

Standardization to Support Innovation and Commercialization of HFC Infrastructure

5th International Conference on Hydrogen Safety | Brussels | September 10th, 2013
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Study 'Safe Hydrogen Infrastructure in Germany'

April, 2012



SICHERE WASSERSTOFFINFRASTRUKTUR

ENDBERICHT

Im Auftrag des



Bundesministerium
für Verkehr, Bau
und Stadtentwicklung

vertreten durch

NOW

Nationale Organisation Wasserstoff- und Brennstoffzellentechnologie

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9. Dezember 2011



Ludwig Bolkow
Systemtechnik

bast



CCS GLOBAL

www.lbst.de • www.bast.de • www.tuev-sued.de • www.ccsglobalgroup.com

Clear criticism on **non-federally harmonized catalogue of requirements** on examination during approval processes as well as on the **bad state of pre-information of the authorities** (more an administrative than a legal deficit)

- Recommendations especially for an efficient approval of HRS's in Germany have to be implemented without delay, in order to allow for an efficient and fast infrastructure implementation:
 - Federally harmonized catalogue of requirements for the examinations in the frame of approval processes
 - Securing a better level of advance information at authorities
 - Harmonization of requirements like intended by the ISO 20100 in preparation
 - Provision of templates as e.g. for explosion protection documents (→ 2 such templates have been identified)

Download: www.now-gmbh.de



Guideline for the approval of Hydrogen Refueling Stations



Goals: -Harmonization of permission process
-Efficient procedure



Background: Study „Safe Hydrogen Infrastructure“ carried out by NOW; Strong request by H2Mobility/CEP



Products: Website & booklet



Target groups: Applicants and authorities








www.h2-genehmigung.de



Content website



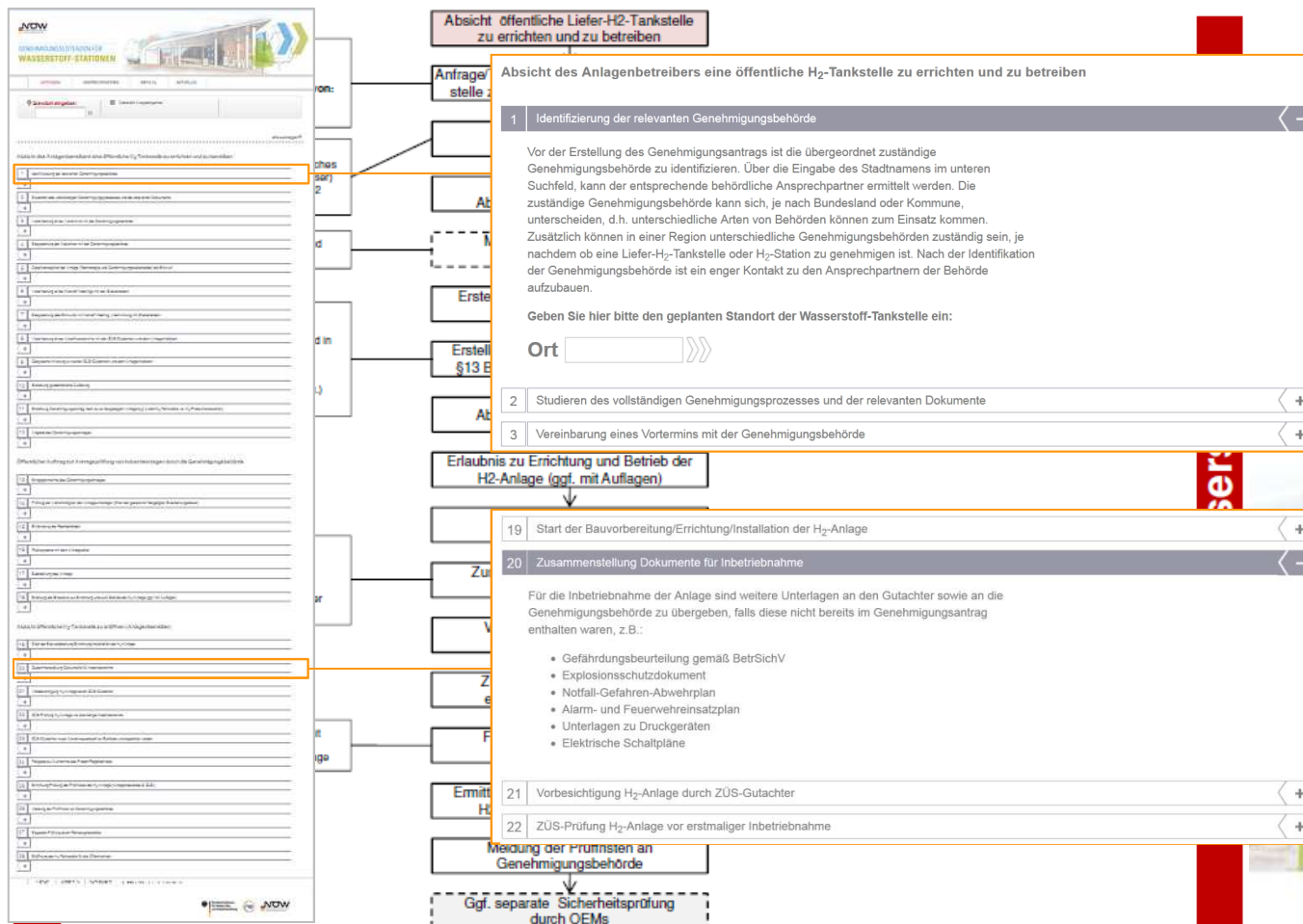
-  Guideline with 28 process steps for applicants and authorities
-  Search function for contact persons at responsible authority
-  Information about H2 (General Information, Hydrogen Refuelling Stations, FCHV)
-  News
-  English version available Oct. 2013



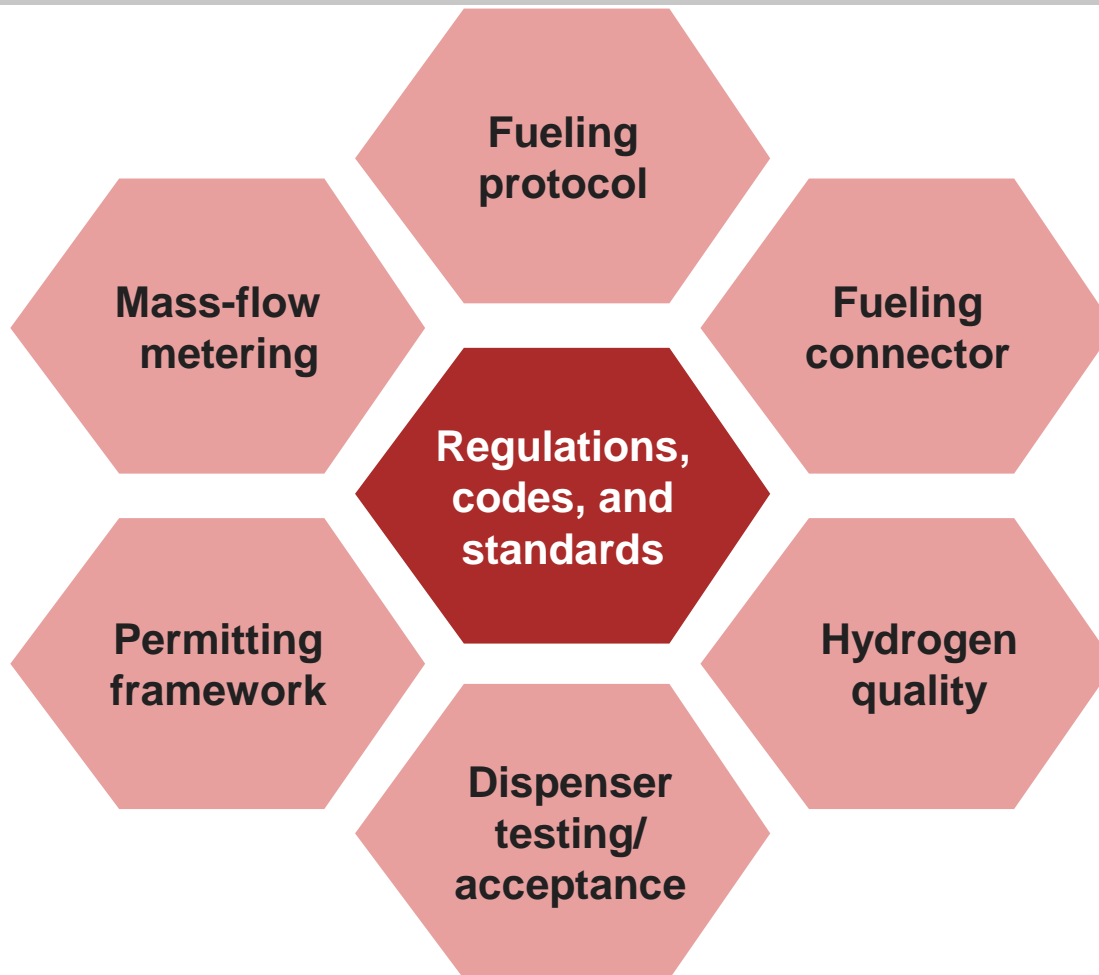
www.h2-genehmigung.de



Guideline for Hydrogen Refuelling Stations



International alignment on regulations, codes and standards required



NOW in cooperation with the Federal Ministry of Transport, Building and Urban Development (BMVBS) initiated the **first 'International workshop on H2 infrastructure and transportation' from 24th to 26th of June in Berlin**. The Goal of the workshop was to **share international experience and knowledge** in order to **discuss current challenges** and to **develop new strategies to further integrate HFC (hydrogen and fuel cell) technologies into the global transportation sector**. The workshop opened the opportunity to align common interest and to harmonize the appearance of key players, such as the **USA, Japan, Germany, Scandinavia and the European Commission** to **accelerate the advancement of hydrogen and fuel cell technology globally**.

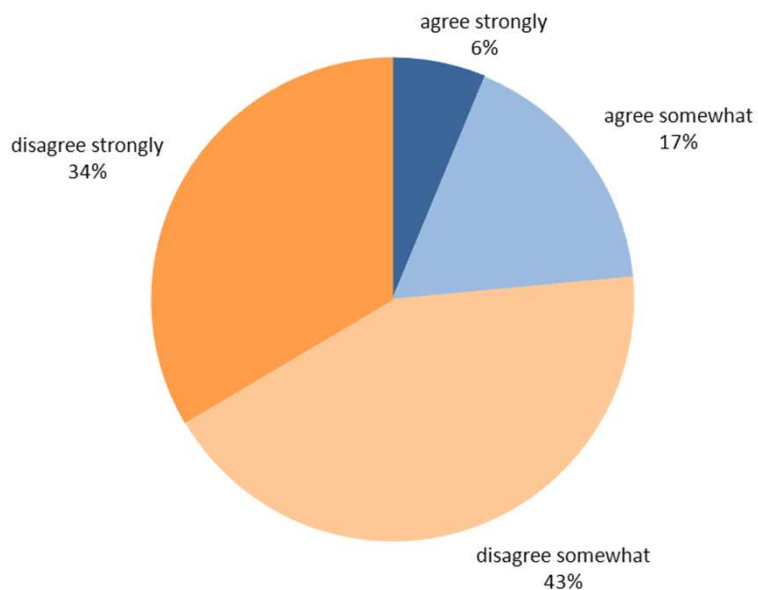


Evaluation of Hydrogen Safety



Survey 01/2013

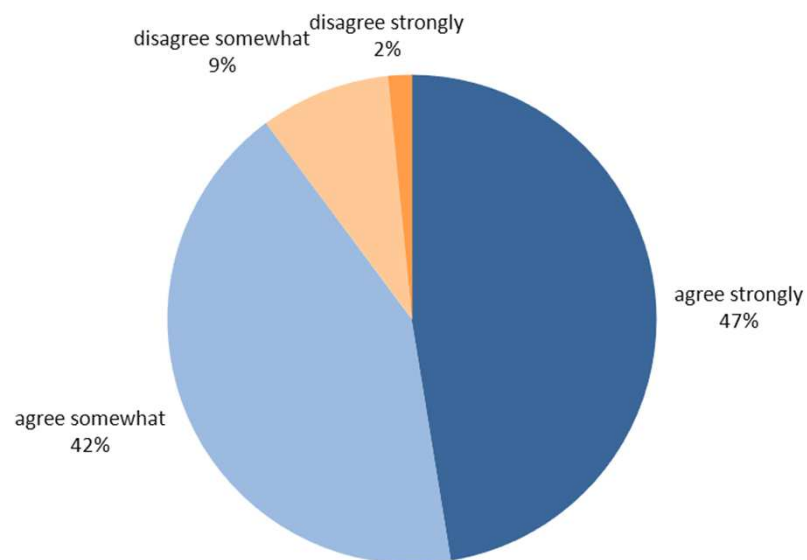
I would be more afraid to live next to a hydrogen filling station than an ordinary filling station.



(n=1012)

Survey 01/2013

I take it for granted that hydrogen vehicles will be safe once they are officially sold.



(n=1012)

www.hytrust.de



Thank you very much!

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Wasserstoff- und Brennstoffzellentechnologien – Tragende Säulen der Energiewende 2.0

Weiterentwicklung
des
Nationalen Innovationsprogramms
Wasserstoff- und Brennstoffzellentechnologie
(NIP)



Nationales Innovationsprogramm
Wasserstoff- und
Brennstoffzellentechnologie

Berlin im Juni 2013

download: www.now-gmbh.de