



FORM 1: PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY

Circulation date 2022-01-12	Reference number: TS/P 303 (to be given by ISO Central Secretariat)
Closing date for voting 2022-04-06	
Proposer AFNOR	ISO/TS/P 303

A proposal for a new field of technical activity shall be submitted to the ISO Central Secretariat, which will assign it a reference number and process the proposal in accordance with the [ISO/IEC Directives Part 1, Clause 1.5](#). The proposer may be a member body of ISO, a technical committee, subcommittee or project committee, the Technical Management Board or a General Assembly committee, the Secretary-General, a body responsible for managing a certification system operating under the auspices of ISO, or another international organization with national body membership. Guidelines for proposing and justifying a new field of technical activity are given in the [ISO/IEC Directives Part 1, Annex C](#).

Proposal (to be completed by the proposer)

Title of the proposed new committee (The title shall indicate clearly yet concisely the new field of technical activity which the proposal is intended to cover). Natural gas fuelling stations for vehicles
Scope statement of the proposed new committee (The scope shall precisely define the limits of the field of activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned). Standardization in the field of design, construction and operation of stations for fuelling compressed natural gas (CNG) and liquefied natural gas (LNG) to vehicles. It includes equipment, safety devices and maintenance.
<input checked="" type="checkbox"/> The proposer has checked whether the proposed scope of the new committee overlaps with the scope of any existing ISO committee <input type="checkbox"/> If an overlap or the potential for overlap is identified, the affected committee has been informed and consultation has taken place between proposer and committee on i. modification/restriction of the scope of the proposal to eliminate the overlap, ii. potential modification/restriction of the scope of the existing committee to eliminate the overlap. <input type="checkbox"/> If agreement with the existing committee has not been reached, arguments are presented in this proposal (under question 7) as to why it should be approved.

Proposed initial programme of work. (The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall, therefore, show the relationship between the subject proposed. Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, characteristics, other requirements, data to be supplied, test methods, etc.). Supplementary justification may be combined with particular items in the programme of work. The proposed programme of work shall also suggest priorities and target dates.)

Revision of ISO 16923:2016, Natural gas fuelling stations - CNG stations for fuelling vehicles
Revision of ISO 16924:2016, Natural gas fuelling stations - LNG stations for fuelling vehicles

Indication(s) of the preferred type or types of deliverable(s) to be produced under the proposal (This may be combined with the "Proposed initial programme of work" if more convenient).

ISO standards

A listing of relevant existing documents at the international, regional and national levels. (Any known relevant document (such as standards and regulations) shall be listed, regardless of their source and should be accompanied by an indication of their significance.)

- ISO 16923 and ISO 16924 were developed under the responsibility of ISO/PC 252 (disbanded after publication of the 2 standards)
- CEN-CENELEC Guide 38 "Guide for multifuel stations" could also be used for covering compatibility issues with other fuels.

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing ISO and IEC deliverables. (The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

No expected impact on existing work except the proposed revision of ISO 16923 and 16924.

Liaison with IEC/TC 31 Equipment for explosive atmospheres will be established. It is intended, as in current version of ISO 16923 and ISO 16924, to refer to IEC standards on explosives atmospheres developed under the responsibility of IEC/TC 31.

A listing of relevant countries where the subject of the proposal is important to their national commercial interests.

The countries

- of the former 21 P-members of ISO/PC 252:
Argentina, Armenia, Canada, Czech Republic, Germany, India, Iran, Israel, Italy, Korea, New Zealand, South Africa, Spain, Sweden, Switzerland, Thailand, The Netherlands, Turkey, United States
- and the former 10 O-members of ISO/PC 252:
Austria, Ecuador, Finland, France, Japan, Morocco, Poland, Oman, Portugal, Trinidad and Tobago

A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable(s). (In order to avoid conflict with, or duplication of efforts of, other bodies, it is important to indicate all points of possible conflict or overlap. The result of any communication with other interested bodies shall also be included.)

“NGV Global”, NGO about natural gas vehicles in special consultative status with the Economic and Social Council of the United Nations, will ask for a liaison.

Cooperation with CEN/TC 326 Natural gas vehicles - Fuelling and operation will be sought.

A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) and how they will each benefit from or be impacted by the proposed deliverable(s).

Industry will benefit from the revisions: fuelling stations designers and manufacturers but also fuelling stations operators and users.

Authorities will benefit as the revised standards will help to authorize new or modified fuelling stations.

The revised standards will address:

- SDG 7 clean and affordable energy
- SDG 9 industries, innovation and infrastructure
- SDG 13 climate actions

An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.

If the proposal is accepted, AFNOR is willing to undertake the work of secretariat of the new TC, and is committed to providing all resources to successfully run the secretariat. It is anticipated that the committee manager that will be nominated is Mr Christophe ERHEL (BNG on behalf of AFNOR) and the chair Mr Erik BÜTHKER (TotalEnergies).

Purpose and justification for the proposal. (The purpose and justification for the creation of a new technical committee shall be made clear and the need for standardization in this field shall be justified. Clause C.4.13.3 of [Annex C](#) of the ISO/IEC Directives, Part 1 contains a menu of suggestions or ideas for possible documentation to support and purpose and justification of proposals. Proposers should consider these suggestions, but they are not limited to them, nor are they required to comply strictly with them. What is most important is that proposers develop and provide purpose and justification information that is most relevant to their proposals and that makes a substantial business case for the market relevance and the need for their proposals. Thorough, well-developed and robust purpose and justification documentation will lead to more informed consideration of proposals and ultimately their possible success in the ISO IEC system.)

Five years after their publication, International standards ISO 16923 and ISO 16924 on Compressed Natural Gas and Liquefied Natural Gas fuelling stations should be updated. As natural gas as a transport fuel offers important benefits to consumers, the environment and the economy, it is indeed expected its use will continue to increase in the coming years (see figures below about the number of CNG/LNG fuelling stations and the number of natural gas vehicles). Updated and market relevant ISO standards on CNG and LNG are therefore needed.

Natural gas provides a quick and cost-effective way to decarbonize road transport and improve air quality in cities. It is an immediately available alternative to oil, with lower GHG emissions than any other hydrocarbon fuel and emitting virtually none of the pollutants (particulate matter and nitrogen oxides or NOx) that increasingly contaminate the air in areas with dense traffic. Vehicles fuelled by natural gas are quieter compared to Diesel and offer a lower total cost of ownership compared to conventional fuels. The technology used in natural gas vehicles is mature and safe.

Gas as a vehicle fuel is available as compressed natural gas (CNG) and liquefied natural gas (LNG). It can be used for cars, vans, buses and trucks, with many different models on the market today from established manufactures.

Natural gas also offers important synergies with biomethane from waste and biomass or synthetic gas produced using wind and solar energy. When using renewable gas, a quasi-carbon-neutral mobility is achieved without any impact on the infrastructure and vehicle technology.

Figures:

In 2019, the number of CNG and LNG fuelling stations reached 33383 worldwide:

- 20 275 in Asia-Pacific
- 5 848 in Latin America
- 5 194 in Europe
- 1 856 in North America
- 210 in Africa

More than 4 000 stations are under construction or in project.

In 2019, the number of natural gas vehicles reached 27 million worldwide. The top ten countries are:

China 6 760 000
Iran 4 950 000
India 3 307 466
Pakistan 3 000 000
Brazil 1 859 300
Argentina 1,652 939
Italy 1 134 982

Uzbekistan 815 000

Colombia 579 791

Thailand 474 486

In the European Union, the number on CNG fuelling stations increased from 3 091 in 2016 to 3 642 in 2020. And the number of LNG fuelling stations increased from 80 to 332.

It is proposed to establish a new technical committee to gather the relevant expertise on CNG and LNG fuelling stations in a dedicated structure.

Signature of the proposer

Mr Franck LEBEUGLE, AFNOR Standardisation director

In case of question, please do not hesitate to contact Mr. Christophe ERHEL

(christophe.erhel@afgaz.fr).

Further information to assist with understanding the requirements for the items above can be found in the [Directives, Part 1, Annex C](#).