



Legal Obligations for LNG Truck Drivers Training

June 2024

Contact

MARCOGAZ AISBL

Rue Belliard, 40

1040 Brussels – Belgium

marcogaz@marcogaz.org

www.marcogaz.org

ABOUT MARCOGAZ

Founded in 1968, MARCOGAZ is the technical association of the European gas industry. It represents 28 member organisations from 20 countries. Its mission encompasses monitoring and policy advisory activities related to the European technical regulation, standardisation and certification with respect to safety and integrity of gas systems and equipment, rational use of energy as well as environment, health and safety issues. It is registered in Brussels under number BE0877 785 464.

DISCLAIMER

This document and the material herein are provided “as is”. All reasonable precautions have been taken by MARCOGAZ to verify the reliability of the content in this document. However, neither MARCOGAZ nor any of its officials, agents, data or other third-party content providers provides a warranty of any kind, either expressed or implied, and they accept no responsibility or liability for any consequence of use of the document or material herein.

The information contained herein does not necessarily represent the views of all Members of MARCOGAZ. The mention of specific companies or certain projects or products does not imply that they are endorsed or recommended by MARCOGAZ in preference to others of a similar nature that are not mentioned. The designations employed, and the presentation of material herein, do not imply the expression of any opinion on the part of MARCOGAZ concerning the legal status of any region, country, territory, city or area or of its authorities, or concerning the delimitation of frontiers or boundaries.

TABLE OF CONTENT

1. Introduction	1
2. Specifications Overview.....	1
Annex I.....	2

LIST OF TABLES

<i>Table A1: Legal obligations, reference standard, code or norm and source, by country.</i>	2
<i>Table A2: Original and translated sentence of the obligation by country.</i>	3
<i>Table A3: Interpretation of the obligation and market player use.</i>	8

1. Introduction

The increasing number of vehicles has led to a rise in air pollution levels. Particularly in major urban centers, transportation contributes to approximately 60 – 80% of all toxic atmospheric emissions. Despite the application of modern exhaust gas purification technologies, achieving further significant reductions in emissions from petrol and diesel engines remains challenging.

One potential solution to mitigate emissions is the use of Liquefied Natural Gas (LNG) to power trucks. Notably, The Blue Corridors project, one of the European projects related aimed to establish LNG as an alternative fuel for long distance transport. Therefore, it would be advisable for truck drivers in each country to be guided by the same instructions regarding LNG refueling for their vehicles.

Following the collection of information on legal requirements related to drivers of LNG – powered trucks, in various countries, a comparison was conducted regarding the specifications for LNG fuel tanks in vehicles.

2. Specifications Overview

Based on the responses provided, as detailed in Annex I, it is notable that although LNG refueling stations are present in nearly all European countries, there are different approaches regarding the legal obligations of truck drivers. Some findings of the collected data are summarized here:

- In the Czech Republic, regulations are based on EN ISO 16924.
- In Poland, additional regulations and requirements have been established by local authorities. Moreover, individuals responsible for filling LNG tanks installed in vehicles, are obliged to have an appropriate license.
- In France and Germany, no specifications regarding legal obligations are outlined.
- In Belgium, The Netherlands and Italy the personnel responsible for refueling trucks are required to be trained, including both on – site staff and drivers.
- In Switzerland, the lack of publicly available LNG refueling stations is highlighted. While truck drivers are provided with brief training if they wish to refuel their vehicles, there are no mandatory obligations as per national regulations.

The standard EN ISO 16924 (Natural gas fueling stations – LNG stations for fueling vehicles), provides general guidelines for training refueling personnel. However, countries indicate varying legal regulations applied to the LNG trucks refueling process. In conclusion, despite the different approaches across Europe, possibly due to different market development, it remains the employer's responsibility, according to EU regulation, to ensure the protection of employees' health as well as proper and safe operations. However, considering that the European market is a common market, it seems reasonable that the general rules and requirements for refueling LNG-powered vehicles should be unified, as is the case for refueling petrol or diesel vehicles.

Annex I

Table A1: Legal obligations, reference standard, code or norm and source, by country.

About benchmarking LNG “Contractors/operators/drivers qualification” among EU states, MARCOGAZ is also collecting the requirements of the national legislation of the different EU states in comparison to the EN standards requirements.			
Country	Legal obligations	Reference standard, code, norm	Source
Belgium			BBT (Beste Beschikbare Technieken (BBT) voor verdeling van LNG): https://emis.vito.be/sites/emis/files/study/vito_BBT_VerdelingLNG-DEF-BK.PDF
Czech Republic	In 2020 EN ISO 16924 is applied. Drivers must be trained before 1st refuelling.		EN ISO 16924
Europe	A) According to EU legislation it is employers' duty to protect the health, safety and welfare of their employees.		
	B) In Europe there is a norm which might have some (partial) relevance to the qualification and training of employees; that's the: EN ISO 9712:2012 Non-destructive testing -- Qualification and certification of NDT personnel. The qualification and training of employees is now also covered by a new working group in ISO, i.e.: ISO/TC 22/ SC 41 / WG 9 "Training and competence assessment", chaired by Diego Goldin. But this is very new, and no standard is available yet.	EN ISO 9712:2012	under development
	C) EN ISO 16924 Natural gas fuelling stations - LNG stations for fuelling vehicles		EN ISO 16924 Natural gas fuelling stations - LNG stations for fuelling vehicles
France		Arrêté du 30 août 2010 relatif à la rubrique 1414-3	
Germany			"TRBS 3151 Vermeidung von Brand-, Explosions- und Druckgefährdungen an Tankstellen und Gasfüllanlagen zur Befüllung von Landfahrzeugen". Paragraph 5.1.1 (5). https://www.baua.de/DE/Angebote/Rechtstexte-und-Technische-Regeln/Regelwerk/TRBS/TRBS-3151.html
Italy		law 81/08 (art. 37); DM 24/05/2002; DM 12/03/2019; 2015 LNG technical guideline of VVF;	
Netherlands		PGS33	PGS33
Poland	Polish law requires the person refuelling a LNG vehicle to have a valid cryogenic gases handling certificate from TDT (Transportowy Dozór Techniczny – [Eng. Transport Technical Supervision Bureau in Poland]) The certificate can be obtained after special training and national exam (several hours of course duration).	Obwieszczenie Ministra Infrastruktury i Rozwoju z dnia 1 sierpnia 2014 r. w sprawie ogłoszenia jednolitego tekstu rozporządzenia Ministra Transportu w sprawie warunków technicznych dozoru technicznego w zakresie projektowania, wytwarzania, eksploatacji, naprawy i	https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20140001465

		modernizacji specjalistycznych urządzeń ciśnieniowych	
Spain			Ley 31/1995, de 8 de noviembre, de prevención de Riesgos Laborales; Artículo 15. Principios de la acción preventiva. Artículo 17. Equipos de trabajo y medios de protección. Artículo 19. Formación de los trabajadores. Artículo 29. Obligaciones de los trabajadores en materia de prevención de riesgos.

Table A2: Original and translated sentence of the obligation by country.

	About benchmarking LNG "Contractors/operators/drivers qualification" among EU states, MARCOGAZ is also collecting the requirements of the national legislation of the different EU states in comparison to the EN standards requirements.		
Country	Original sentence		Translation
Belgium	"4.3 Opleiden van belanghebbenden è Beschrijving Opleiding van (buitenlandse) klanten, contractanten, medewerkers op de plaats van exploitatie of andere betrokkenen (bv. brandweerdiensten) in de exploitatie is een essentiële voorwaarde om een veilige en milieuvriendelijke exploitatie van een samenbouw te borgen. Dit kan ook vastgelegd worden in het managementsysteem (zie 4.2). De exploitant van de LNG-aflieverinstallatie is verantwoordelijk voor het juiste opleidingsniveau van de belanghebbenden (bv. klanten en onderhoudspersoneel) die aan de LNG-aflieverinstallatie werkt (PGS 33, 2017). Dit duidt het belang van correcte uitvoering en opvolging van deze maatregel. De exploitant kan zelf een opleiding organiseren, hiervoor beroep doen op opleidingsinstellingen, of een systeem opzetten waardoor de opleiding door de klant georganiseerd wordt, en de exploitant een periodieke steekproef van het opleidingsniveau neemt. Het kennen van de leerlessen en instructies uit de opleiding kan daarbij gekoppeld worden aan het toekennen van een tankkaart voor het tankstation. Indien uit de steekproef blijkt dat een chauffeur niet de nodige handelingen kent of veiligheidsvoorschriften naleeft, kan vooraf contractueel zijn vastgelegd, dat de desbetreffende kaart ingetrokken wordt. Dit is vooral relevant indien het een onbemand station betreft en de chauffeur die tankt dus de toezichthouder op het moment van de verdeling is (zie hiervoor ook paragraaf 4.5)"		4.3 Training of stakeholders and description Training of (foreign) customers, contractors, employees at the place of operation or other stakeholders (e.g. fire services) in the operation is an essential condition for ensuring the safe and environmentally friendly exploitation of a co-operation. This can also be recorded in the management system (see 4.2). The operator of the LNG delivery plant is responsible for the appropriate level of training of the stakeholders (e.g. customers and maintenance personnel) working on the LNG delivery plant (PGS 33, 2017). This indicates the importance of correct implementation and follow-up of this measure. The operator may organise training himself, call on training institutions, or set up a system whereby the training is organised by the customer, and the operator takes a periodic sample of the level of training. Knowing the learning lessons and instructions from the training can be linked to the allocation of a fuel card for the petrol station. If the sample shows that a driver does not know the necessary operations or complies with safety regulations, it may be contractually stipulated that the card in question is revoked. This is especially relevant if it is an unmanned station and the driver who fills up is therefore the supervisor at the time of distribution (see also paragraph 4.5)
Czech Republic			
Europe			
	9.4.4 Instructions ---- 9.4.4.1 The manufacturer of the pump shall be required to provide comprehensive operating instructions. The operating instructions shall be in a language, or languages, understood by the operator(s) as well as any language prescribed by local regulations. 9.4.4.2 The texts shall be simple, appropriate, complete and suitable for the personnel in charge of the pump. 9.4.4.3 The documentation delivered with the pump shall reflect its complexity and as minimum contain the following information: 1) procedures for safe operation, including warnings concerning known hazardous practices, undesigned use and residual risks; 2) procedures for maintenance and servicing; 3) a list of parts required for service. 9.4.4.4 Examples of content required for a cryogenic pump operation manual are provided in Annex J. 9.4.4.5 The operating instructions shall be readily available to the operator(s) at all times. 19.2 Fuelling procedure 19.2.1 Fuelling shall only be carried out by a person who has been trained in accordance with 19.5. 19.2.2 Instructions on how to fuel a vehicle shall be	n/a	

	About benchmarking LNG "Contractors/operators/drivers qualification" among EU states, MARCOGAZ is also collecting the requirements of the national legislation of the different EU states in comparison to the EN standards requirements.	
Country	Original sentence	Translation
	<p>displayed at the dispenser. 19.3.2.2.3 The fuelling instructions shall be displayed clearly at dispensing units immediately adjacent to each fuelling hose. The instructions shall include the relevant safety precautions with particular references to non-smoking, and turning-off the engine. 19.5 Training ---- 19.5.1 Fuelling station operators and persons who carry out fuelling shall be trained, especially in: 1) safety procedures and precautions; 2) fuelling procedures and any other regular actions needed for long time operation of the fuelling station; 3) assessment of normal and abnormal operation of equipment; 4) actions to be taken in emergency situations (e.g. ESD); 5) other safety procedures and precautions; 6) fire-fighting to the extent of the personal responsibility. --- Training shall be conducted upon employment and at least every two years thereafter as well as after any change of procedures. 19.5.2 All fuelling station personal shall be trained immediately on beginning of their employment. 19.5.3 For self-service fuelling stations for registered customers additional precautions shall be taken as follows: 1) Arrangements shall be made to ensure that only trained customers, registered with the fuelling station operating company have access to fuelling and that the vehicle to be fuelled is suitable for refuelling at the fuelling station and is registered with the fuelling station operating company. Instructions posted at the dispenser are detailed and clear with respect to self-service operation. 2) A fixed communication system shall be provided to allow communication from the fuelling station to a help desk.</p>	
France	<p>Arrêté du 30 août 2010 relatif à la rubrique 1414-3</p> <p>"Définitions</p> <p>" Station-service " : toute installation où les carburants sont transférés de réservoirs de stockage fixes vers les réservoirs à carburant de véhicules à moteur, de bateaux ou d'aéronefs.</p> <p>" Libre-service surveillé " : une installation peut être considérée comme étant en libre-service surveillé lorsque le transfert du produit est effectué sous la surveillance directe ou indirecte d'un personnel d'exploitation de permanence, présent sur le site, connaissant le fonctionnement des installations et capable de mettre en oeuvre les moyens de première intervention en matière d'incendie et de protection de l'environnement. L'installation est considérée en libre-service surveillé seulement si la personne effectuant le transfert de produit est distincte de la personne assurant la surveillance.</p> <p>" Libre-service sans surveillance " : installations en libre-service autres que celles considérées comme surveillées.</p> <p>Ne sont pas considérées comme étant en libre-service les installations de remplissage et d'avitaillage dont l'accès et l'usage des installations sont strictement réservés à un personnel spécialement formé à cet effet et aux risques des produits manipulés.</p> <p>" Aire de remplissage " : surface accessible à la circulation des véhicules englobant les zones situées à moins de 1,5 mètre de la paroi des appareils de distribution dans le sens de la circulation sur 2,2 mètres."</p>	<p>Definitions: A) " Service station": any installation in which the fuels are transferred from stationary storage to the tank of vehicles, ships and aircrafts. B) "Supervised self-service" : an installation can be considered as being supervised self-service when the transfer of product is done under the direct or indirect supervision of permanent operational personnel, présent on-site, who is knowledgeable on the functioning of the installations and is capable of operating the first intervention means in case of fire and environment protection. The installation is considered as supervised self-service only if the person who does the transfer of produit is different from the supervising person. C) "Unattended self-service": self-service installations different than those considerd as supervised. The filling stations in which the access and use of the installations are strictly reserved to personnel specifically trained to this end, and trained on the risks of the handled products, are not considered as self-service. D) "Filling area": surface accessible to vehicle traffic, including areas located less than 1.5 meters from the wall of distribution devices in the direction of traffic over 2.2 meters.</p>
Germany	(5) "Die Betankung der Fahrzeuge mit Flüssigerdgas (LNG) darf nur durch unterwiesenes Personal erfolgen."	(5) ""The refuelling of vehicles with liquefied natural gas (LNG) may only be carried out by trained personnel.""
Italy		National requisites for training operators of refueling stations. A) Requisites for training of personnel: law 81/08 (art. 37) prescribes that the employer provides the necessary training to his personnel. The technical guideline of VVF (Fire Brigades) of 2015 on LNG, prescribes that the personnel in charge of plants must know the norms of the ministerial

About benchmarking LNG "Contractors/operators/drivers qualification" among EU states, MARCOGAZ is also collecting the requirements of the national legislation of the different EU states in comparison to the EN standards requirements.		
Country	Original sentence	Translation
Netherlands	<p>"3.4.3 Regulations for customers of LNG reg. 3.4.19 The delivery of LNG may only be carried out by a customer who is registered by the establishment manager as a permitted customer. reg. 3.4.20 The establishment manager shall determine upon this registration in a statement to be signed by the customer that: a) the customer is familiar with and will comply with the following instructions for the delivery of LNG: - on the site of the LNG delivery installation smoking and naked flames are prohibited; - before the hose connection between the delivery installation and the vehicle LNG tank is created, the motor of the vehicle shall be turned off; - the hose connection or connection with a filling arm shall be properly made where the use of attachments other than those supplied by the licensor is prohibited; - after the hose connection or connection with the filling arm has been disconnected, the hose and the hose coupling (nozzle) shall be put away in the place intended for this; - only vehicle LNG tanks mounted permanently in or on the motor vehicle that are intended for delivery of LNG to the motor of the vehicle may be filled; - filling of other (refillable) cylinders is prohibited; b) the customer (the person who operates the LNG delivery installation) has had practical instruction for filling the vehicle LNG tank with the licensor's delivery system; c) the customer only has permission for personal use of the LNG delivery installation. reg. 3.4.21 The establishment manager shall keep a register of the customers accepted by him (driver and type of vehicle) and the statements signed by them (user/director/driver). reg. 3.4.22 The establishment manager shall register the following details for all deliveries: • registration details of the customer;</p>	<p>technical guideline, the internal safety rules, and the emergency plan. There is a new guideline draft, which does not include substantial modifications. B) Training of customers of unattended self-service of CNG: DM 24/05/2002 and subsequent integrating norms (up to DM 12/03/2019, CNG): 1) System for recognition of the customer by means of the electronic payment system (card), which enables CNG delivery. 2) Previous customer training and registration in a specific data base on a portal. 3) On-site training provided by the station manager. 4) Tutorial at least in Italian and English. 5) Registration of customer data in data base as demonstration of delivered training. The customer is responsible for the suitability of his vehicle for self-service refueling, and for doing proper operations. Adequate instructions must be available on/near the dispenser, depending on the self-service kind. While using the self-service station the customer must declare under his responsibility that he has been duly trained, that his vehicle is suitable, and that he uses personally the electronic identification means he has registered. The 2015 LNG technical guideline of VVF (version in force at present) do not prescribe a particular training of the customer. The new draft of LNG technical guideline of VVF now under elaboration prescribes that the customers are previously trained on the self-service refueling operations/procedure, on the relevant risks, as well as on the precautions, limitations, prohibitions and on the behavior in case of emergency, on the consequences of incorrect/forbidden behavior; customers must be registered in a specific data base. Training can be delivered on-site i.e. at the refueling station, by on-purpose personnel, or by means of tutorial. When the customer of self-service is doing refueling as part of his job, the previous training and the data base registration must be ensured directly by his employer.</p>

About benchmarking LNG "Contractors/operators/drivers qualification" among EU states, MARCOGAZ is also collecting the requirements of the national legislation of the different EU states in comparison to the EN standards requirements.		
Country	Original sentence	Translation
	<ul style="list-style-type: none"> • date and time of the delivery; • quantity of LNG delivered. <p>These data shall be kept for at least two weeks.</p> <p>Note</p> <p>The purpose of the retention period of two weeks is so that in case of an incident or disaster it can be checked what operations were carried out at a particular time with the LNG delivery installation and by whom."</p>	
Poland	<p>§ 3. Osoby napełniające zbiorniki CNG, LNG i wodoru zamontowane w instalacjach zasilania pojazdów i statków żeglugi śródlądowej oraz osoby obsługujące kotły parowozowe muszą uzyskać uprawnienia, o których mowa w § 15a rozporządzenia wymienionego w § 1, w terminie 12 miesięcy od dnia wejścia w życie niniejszego rozporządzenia.</p>	<p>§ 3. Persons filling CNG, LNG and hydrogen tanks installed in vehicle and ship power supply installations inland navigation and persons operating steam locomotive boilers must obtain the qualifications referred to in § 15a the regulation referred to in § 1, within 12 months from the date of entry into force of this regulation.</p>
Spain	<p>Ley 31/1995, de 8 de noviembre, de prevención de Riesgos Laborales. --- Artículo 15. Principios de la acción preventiva. 1. El empresario aplicará las medidas que integran el deber general de prevención previsto en el artículo anterior, con arreglo a los siguientes principios generales: a) Evitar los riesgos. b) Evaluar los riesgos que no se puedan evitar. c) Combatir los riesgos en su origen. d) Adaptar el trabajo a la persona, en particular en lo que respecta a la concepción de los puestos de trabajo, así como a la elección de los equipos y los métodos de trabajo y de producción, con miras, en particular, a atenuar el trabajo monótono y repetitivo y a reducir los efectos del mismo en la salud. e) Tener en cuenta la evolución de la técnica. f) Sustituir lo peligroso por lo que entraña poco o ningún peligro. g) Planificar la prevención, buscando un conjunto coherente que integre en ella la técnica, la organización del trabajo, las condiciones de trabajo, las relaciones sociales y la influencia de los factores ambientales en el trabajo. h) Adoptar medidas que antepongan la protección colectiva a la individual. i) Dar las debidas instrucciones a los trabajadores. 2. El empresario tomará en consideración las capacidades profesionales de los trabajadores en materia de seguridad y de salud en el momento de encomendarles las tareas. 3. El empresario adoptará las medidas necesarias a fin de garantizar que sólo los trabajadores que hayan recibido información suficiente y adecuada puedan acceder a las zonas de riesgo grave y específico. 4. La efectividad de las medidas preventivas deberá prever las distracciones o imprudencias no temerarias que pudiera cometer el trabajador. Para su adopción se tendrán en cuenta los riesgos adicionales que pudieran implicar determinadas medidas preventivas, las cuales sólo podrán adoptarse cuando la magnitud de dichos riesgos sea sustancialmente inferior a la de los que se pretende controlar y no existan alternativas más seguras. 5. Podrán concertar operaciones de seguro que tengan como fin garantizar como ámbito de cobertura la previsión de riesgos derivados del trabajo, la empresa respecto de sus trabajadores, los trabajadores autónomos respecto a ellos mismos y las sociedades cooperativas respecto a sus socios cuya actividad consista en la prestación de su trabajo personal. --- Artículo 17. Equipos de trabajo y medios de protección. 1. El empresario adoptará las medidas necesarias con el fin de que los equipos de trabajo sean adecuados para el trabajo que deba realizarse y convenientemente adaptados a tal efecto, de forma que garanticen la seguridad y la salud de los trabajadores al utilizarlos. Cuando la utilización de un equipo de trabajo pueda presentar un riesgo específico para la seguridad y la salud de los trabajadores, el empresario adoptará las medidas necesarias con el fin de que: a) La utilización del equipo de trabajo quede reservada a los encargados de dicha utilización; b) Los trabajos de reparación, transformación, mantenimiento o conservación sean realizados por los trabajadores específicamente capacitados para ello. 2. El empresario deberá proporcionar a sus trabajadores equipos de protección individual adecuados para el desempeño de sus funciones y velar por el uso efectivo de los mismos cuando, por la naturaleza de los trabajos realizados, sean necesarios. Los</p>	<p>Article 15. Principles of preventive action. 1. The employer shall apply the measures that make up the general duty of prevention provided for in the preceding article, in accordance with the following general principles: a) Avoid risks. b) Assess the risks that cannot be avoided. c) Combat risks at their source. d) Adapt the work to the person, in particular with regard to the design of jobs, as well as the choice of equipment and methods of work and production, with a view, in particular, to mitigate the monotonous and repetitive work and to reduce the effects of it on health. e) Take into account the evolution of the technique. f) Substitute what is dangerous for what is little or no danger. g) Planning prevention, seeking a coherent set that integrates technique, work organization, working conditions, social relationships and the influence of environmental factors at work. h) Adopt measures that put collective protection before individual protection. i) Give proper instructions to workers. ---- 2. The employer will take into account the professional capacities of the workers in terms of health and safety when entrusting them with the tasks. ---- 3. The employer shall adopt the necessary measures in order to guarantee that only workers who have received sufficient and adequate information can access the areas of serious and specific risk. ---- 4. The effectiveness of preventive measures must foresee distractions or non-reckless recklessness that the worker may commit. For its adoption, the additional risks that certain preventive measures may imply will be taken into account, which may only be adopted when the magnitude of said risks is substantially lower than that of those to be controlled and there are no safer alternatives. ---- 5. They may arrange insurance operations whose purpose is to guarantee as a scope of coverage the forecast of risks derived from work, the company with respect to its workers, the self-employed with respect to themselves and cooperative societies with respect to their partners whose activity consists of the provision of their personal work. ----- Article 17. Work equipment and means of protection. ---- 1. The employer shall adopt the necessary measures so that the work teams are adequate for the work to be carried out and suitably adapted for this purpose, in such a way as to guarantee the safety and health of the workers. When the use of work equipment may present a specific risk to the safety and health of workers, the employer shall adopt the necessary measures so that: a) The use of work equipment is reserved to those in charge of said utilization. b) The repair, transformation, maintenance or conservation works are carried out by workers specifically trained to do so. ---- 2. The employer must provide his workers with adequate individual protection equipment for the performance of their duties and ensure their effective use when, due to the nature of the work performed, they are necessary. Personal protective equipment must be used when risks cannot be avoided or cannot be sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization. ----- Article 19. Training of workers. ---- 1. In compliance with the duty of protection, the employer must ensure that each worker receives sufficient and adequate theoretical and practical training in preventive matters, both at the time of hiring, whatever</p>

About benchmarking LNG “Contractors/operators/drivers qualification” among EU states, MARCOGAZ is also collecting the requirements of the national legislation of the different EU states in comparison to the EN standards requirements.		
Country	Original sentence	Translation
	<p>equipos de protección individual deberán utilizarse cuando los riesgos no se puedan evitar o no puedan limitarse suficientemente por medios técnicos de protección colectiva o mediante medidas, métodos o procedimientos de organización del trabajo. --- Artículo 19. Formación de los trabajadores. 1. En cumplimiento del deber de protección, el empresario deberá garantizar que cada trabajador reciba una formación teórica y práctica, suficiente y adecuada, en materia preventiva, tanto en el momento de su contratación, cualquiera que sea la modalidad o duración de ésta, como cuando se produzcan cambios en las funciones que desempeñe o se introduzcan nuevas tecnologías o cambios en los equipos de trabajo. La formación deberá estar centrada específicamente en el puesto de trabajo o función de cada trabajador, adaptarse a la evolución de los riesgos y a la aparición de otros nuevos y repetirse periódicamente, si fuera necesario. 2. La formación a que se refiere el apartado anterior deberá impartirse, siempre que sea posible, dentro de la jornada de trabajo o, en su defecto, en otras horas pero con el descuento en aquélla del tiempo invertido en la misma. La formación se podrá impartir por la empresa mediante medios propios o concertándola con servicios ajenos, y su coste no recaerá en ningún caso sobre los trabajadores -- - Artículo 29. Obligaciones de los trabajadores en materia de prevención de riesgos. 1. Corresponde a cada trabajador velar, según sus posibilidades y mediante el cumplimiento de las medidas de prevención que en cada caso sean adoptadas, por su propia seguridad y salud en el trabajo y por la de aquellas otras personas a las que pueda afectar su actividad profesional, a causa de sus actos y omisiones en el trabajo, de conformidad con su formación y las instrucciones del empresario. 2. Los trabajadores, con arreglo a su formación y siguiendo las instrucciones del empresario, deberán en particular 1.º Usar adecuadamente, de acuerdo con su naturaleza y los riesgos previsibles, las máquinas, aparatos, herramientas, sustancias peligrosas, equipos de transporte y, en general, cualesquier otros medios con los que desarrolle su actividad. 2.º Utilizar correctamente los medios y equipos de protección facilitados por el empresario, de acuerdo con las instrucciones recibidas de éste. 3.º No poner fuera de funcionamiento y utilizar correctamente los dispositivos de seguridad existentes o que se instalen en los medios relacionados con su actividad o en los lugares de trabajo en los que ésta tenga lugar. 4.º Informar de inmediato a su superior jerárquico directo, y a los trabajadores designados para realizar actividades de protección y de prevención o, en su caso, al servicio de prevención, acerca de cualquier situación que, a su juicio, entraña, por motivos razonables, un riesgo para la seguridad y la salud de los trabajadores. 5.º Contribuir al cumplimiento de las obligaciones establecidas por la autoridad competente con el fin de proteger la seguridad y la salud de los trabajadores en el trabajo. 6.º Cooperar con el empresario para que éste pueda garantizar unas condiciones de trabajo que sean seguras y no entrañen riesgos para la seguridad y la salud de los trabajadores. 3. El incumplimiento por los trabajadores de las obligaciones en materia de prevención de riesgos a que se refieren los apartados anteriores tendrá la consideración de incumplimiento laboral a los efectos previstos en el artículo 58.1 del Estatuto de los Trabajadores o de falta, en su caso, conforme a lo establecido en la correspondiente normativa sobre régimen disciplinario de los funcionarios públicos o del personal estatutario al servicio de las Administraciones públicas. Lo dispuesto en este apartado será igualmente aplicable a los socios de las cooperativas cuya actividad consista en la prestación de su trabajo, con las precisiones que se establezcan en sus Reglamentos de Régimen Interno.</p>	<p>the modality or duration of this, and when there are changes in the functions carried out or new technologies or changes in work teams are introduced. The training must be specifically focused on the job or function of each worker, adapt to the evolution of risks and the appearance of new ones and be repeated periodically, if necessary. --- 2. The training referred to in the previous section must be given, whenever possible, within the working day or, failing that, at other hours but with a discount on the time invested in it. Training may be given by the company through its own means or by arranging it with third-party services, and its cost will not fall under any circumstances on the workers ----- Article 29. Obligations of workers in risk prevention. ---- 1. It is up to each worker to ensure, according to their possibilities and through compliance with the preventive measures that are adopted in each case, for their own safety and health at work and that of those other people to whom that may affect their professional activity, due to their acts and omissions at work, in accordance with their training and the instructions of the employer. ---- 2. Workers, in accordance with their training and following the instructions of the employer, must in particular. ---- 1.º Use properly, in accordance with their nature and foreseeable risks, machines, devices, tools, dangerous substances, transport equipment and, in general, any other means with which they carry out their activity. ---- 2.º Correctly use the means and protective equipment provided by the employer, in accordance with the instructions received from him. ---- 3.º Do not put out of operation and correctly use the existing safety devices or those installed in the means related to their activity or in the work places where it takes place. ---- 4.º Immediately inform their direct hierarchical superior, and the workers designated to carry out protection and prevention activities or, where appropriate, the prevention service, about any situation that, in their opinion, poses, for reasonable reasons, a risk to the safety and health of workers. ---- 5.º Contribute to the fulfillment of the obligations established by the competent authority in order to protect the safety and health of workers at work. ---- 6.º Cooperate with the employer so that he can guarantee working conditions that are safe and do not entail risks for the safety and health of workers. ---- 3. Non-compliance by workers with the obligations in terms of risk prevention referred to in the previous sections will be considered labor non-compliance for the purposes provided for in article 58.1 of the Workers' Statute or lack of , where appropriate, in accordance with the provisions of the corresponding regulations on the disciplinary regime of public officials or statutory personnel at the service of public administrations. The provisions of this section will also be applicable to members of cooperatives whose activity consists of the provision of their work, with the details established in their Internal Regulations.</p>

Table A3: Interpretation of the obligation and market player use.

	About benchmarking LNG “Contractors/operators/drivers qualification” among EU states, MARCOGAZ is also collecting the requirements of the national legislation of the different EU states in comparison to the EN standards requirements.		
Country	Interpretation	Lawyer's interpretation (TBD)	Market player use
Belgium	Fulfilled if operator limits use of station via a specific card after a training is done by driver. Questions -Is BBT a legally binding document, or a guidance note? -Will this change when PGS33 is going to change (which is much stricter)		
Czech Republic			GASNET gives its fuel card after signing a contract where the customer (fleet owner/employer of drivers) undertakes to train all his drivers. GASNET provides all training documents as operation manual and refueling instruction to its customer in advance. These documents are also on GASNET webpage Ing.cz. Refuelling instruction at station will use standardized pictograms as developed in LNG working group. GASNET will provide also face to face training at refueling station for its customer for free if they will ask. But this training is not mandatory in Czech Republic and it will be only additional service for customers.
Europe	So in the case of a truck driver- whoever is the employer of the driver has this obligation, e.g. the haulier. In several EU countries the employer even has an obligation to train/re-educate the employees on an annual basis on the hazards related to their jobs. And it is the employers obligation to meet local regulations e.g. a German driver refueling in NL/PL.		Station operators have no obligation to train customers, but as an additional voluntary service/part of building relationship can offer various training materials and training concepts.
France	Does not specify how the competence is acquired/assessed. Is not specific who has the obligation.		as for Europe case A
Germany	Does not specify who has the obligation.		as for Europe case A
Italy			
Netherlands	Gives obligation to station operator to ensure only registered personnel refuels (in contradiction to EU law, where the employer is accountable for his/her employees). Training is available on https://www.ngva.eu/lngtraining/ Received certificate can be registered via a fuel card which then allows to operate the LNG filling station for LNG refueling.		
Poland			Some market players offer refueling services in case drivers do not have relevant certificate.
Spain	According to EU law. Not LNG specific but in general stating that it is the obligation of the employer to train his/her employees.		