



ISO/TC 197  
Hydrogen technologies

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**Information on CEN TC 268 for ISO TC 197**

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Background: Here is some information on CEN TC 268 that will be presented by Hervé Barthélémy at the Dec. Plenary meeting.

Committee URL: <http://isotc.iso.org/livelink/livelink/open/tc197>



**«Cryogenic vessels and specific hydrogen technology applications»**

**CEN/TC 268**

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## **CEN/TC 268 Cryogenic vessels and specific hydrogen technology applications**

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### **Information on CEN/TC 268 works for the plenary meeting of ISO/TC 197 to be held on 3<sup>rd</sup> and 4<sup>th</sup> December 2015**

#### **C**OMMENTARIES

CEN/TC 268 decided in June 2014 to establish a liaison with ISO/TC 197 because CEN/TC 268 extended its scope in 2014 in order to standardize standards on hydrogen technologies in a specific European context.

Information on CEN/TC 268 works are available below.

# CEN TC 268 "Cryogenic vessels"

## 1 Scope

Standardization in the field of insulated vessels (vacuum or non- vacuum) for the storage and the transport of refrigerated liquefied gases, as defined in Class 2 of "Recommendations on the Transport of dangerous goods - Model regulation", in particular concerning the design of the vessels and their safety accessories, gas/materials compatibility, insulation performance, the operational requirements of the equipment and accessories. The one-off preparation of standards for hydrogen technologies strictly meeting the European mandate on the draft Directive deployment of alternative fuels infrastructure.

## 2 Extension of scope

Possible revision to be discussed under item 5.3 of the draft agenda (see document N 712).

*Context: The European Commission is drafting a Directive on the deployment of alternative fuels infrastructure. The European Commission would like that standards support the Directive. To do this, it must be European standards. At this stage, there are only works within ISO/TC 197 "Hydrogen technologies".*

*European stakeholders have identified three areas in which a European needs to be created to develop standards:*

- ✓ *Outdoor hydrogen refuelling points incorporating filling protocols;*
- ✓ *The hydrogen purity;*
- ✓ *Connectors for vehicles for the refuelling of gaseous hydrogen.*

*Regarding the limited time allocated to produce these European standards, it's proposed to extend the scope of CEN/TC 268 "Cryogenic vessels", managed by AFNOR and to entrust this work to a new dedicated working group within existing European technical committee.*

A first consultation of CEN/TC 268 members was launched in January 2014 in order to approve the extension of title and scope of the technical committee. Only Germany disapproved these extensions. DIN reproached that the technical committee wasn't consulted before launching the CIB.

Extensions of title and scope were validated by CEN/BT in April 2014.

## 3 Structure and organization

CEN/TC 268 Chairman	CEN/TC 268 Secretariat
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### CEN/TC 268 Working groups:

- **CEN/TC 268/WG 1 " Design "**  
Convenor: To be nominated by UK (UK)
- **CEN/TC 268/WG 2 " Compatibility, insulation and accessories "**  
Convenor: Mr Hervé BARTHÉLÉMY (France)
- **CEN/TC 268/WG 3 " Operational requirements "**  
Convenor: Mr Wolfgang OTTE (Germany)
- **CEN/TC 268/WG 4 " Fundamental requirements "**  
Convenor: Mr Wolfgang OTTE (Germany)

- **CEN/TC 268/WG 5 "Specific hydrogen technologies applications "**  
Convenor: Mr Hervé BARTHÉLÉMY (France)

## 4 Directives and European mandate

The European Directive on the deployment of alternative fuels infrastructure 2014/94/UE has been published in the Official Journal of the European Union on 28<sup>th</sup> October 2014 (n° OJEU L 307). The Directive is available via this link:

<http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=CELEX:32014L0094>

The mandate concerning CEN/TC 268, M/533, has been approved and specifies that CEN/TC 268 shall provide solution based on international standards for:

- One technical solution for interoperability with a technical specification for outdoor hydrogen refuelling points dispensing gaseous hydrogen compatible with ISO/TS 20100:2008 or its latest edition;
- One technical solution for interoperability with a technical specification for hydrogen purity dispensed by hydrogen refuelling points compatible with ISO 14687-2:2015;
- One technical solution for interoperability with a technical specification for fuelling algorithms and equipment of hydrogen refuelling points compatible with ISO/TS 20100:2008 or its latest edition;
- One technical solution for interoperability with a technical specification for connectors for vehicles for the refuelling of gaseous hydrogen compatible with ISO 17268:2012.

## 5 Works of interest for ISO/TC 197

A dedicated working group for the development of standards on hydrogen technologies has been created in June 2014.

The first meeting was held on 2015-01-12 in order to establish the working plan to develop standards in accordance with mandate M/533.

- ✓ ISO 17268:2012 will be adopted by CEN/TC 268 by UAP (Unique Acceptance Procedure) during the first half of next year, WG 5 experts estimating that no modifications are needed. This International Standard will be adopted in 2016 at European level.
- ✓ ISO 19880-1 " Gaseous hydrogen - Fuelling stations - Part 1: General requirements" is under approval as a technical report at ISO/TC 197 but will be revised soon to convert it in an International standard. This document will fulfill the requirements of the mandate M/533.
- ✓ Regarding the purity of hydrogen, ISO/TC 197 is not ready to revise ISO 14687-2 " Hydrogen fuel - Product specification - Part 2: Proton exchange membrane (PEM) fuel cell applications for road vehicles". The new version will not be published before end of 2017. Discussions with OEM (Original Equipment Manufacturers) and EIGA are engaged. OEM don't understand the timeframe for the development of standards. A new work item is open in order to formally register this work under CEN/TC 268 work programme.

The next meeting of WG 5 will be held on 2016-01-15 in AFNOR.