



ISO/TC 197
Hydrogen technologies

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CIB explanation to publish DTR 19880-1 as a TS

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Background: Here is the explanatory note, prepared by the TC 197 Chair and Secretary, meant to accompany the CIB vote concerning the document 19880-1.

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

Explanatory note for the ISO/TC 197 CIB to publish DTR 19880-1 as TS 19880-1

On December 5, 2015, ISO/TC 197, at its 24th plenary meeting in Torrance, California, unanimously approved the following resolution:

Resolution 399:

ISO/TC 197 approves the circulation of a CIB ballot with a closing date of January 31, 2016 to consider publishing DTR 19880-1 as a Technical Specification (TS) rather than as a Technical Report (TR). P-members are encouraged to cast their votes by January 15, 2016 in view of the critical discussions pending with CEN TC 268 WG 5.

In order to understand the context of the 19880-1 document we need to look at the history of TS 20100:2008 *Gaseous hydrogen – Fuelling stations*, on the same subject.

On December 4, 2015, ISO/TC 197, at its 24th plenary meeting in Torrance, California, approved the following resolution:

Resolution 396:

ISO/TC 197 agrees that as ISO TS 20100:2008 is not deemed to provide an adequate level of safety for current fueling station needs, ISO/TC 197 agrees to withdraw ISO TS 20100:2008 with immediate effect and inform CEN and EC immediately.

*Approval: Canada, China, France, Japan, Korea, Norway, Russia, Sweden, UK, US
Abstention: Germany, Netherlands, Italy*

History of ISO/TS 20100:2008

ISO/TS 20100 was published in April 2008. It was originally approved for publication by ISO/TC 197 in December 2007 as DTS 20012. (A new number 20100 was assigned to the TS by ISO Central Secretariat during the publication phase). Although it gained 75% of positive votes, it received a strong opposition from Japan, Sweden, UK and USA. The sentiment within countries that approved DTS 20012 (e.g. Canada) was that it was a useful guideline document for demonstration fueling projects rolling out at that time. Although TS 20100 contains a diagram illustrating a relationship between temperature and pressure for 70 MPa fueling, it provides no useful guidance on how it should be implemented. As such, TS 20100 is unfit for use as a guideline for commercial public fueling stations of today which operate at 70 MPa and thus cannot provide an adequate level of public safety.

In view of the strong looming possibility that some European Member States may be willing to adopt TS 20100 into their national legislation as part of the Article 11 (Transposition) implementation of the EU Alternative Fuels Infrastructure Directive (AFI), ISO/TC 197 took the resolution 396 to withdraw TS 20100 immediately to avoid potential unsafe situations at public fueling stations.

European Context

The withdrawal of the TS 20100 has created a void in international fueling guidelines. A Technical Report (TR 19880-1) could partially fill the void. However,

the European regulatory process does not allow for technical reports to be adopted as legal documents. Therefore, the replacement of TS 20100 with a TS would be a more desirable solution from the EU perspective, particularly taking into account the above mentioned AFU Directive and its Article 11. Also, there will be less confusion replacing a TS with a TS, rather than with a TR, which is considered a lesser document.

ISO Context

From the ISO perspective, if the above mentioned European context is not taken into account, the publication of the DTR 19880-1 as a TS or TR would not make any difference for the current program of ISO/TC 197. Either document can end up being turned into a Draft International Standard (DIS), which is what is planned for July 2016. It is worth noting that as per ISO Directives, the definition of a TS – *“document ... for which there is a future possibility of agreement on an International standard, but for which at present the subject matter is still under technical development”* fits better the current document 19880-1 than the definition of a TR – *“document ... containing collected data of a different kind from that normally published as an International Standard or Technical Specification”*.

Feedback from ISO Central Secretariat

Consultations with the ISO Central Secretariat (our Technical Program Manager Mr. Andrew Dryden) confirmed that ISO/TC 197 can decide to publish the DTR 19880-1 as TS 19880-1 by passing a resolution to approve the decision. It is worth remembering that the DTR received 100% support and the content will not have any important changes prior to publication.

Discussions at the ISO/TC 197 Plenary

The feedback received from the P-members during the discussion at the plenary meeting in Torrance (prior to the vote on resolution 399) indicated that all P-members are, in principal, in favour of the publication of TS 19880-1. Some P-members, however, felt that they needed to consult their mirror committees before making a final decision. Respecting their position, TC 197 took the resolution 399 to hold a CIB to give the P-members time to consult with their mirror committees.

As noted in resolution 399, the P-members are encouraged to cast their votes before January 15, 2016 due to critical discussions with CEN/TC 268/WG5 responsible for technical content of the implementation of the European Commission mandate for the AFI Directive related to hydrogen.

Conclusion

In view of the above considerations, it is reasonably justified to publish the DTR 19880-1 as a Technical Specification (TS 19880-1) to supersede TS 20100, which has recently been withdrawn due to safety concerns as mentioned earlier.

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