications for drivers	Quiz Race, text anal- ysis
Unit 3	Understand driver train- ing obliga- tions	Discuss Driver CPC card re- quirements	Discuss the steps required to qualify and renew CPC	Simplify complex pro- cesses into easy-to-un- derstand steps	Pit Stop, roadmap template

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Unit 4	Learn na- tional road haulage regulations	Present national documenta- tion re- quirements	Match documents with their purpose us- ing a game format	Reinforce memory with gamified activities for document identification	Bingo, interactive board
Unit 5	Understand interna- tional road haulage regulations	Present cross-bor- der docu- mentation require- ments	Analyse real-world cases of international road haulage	Jeopardy, Quiz Race to reinforce knowledge of documents	Polls, Jeopardy
PART 2					
Unit 1	Understand Europe- an social regulations for road haulage	Present European Regulation 561/2006 and related topics	Discuss how these regulations apply to daily operations		Quiz Race, Route Runner, social regulation tools
Unit 2	Learn work- ing hours regulations for road haulage	Present working hours and rest period regulations	Engage in practical exercises to calculate rest times	Connect regulations with real-world implications for drivers	Quiz Race, text anal- ysis
Unit 3	Learn European and nation- al working hours regu- lations	Review regulations for working hours and rest periods	Practice calculating working/ rest times using real examples		Jeopardy, Men- timeter, interactive calculators

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Unit 4	Learn na- tional road haulage regulations	Present national documenta- tion re- quirements	Match documents with their purpose us- ing a game format	Reinforce memory with gamified activities for document identification.	Bingo, interactive board
Unit 5	Understand interna- tional road haulage regulations	Present cross-bor- der docu- mentation require- ments	Analyse real-world cases of international road haulage	Jeopardy, Quiz Race to reinforce knowledge of documents	Polls, Jeopardy
Conclu- sion	Review key social regulation concepts	Summarise social regu- lation top- ics, answer questions	Participate in final quiz and discus- sion	Ensure learners leave with a clear understanding and action steps.	Quiz Race, Route Runner, regulatory review tools

Example 3: Finland¹–Module "Eco-Driving"



Objective

Equip drivers with the ability to drive economically, safely, and environmentally friendly, using predictive driving techniques to reduce fuel consumption and improve traffic safety.



Truck and bus drivers



Training Method

Interactive, synchronous virtual classroom training with gamified learning elements.



Duration

7 hours (45-minute sessions): 3.5 hours in the morning and 3.5 hours after lunch.

Training Content

- The responsibility of drivers in reducing environmental impacts and ensuring safety.
- Principles of eco-driving, including the importance of proper route selection, vehicle technology, and driving style.
- Practical techniques for reducing fuel consumption, including the use of in-vehicle technology.
- Anticipation and accident prevention strategies.

Key topics

- Accountability and environmental impacts of driving.
- Anticipating road conditions and hazards.
- Practical techniques for improving fuel economy and driving efficiency.
- The use of vehicle technology for safety and fuel economy.
- Proactive driving techniques to avoid accidents and increase safety.

Trainer Qualifications

The trainer should be knowledgeable in all subject areas, with experience in eco-driving training and working with professional drivers. Ideally, they should have been drivers in the past and hold relevant vocational training qualifications. Basic digital skills and experience with virtual classroom tools are necessary for organizing interactive, gamified training.

Implementation in Seven Units



45 minutes each

Welcome and Introduction

What and why?	The introduction sets the stage for the session, engages learners, and introduces the key concepts of eco-driving. Engaging participants early and introducing them to the importance of eco-driving ensures they remain active throughout the session.
Learning Outcome	Learners feel comfortable with the session's structure and understand the importance of eco-driving. They can explain why fuel efficiency and reducing emissions are critical aspects of modern driving.
How?	Facilitate an icebreaker, introduce the agenda, and explain the broader environmental and economic benefits of eco-driving. Provide guidance on using the virtual classroom tools (chat, polls, screen sharing) and review netiquette for active participation.

Recommended GLE options	Wheel of Fortune : Fill the wheel with different questions and spin the wheel. Let your learners respond to the question.
	Pit Stop : Fill the card deck with icebreaker and introductory questions and pictures and let your participants respond and discuss
Resources from the Online Pool	Pre-designed PowerPoint templates from GamingDRV for introductions, including netiquette and agenda slides.
	Mentimeter or other interactive tools: use polls to gather initial input on eco-driving practices and to assess participants' knowledge and understanding of eco-driving at the outset.
Other Resources	Provide external links to initial reading material on eco-driving and related industry standards. Offer additional resources for learners to explore further eco-driving concepts on their own.







Unit 1–2: The Driver's Role in Eco-Driving

What and why?	The driver plays a critical role in reducing fuel consumption and emissions, particularly in heavy traffic. By understanding how driving behavior impacts fuel consumption, traffic safety improves, fuel consumption decreases, and exhaust gas emissions are reduced. This can lead to savings of up to tens of percent in fuel costs, a reduced environmental load, and significant savings in other vehicle operating costs. Through regular monitoring of driving style data and feedback, drivers can adopt a permanent proactive and economical driving style, further improving both fuel efficiency and safety.
Learning Outcome	Learners understand their role in eco- driving and how to adapt their driving be- havior for fuel efficiency and reduced emis- sions.
How?	Discuss the connection between driving habits and fuel efficiency. Use examples of good and bad eco-driving practices to engage learners in real-life scenarios.
Recommended GLE options	Pit Stop : Adapt questions and image to your needs



Resources from the Online Pool	Pre-designed PowerPoint templates from GamingDRV for introductions, including netiquette and agenda slides.	
	or other interactive tools: use polls to gather initial input on eco-driving practices and to assess participants' knowledge and understanding of eco-driving at the outset.	
Other Resources	Proactive driving increases road safety (FI)	
	National statistics:	



National statistics:

Liikennejärjestelmän ympäristöllinen kestävyys: <u>Tieto Traficom</u>



YouTube Videos:

Taloudellinen ajaminen ja ekologinen autonkäyttö: <u>youtube.com</u>



If used preliminary assignment, show results of main topics

Unit 3–4: Vehicle Features and Their Proper Use

What and why?	The driver plays a key role in maximizing the efficiency of vehicle features designed for eco-driving. Proper use of technologies such as cruise control, engine braking, and fuel-saving modes can significantly reduce fuel consumption—leading to tens of percent savings in fuel costs. These features also help reduce wear and tear on the vehicle, further cutting down operating costs. By regularly monitoring driving style data and providing feedback, drivers can be guided toward a permanent proactive and economical driving style, ensuring long-term fuel savings and improved vehicle performance		
Learning Outcome	Learners understand the features of their vehicles and can apply them to improve fuel efficiency and reduce emissions.		
How?	The level of competence of the trainees is tested with various questions and discussion about the competence of vehicle technology and the technical characteristics of different types of vehicles and their intended uses.		
Recommended GLE options	Route Runner : Question List "Taloudellinen ajotapa linja-autolla"		
	Use Quiz race to test the knowledge		
Resources from the	Bussi : <u>TTS – Työtehoseura 360</u>		
Online Pool	PraLe: Practical learning		





Other Resources	Use <u>TTS-webpage</u> for getting familiar of one type on bus and it's technology by 360 pictures and videos
	Use <u>PraLe-bus</u> preliminary checking practice. If trainees are in the classroom, this can be done together. If it's hybrid or online-training, share the view from VR to Teams or other online meeting chosen.

Unit 5: Safety and Anticipation

Resources from the Online Pool	Kahoot! – <u>quiz</u>				
Recommended GLE options	Bingo : Question List "Taloudellinen ajotapa"				
	Use real-life examples or statistics to show how safe driving reduces accidents and enhances security.				
How?	Spark discussion about how predictive and economical driving relate to road safety.				
Learning Outcome	Learners understand the link between eco-driving and driving security, with an emphasis on proactive driving and reducing risks while driving.				
What and why?	Security is directly related to eco-driving. Safe driving practices help reduce accidents, wear and tear on vehicles, and fuel consumption. Eco-driving contributes to overall road safety.				



Other Resources	National statistics:
	Onnettomuudet, joissa raskas ajoneuvo on osallisena – <u>Liikenneturva</u>
	Use statistics to open discussion about accidents and how to decrease them. Set and ask examples. Use local news.



Unit 6–7: Proactive and Economical Driving Monitoring

What and why?	Proactive driving involves anticipating road conditions and adjusting driving behavior to improve fuel efficiency and safety. Monitoring fuel consumption allows drivers to track their eco-driving performance and make adjustments for optimal efficiency.
Learning Outcome	Learners know how to apply proactive driving techniques and ways to monitor their fuel consumption to improve eco-driving performance.
How?	Discuss how companies and employers monitor proactive and economical driving and how it benefits individual drivers. Encourage learners to share their experiences with fuel consumption monitoring.
Recommended GLE options	Pit Stop : Adapt questions and image to your needs
Resources from the Online Pool	Interactive presentation software – Mentimeter



PraLe/Komag
Taloudellinen ja ennakoiva ajotapa parantaa kuljetusten ympäristötehokkuutta (kaukokiito.fi)
Ask what kind of driving style monitoring devices the trainees have experience with. Introduce a few known devices and explain what information they produce.
Present Komag's 360 predictive driving video and spark conversation.

Image: Control of the control of the

Conclusion and Closing Activities

What and why?	Summarizing the key points of eco-driving helps consolidate what learners have gained from the training. A final interactive review ensures knowledge retention.
Learning Outcome	Learners can recall the essential elements of eco-driving, such as fuel efficiency, sustainable driving practices, and how to monitor their own eco-driving performance.
How?	Use a gamified review session such as Quiz Race or Route Runner to recap the day's key topics. Allow learners to ask any remaining questions and share their experiences of eco-driving. Provide links to additional resources or further reading on eco-driving and fuel efficiency.

Recommended GLE options	Quiz Race : Test participants' knowledge on the main concepts of eco-driving using a competitive quiz format.
	Pit Stop : For further discussion and reflection.
Resources from the Online Pool	Continue to use interactive educational games from GamingDRV, such as Quiz Race or Route Runner , to engage learners in a fun and competitive final review session.
ther Resources	Provide links to external resources, such as eco-driving tips and tools for tracking fuel consumption or driving efficiency. Follow-up material from Finland's national transport organisations can also be shared for further learning.

Summary Table for Module "Eco-Driving"

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Welcome & Intro	Engage learners and in- troduce eco-driving concepts	Facilitate icebreaker, overview of eco-driving benefits	Share back- ground on eco-driving practices	Focus on creating relevance by discussing learners' real-life driving habits and eco-driving experience	Pit Stop, Mentime- ter, Wheel of Fortune
Unit 1–2	Understand the driv- er's role in eco-driving	Present the key role drivers play in fuel effi- ciency and eco-driving	Discuss how driving behavior impacts fuel consump- tion and emissions	Connect eco-driving to real-world savings and efficiency, emphasizing the envi- ronmental impact	Interactive discus- sion, video demon- stration
Unit 3-4	Learn about car features and their correct use	Explain the features of modern cars that support eco-driving	Practice using vehicle features to drive economically	Use practical examples to demonstrate how different car features can optimise fuel usage	Visual aids, vehi- cle feature demo tools

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Unit 5	Understand the securi- ty aspects related to eco-driving	Discuss the link between security and eco-driving	Participate in dis- cussions on how eco-driving enhances road safety	Highlight the connection between eco-driving practices and safety outcomes	Interactive discus- sion, visual examples
Unit 6–7	Learn pro- active and economi- cal driving techniques and moni- toring	Demonstrate proactive driving strategies and fuel consumption monitoring	Practice identifying and applying proactive driving techniques	Focus on applying pro-active driving in real-world scenarios to minimise fuel consumption and improve efficiency	Quiz Race, role-play- ing, interactive exercises
Conclu- sion	Review and close ses- sion	Summarise eco-driving principles, answer questions	Participate in final review quiz and discus- sion	Reinforce key concepts and encour- age real-life application of eco-driving principles after the session.	Route Runner, Quiz Race

Example 4: Ireland¹-Module "Health and wellbeing for safe roads"



Objective

To know the connection between driver health and wellbeing and road safety.



Truck drivers.



Training Method

Interactive, synchronous virtual classroom training with gamified learning elements.

> This example is the module "Health and well-being for safe roads" in the Irish context. When implementing this module, please replace all Irish sources with their respective national sources!

1



7 hours (45-minute sessions): 3.5 hours in the morning and 3.5 hours after lunch.



Training Content

Includes the importance of physical and mental ability: principles of a healthy, balanced diet, the effects of alcohol and drugs on behavior, fatigue and stress, role of the work/rest cycle, ergonomic principles; movements and postures, physical fitness, handling exercises, personal protection and ability to assess emergency situations.

Key topics

- the importance of physical and mental ability
- the principles of a healthy, balanced diet
- the effects of alcohol and drugs
- fatigue and stress
- importance of rest
- ergonomics
- fitness and exercise
- personal safety
- emergency situations

Trainer Qualifications

The trainer should be familiar with the importance of diet and exercise, with experience teaching professional drivers who work long hours and / or complex shifts. They should have competence with driving hours' rules and, ideally have experience with virtual classroom / distance learning training methodology.

Learning Outcomes

- Physical activity does not always mean walking, running, cycling or swimming; it can be simple movements done in the vehicle.
- Know the importance of declaring something that can affect your driving.
- Diets and choice are improving, but fast food is still king of the road. Can they prepare food to go from home? Do drivers consider healthy options at the services?
- Professional drivers (in particular) need good quality sleep at home. Is it something they have considered?
- Understand the connection between a stopping point and a risk of hijack. Who is instructing you to stop? Are they fake officials? Are you isolated in the vehicle during the night?
- Responding to an emergency is a vital skill for a driver; know what to do and how to do it.

Implementation in Six **Units**



45 minutes each

Welcome and Introduction

What and why?	The introduction sets the stage for the session, engages learners, and introduces the key concepts of fitness, diet, personal safety and dealing with emergencies. Engaging participants early and introducing them to the importance of these topics will ensure they remain active throughout the session.
Learning Outcome	Learners feel comfortable with the session's structure and understand the importance of looking after themselves, staying safe on the road and reacting to emergencies. They can explain why it is important to exercise the mind and body, the value of good food when it comes to driving performance, the importance of rest and breaks, how to stay safe on the road and how to deal with emergencies.
How?	Facilitate an icebreaker, introduce the agenda, and focus on the benefits of looking after yourself. Provide guidance on using the virtual classroom tools (chat, polls, screen sharing) and review netiquette for active participation.

Resources from the online pool	Pre-designed PowerPoint templates from GamingDRV for introductions, including netiquette and agenda slides.	
	Mentimeter or other interactive tools: use polls to gather initial input on eco-driving practices and to assess participants' knowledge and understanding of eco-driving at the outset.	
Recommended GLE options	Route Runner : Use to emphasise a journey with regular breaks, with the aim of engaging participants by asking them about their quality of rest and discussing ways to improve their physical and mental health.	
Other resources	Provide external links to reading material on breaks, recovery, fitness and diet. Offer additional resources for learners to explore further health and wellbeing topics.	





Unit 1: The importance of physical and mental ability



Other Resources

National statistics:

RSA: Medical Fitness



EU publications:

EU Road Safety Policy

Legal Content



Unit 2: The principles of a healthy, balanced diet

What and why?

We all know that consuming a good and balanced diet is beneficial for our general health and well-being, but it can be difficult for drivers to find ways to maintain a healthy eating lifestyle. Choice at roadside services can be very limited and is often represented by fast food outlets. It can also be difficult for drivers to pack a healthy lunch at home; they can be away for many days at a time, which makes it more tempting to buy a quick meal without thinking about the quality of the food. It is important for people to understand the connection between the food and drink we consume and our performance during the day. It is also good to highlight ways to make a lifestyle healthier through better decisions about food.

Learning Outcome	Learners understand the importance of food and drink and recognise the connection between what they consume and how they perform in the day.	
How?	Make sure the learners reflect on their own experiences; what is their typical diet? Do they think about what they are eating or drinking? Offer informative facts about nutrition and food value, and consider using some content to demonstrate the human metabolism and how food is processed by the body.	
Recommended GLE options	Quiz Race : As you must be quick, it can be used to support information on the metabolism process.	QUIZ RACE
Resources from the Online Pool	Use Mentimeter to create a quick poll; ask the learners what they think represents a balanced diet.	
Other Resources	Literature:	
	Case study of a healthy eating intervention for Swedish lorry drivers – Research Gate	
	Ernährungsumschau	
	YouTube Videos:	
	Healthy meal prep for truck drivers	
	What I eat in a day as a female truck driver	

Unit 3: The effects of alcohol and drugs

What and why?	Here, it's about showing an increase in alcohol-related collisions and discussing the reasons behind the rise. Is it because more people are drinking than ever before? Are tolerance levels increasing so people feel more able to control a vehicle after a drink or two? Is there less police presence to discourage people from taking risks? Allow the learners to discuss the topic and to talk about the reasons why.
	Most illegal drugs have a similar effect on driving, but drugs have a different effect on different people. Tolerance can be different from day to day and the amount you consume can make a huge difference. Focus on the fact that drug driving is becoming as problematic as drink driving. What does it mean if you drive for a living? What if the effects are still there the next day when you transport passengers or cargo?
Learning Outcome	Learners know the impact of alcohol and drug misuse and what it means for driving. They understand the risk and recognise that the problem is not reducing quickly enough to keep roads safe.
How?	Be sure to talk about the impact on driving of social and home alcohol consumption, and reinforce the point that drugs are completely unpredictable and some days you may react differently.

Recommended GLE options	Wheel of Fortune: It is a way of showing how random and unpredictable the results can be, like when you drink or take drugs before driving.	wheel or fortune
Resources from the Online Pool	There are templates on Jeopardy that can be used quickly and easily; several games are already available for the topic of alcohol and drugs.	
Other Resources	EU publications:	
	ETSC – Drink Driving	(***)
	EUDA – Drugs and Driving	
	Literature:	
	Garda – What is drug driving?	
	ETSC – Drug Driving	
	YouTube Videos:	
	<u>Driving under the influence of drugs</u>	D
	Driving under the influence of alcohol	

Unit 4: Fatigue, stress and rest

What and why?

The focus for this unit is on the impact of rest and sleep on driving. Reinforce the need to take extra time and care and to get the best sleep you can. Your rest at home has a direct impact on your work. Don't rough it, sleep comfortably in a quiet and dark environment where possible. Is it possible for drivers to break up their shift? What about a variation of the schedule? Do they lose time by hanging around after their shift? Make sure they understand the importance of good time management. Sleep deprivation leads to more serious physical and mental challenges. Drivers must be aware of the knock-on effects. Insomnia is a condition that can go under the radar. Plenty of people just shrug it off. It is possible to help yourself and limit the effects of insomnia. Do not assume fatigue is less serious than sleepiness. Remember driving any vehicle at any time is hazardous, especially if you're tired. Emphasise the need to own your own safety. Don't push yourself. Stay rested. Get a great sleep. Stay safe

Learning Outcome

Learners realise the importance of good rest and sleep, and how it connects to safety on the road.

How?	Explain the reasons why rest and sleep are important in everyday life. Make sure the session is interactive by asking the learners about their own experiences (if they want to talk about it). Use Route Runner to demonstrate the need to think about your journey and how you can give yourself a break along the way.	No.
Recommended GLE options	Route Runner : It is a longer game, so fatigue can become real! Make the connection between tiredness and making decisions about which route to take, what the answers are, how your team are reacting.	BUNNER
Resources from the Online Pool	This topic is complex, so you will need a GLE solution that can cover the details adequately. Socrative will provide a quiz format that includes the cause and effect of fatigue, stress and rest.	
Other Resources	EU publications: ETF Europe Road Safety – Transport	
	Literature: Science Direct	=
	YouTube Videos: Driver Fatigue	P

Unit 5: Ergonomics, fitness and exercise

What and why?

This unit focuses on the importance of ergonomics, especially when driving. It also includes the topic of fitness and exercise. Provide examples of good posture and useful exercises for the muscles, making the point that it can help to reduce cramps and make your journey more comfortable. It's amazing how we forget to exercise certain parts of our body! Drivers should move their eyes when they're waiting to deliver or stopped for a break. Also, a clean vehicle can not only make it easier to exercise in, but it also improves health in other ways; less risk of infection if the vehicle is used by others. less clutter to move around the cab, easier to find things you need.

How often do the drivers exercise? Do they realise that exercise can be small, infrequent periods of movement? Connect the level of exercise with the impact of alertness and response times, and how exercise can combat mental health issues. Good quality exercise produces a natural high; who doesn't like that?! The importance of sharing mental health issues with someone they trust or get on with cannot be underestimated here... They will feel less isolated by sharing their issues; this has the effect of releasing a pressure valve and can make a big difference. Taking a more positive attitude to life can actually lead to a more fulfilled life; instead of seeing potential problems people start to see opportunity.

Learning Outcome	Learners discover how to keep fit and active in the vehicle, how keeping a clean and clear environment can aid health and why general fitness is good for the mind and body.	
How?	Discuss the importance of staying comfortable on a drive. Over time, poor posture / ergonomics can lead to serious physical impairment. Explain that it can be simple to do exercises in your vehicle, and the benefits are significant for professional drivers. Make sure the session is interactive.	
Recommended GLE options	Pit Stop : This GLE is good for mental agility because it will make the learner think carefully. Mental agility is as important as physical activity.	g
Resources from the Online Pool	The Escape Team GLE fits well with the topic; you must be flexible and fit to set yourself free! This is a good team resource and gives you options to cover the topic in different ways	
Other Resources	EU publications:	
	OP Europe publication not available!	
	Literature:	
	HSA: Driver Selection and Training	
	YouTube Videos:	
	ET Transport: BEST Workout Tools for Truckers on the Road and Workouts Without Equipment	

Unit 6: Personal safety and emergency situations

What and why?

This module is about the personal safety of the driver and how to deal with emergency situations that directly affect them, their vehicle, their load or their passengers. Drivers can be subjected to abuse, threatening behavior, theft or injury, so it is important to know how to stay safe and what to do in an emergency.

Focus on the steps to stay safe; if there are people that you do not recognise around your vehicle, do you report it? What about strangers walking around the loading site? It is important to report suspicious behavior, even if you think it is not your job. If you get stopped by the roadside by enforcement agencies, how do you know they are genuine? If you need to stop overnight, do you park in a secure location? Is it well lit? Do you have others around you?

Do you check under the seats or the doors to see if there are any stowaways? Learners will need to understand how to stay safe in this situation.

If you are faced with someone who is threatening you or someone else, how can you deal with the conflict? What steps do you need to take?

What procedures are needed to ensure the safety of the vehicle and the load?

Learning Outcome	Learners will know how to keep themselves safe, how to deal with conflict and how to deal with an emergency.
How?	Discuss the importance of personal safety. Focus on the need to make other people aware of where you are and what you are doing. Create an engaging session by using case study scenarios or break out rooms for personal safety and dealing with an emergency.
Recommended GLE options	Route Runner : This is a good GLE for this module because it will test the learner strategy and awareness, which is important for personal safety.
Resources from the Online Pool	Popplet offers a visual game-based solution, so it is useful to add video and / or photo content. Use images that convey the topic (emergencies on the road) and add text to encourage learners to think about their own safety
Other Resources	EU publications
	EC Security Guidance for the European Commercial Road Freight Transport Sector
	Literature
	Truck driver safety 'the prime objective' as cargo crime hits new heights

Conclusion and Closing Activities

What and why?	Summarising the benefits of a healthy lifestyle and taking care of yourself helps to consolidate what learners have gained from the training. It is important to emphasise cause and effect; what happens to others if you do not look after yourself?
	A final interactive review of each topic on page 73 ensures knowledge retention.
Learning Outcome	Learners can recall and link the key points about physical and mental wellbeing and the effect on staying safe behind the wheel and considering other road users.
How?	Use a gamified review session such as Quiz Race or Route Runner to recap the day's key topics. Allow learners to ask any remaining questions and share their experiences of physical and mental wellbeing. Provide links to additional resources or further reading on the benefits of diet, exercise, sleep, restfulness and clean living.

Summary Table for Module "Health and wellbeing for safe roads"

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Welcome & Intro	Engage learners and in- troduce examples of healthy living	Facilitate icebreaker, overview of benefits of healthy living	Share back- ground on safe driving	Focus on creating relevance by discussing learners' way of life and what it means for safe driving	Use chat, polls and media
Unit 1	Understand the impor- tance of physical and mental ability	Present the key points of physical and mental ability for a driving job	Discuss how why good physical and mental fitness is important	Connect the impact of poor physical and mental fitness with road risk	Interactive discussion with video & GLE
Unit 2	Know the value of a balanced diet	Present different examples of lunch & discuss the benefits of each item	Discuss dif- ferent types of food & drink	Use the food groups, food colours & food types to reinforce the differences	Interactive discus- sion with images
Unit 3	Understand the effects of drugs & alcohol	Focus on the use of drugs & alcohol for leisure & why it impacts driving	Discuss the effects & the penal- ties	Reinforce the point that it takes time for drugs & alco- hol to leave your system	Role play, quizzes & case studies

Phase	Learning Outcome	Trainer Activity	Learner Acrivity	Didactic- Methodologi- cal Remarks	Tools and Media
Unit 4	Understand the impact of fatigue & stress	Explain the impact of long hours, poor sleep & high stress	Discuss your own experienc- es & think about why it happened	Emphasise the fact that fatigue & stress can kill; it is vital to take time out	Interactive discussion & experi- ences
Unit 5	Know what ergonomics is & what it means for you	Reinforce the point that exer- cise can be done anywhere!	Focus on your current fitness & think about how it can be im- proved road	Explain the connection between poor posture & poor fitness & performance on the	Use Pit Stop & other GLEs
Unit 6	Understand hot to keep yourself safe & what to do in an emergency	Emphasis the need to look after your own safety & have a clear mental prcoees for emergen- cies	Think about your own situation & how you can reduce the risk in your day to day work. How would you anage an emergency on the road?	Do not trust anyone without official ID. Keep it locked. Take the keys. Know hot to handle it.	Use Route Runner & Popplet



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