



ISO/TC 197
ISO/TC 197 - Hydrogen technologies
Email of secretary: sylvie.gingras@bnq.qc.ca
Secretariat: SCC

N484 - Result of voting on NWIP on ISOTR 15916

Document type: Other committee document

Date of document: 2010-11-11

Expected action: INFO

Action due date: 2010-12-10

Background:

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



Result of voting on new work item proposal (NWIP) on the revision of ISO/TR 15916:2004 Basic considerations for the safety of hydrogen systems

Date
2010-11-10

ISO/TC 197 **N 484**

Title of TC/SC concerned
Hydrogen technologies

To be completed by the secretariat and sent to the ISO Central Secretariat and to all P- and O-members of the TC or SC concerned, with a copy to the TC secretariat in the case of a subcommittee.

Proposal	ISO/TC 197 N 472	Circulation 2010-04-19	Deadline 2010-07-19
Title (new title if appropriate; French title to be indicated in all cases, even when no French version is envisaged)			
English title	Basic considerations for the safety of hydrogen systems		
French title	<i>Considérations fondamentales pour la sécurité des systèmes à l'hydrogène</i>		

Results (the compilation of results is given as an annex)

The following criteria for acceptance have been met:

- Approval by a simple majority of the voting P-members
- 5 or more P-members voting approval have agreed to participate in the development of the project and have nominated an expert

In the light of results, the proposal is therefore:

- Approved** (all approval criteria met)
- Not approved** (one or more approval criteria not met)

Associated draft

- no draft was associated with this ballot. A first draft is expected by (give date)
- the associated draft is adopted as a working draft (WD)
- the associated draft is approved as a Committee draft (CD)
- the associated draft is approved as the proposed Draft International Standard (DIS)

Further procedures (attribution to TC/SC/WG, Project Leader, development procedure, meetings, etc.)

- The project is to be first registered as a Preliminary Work Item (stage 00.60)
- The project is to be immediately registered as an active work item

Other:
Based on the results of voting, this work is to be allocated to a new ISO/TC 197 working group: ISO/TC 197 WG 16 Basic considerations for the safety of hydrogen systems under the convenership of Mr. Ulrich Schmidtchen (ulrich.schmidtchen@bam.de).

Experts (give details below, or as a separate annex)

The names of the experts that were nominated during the circulation of ISO/TC 197 document N 472 are given in Annex A. Now that ISO/TC 197 WG 16 has been created in the ISO Global Registry, P-members that have nominated experts are invited to register them in the ISO Global Registry as soon as possible. P-members that have not yet nominated their experts shall make sure that they nominate them through the ISO Global Registry before 10 December 2010.

Documents to be considered (give details below, or as a separate annex)
 See the comments received in Annex B.

Proposed development track 1 (24 months) 2 (36 months - default) 3 (48 months)

If you do not want to change the defaults to earlier dates do not put anything in the "Target date for submission" fields.

Target date for submission:	as a CD:	as a FDIS:	
	as a DIS:	for publication:	November 2012

Secretariat	Secretary
SCC/BNQ	

Registration by the Central Secretariat	
Date	Allocated project number
11 November 2010	ISO/NP TR 15916 1

Other information, comments, etc. appended (see Annexes A and B)

Compilation of the results of voting on ISO/NP TR 15916

Member body	Member status	Feasible to develop a Globally Relevant Standard			When a draft has been attached						Comments enclosed (See Annex B)	Participation	Expert(s) nominated	no reply (optional)
					Accepted for Stage 0	Accepted for Progressing to WD	Accepted as a WD	Accepted as CD	Accepted as DIS					
					Y/N	Y/N	Y/N	Y/N	Y/N					
P/O	Yes	No	Abst.	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N		
Argentina	P	X				Y					Y	Y	Y	
Brazil	P			X										
Canada	P	X				Y					Y	Y	Y	
China	P	X			Y						Y	Y	Y	
Denmark	P			X										
Egypt	P	X												
France	P	X			Y							Y	Y	
Germany	P	X				Y						Y	Y	
India	P	X								Y				
Italy	P			X										
Japan	P	X					Y							
Korea, Republic of	P	X				Y								
Netherlands	P	X				Y								
Norway	P			X										
Russian Federation	P	X							Y					
Spain	P			X										
Sweden	P	X				Y						Y	Y	
Switzerland	P			X										
United Kingdom	P	X				Y						Y	Y	
USA	P	X			Y						Y	Y	Y	
Totals (P-members only)		14	0	6	3	7	1	1	1	4	8	8		

Abstentions and incomplete votes are not counted

Total of P-members voting (x): 20

ISO/TC 197/WG 16 Membership

Argentina

José Luis Aprea, cneanqn@infovia.com.ar

Canada

Andrei V. Tchouvelev, atchouvelev@tchouvelev.org

Pierre Benard, Pierre.Benard@UQTR.CA

Joe Wong, Powetech Labs, Joe.Wong@powertechlabs.com

China

ZHENG Jingyang, Institute of Process Equipment, Zhejiang University, jyzh@zju.edu.cn

France

Frédéric Barth, Air Liquide, frederic.barth@airliquide.com

Germany

Ulrich Schmidtchen, convener, ulrich.schmidtchen@bam.de

Sweden

Paul Adams, Paul.Adams@volvo.com

United Kingdom (BSI)

Karen Hall, khall@ttcorp.com

Charlie Duncombe, charlie.duncombe@bsigroup.com

USA

Thomas G. Witte, Air Products, wittetg@airproducts.com

Miguel Maes, NASA, White Sands Test Facility-JSC, miguel.j.maes@nasa.gov

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
AR				The International Standard ISO TR 15916 has been adopted in Argentina as a national standard. The document is titled as: IRAM-ISO 15916:2007 - Consideraciones básicas de seguridad para sistemas de hidrógeno.		
CA				Besides EU NoE HySafe referred to in the NWIP by Germany, other very reputable sources include but not limited to: <ul style="list-style-type: none"> • Canadian Hydrogen Safety Program (under NRCan); • US DOE hydrogen safety C&S program; • Japanese hydrogen safety program; • a number of EU projects that directly or indirectly considered hydrogen safety related issues like HYPER, HyApproval, StoreHy, NaturalHy, etc.; • IEA HIA Task 19 on hydrogen safety. All this information needs to be assessed, processed and the good gist of it find home in a state-of-the-art international technical report like ISO/TR 15916		
CN				ISO/TR 15916 <i>Basic considerations for the safety of hydrogen systems</i> provides guidelines for the use of gaseous and liquid hydrogen systems. With the rapid development of hydrogen energy, the slush hydrogen systems can also be used in the near future, and therefore, the basic properties of slush hydrogen and safety requirements of slush hydrogen systems are suggested to be provided. Furthermore, based on the existing items in ISO/TR 15916, suggested items are as follows: <ol style="list-style-type: none"> 1. Hydrogen production by renewable energy E.g. hydrogen production by water electrolysis whose electric power is form renewable energy, hydrogen production by solar-thermochemical method, hydrogen production by solar energy splitting water, etc. 2. basic properties of slush hydrogen 3. factors involved in solid-state hydrogen storage hazards 		

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
				<p>4. test requirements for materials Materials used for hydrogen system, especially exposed in hydrogen environment shall be tested, to make sure that those materials are suitable for hydrogen service.</p> <p>5. heat treatment requirements for materials</p> <p>6. high-pressure vessel for gaseous hydrogen storage The requirements for design, manufacture and use of stationary and mobile high-pressure vessel for gaseous hydrogen storage.</p> <p>7. liquid and slush hydrogen vessel The requirements for design, manufacture and use of stationary and mobile liquid and slush hydrogen vessel.</p> <p>8. solid-state hydrogen container The requirements for design, manufacture, and use of stationary and mobile solid-state hydrogen container.</p> <p>9. gaseous hydrogen piping The requirements for design, manufacture, use and location of gaseous hydrogen piping in hydrogen station, hydrogen filling station and hydrogen supply station.</p> <p>10. liquid and slush hydrogen piping The requirements for design, manufacture, use and location of liquid and slush hydrogen piping.</p> <p>11. control room The requirements for design and location of control room in hydrogen station, hydrogen filling station and hydrogen supply station.</p>		
US				<p>We support this document for the dissemination of general guidance and best practice with regard to handling hydrogen. As such, we agree with re-issuing this as a TR with the latest information available to the industry. We, however, do not support the development of a standard with mandatory requirements.</p>		