



Equip EQF level 5 trainings for managers in the transport sector with inclusive teaching methods, tools and training material to ensure online and distance teaching and learning, continuous learner monitoring and the evaluation of learning outcomes

Recommendations

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1. Introduction

The e-ManTRA project aimed to equip European Qualifications Framework (EQF) level 5 training courses of transport managers in Europe with effective and inclusive training tools, materials and teaching methods to ensure distance education and e-learning for learners.

To achieve this, the project partners have developed:

- Innovative pedagogical guides for the implementation of distance or hybrid training for teachers and trainers
- A guide to help learners in EQF level 5 T&L courses to adapt to distance learning
- Innovative digital resources: a digital card game on ESR, an escape game, and a virtual platform.

2. Objectives

Although 100% distance or hybrid training has become widespread following the Covid-19 health crisis, difficulties remain in implementing it. Therefore, the aim of this document is to provide recommendations that will define the conditions under which the transition to online, distance and blended education can be successful for T&L EQF level 5 courses.

More concretely, these recommendations aim to:

- Guide training providers and competent authorities in establishing an environment conducive to quality digital education,
- Give advice on how to integrate digital tools and online teaching approaches into the pedagogical pathways,
- Provide recommendations that facilitate the implementation of the e-ManTRA project results,
- Provide actors of higher education in T&L as well as public authorities and competent bodies with information to enable them to support the development of digital training for EQF level 5 transport managers and beyond (public aids, educational and employment guidance, promotion actions etc.).

3. Methodology

During a transnational meeting in Sweden, a workshop with all partners was organised to:

- identify the relevant target groups in all partner countries,
- have a first brainstorming on relevant topics, advice, and so on, to be included in the recommendations.

The following target groups were identified:

- Teachers and trainers
- Training providers in Transport and Logistics
- Training developers
- Public authorities
- Other: Networks, employers union, transport representatives...

A first list of recommendations was drawn up. This list was then discussed by the partners during a working meeting: prioritisation of recommendations and selection. At the end of the meeting, 13 recommendations have been selected.

4. Recommendations

The recommendations below are presented in the form of an action plan in order to facilitate their understanding and implementation.

The table below summarises the recommendations developed by target group.

TARGET GROUP	RECOMMENDATIONS
<p>TEACHERS, TRAINERS AND TRAINING PROVIDERS</p>	<p>The use of the e-ManTRA methods and tools in digital training.</p> <p>The use of new digital tools in transport training.</p> <p>The use of distance training for training courses in transports.</p> <p>Practical advice on how to improve distance learning.</p> <p>How to activate and motivate students to learn in distance education? Success stories from students.</p>
<p>TRAINING DEVELOPERS</p>	<p>Training of teachers and trainers to develop and implement digital training.</p> <p>Adapt training contents to digital learning settings and technological considerations.</p> <p>What is the benefit of diversifying education?</p> <p>How to keep the e-ManTRA tools updated?</p>
<p>PUBLIC AUTHORITIES</p>	<p>Benefits and opportunities of digital training as well as limitations</p> <p>The effect of gamified teaching materials on learning</p> <p>Favour the use of digital tools (training of pedagogical staff, pilot projects...)</p> <p>How to digitalise transport training in the long term?</p>

4.1 Recommendations for teachers, trainers and training providers

4.1.1 Recommendations regarding the use of the e-ManTRA methods and tools in digital training

TITLE	Recommendations regarding the use of e-ManTRA methods and tools in digital training
PRIORITY LEVEL	++
CONTEXT	<ul style="list-style-type: none"> • As the world becomes more digitized, it's important to recognize the benefits of modern tools and technologies also in training. • Traditional classroom training methods have (for different reasons) become less practical or feasible for some students. Relying on traditional training methods is comforting, and the value of the social interaction and personal touch of classroom training has become obvious when looking at distance training in video meetings. It's therefore understandable that instructors may face challenges in adapting their current training methods. • New methods allow for more flexibility in scheduling, greater accessibility for students who cannot attend physical classes, and a wider range of instructional materials and resources. • Teachers and training providers should therefore consider incorporating digital tools and distance learning methods into transport and logistic training programs. • With advances in technology and online learning, (with an aggressive, helping hand from Covid19), distance training methods have become increasingly popular and accessible. Instructors can now carry out engaging and interactive training courses that can be delivered remotely. These courses offer significant advantages for transport and logistics students who may have other commitments, such as work or family obligations. • By embracing new methods, instructors can create effective training programs that are accessible to a wider range of students
DESCRIPTION OF THE RECOMMENDATION	<p>The integration of digital tools in a training course is not always simple because it is sometimes not adapted to the pedagogical objectives of the course. However, the tools and guides developed in the framework of the e-ManTRA project can help you to integrate more user-friendly and digital content into your transport manager (EQF level 5) training courses.</p> <p>Here are some tips for using them:</p> <p>Step1: Make the teachers' guides your own. Even before reviewing your training practices, consult the teacher guide documents.</p>

These will allow you to learn about virtual training in general, but also to receive good practices for transferring your class to a virtual classroom or inserting digital tools.

Step 2: Use the online making decision tool to help you identify the most appropriate tools and formats for your pedagogical needs.

Step 3: Get inspiration from our pedagogical scenarios.

To help teachers and trainers implement online or blended learning with learning objectives related to EQF level 5 transport manager training, the e-ManTRA project offers examples of pedagogical scenarios that combine complementary formats, methods and tools. As a teacher/ trainer you can use them as they are or adapt them to your own training needs and contexts.

Keep in mind: Always propose more than one communication media in the same lesson: images, videos, graphics, text, voice.

Step 4: Test the tools and accompany.

In addition to the inventory materials, the project has developed three digital tools: a multi-user virtual platform, a card game on ESR regulations and an escape game.

Before using them with your class, read the user guides, test the tool(s) and prepare your learners to use it/them. The use of digital technologies implies more autonomy for learners, the reason why the trainer should do some preliminary work in order to make all the material and explanations as explicit as possible and accompany the learners in the use of digital tools.

Learners can also consult the learners' guide to optimising distance learning.

Step 5: Take time to receive feedback and improve your practices.

Step 6: Share your knowledge and experience of using e-manTRA tools with your colleagues.

OBJECTIVES

- How to use the tools developed in the framework of the e-ManTRA project?
- Integrate digital tools and project guides into transport manager training.

**COUNTRIES
CONCERNED**



TARGET GROUP	Teacher, trainers
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++

RISKS	SOLUTIONS
Lack of time	<p>The e-ManTRA tools have been developed to ensure ease of use.</p> <p>The guides are a basis for including the project elements in the training courses.</p>
Trainers are not competent enough in the use of digital tools	<p>Your training centre can provide digital training to ensure every trainer is ready to use specific software and tools.</p> <p>Work in team with trainer that are more familiar with the use of digital tools.</p> <p>Read the user guidelines.</p>

MONITORING AND ASSESSMENT INDICATORS
<ul style="list-style-type: none"> • Number of trainers / training organisations using e-ManTRA tools • Feedback from trainers / teachers • Number of uses of the online making decision tool

4.1.2 The use of new digital tools in transport training

TITLE	The use of new digital tools in transport training. How to implement and improve digital training, in what framework?
PRIORITY LEVEL	++
CONTEXT	<ul style="list-style-type: none"> ● The transport and logistics sector has been experiencing a fast-paced transformation in recent years, especially during and right after the Covid-19 pandemic. ● This transformation has led to a change in the role of transport managers, who are now responsible for managing different tools and softwares to make road transport as efficient as possible. ● The training of future transport manager’s needs, accordingly, to be based on digital tools that make students familiar with the digital environment they will likely encounter as soon as they enter the labour market.
DESCRIPTION OF THE RECOMMENDATION	<p>Step 1: Identify which digital skills are more relevant to the transport manager position. For example, with direct contact with companies, creation of working group with a batch of companies relevant to the logistics sector, or by getting continuous feedback from companies receiving interns from the school.</p> <p>Step 2: Detect that software being implemented by transport and logistics companies; therefore, being more relevant for the needs of training.</p> <p>Step 3: Organise a training for trainers if needed.</p> <p>Step 4: Consider how the e-Mantra tools can be incorporated into this set of digital tools.</p> <p>Step 5: Evaluate the digital competence of learners, and provide support to those under the required level to successfully use the tools from Step 2 and/or Step 3</p> <p>Step 6: Provide training for trainees for the software and tools to be used in transport and logistics training / daily work.</p> <p>Step 7 Monitor and evaluate the acquisition of the digital skills identified in Step 1.</p>
OBJECTIVES	<ul style="list-style-type: none"> ● To identify the digital skills relevance to the transport manager position. ● To select those software and tools more relevant for the management of road transportation. ● To provide learners and professionals with training to be digital competent. ● To ensure transport managers are familiar with the digital tools and software they will be expected to use in their position.


COUNTRIES CONCERNED	     
TARGET GROUP	Teachers, trainers & Training providers in T&L
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++

RISKS	SOLUTIONS
There is no information on the most relevant software used in road transport management	Create a partnership with stakeholders (national education, training centres, associations, unions...) and road transport companies, to provide this info
There's a huge gap in digital competence between people of different ages	Provide digital training to ensure every learner is ready to use specific software and tools
Trainers are not competent enough in the use of digital tools	Provide digital training to ensure every trainer is ready to use specific software and tools
Digital tools are too expensive to be implemented in training	Contact public institutions to provide funding / Ask companies to sponsor the cost of the software. Use the digital tool of e-ManTRA project that are free. (It's a good start to test digital tools in the training) Training centres could also create their own internal digital resources.

MONITORING AND ASSESSMENT INDICATORS
<ul style="list-style-type: none"> • Number of companies / stakeholders collaborating in the identification of tools and software. • Level of digital competence of current and future transport managers. • Level of digital competence of current and future transport trainers. • Number of new software and tools incorporated in transport training. • Hours of usage of the e-Mantra tools / Numbers of training providers using e-ManTRA tools.

4.1.3 The use of distance training for training courses in transports

TITLE	
The use of distance training for training courses in transports	
PRIORITY LEVEL	++
CONTEXT	<ul style="list-style-type: none"> • Covid-19 has led to a total change of mind in the concept of training: until that moment, the transport and logistics sector had not considered the possibility of online training. • The development of new digital tools to implement distance training, mainly because of the need detected during the lockdown period, also help more people to access both initial training and continuous learning.
DESCRIPTION OF THE RECOMMENDATION	<p>Step 1. Review the current state of play of the training format used in the transport and logistics sector and identify training courses/ training modules that could be adapted to distant training.</p> <p>Distance training does not mean that all training will be done at a distance. Discuss with the trainers which elements of the training can be done at a distance.</p> <p>You can use the principle of the SMAR (Substitution, Augmentation, Modification and Redefinition) model.</p> <p>Make a distinction between initial transport and logistics training that will conduct to the competences of Technician in Transport and Logistics and continuous learning, which offers specific courses to anybody working in the transport sector.</p> <p>Step 2. For <i>initial studies in Transport and Logistics training</i>: Follow the guidelines given by the e-ManTRA project curriculum, to adapt the training program to include distance training.</p> <p>To get started with distance training it is possible to try out distance learning for one module of the course.</p> <p>For <i>continuous training</i>: Create specific modules that can be done in distance training. Framework to define duration of the training, layout of the training, follow-up, materials, evaluation, validation...</p> <p>Step 3. Choose and implement the software and digital tools that would be needed to offer the distance training.</p> <p>Step 4. Consider how the e-Mantra tools can be incorporated into this set of digital tools (see recommendation 4.1.1)</p> <p>Step 5. Train the trainer and eventually the learners to use these tools and software with a “getting started” module.</p> <p>Step 6. Assessing the development of the training and considering the elements that could be improved or changed.</p>
OBJECTIVES	<ul style="list-style-type: none"> • To promote the use of distant training in transport training courses • To go forward in the field of Transport and Logistics training

	<ul style="list-style-type: none"> Reach a broader group of people interested in obtaining training related to Transport and Logistics
COUNTRIES CONCERNED	
TARGET GROUP	Training providers in T&L
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	+++

RISKS	SOLUTIONS
Lack of structure	Implementing distance learning means having a good platform where to host the courses. Schools have access to Google or Microsoft support at competitive prices, it is a good start. Later, a bespoke platform could be considered.
Technical difficulties	Simplifying technology / Train the trainers and learners to get familiar with digital tools.
Difficult access to curricular materials	Provide teachers with subscriptions to specialised publishers so as they can adapt the program. Creation of forums where teachers from different schools can share their materials and experiences.
Lack of face-to-face interaction	Providing opportunities for interaction, for example, favour the use of the e-ManTRA multiuser platform.

MONITORING AND ASSESSMENT INDICATORS
<ul style="list-style-type: none"> Number of distance courses offered. Number of learners enrolling the courses. Number of Training providers in T&L using the E-Mantra tools. Learner's satisfaction with the quality of courses offered. Level of satisfaction expressed by learners. The success rates of transport managers in achieving learning objectives and passing relevant certification exams.

4.1.4 Practical advice on how to improve distance learning.

TITLE	Practical advice on how to improve distance learning
PRIORITY LEVEL	++
CONTEXT	<ul style="list-style-type: none"> Distance learning has become increasingly popular over the last few years, and with the COVID-19 pandemic, it has become the norm for many teachers, trainers, and training providers. While distance learning has many benefits, it can also present some challenges, especially for those who are new to this mode of teaching.
DESCRIPTION OF THE RECOMMENDATION	<p>Step 1: Establish a supportive environment:</p> <p>Training providers and competent authorities should create an environment that is supportive of quality digital education. This includes providing access to appropriate technology, ensuring reliable internet connectivity, and offering technical support to learners.</p> <p>Step 2: Integrate digital tools and online teaching approaches:</p> <p>Educators/Trainers should be trained on how to integrate digital tools and online teaching approaches into their pedagogical pathways. This includes using interactive multimedia resources, virtual simulations, and online collaboration tools to engage learners and create a dynamic learning environment.</p> <p>Keep in mind that there are many digital resources, choose the most relevant to your learning situation.</p> <p>Step 3: Ensure accessibility:</p> <p>Digital education should be accessible to all learners, including those with disabilities. This includes providing captioning and transcripts for videos, ensuring website and course materials are accessible to screen readers, and using accessible design principles.</p> <p>It is also important to centralise the digital resources in a single digital space that is easily accessible for your learners. As your learners may consult it at any time, describe or explain them as much as possible.</p> <p>Step 4: Foster learner engagement:</p> <p>Learner engagement is crucial for effective distance learning. Educators should use a variety of strategies to promote engagement, such as interactive discussions, online quizzes, and gamification. For transport managers training e-ManTRA tools can be a good start.</p> <p>Step 5: Provide support and guidance: Learners may require additional support and guidance in distance learning. Training providers and competent authorities should provide access to resources such as</p>

	<p>online tutorials, webinars, and mentoring programs to support learners in their learning journey.</p> <p>Step 6: Encourage collaboration: Collaboration is an essential component of distance learning. Educators should promote collaboration among learners through group projects, online discussion, and peer-to-peer feedback. You can use the virtual multi-user platform that facilitates team's work.</p> <p>Step 7: Continuously evaluate and improve: Distance learning programs should be evaluated regularly to ensure their effectiveness. Training providers and competent authorities should gather feedback from learners and educators to identify areas for improvement and make necessary changes to enhance the quality of digital education.</p>
OBJECTIVES	<ul style="list-style-type: none"> To improve and make necessary changes to enhance the quality of digital education.
COUNTRIES CONCERNED	
TARGET GROUP	Teachers, trainers & Training providers in T&L
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++

RISKS	SOLUTIONS
Lack of learner engagement.	Use interactive tools such as virtual whiteboards, quizzes, polls, and discussion forums to encourage learners' participation and collaboration.
Technical difficulties.	Provide technical support and troubleshooting guides for learners and teachers and ensure that all necessary equipment and software are properly configured and maintained.
Limited social interaction.	Encourage learners to communicate and collaborate with each other through multi-user platform, online group projects, peer mentoring, and virtual study groups.
Difficulty in assessing student learning.	Use a combination of formative and summative assessments, including self-assessments, quizzes, essays, and projects, to ensure that learners are

	meeting learning objectives and to provide feedback for improvement.
Difficulty in adapting to new technologies and teaching methods.	Provide training and professional development opportunities for teachers and trainers to help them develop the skills and knowledge needed to effectively use digital tools and online teaching approaches.
Inadequate course design.	Design courses with clear learning objectives, appropriate assessments, and engaging learning materials that are tailored to the needs of the target audience.

MONITORING AND ASSESSMENT INDICATORS

1. Learners' engagement and participation levels in online activities and discussions.
2. Learner's satisfaction with the quality of digital education and online teaching methods.
3. Teacher and trainer feedback on the effectiveness of digital tools and online teaching approaches.
4. Success rates of learners in completing courses and achieving learning objectives.
5. Feedback from employers and industry partners on the knowledge and skills of graduates from digital training programs.

The e-ManTRA project aims to provide digital training for transport managers at EQF level 5 and beyond. Therefore, specific monitoring and assessment indicators include:

1. The number of transport managers completing digital training programs.
2. The satisfaction levels of transport managers with the quality of digital training and the relevance of the course content to their professional needs.
3. The success rates of transport managers in achieving learning objectives and passing relevant certification exams.
4. The number of transport companies and organizations that recognize and value the digital training provided through the e-ManTRA project.

4.1.5 How to activate and motivate learners to learn in distance education?

TITLE	How to activate and motivate learners to learn in distance education?
PRIORITY LEVEL	++
CONTEXT	<ul style="list-style-type: none"> The COVID-19 pandemic has led to a shift towards distance education, which has presented unique challenges for learners and educators alike. However, there are ways to activate and motivate students to learn in this context.
DESCRIPTION OF THE RECOMMENDATION	<p>There are several strategies that can be used to activate and motivate students to learn in distance education:</p> <p>Step 1 Set clear expectations: Learners need to know what is expected of them in terms of participation, deadlines, and assignments. Provide clear and detailed instructions and ensure that learners understand them. It is also important to explain to your learners how they will use the knowledge/ skills provided in the course. Ask yourself: what is the goal of this course, the interest of following your class? Is it clear to learners?</p> <ul style="list-style-type: none"> Step 2 Create an engaging learning environment: Make sure that the online learning environment is user-friendly, visually appealing, and easy to navigate. Use a variety of multimedia tools, such as videos, audio recordings, and interactive quizzes, to keep learners engaged. <p>However, be sure that your learners know how to access/ use the tools you suggest. You can for example use it first during a face-to-face class or prepare a guide explaining the procedure for accessing and using them.</p> <p>Keep in mind that teaching tools are not only digital. It is necessary to find the right tool and format that serves the learning objectives best.</p> <p>Step 3 Foster a sense of community: Working together at the same time and towards the same goal can increase motivation. The trainers need to lead students through the process with clearly set instructions, assignments and expectations that always make the learning objective transparent.</p> <p>Encourage learners to interact with each other through online discussion, group projects, and peer feedback. This can help create a sense of belonging and support among learners, which can improve motivation and engagement.</p> <p>If you form groups, remember to mix learners of different levels. You will get better results with structured collaboration. It is advisable to give clear instructions and a precise role to everyone beforehand.</p>

Step 4 Provide regular feedback and remain available:
Provide learners with regular feedback on their work and progress. This can help them stay on track and feel a sense of accomplishment. Also explains how students can contact you outside of class if they have questions (email, time slot...).


Step 5 Use personalised learning strategies:
Tailor your teaching approach to meet the individual needs and interests of your learners. This can help increase their engagement and motivation.

Pay attention to the pace of learning: learners may be different and have a different pace of learning.
Don't hesitate to ask students for their opinion too.

- **Step 6** Encourage self-reflection:
Encourage learners to reflect on their learning and set goals for themselves. This can help them take ownership of their learning and stay motivated.

You can also invite them to use the quiz provided by e-ManTRA project so that they can identify their strengths and weaknesses.

- **Step 7:** Celebrate success:
Acknowledge and celebrate the achievements of your learners, whether it's through public recognition, certificates, or other forms of positive reinforcement. This can help build their confidence and motivate them to continue learning.

OBJECTIVES	● To improve the digital training of learners
COUNTRIES CONCERNED	
TARGET GROUP	Teacher, trainers
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++

RISKS	SOLUTIONS
Lack of face-to-face interaction	Providing opportunities for interaction, for example favour the use of the e-ManTRA multiuser platform
Technical difficulties	Simplifying technology / Train the trainers and learners to get familiar with digital tools

Distractions at home	Establishing clear expectations / Encourage your learners to use the guide for students provided by the e-ManTRA project
Lack of structure	Providing support


MONITORING AND ASSESSMENT INDICATORS

- Number of learners motivated by the courses.
- Feedbacks received from the learners.
- Number of learners attending the classes and staying in the course
- Number of interactions, group projects and other collaborative activities

4.2 Recommendations for Training developers

4.2.1 Training of teachers and trainers to develop and implement digital training.

TITLE	<p>Training of teachers and trainers to develop and implement digital training</p> <p>Development of training for trainers</p> <p>Aspects to consider in teacher training</p>
PRIORITY LEVEL	+
CONTEXT	<ul style="list-style-type: none"> • When transitioning traditional face to face training into a digital or virtual format it is crucial that trainers are prepared and have the digital skills required to carry out a digital training. • If the use of digital equipment and the internet is part of the majority of citizens, massified by the covid lockdown and remote working, trainers rarely have a vision of the scope of possibilities of digital technology applied to training
DESCRIPTION OF THE RECOMMENDATION	<p>Designing a training activity, in other words imagining an educational programme, is a project with its own objectives, steps and techniques.</p> <p>Step 1 Drawing up specifications that define the training needs including:</p> <ul style="list-style-type: none"> - The target group who needs the training, - The context: the target's environment and the strategic imperatives that lead to the need for training. - - The skills to be acquired by the target, which define the objectives of the training, - The constraints: time, budget, etc. <p>Step 2 Determining the level of knowledge and skills of the trainers and the resources already available.</p> <p>Step 3 Designing an educational scenario. Building an educational scenario involves three steps:</p> <ul style="list-style-type: none"> - Identify the learning activities that achieve the learning objectives and their support. - Complement the learning objectives with transitional objectives - Check the overall coherence of the sequences and the module <p>Step 4 Promote and communicate new training opportunities for trainers as well as new training formats and changes in modern training needs. Tool to use: e-ManTRA guidelines for teachers and trainers.</p>

	<p>Step 5 Give time to adapt and process.</p> <p>Step 6 Train the trainers in a combination of a face-to-face introductory class or workshop to get familiar with digital tools, methods and formats, self-directed exploration time with an eLearning and guided virtual classes with break-out sessions and practical application (e.g. practice small virtual training sessions with each other). Content should include (introduction into equipment and devices, technological background knowledge that might be needed, didactical and digital methods training that are engaging, interactive and motivating in a virtual setting, introductions into specific tools, production or use of digital teaching resources, monitoring of connection data and results, etc.).</p> <p>Step 7 Follow-up with regular short upskilling workshops and presentations of new digital tools and methods.</p>
OBJECTIVES	<ul style="list-style-type: none"> To provide trainers with necessary skills and mindset for digital training
COUNTRIES CONCERNED	
TARGET GROUP	<ul style="list-style-type: none"> Training providers in T&L, Training developers, public authorities
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++

RISKS	SOLUTIONS
<p>Heterogeneous background of trainers when it comes to digital skills, readiness, mindsets, attitudes and more.</p>	<p>Train the trainer on different skill levels and with several focus areas.</p> <p>Provide training opportunities for trainers to improve their digital skills and knowledge.</p>
<p>Mindset and attitude</p> <p>While some might be eager to conduct a digital training and try new methods and tools, others might be hesitant or even unwilling or too afraid to transition into digital formats and to learn new tools and methods.</p>	<p>Awareness training</p> <p>Trainings for trainers should be aware of the different backgrounds and sensitive to the fears of trainers that are new to digital formats. They need special attention, and some work is needed to convince them of the benefits and added value of digital formats. Easy to implement and user-friendly examples and best practice tutorials</p>

	<p>might help as well as step-by-step guidance and scaffolded training approaches for trainers.</p>
<p>Industry-specific skills hinder or trump didactic concepts</p>	<p>Develop a comprehensive training program that incorporates digital skills and knowledge, as well as didactics/ pedagogical skills on top of industry-specific skills and knowledge.</p> <p>Industry specific expertise is already a requirement for trainers. Time and again, however, subject matter experts lack pedagogical background and didactic understanding because it is not part of their training and not a prerequisite for working as a trainer if they are not trained vocational schoolteachers or similar. These trainers need training that provides them with additional pedagogical didactic as well as digital skills to be able to design their training in the best possible way and to achieve the best learning success for the learners.</p>
<p>Technological equipment</p>	<p>Tutorials for specific equipment and end devices</p> <p>Short tutorials can provide quick and straightforward instruction here, which trainers can learn in a self-directed manner. An internal technical support should be available for trainers in case of further questions and technical problems.</p> <p>Equipment needed to conduct virtual training should be provided and explained/ introduced in a handover if needed.</p> <p>All technical equipment should be available for testing purposes ahead of time, especially to get familiar with new devices (e.g., VR glasses).</p> <p>Refer to the teachers' guidelines of e-ManTRA project.</p>
<p>Finances</p>	<p>Public authorities should provide funding and support for teacher and trainer training programs that focus on digital skills and knowledge and establish national standards and guidelines for digital training in T&L sector.</p>

MONITORING AND ASSESSMENT INDICATORS

Well-trained trainers who can use digital tools effectively, digital skills are an integral part of trainer training:

- At least 70% of trainers can demonstrate solid digital competencies that enable them to successfully deliver interactive virtual training independently.
- The offer of virtual training and face-to-face training should be balanced, but at least 30 to 70%. However, depending on customer requests, this value is to be adjusted and subject to customer wishes.

4.2.2 Adapt training contents to digital learning settings and technological considerations.

TITLE	Adapt training contents to digital learning setting and technological considerations
PRIORITY LEVEL	++
CONTEXT	<ul style="list-style-type: none"> • The coronavirus pandemic and the measures taken by governments to contain the virus have created major challenges for the training industry. • Digital training offers many opportunities and possibilities, some of which go far beyond face-to-face learning. However, there are also difficulties and challenges when transferring training to the virtual classroom.
DESCRIPTION OF THE RECOMMENDATION	<p>Transferring face-to face training into a virtual content needs to consider different aspects: Your specific target group characteristics, your specific training content and the learning outcomes to be achieved.</p> <p>Step 1 Set the framework and define the right objectives for the digitisation project: Why digitise this or that training content? For which target group? For which uses: open classroom training, 100% digitalized, blended, hybrid or commodal training? And for what expected benefits.</p> <p>Step 2 Analyse the existing training materials: Start by analysing the existing training materials and identifying the key learning outcomes that need to be achieved. For example, find out whether an LMS, a virtual learning environment or other system is already in place in the training centre and is used by the teaching team.</p> <p>Step 3 Identify the most appropriate digital tools: Based on the analysis of the training materials, identify the most appropriate digital tools that can be used to deliver the training. Consider factors such as the type of content, the learning objectives, and the target audience.</p> <p>Take also into account the hardware and software availability:</p> <ol style="list-style-type: none"> 1. Do your learners have PCs, laptops or other end devices that they can use to edit texts and answer questions? Do they prefer using mobile devices that are not necessarily suitable for text entry? Also beware of the large files, impossible to download on a smartphone. 2. Does the company/training provider restrict the installation of programmes on their devices? 3. Does the company/training provider have a firewall that could block the access or use of some digital tools? 4. How stable is their internet connection? 5. If the learners are supposed to work with certain software, do they have access? If not, how can access be achieved?

Keep also in mind the principles for designing accessible learning materials: [SCULPT \(Structure, Colour, Use of image, Links, Plain language and Tables\)](#)

Test your teaching materials with accessibility checkers (tools, checklists or people with special needs).

Step 4 Develop a digital learning strategy:

Develop a digital learning strategy that outlines how the digital tools will be used to deliver the training. This should include a plan for how the training will be delivered, how learners will be assessed, and how progress will be tracked?

Make sure that your strategy is GDPR compliant:

1. Meet your data protection officer and or legal team to find out what policies and procedures are already in place.
2. Determine what personal data will be collected,
3. obtain explicit consent from the users. For that you should have a clear and concise privacy police that explains how you will use the personal data collected through your LMS for example.
4. Protect your system / LMS from unauthorised access
5. Control who has access to personal data within your system/ LMS
6. Provide user access to their own data

Other option: Digital learning platforms are also emerging that function without the need for collecting personal data about users.

Step 5 Adapt the training content:

Once the digital learning strategy has been developed, adapt the training content to fit the digital learning environment. This may involve restructuring the content, adding multimedia elements, and designing interactive activities that engage learners.

Step 6 Use e-ManTRA guides and tools: e-ManTRA provides a range of guides and tools that can be used to support the adaptation of training content to digital learning settings. These include guidelines for the development of digital learning materials, training scenarios and best practices for the use of digital tools in education.

OBJECTIVES

1. Support training developers in identifying the most appropriate digital tools and platforms for their specific training needs.
2. Provide guidance on how to optimize the use of modern technologies in digital training.
3. Help training developers to understand how to ensure accessibility and inclusivity in digital training content for learners with disabilities.

COUNTRIES CONCERNED



TARGET GROUP

Training providers in T&L, Training developers

LEVEL OF DIFFICULTY
FOR IMPLEMENTATION

++


RISKS	SOLUTIONS
Lack of technical expertise among training developers and instructors.	Provide training and support to help them develop the necessary technical skills.
Technical glitches or system failures during online training sessions.	Ensure that backup systems and contingency plans are in place to minimize disruptions.
Limited access to technology or internet connectivity among learners.	Provide alternative options such as offline materials or low-bandwidth versions of online content for learners with limited access to technology.
Intellectual property theft or unauthorized use of digital training materials.	Protect digital training materials with appropriate copyright and intellectual property laws and monitor for unauthorized use. If you use external resources, make sure they are copyright free, check it before re-use them.

MONITORING AND ASSESSMENT INDICATORS

- Number of digital tools used in the training.
- Number of training content adapt to digital learning.
- Number of digital resources created

4.2.3 What is the benefit of diversifying education?

TITLE	What is the benefit of diversifying education?
PRIORITY LEVEL	+++
CONTEXT	<ul style="list-style-type: none"> Diversifying education can provide numerous benefits that can help students develop into more well-rounded, innovative, and successful individuals.
DESCRIPTION OF THE RECOMMENDATION	<p>Knowing the benefits of diversifying education highlights the many possibilities for the training industry.</p> <p>Step 1: Consider the benefits of diversifying education.</p> <p>Benefits:</p> <ul style="list-style-type: none"> - Nowadays, learners can have very different levels of knowledge and skills from each other. The diversification of forms of education makes it possible to create a variety of forms of learning and to adapt to the specific needs of learners. - The variety of tools available today makes it possible to make a course more dynamic and fun. Learners are thus more attentive and more motivated. <p>The digitisation of group teaching can provide a more flexible, cost-effective, engaging, and personalised learning experience for students, while also providing instructors with valuable data and insights to improve their teaching strategies:</p> <ol style="list-style-type: none"> 1. Improved problem-solving skills. 2. Increased creativity 3. Improved social skills. 4. Career advantages 5. Flexibility 6. Innovation 7. Increased accessibility 8. Cost savings 9. Improved collaboration 10. Personalization 11. Enhanced engagement 12. Data analysis <p>Step 2 Promote these benefits by organising a communication campaign with training organisations and teachers/ trainers. Raising the awareness of trainers and teachers will encourage them to use the variety of possibilities available to them.</p> <p>Step 3 Do not neglect the balance: Diversity does not mean using everything. It is important not to diversify too much in terms of training tools or formats.</p>


	<p>Keep in mind that teaching tools are not only digital. It is necessary to find the right balance of digital and non-digital tools.</p> <p>Remember: do not plan the use of the tool without considering the overall didactic project. This makes the function of each individual tool in relation to the learning objective clearer and encourages its conscious use by learners.</p>
OBJECTIVES	<ul style="list-style-type: none"> • Diversification of distance education • Digitisation of group teaching
COUNTRIES CONCERNED	
TARGET GROUP	Training providers in T&L, Training developers, public authorities
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++

RISKS	SOLUTIONS
Technical issues	Technical support
Digital divide	Provide access to technology, internet connectivity, training and support, and community partnerships.
Social isolation	Engage students in interactive activities
Privacy and security concerns	Cybersecurity measures
Teacher training	Training for instructors

MONITORING AND ASSESSMENT INDICATORS
<ul style="list-style-type: none"> • Number of offered courses in each format. • Number of different pedagogical approaches used in distance education. • Range of e-ManTRA technologies used in distance education. • Evaluate the outcomes of academic performance and retention rates.

4.2.4 How to keep the e-ManTRA tools updated?

TITLE		How to keep the e-ManTRA tools updated?
PRIORITY LEVEL		+++
CONTEXT	<ul style="list-style-type: none"> Ensuring the sustainability of digital resources and tools is essential for the longevity and impact of research projects. 	
DESCRIPTION OF THE RECOMMENDATION	<p>Overall, sustainability requires planning, communication, and collaboration. By taking these steps, you can help ensure that your digital resources and tools remain relevant and useful for years to come.</p> <p>Step1 Plan Plan to update the software with which you use the e-ManTRA digital tools.</p> <p>Before each use of the card game and the escape game, update the internet software and ensure that the history and cache are deleted.</p> <p>Plan to centralise and collect problems internally.</p> <p>Clearly communicate that web readers must be regularly updated in order for the tools to work smoothly.</p> <p>Monitor laws and regulations to make sure content of tools are relevant. If any changes are necessary, communicate them to the project contacts.</p> <p>Step 2 Communicate</p> <p>Define an internal referent who will collect and then communicate any problems encountered when using the tools.</p> <p>It's important to identify any issues, gaps that arise during the use to communicate in order to allow adjustments or improvements.</p> <p>Internally you can also establish a functionality mailbox:</p> <ul style="list-style-type: none"> - where all functionality-related information is to be sent, - where content-related feedback is to be sent. <p>Clearly communicate to everyone involved in usage of the tools that all bugs are to be reported to the functional mailbox.</p> <p>Step 3 Collaborate</p> <p>Report bugs and suggest improvements can help improve the tools.</p> <p>By encouraging feedback from users, we can ensure that it remains relevant and useful over time.</p>	

	All code is also available at the E-ManTRA project site for organisations that would like to do changes on the apps or content in order to develop future versions of the apps.
	<ul style="list-style-type: none"> Keeping the e-ManTRA tools updated
COUNTRIES CONCERNED	
TARGET GROUP	Teachers, trainers & Training providers in T&L
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++

RISKS	SOLUTIONS
Accessibility	All resources presented by this project is open-source software and accessible and can be used by instructors in the future.
Obsolescence of the tools	<p>Community engagement is crucial for the sustainability of digital resources and tools. Encouraging users to spread the word.</p> <p>Report bugs and suggest improvements can help improve the tool's</p>

MONITORING AND ASSESSMENT INDICATORS
<ul style="list-style-type: none"> % use of tools per year (in the next 5 years) Number of feedbacks received.

4.3 Recommendations for public authorities

4.3.1 Benefits and opportunities of digital training as well as limitations

TITLE	Benefits and opportunities of digital training as well as limitations
PRIORITY LEVEL	++
CONTEXT	<ul style="list-style-type: none"> • In the context of the Covid 19, distance learning was the norm and ensured continuity in the teaching of transport operator training. • Distance and digital learning have thus become as important as traditional classroom teaching. These innovative teaching and learning methods have many advantages but also disadvantages. • It is important to identify the advantages and disadvantages of digital training in the short and long term in order to: <ul style="list-style-type: none"> - anticipate the obstacles as best as possible - find solutions to encourage the implementation of digital training, or the use of digital tools in training.
DESCRIPTION OF THE RECOMMENDATION	<p>Step 1: Consider the results of the e-ManTRA project on the strengths and weaknesses of distance learning.</p> <p>Sample list</p> <p>Strengths:</p> <ul style="list-style-type: none"> - Flexibility of tools / diversity of tools - More suitable working rhythm / Flexibility of time - Inclusion and accessibility - Playful learning (if digital tools used) - Shorter course sessions - Sustainability - Less costs and less travel costs <p>Weaknesses:</p> <ul style="list-style-type: none"> - Lack of practice - Lack of communication with peers and the teacher/trainers - Feeling of loneliness - Lack of motivation - Concentration problems - Need for learning competence - Technical problems: connection, difficulties using digital tools. <p>Step 2: Consider solutions to overcome barriers.</p> <p>Working group with stakeholders on the obstacles and how to remove them: Ministry of Transport, Ministry of Education/Higher Education, training organisations, training developer, professional body...</p>

	<p>Focus on what the authorities should favour because it works well (based on the results of the project) and show the limits (= what to avoid during this pilot phase).</p> <p>Step 3: Pilot phase Test the solutions in several training centres.</p> <p>Step 4: Evaluation of the pilot phase Plan an evaluation in the middle of the pilot phase and an evaluation at the end of the pilot phase. The mid-term evaluation will show whether the project is progressing in the right direction and will enable adjustments to be made if necessary.</p> <p>Kirkpatrick method can help you to evaluate.</p> <p>Step 5: Implementation of solutions</p> <p>Step 6: Long term (1 year after) evaluation and readjustment</p>
OBJECTIVES	<ul style="list-style-type: none"> • Identify the advantages and disadvantages of digital education for better knowledge/awareness. • Optimise distance learning. • Promoting the use of digital tools in T&L training • Countering the difficulties of distance learning
COUNTRIES CONCERNED	
TARGET GROUP	Public authorities
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++

RISKS	SOLUTIONS
Low support from public authorities	Demonstrate the benefits of this study in the long term and the improvement of training closer to the needs of teachers and learners.
Lack of knowledge about the advantages and disadvantages:	Knowledge and awareness for better decision making
Lack of digital tools for training	Use the digital tools developed in the framework of the e-ManTRA project and evaluate the impact at 6 months, 1 year.


Showing the benefits of using digital tools will encourage the deployment and creation of new tools.

MONITORING AND ASSESSMENT INDICATORS

- Number of people interviewed.
- Number of advantages and disadvantages identified.
- Number of solutions found.
- Number of people participating in the pilot phase

4.3.2 The effect of gamified teaching materials on learning

TITLE	The effect of gamified teaching materials on learning
PRIORITY LEVEL	+++
CONTEXT	<ul style="list-style-type: none"> • Facilitating a virtual classroom requires a lot of pedagogy, energy and a rethinking of the way in which courses are given. • Online training can be boring, to avoid monotony, it is important to ensure that the training is interactive, dynamic and entertaining. To do this, it is important to make the training as descriptive and practical as possible by integrating challenges, videos and gamified solutions, all of which are geared towards professional applications. • Games are developing exponentially in teaching and in the pedagogical methods used, particularly since covid-19. • The mechanisms of games in learning would facilitate motivation in short term (immediate reward through points, rewards, etc.) and long term (pleasure of playing, autonomy, learning). However, they need to be used wisely to be motivating and effective. • The gamification of learning is part of the reflection on the pedagogy of tomorrow, and understanding its effects is therefore essential.
DESCRIPTION OF THE RECOMMENDATION	<p>Step 1: Consider the feedback from the learners who tested the card game and the escape game (Evaluation report of the test phase), and in particular their feedback on their learning experience following the use of the card game and escape game.</p> <p>Step 2 Discuss the effects of gamification on the learning of learners in transport operator training courses with strengths and areas for improvement.</p> <p>Step 3: Provide gamified pedagogical resources for current T&L training.</p> <p>There are a number of tools and methods that can be applied to make training more entertaining and playful:</p>


	<ul style="list-style-type: none"> - The inventory developed in the framework of the e-ManTRA project can provide you with examples of good practice. - The virtual platform - The card game "Master of transport" - The escape game "Seal the deal" <ul style="list-style-type: none"> • Step 4: Long-term impact assessment. • Step 5: Consider long-term effects and include gamified learning resources in future training content
OBJECTIVES	<ul style="list-style-type: none"> • Optimise distance learning • Promoting the use of digital tools in T&L training • Thinking about tomorrow's education
COUNTRIES CONCERNED	
TARGET GROUP	Public authorities
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++

RISKS	SOLUTIONS
Non-representative feedback from learners	To test gamified educational tools more widely and gather feedback from learners and teachers.
Difficulties in assessing effects on long-term learning, retention of information?	Evaluate learning and retention of information at several stages: after the game, a few weeks later, or even months?

MONITORING AND ASSESSMENT INDICATORS
<ul style="list-style-type: none"> • Number of feedbacks collected. • Retention rate of information.

4.3.3 Favour the use of digital tools (training of pedagogical staff, pilot projects...)

TITLE	Favour the use of digital tools (training of pedagogical staff, pilot projects, ...)
PRIORITY LEVEL	+
CONTEXT	<ul style="list-style-type: none"> • The COVID-19 pandemic has shown how urgently digital and virtual formats are needed to meet challenges of our time and to continuously fulfill educational missions, goals and needs. • The trend in VET is towards more and more flexibility. Digital and virtual training formats offer maximum flexibility and thus represent a strategic advantage for training providers. • Digital tools are of high relevance to the times. The younger generations are used to the use of digital tools for teaching and learning from school. This must also be taken up and continued in the VET landscape in order to remain up-to-date and also appeal to and address newer generations. • Digital tools have an advantage over presentation-only trainings because they often involve more interaction, fun and activation, which increases motivation and engagement in learning processes which in turn can enhance learning outcomes. • Digital tools have the advantage that results can often be saved, evaluated, and presented quickly and automatically. This massively supports the trainer or teacher in both face-to-face and virtual trainings.
DESCRIPTION OF THE RECOMMENDATION	<p>Digital tools should be widely and preferentially used for several reasons. Some examples:</p> <ul style="list-style-type: none"> • They can be used in face-to-face and virtual settings, but also in hybrid and blended formats. • They are often the more environmentally friendly alternative, as no materials such as pens, paper, etc. are needed. • Collaboration is much easier to design, as everyone has easy access to the same documents and information, and documentation and work history can almost always be tracked via digital software. <p>Some steps to promote the favoured use of digital tools:</p> <p>Step 1 Establish a framework for the use of digital tools in training (VET) for orientation.</p> <p>Step 2 Promote digital literacy: Public authorities can promote digital literacy among VET and T&L sector by encouraging and providing training programs that teach digital skills. The authorities can also work with industry associations and educational institutions to promote digital skills and training</p>

<p>prospects. Promotion at different levels and all kinds of events (conferences, conventions, public events, policy levels etc.) in different formats (digital and usual formats) should be used to reach as many people as possible.</p> <p>Step 3 Establish guidelines and regulations: Guidelines should clarify requirements for digital/ virtual training programs as well as incentives for the use of digital resources (for distance training) that helps foster a mindset shift as well as practical stimulus for the development of digital training resources. Give guidance through guidelines on fitting open educational resources (OER) tools, GDPR, guide between different formats (see the e-ManTRA guide for teachers and trainers) etc. as well as promotion of specific tools and GDPR-compliant resources (meets the requirements for properly handling personal data as defined in the law).</p> <p>Step 4 Monitor and evaluate: Public authorities should monitor and evaluate the effectiveness of digital training programs to ensure high quality training and flexible modules.</p>	
OBJECTIVES	<ul style="list-style-type: none"> • Promoting and paving the way for the use of digital tools, methods and training formats • Provide T&L VET with flexible and engaging distance training opportunities and ensure digital skills and knowledge in the sector
COUNTRIES CONCERNED	
TARGET GROUP	Public authorities
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	++


RISKS	SOLUTIONS
Technical dependency	Promote flexible training programs
Access / Equipment of schools, teachers, learners	Provide stimuli and funding for digital tools and equipment
No implementation in everyday trainings	<p>Promote at different levels and different types of events.</p> <p>Funding and stimuli for the development of innovative and convincing digital training formats to be presented and offered to customers.</p>

MONITORING AND ASSESSMENT INDICATORS

The quality of training programs and the availability of digital and virtual training would be main indicators, as is the more widespread use of digital tools and resources in everyday training. A regular survey of training providers, trainers, and participants could be used to monitor the use of digital tools and its quality and effectiveness.

4.3.4 How to digitalise transport training in the long term? (Romania version)

TITLE	How to digitalise transport training in the long term?
PRIORITY LEVEL	+++
CONTEXT	<ul style="list-style-type: none"> • The European legislation, by Regulation (EC) No 1071/2009, imposes on the member states only the knowledge that must be taken into account for ascertaining the professional competence of transport managers, as well as the way of organising the examination necessary to obtain the certification of their professional competences. Nevertheless, many of the member states have established, through national laws, special conditions for the professional training for transport managers. These conditions often require the courses to be held in a real classroom, completely or at least partially. Thus, there is often a need to make some changes in the legislation, in order to allow the training in the online environment. • COVID-19 has forced us to adopt new methods for interacting with the real world and, for a short amount of time, in many European countries the national authorities allowed training providers to move their training online. By allowing the online courses, the pandemic taught us that teaching and learning can be more flexible and organised differently. • We discover that online training actually improves the scope and opportunity, because face to face classes would mean the learners could only attend classes that were near them. Additionally, online sharing technology means that training centres can more easily than ever share resources and teaching materials with their learners. Finally, learners get more choices in lessons paired with more learning material, and all of it delivered in a more time-efficient manner.
DESCRIPTION OF THE RECOMMENDATION	<p>Step 1. Conduct a pilot phase, to be held in the 26 FATII training centres, as well as in other authorised training centres in Romania, to demonstrate that distance training is feasible for the transport managers courses and that tools provided by e-ManTRA are very useful.</p> <p>Step 2. To present the results of the pilot phase to the authorities and to demonstrate the utility of an amendment of the transport legislation, which currently only allows courses to take place in the classroom, with the physical presence of the students and only at the premises authorised by the Ministry of Transports.</p> <p>Step 3. As the occupation of transport manager is certified by certificates of professional competence recognized in all EU countries (so it is a regulated occupation), new regulations are needed to ensure these changes. These new regulations should include the necessary changes in order to:</p> <ul style="list-style-type: none"> o permit the use of distance/online training for courses for transport managers:

	<p>o give greater flexibility to authorised training centres, so that they can tailor their own courses as they consider to be appropriate, maintaining the requirements of the European regulations regarding the competences of the transport managers.</p> <p>Step 4. In order to address the challenges of the digital training, represented not only by the necessary equipment and devices, but also by the lack of digital literacy for trainers/students, to propose to the competent authorities to organise training courses for trainers/teachers involved in the training of transport managers, using the digital e-ManTRA tools, which are free and inclusive.</p> <p>The authorities must find ways to provide long-term financing for the online training of transport managers, with the main argument being that the field of transport and logistics is facing an acute, deep and extremely worrying shortage of personnel not only at national level, but also at European level.</p>
OBJECTIVES	<ul style="list-style-type: none"> • To accept digital training for the approved courses in transport training • Encourage distance learning and the use of digital tools for (transport and logistics) VET courses through appropriate legislation. • Give more autonomy to schools to propose some distance training. • Awareness of the fact that it is often necessary to amend legislation to allow training in the online environment.
COUNTRIES CONCERNED	
TARGET GROUP	<ul style="list-style-type: none"> • Public authorities
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	<p>++</p>

RISKS	SOLUTIONS
<p>Low support from public authorities</p>	<p>Considering the feedback from the teachers/trainers and students who tested the different tools created by e-ManTRA, it is clear that online training is also suitable for courses intended for transport managers. That is why the authorities concerned must accept, at least partially, the digital training for the approved courses in transport training.</p>


<p>Low involvement from other training centres</p>	<p>Using various means of communication (website, social media, e-mail), to further promote the e-ManTRA materials, even after the end of the project, to our colleagues working in other training centres, showing them that the use of online tools is effective and successful.</p>
<p>Issues regarding the validity and trustworthiness of online assessments</p>	<p>Online assessments must be reliable, transparent and feasible. Other key components include integrity, cheat prevention, privacy and accessibility. Assessment techniques such as project reports and assignments pose a serious threat of plagiarism.</p> <p>The collection of pedagogical methods and tools created by the e-ManTra contains several examples of applications that can be used in the process of evaluating students' skills, reducing these risks and improving the process of training assessment. For oral examinations & evaluations, using video conferences and online platforms (such as the platform developed by e-ManTRA project), these issues can also be reduced.</p>

MONITORING AND ASSESSMENT INDICATORS

- The legislative changes at European level regarding the online training for transport and logistic personnel
- The legislative changes at national level regarding the online training for transport and logistic personnel
- Number of European training centres using the e-Mantra tools for online courses
- Number of hours spent on using e-ManTRA tools by training centres.

4.3.4 How to digitalise transport training in the long term? (General version)

TITLE	
How to digitalise transport training in the long term?	
PRIORITY LEVEL	+++
CONTEXT	<ul style="list-style-type: none"> • COVID-19 has forced us to adopt new methods for interacting with the real world and, for a short amount of time, in many European countries the national authorities allowed training providers to move their training online. By allowing the online courses, the pandemic taught us that teaching and learning can become less time-consuming and more accessible. • Today, vocational training needs to enter a "post-covid" era, to go beyond the tinkering of confinements and to reinvent itself in relation to what has been learned during this period. • Various factors are encouraging this essential development in the world of public and private, initial, permanent and continuing education and training: the mobility of learners as well as that of teachers and trainers, their diversified activities, the evolution of digital devices and technologies, the multiple supports available, the contribution of online or offline educational resources to the appropriation of knowledge, know-how and interpersonal skills, the use of social networks. Digital education contributes to innovation in teaching practices and also changes the educational framework.
DESCRIPTION OF THE RECOMMENDATION	<p>Step 1: Adapt the training framework.</p> <p>In the long term, the possibility for the learner to be trained at a distance, entirely or partially, requires the setting up of a framework for monitoring the learner in order to ensure that he/she completes his/her training and does not "slip" into dropping out. This raises the question of the follow-up and support to be put in place on which the delivery of the certification is based (tools for pedagogical follow-up, duration of training, contents, modality of evaluation of learners).</p> <p>Provide for adjustments to theoretical and practical training times for people with disabilities.</p> <p>Step 2. Establish a framework for the evaluation of distance learning providers.</p> <p>It is important to clearly define, through a training agreement, the duration, content and methods of carrying out the courses thus entrusted to the establishments and organisations, as well as the respective obligations of each of the parties in terms of monitoring and supporting the learners.</p> <p>The training organisation providing distance learning must be able to demonstrate to the competent authorities that it implements measures</p>

	<p>to support and encourage the commitment of beneficiaries and prevent them from dropping out.</p> <p>Step 3. Allocate a budget to prevent and resolve social and material difficulties that may jeopardise the delivery of distance learning.</p> <p>Step 4. Define a framework around the media and the use of digital content. Secure the use of digital content for which training organisations are not systematically the copyright holders.</p> <p>In the same way, for training organisations that produce educational content, provide a framework protecting the materials they are likely to make available to their trainers and learners.</p> <p>Step 5. In order to address the challenges of the digital training, represented not only by the necessary equipment and devices, but also by the lack of digital literacy for trainers/students, to propose to the competent authorities to organise training courses for trainers/teachers involved in the training of transport managers, using the digital e-ManTRA tools, which are free and inclusive.</p>
OBJECTIVES	<ul style="list-style-type: none"> • Encourage distance learning and the use of digital tools for (transport and logistics) VET courses through appropriate legislation. • Give more autonomy to schools to propose some distance training. • Awareness of the fact that it is often necessary to amend legislation to allow training in the online environment. • Recognition of distance training for transport training
COUNTRIES CONCERNED	
TARGET GROUP	<ul style="list-style-type: none"> • Public authorities
LEVEL OF DIFFICULTY FOR IMPLEMENTATION	<p>++</p>

RISKS	SOLUTIONS
<p>Low support from public authorities</p>	<p>Considering the feedback from the teachers/trainers and students who tested the different tools created by e-ManTRA, it is clear that online training is also suitable for courses intended for transport managers. That is why the authorities concerned must accept, at least</p>

	partially, the digital training for the approved courses in transport training.
Low involvement from other training centres	Using various means of communication (website, social media, e-mail), to further promote the e-ManTRA materials, even after the end of the project, to our colleagues working in other training centres, showing them that the use of online tools is effective and successful.
Issues regarding the validity and trustworthiness of online assessments	<p>Online assessments must be reliable, transparent and feasible. Other key components include integrity, cheat prevention, privacy and accessibility. Assessment techniques such as project reports and assignments pose a serious threat of plagiarism.</p> <p>The collection of pedagogical methods and tools created by the e-ManTra contains several examples of applications that can be used in the process of evaluating students' skills, reducing these risks and improving the process of training assessment. For oral examinations & evaluations, using video conferences and online platforms (such as the platform developed by e-ManTRA project), these issues can also be reduced.</p>

MONITORING AND ASSESSMENT INDICATORS

- The regulations changes at national level regarding the online training for transport and logistic personnel
- Number of European training centres using distance training
- Number of European training centres using the e-Mantra tools for online courses