



International Partnership *for the* Hydrogen Economy



Regulations, Codes and Standards Working Group Update



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Joint IPHE ILC/SC Meeting
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RCSWG Accomplishments

- IA HySafe launched September 2009
- International Conference on Hydrogen Safety (ICHS-3) Ajaccio (FR), (IPHE label)
 - Over 250 world experts and scientists in H2 safety attended
- Global Technical Regulation (GTR) for hydrogen fuelled vehicles has had significant progress
 - Draft GTR completed 2Q 2009; Final GTR in 2011
- Hydrogen Fuel Quality Draft ISO Standard on track for 2010
- HyApproval: “Handbook for Approval of Hydrogen Refueling Stations” was published 2008



RCSWG Accomplishments

- Fuel Cell Testing, Safety, and Quality Assurance (FCTESQA) aimed at testing new technology completed in 2009
- Installation Permitting Guidance for Hydrogen and Fuel Cells Stationary Applications (HYPER) published in 2009
- Hydrogen Incidents and Accidents Database (HIAD) restructured and relaunched in 2009



RCSWG Updates

EU Update

- Organization of an expert workshop on gap analysis in CFD models and tools for hydrogen safety applications (EU, Canada)
- International Symposium on Diagnostic Tools for Fuel Cell Technologies, Trondheim (NO), June 2009 (FCTEDI), organized by JRC
- International Workshop on the Effects of Fuel & Air Quality to Performance of Fuel Cells, Berlin (DE), September 2009 (FCTEDI), Organized by JRC
- Involvement with SDO (by JRC-IE)
 - Preparation and circulation to experts of questionnaire on the development of international standards for off road vehicles and Auxiliary power units (APUs) (adhoc WG 6 of IEC/TC105)
 - Participation to plenary meeting of IEC/TC105
 - Participation to meeting of WG13 on Hydrogen Detecting Apparatus of ISO TC197



RCSWG Updates

US Update

- Developed online permitting compendium for hydrogen fueling stations and fuel cells for telecommunication applications
- Published National Fire Protection Agency (NFPA-2) draft of *Hydrogen Technologies Code* in 2009
- Drafted GTR for hydrogen fueled vehicles
- Upgraded web-based *Introduction to Hydrogen Safety for First Responders*
 - Total of 9,300 visits since January 2007 (Averages 300-500 unique visits/month)
- Delivered first responder training course utilizing fuel cell vehicle prop
 - Over 90 first responders from 18 states have participated
- Strong participation in ISO TC197 plenary and working group committees



RCSWG Next Steps

- Increase coordinated approach to harmonize RCS activities across IPHE participating countries
- Finalize items in Action Plan
- Identify and promulgate good practices among IPHE members
- Work with other international organizations and governments to reduce gap of international activities and encourage timely exchange of information on advancements
- Establish and maintain network of IPHE experts and enlist expertise where needed for implementation of Action Plan