

CEN Meeting on Collecting of European Positions on H₂ Supply to Road Vehicles in relation to standardization

EIGA WG-11 (Hydrogen Energy)

Position

Brussels 2013-10-25

ISO TS 20100:2008 (H2 Refuelling Station) to be adopted as EN at European level?

- No. ISO TS 20100:2008 is not state of the art.
- ISO Standard development should be pursued for HRS.
- Activity is going on to restart ISO working group with new Convener. NWIP (US/F) is out for voting until 2013-11-19.
- Some topics of the scope are still in discussion (e. g. Safety distance may be treated as an informative annex)
- The new ISO standards (TR or IS) should be adopted as CEN standards, with option to introduce modifications . This would require a CEN TC to be set up.
- If ISO runs into difficulty as previously experienced, develop a CEN Standard.
- EIGA recommends that in parallel more research should be conducted around safety distance, e.g.:
 - Review current rules for safety distances (US, GER, France, Canada, Japan)
 - Identify data to be collected to develop better modeling
 - Lack of sufficient Statistics on leaks and reliability to develop rational rules
 - CNG experience to be leveraged
- Industrial Gas companies will ensure through the EIGA WG-11 that these initiatives are launched.

ISO 14687-2:2012 'Hydrogen fuel - Product specification – Part 2' to be adopted at European level?

- No. ISO standard not to be adopted by CEN without modifications.
- Not in use yet in Europe, difficult to apply (lack of qualified analytical tools to ensure specifications, for example Sulfur). ISO document does not balance vehicle requirements and the supply chain costs. H₂ quality may be over specified for some impurities.
- Current hydrogen delivered in Europe with less stringent specifications (liquid, gas, on-site generators) seems to be adequate for Fuel Cells (lessons learned from experience).
- Beyond the H₂ quality standard, Quality Assurance needs to be developed (e. g. sampling method and frequency).
- ISO working group to be restarted by a member state or start of a CEN working group on this topic. EIGA WG11 will support this by providing recommendations
- In the mean time quality will be defined on a case by case basis. CEP (Germany) has long discussions and experience on this topic
- Reference to ISO H₂ quality norm in AFD should be removed
- Discussions with OEMs should result in balanced specification at optimum cost

SAE J2601 'Hydrogen fuelling algorithms and equipment' to be adopted as EN at European level?

- No
- New ISO TR or IS 20100 (see slide 2) should refer to SAEJ 2601 due to the fact that the standardization of the fuelling protocol is still ongoing
- Safety aspects of the fueling protocol should be fully covered by SAE J2601 or in ISO 20100
- European actors need to participate to SAE J2601 discussions

ISO 17268:2012 'Gaseous hydrogen land vehicle refuelling connection devices' to be adopted at European level?

- YES. Ok for CEN adoption

EIGA WG-11 working group is a Liaison to ISO TC197 and is willing to share its expertise with CEN/CENELEC

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EIGA WG-11 Mission :

*Develop EIGA documents on hydrogen safety for hydrogen energy applications
Follow TC197 standardization activities and ensure participation of European Gas Companies*