



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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# Response to the public consultation on an EU strategy for liquefied natural gas and gas storage

September 2015

**CEN (European Committee for Standardization)** is an officially recognised organisation (EU Regulation 1025/2012<sup>1</sup>) responsible for developing and defining standards at European level. These standards set out specifications, requirements and recommendations in relation to a wide range of products and services.

The members of CEN are the National Standards Bodies of 33 European countries including all of the EU member states plus Iceland, Norway, Switzerland, Former Yugoslav Republic of Macedonia and Turkey. CEN also works to promote the international harmonisation of standards in the framework of a technical cooperation agreement with ISO (International Organization for Standardization).

European Standards are developed through a process of collaboration among technical experts nominated by business and industry, research institutes, public authorities, consumer and other stakeholders. These standards are implemented throughout all of the 33 countries covered by CEN.

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## Introduction

CEN prepares voluntary standards that help facilitate trade between countries, create new markets, cut compliance costs, and support the development of a Single European Market. CEN's mission is to support and strengthen Europe's growth and competitiveness.

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In cooperation with the European Commission and other stakeholders CEN, and its sister organization CENELEC, develops and adopts European Standards to support the successful implementation of the European Union's climate and energy package, including the so-called '20-20-20' targets for greater energy efficiency, a higher share of energy from renewable sources, and a reduction in greenhouse gas emissions by 2020.

CEN therefore welcomes the opportunity to contribute and express views on the above-mentioned public consultation.

**Q11 – What technological developments do you anticipate over the medium term in the field of LNG and how do you see the market for LNG in transport developing? Is there a need for additional EU action in this area to reduce barriers to uptake, for example on technology or standards, including for quality and safety?**

European Standards provide a basis for the integration of technologies into complex, innovative systems and solutions, and assist in ensuring interoperability. Standardization is therefore a key instrument for the consolidation of the Single Market and for strengthening the competitiveness of the European industry.

European Standards are prepared by technical committees (TC). Each TC has its own field of operation (scope) within which a work programme of identified standards is developed and executed. After its publication, a European Standard must be given the status of national standard by all CEN members withdrawing any national standard that would conflict with it.

The following technical committees have activities related to liquefied natural gas and gas storage, :

- CEN/TC 282 'Installation and equipment for LNG' develops standards in the field of plant and equipment used for production, transportation, transfer, storage and regasification of LNG (list of available standards [here](#) and list of standards under development [here](#)).
- CEN/TC 234 'Gas infrastructure' develop standards of functional requirements in the field of gas infrastructure (including transmission, distribution, storage, compression, regulation and metering, installation, injection of non-conventional gases, gas quality issues and others), from the input of gas into the on-shore transmission network up to the inlet connection of gas appliances. CEN/TC 234 developed a specific series of standards (EN 1918 series) dealing with 'Gas supply systems – Underground gas storage' (list of available standards [here](#)). This series is currently under revision and the vote by members (i.e. step before publication of the standard) is planned in October 2015 (see list of standards under development [here](#)).

In 2013, DG Move launched the EU Clean Fuel Strategy and an ambitious set of measures. In this context, directive 2014/94/EU on the deployment of alternative fuels infrastructure has been adopted in October 2014. The directive establishes 'a common framework of measures for the deployment of alternative fuels infrastructure in Europe in order to minimize dependence on oil and to mitigate the environmental impact of transports'.

To support the implementation of this new Directive, DG Move developed a standardization request (Commission Implementing Decision C(2015)1330) asking CEN to develop, among others, standards for LNG refuelling points for motor vehicles and for maritime and inland waterway vessels for 2016 and 2017. In response to this request, the following standards are currently under development:

| <i>Reference and title</i>   |
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| <p>prEN ISO 20519 'Ships and marine technology —Specification for bunkering of gas fuelled ships'<br/> <i>Note: Developed at ISO level – will be developed in parallel at CEN level (CEN/TC 282)</i></p>   |
| <p>ISO 12617:2015 'Road vehicles -- Liquefied natural gas (LNG) refuelling connector -- 3,1 MPa connector'<br/> <i>Note: Published at ISO level. CEN (TC 301 'Road vehicles') could possibly adopt the published ISO standard at European level → currently under consideration</i></p>  |
| <p>prEN ISO XXX 'Natural gas fuelling stations - LNG stations for fuelling vehicles'<br/> <i>Note: Based in ISO 16924.2 from ISO/PC 252' Natural gas fuelling stations for vehicles'. CEN (TC 326 'Natural Gas Vehicles – Fuelling and Operation') could possibly adopt the published ISO standard at European level → currently under consideration</i></p> |

This work shows the close link between the development of European standards and the international standards. The close cooperation with ISO through the existing cooperation mechanism between ISO and CEN (Vienna Agreement) ensures the European requirements formulated in the Standardization Request are duly addressed. Within this frame, it has to be stressed that CEN is strongly committed to develop the relevant standards within the EC requested timeframe and to contribute to the build-up of alternative fuels stations across Europe.

To complete this picture, CEN has some further suggestions to enhance the outcome of the efforts on alternative fuels infrastructures.

CEN Members experiences show, in parallel to the ongoing standardization work, a need for legal alignment of permits for road service stations and port bunkering station constructions in order to harmonize the practices in various European countries. Technical standards cannot be prescriptive about the process of implementation of a new facility (safety distances, co-activity with other fuels stations, separation from public access, etc.) but could provide some common requirements at European level. To this extent, CEN members suggest to work, as starting point, on already existing bunkering stations or road service stations (France, Netherlands, Norway, Spain, Sweden, United Kingdom, etc.) in order to design a general frame for such facilities.

Finally, LNG shows large variances in methane and heavy hydrocarbon composition depending on its origin. These variances are not compatible with a use as road fuel in combustion engines as they could deteriorate engine performance and emissions. This leads to the suggestion that for road use fuel quality for LNG should be controlled as it is for Petrol and Diesel. The volume of LNG used as a road fuel being very small relative to the quantities for domestic and commercial use and coming from varied sources of supply, the challenge will be in controlling and guaranteeing LNG for road use is delivered in line with those quality requirements.