

ICHHS

**International Conference on Hydrogen
Safety**

9-11 September 2013, Brussels

JRC - role and activities on hydrogen safety





JRC's Mission and Role

... is to provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle

Direct research:

JRC is the European Commission's in-house science service and the only DG executing direct research; providing science advice to EU policy



Serving society, **stimulating innovation**, supporting legislation



Science-based input to EU legislation and standardisation

JRC



Scientific-based
Support



EU Legislation
Standardisation



Sustainability Competitiveness



Innovation
Jobs & Growth





JRC in HORIZON 2020

Industrial leadership priority: JRC will contribute to innovation and competitiveness:

- support to the standardisation process and standards with pre-normative research, development of reference materials and measurements, and harmonization of methodologies in five focal areas (energy; transport;..).
- carrying out safety assessments of new technologies in areas such as energy and transport
- contribution to the strategic orientation and science agenda of public-private partnerships

(COM(2011) 809, 811)



PNR at JRC: facilitate, implement, use the results



(1) Partner with EU industry and research institutions



industry



Science-based input to Standards and Regulations

policy



research



Identify R&D needs

Perform priority R&D



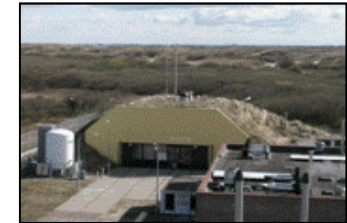
(2) Harmonise internationally

JRC Pre-Normative Research Activities on FCH



Regulation (EU) No 1025/2012 on European Standardisation

*Art. 9: Cooperation with research facilities: JRC shall provide European standardisation organisations with scientific input, to ensure that European standards take into account economic competitiveness and **societal needs** such as environmental sustainability and **safety** and security concerns.*

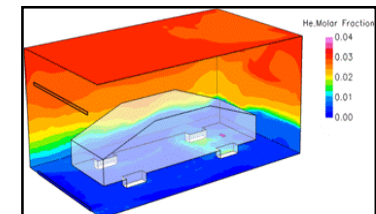
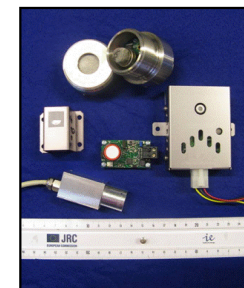


JRC Activities:

- *Fast filling and permeation of type 4 tanks*
- *Performance characterisation of H2 safety sensors*
- *CFD modelling of H2 safety issues*
- *Hydrogen purity requirements for automotive stacks*
- *Performance characterisation of fuel cells*



ICHS2013





Joint Research Centre (JRC)

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Serving society
Stimulating innovation
Supporting legislation

