



# Form 6: Result of voting on New Work Item Proposal

Date: 2015-10-14	ISO/TC 197
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.

**Please attach the results of the NWIP ballot from CIB to this form**

ISO/TC 197	Circulation	Deadline
N692	2015-07-22	2015-10-02

<b>Results (the compilation of results is given as an annex)</b>
The following criteria for acceptance have been met: <input checked="" type="checkbox"/> Approval by a simple majority of the voting P-members; and <input checked="" type="checkbox"/> a commitment to participate actively in the development of the project by at least 4 P-members in committees with 16 or less P-members and at least 5 P-members in committees with 17 or more P-members (rf ISO/IEC Directives, Part 1 clause 2.3.5) and have nominated an expert <input type="checkbox"/> Justification statements have been checked (all positive or negative votes must be accompanied by a statement justifying the decision, or they shall not be counted. See ISO/IEC Directives Part 1, clause 2.3.4)

**In light of results, the proposal is therefore:**

Approved (all approval criteria met) and the project will be registered:

- as new project in the committee's work programme (stage 20.00)
- as a Working Draft (WD – stage 20.20)
- as a Committee Draft (CD – stage 30.00)
- as a Draft International Standard (DIS – stage 40.00)

Disapproved (one or more approval criteria not met)

(note that if no option is selected, the default will be abandoned)

- The draft will be registered as a preliminary work item ( stage 00.60)
- Abandoned.

**Proposed project leader:**  
 Dr. Yasuo Tagaki (ytakagi@tcu.ac.jp), TG1 Leader  
 Mr. Osamu Tajima (otajima-as@yamanashi.ac.jp), TG2 Leader

**This proposal will be developed by:**

- An existing Working Group
- A new Working Group (title: Hydrogen fuel product specification)

Note: establishment of a new WG must be approved by committee resolution

- The TC/SC directly
- To be determined

**List of participating experts**  
 Please see expert list as separate annex.

**Relevant documents**  
 N693, N694, N695 and N696 were also taken into consideration for the vote on this NWIP.

**Proposed development track**

1 (24 months)     2 (36 months - default)     3 (48 months)

*Note: Selection of a development track will automatically associate default target dates with critical stages. If you envisage that you can advance a project quicker than the default target dates you may indicate your preferred earlier target dates in the field "Target date for submission". Important! Quoting earlier target dates implies a commitment to meeting these dates. If you do not want to change the defaults to earlier dates do not put anything in the "Target date for submission" fields.*

<b>Secretariat</b> SCC	<b>Secretary</b> Ferrero, Jim Mr	<b>Registration by the ISO Central Secretariat</b> Date: 2015-10-14 Allocated project number: ISO/NP 14687
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Other information, comments, etc. appended

The formation of the new WG and the co-convenors were approved at the same time as the NWIP.

#### Annex - Nominated Experts

Member Body	Expert
Argentina (IRAM)	Jose Luis Aprea - jlaprea@infovia.com.ar Cristian Vazquez - cvazquez@iram.org.ar
Canada (SCC)	Tommy Cheng (Tommy.Cheng@ballard.com)
China (SAC)	Prof.ZHANG Cunman Tongji University zhangcunman@tongji.edu.cn
France (AFNOR)	Mme Irina PROFATILOVA from CEA : Irina.PROFATILOVA@cea.fr
Japan (JISC)	TOMIOKA, Hidenori: &lt;htomioka@jari.or.jp&gt; NAKATA, Keiichi: &lt;keiichi_nakata@mail.toyota.co.jp&gt; HASHIMASA, Yoshiyuki: &lt;yhashi@jari.or.jp&gt; ASAUMI, Takao: &lt;asaumi@iwatani.co.jp&gt; INOUE, Goichi: &lt;g-inoue@iwatani.co.jp&gt; TATEISHI, Daisaku: &lt;daisaku.tateishi@noe.jx-group.co.jp&gt; MIYASHITA, Osamu; &lt;miyashita@ena.or.jp KOSEKI, Kazuo; &lt;koseki@fcdic.jp
Netherlands (NEN)	Expert: Alice Elliott
Russian Federation (GOST R)	In the Russian Federation introduced the following standards. These standards are identical to ISO standards:
United Kingdom (BSI)	Dr Nick Hart - UK Expert Mr C Duncombe - UK Observer
United States (ANSI)	Ms. Karen Hall, khall@fchea.org, Industry and commerce Mr. Spencer Quong, squong@squong.com, Industry and commerce

# Report of voting

## Ballot Information

<b>Ballot reference</b>	NWIP from Japan for the revision of ISO 14687
<b>Ballot type</b>	NP
<b>Ballot title</b>	ISO 14687 Hydrogen fuel quality -- Product specification
<b>Opening date</b>	2015-07-22
<b>Closing date</b>	2015-09-30
<b>Note</b>	If this NWIP from Japan is approved by ISO/TC 197, it will bring about the creation of a new WG with Yasuo Takagi and Osamu Tajima appointed as co-conveners for a three year period.
<b>Vienna agreement</b>	ISO lead

## Member responses - Votes by members

Country (Member body)	* Status	1a. Agree to add to work programme							Market relevance	1b. Stakeholders consultation		2. Relevant documents		3. Comments		4. Participation	
		Yes			No		Abs	Yes		No	Yes	No	Yes	No	Yes	No	
		20.00	20.20	30.00	40.00	PWI: Yes											PWI: No
Argentina (IRAM)	P	X							X		X			X			
Brazil (ABNT)	P						X				X					X	
Canada (SCC)	S	X							X		X					X	
China (SAC)	P	X							X		X					X	
Czech Republic (UNMZ)	P						X										X
Denmark (DS)	P	X							X		X					X	
Egypt (EOS)	P						X				X					X	
France (AFNOR)	P	X							X		X					X	
Germany (DIN)	P	X							X		X					X	
India (BIS)	P	X							X		X					X	
Italy (UNI)	P						X									X	
Japan (JISC)	P	X							X		X					X	
Korea, Republic of (KATS)	P	X							X		X					X	
Netherlands (NEN)	P	X							X							X	
New Zealand (SNZ)	P						X				X					X	
Norway (SN)	P						X				X					X	
Russian Federation (GOST R)	P	X							X							X	
Spain (AENOR)	P						X				X					X	
Sweden (SIS)	P						X				X					X	
United Kingdom (BSI)	P	X							X		X					X	
Sub-Total Question 1a		12	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8
<b>Totals</b>		<b>12</b>						<b>8</b>	<b>12</b>	<b>4</b>	<b>2</b>	<b>18</b>	<b>1</b>	<b>19</b>	<b>8</b>	<b>12</b>	

Member responses - Votes by members																		
Country (Member body)	*Status	1a. Agree to add to work programme						Market relevance	1b. Stakeholders consultation		2. Relevant documents		3. Comments			4. Participation		
		Yes		No		Abs	Yes		No	Yes	No	Yes	No	Yes	No			
		20.00	20.20	30.00	40.00											PWI: Yes	PWI: No	
United States (ANSI)	P	X						X							X			
Sub-Total Question 1a		13	0	0	0	0	0	8										
<b>Totals</b>		<b>13</b>				<b>0</b>	<b>0</b>	<b>8</b>	<b>13</b>	<b>17</b>	<b>4</b>	<b>2</b>	<b>19</b>	<b>1</b>	<b>20</b>	<b>9</b>	<b>12</b>	

### Member responses - Votes not cast (0)

Comments from voters	
Member	Date
<p><b>Argentina (IRAM)</b> Santella, Mabel Mrs</p> <p><b>Comment to Q.1:</b> we agree with Japan's proposal because in Argentina the three parts are used and it would be advisable the integration.</p> <p><b>Comment to Q.7:</b> Jose Luis Aprea - <a href="mailto:jlaprea@infovia.com.ar">jlaprea@infovia.com.ar</a> Cristian Vazquez - <a href="mailto:cvazquez@iram.org.ar">cvazquez@iram.org.ar</a></p> <p><b>Comment to Q.1:</b> Especially with the drive to lower catalyst loading, it is paramount to have up-to-date hydrogen specifications.</p> <p><b>Comment to Q.7:</b> Tommy Cheng (<a href="mailto:Tommy.Cheng@ballard.com">Tommy.Cheng@ballard.com</a>)</p>	2015-09-30
<p><b>Canada (SCC)</b> Geraghty, Christine Mrs</p> <p><b>Comment to Q.1:</b> It makes sense to combine the current ISO 14687 -1,-2 and -3 into one document in order to make the standard more widely used and more convenience for the users. However, the completion of the 3 parts and following with the advanced technology development should be considered in the revision.</p> <p><b>Comment to Q.7:</b> Prof.ZHANG Cunman Tongji University <a href="mailto:zhangcunman@tongji.edu.cn">zhangcunman@tongji.edu.cn</a></p>	2015-09-23
<p><b>China (SAC)</b> Wang, Geng</p> <p><b>Comment to Q.1:</b> It is important that and overall requirements and awareness of hydrogen fuel quality requirements are for independent FC application, that why combine the existing three standards into one is important. Only hereby we can create a better understanding on how we can update and share the knowledge from users and manufactures.</p>	2015-09-30

Comments from voters		
Member	Comment	Date
France (AFNOR) Solbes, Frédéric M.	<p><b>Comment to Q.1:</b> This NP is important for the French industry.</p> <p><b>Comment to Q.7:</b> Mme Irina PROFATILOVA from CEA : Irina.PROFATILOVA@cea.fr</p>	2015-09-30
Germany (DIN) Klaas, Uwe Mr	<p><b>Comment to Q.1:</b> ISO 14687 no longer regarded as state of the art.</p>	2015-09-30
India (BIS) Jha, R.K Dr	<p><b>Comment to Q.1:</b> agreed</p>	2015-09-30
Japan (JISC) Miyashita, Osamu Mr	<p><b>Comment to Q.1:</b> It is needed to merge three parts of this document (ISO14687). Also, it would be necessary to revise the content of specifications for the fuel cell vehicle application, as per the request from both the car manufacturer side and the hydrogen infrastructure side.</p> <p><b>Comment to Q.5:</b> JIS K0512</p> <p><b>Comment to Q.7:</b> TOMIOKA, Hidenori: &lt;htomioka@jari.or.jp&gt; NAKATA, Keiichi: &lt;keiichi_nakata@mail.toyota.co.jp&gt; HASHIMASA, Yoshiyuki: &lt;yhashi@jari.or.jp&gt; ASAUMI, Takao: &lt;asaumi@iwatani.co.jp&gt; INOUE, Goichi: &lt;g-inoue@iwatani.co.jp&gt; TATEISHI, Daisaku: &lt;daisaku.tateishi@noe.jx-group.co.jp&gt; MIYASHITA, Osamu; &lt;miyashita@enaa.or.jp&gt; KOSEKI, Kazuo; &lt;koseki@fcdic.jp&gt;</p>	2015-09-29
Korea, Republic of (KATS) Jang, Hyuckjo Dr	<p><b>Comment to Q.1:</b> This NWIP will be helpful to revise of ISO 14687.</p>	2015-09-30
Netherlands (NEN) Feenstra, Linda Mrs	<p><b>Comment to Q.1:</b> We support this NWIP</p> <p><b>Comment to Q.7:</b> Expert: Alice Elliott</p>	2015-09-24
Russian Federation (GOST R) Ramenskiy, Alexander Dr	<p><b>Comment to Q.1:</b> In the Russian Federation introduced the following standards.</p> <p><b>Comment to Q.5:</b> In the Russian Federation introduced the following standards.</p> <p><b>Comment to Q.7:</b> In the Russian Federation introduced the following standards. These standards are identical to ISO standards:</p> <p><b>See linked comment file:</b> <a href="#">NWIP from Japan for the revision of ISO 14687 BSI.doc</a> (access restricted to ballot audience)</p>	2015-07-23
United Kingdom (BSI) Duncombe, Charlie Mr.	<p><b>Comment to Q.1:</b> The purpose of this NWIP is to combine the existing three standards on hydrogen quality, 14687-1, 14687-2 and 14687-3 into one document, incorporating their revisions at the same time. NOTE: 14687-1 All applications except PEMFC road vehicles 14687-2 PEMFC vehicles 14687-3 PEMFC stationary appliances PEMFC technology has shown a remarkable progress in recent years such as lowering of Pt - loading, thinned electrolyte membrane, operation with high current density, and operation under low humidity. With this</p>	2015-09-21

Comments from voters		
Member	Comment	Date
United Kingdom (BSI) Duncombe, Charlie Mr.	<p>progress, it has become necessary to reconsider the tolerances of hydrogen impurities for the PEMFC which are given in ISO 14687-2 and -3. Especially pertaining to ISO 14687-2, hydrogen fuel-product specification for FCVs should be reviewed at this timing based on the experiences of several tens of commercialized hydrogen stations. Because the difficulties have been recognized to both timely and cost-effectively analyze and validate those concentrations of a few contaminants of hydrogen at the transfer point between hydrogen stations and FCVs. In addition, it would be necessary to consider the impurities which are not covered in ISO14687-2 and -3 for example oil mixed in hydrogen or impurities in hydrogen produced from bio-gas. For the implementation of the revision work mentioned above, the following task groups (TGs) with different roles will be set up: TG 1: Revision on PEMFC vehicles; TG 2: Revision on PEMFC stationary appliances; TG 3: Compilation of 14687-1, -2, and -3.</p> <p><b>Comment to Q.7:</b> Dr Nick Hart - UK Expert Mr C Duncombe - UK Observer</p> <p><b>Comment to Q.1:</b> We believe that this document is important to the hydrogen industry and support the convenor.</p> <p><b>Comment to Q.7:</b> Ms. Karen Hall, khall@fchea.org, Industry and commerce Mr. Spencer Quong, squong@squong.com, Industry and commerce</p>	2015-09-21
United States (ANSI) Team, ANSI ISO		2015-09-23

Comments from commenters		
Commenter	Comment	Date
Sri Lanka (SLSI) Sirikumara, Jayantha Mr	<b>See linked comment file:</b> <a href="#">NWIP from Japan for the revision of ISO 14687_SLSI.doc</a> (access restricted to ballot audience)	2015-07-27