

Regulations, Codes and Standards (RCS) – What can IPHE contribute?

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Presented at SGS-3 by Pietro Moretto

What can IPHE NOT contribute in international RCS?

IPHE has a *facilitating* function

- is NOT a standardisation body
- is NOT a regulatory body
- is NOT a funding agency

Hence:

- Implementation of RCS activities within IPHE through existing (national) mechanisms and instruments
- Main focus: pre-competitive, pre-normative, pre-regulation research issues
 - ☞ safety issues (regulatory context)
 - ☞ performance assessment methods (standards context)

Implementation of facilitating function in area of RCS

- identify scope of R&D activities which can benefit from IPHE collaboration
 - *IPHE Scoping Paper on RCS, including safety*
- catalysing cooperation and harmonisation of activities by IPHE members related to topics identified in Scoping Papers
 - *workshops/ conferences*
 - *IPHE-endorsed projects*
 - *Set-up of a dedicated RCSWG (2006): EC, US, JP, CAN, CHN, KOR, NO, IT, BR, UK, DE*

Progress on first Action Plan

(1) Meta-gap analysis on world-wide activities on RCS (EC)

- available, under development, lacking
 - across H2 and FC chain
 - starting from EU activities in this area
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- ☞ ongoing within IPHE project FCTEDI (for stationary FC applications)
 - ☞ agreement on “glossary of regulatory terms” needed
 - ☞ additional input from IPHE Members expected

(2) overview of RCS dimension in IPHE-endorsed projects (BR)

- exploitation of findings for establishment of “lessons learned”
- identification of added value IPHE activities on RCS

- ☞ cross-correlation table RCS topics *vs.* projects
- ☞ data collection template for demo-projects provided
- ☞ table + template to be provided to coordinators of IPHE projects
- ☞ project coordinators to identify points of contact or interaction with regulatory and standardisation bodies
- ☞ task completed at RCSWG level, follow-up at Secretariat and national level needed

(3) Overview of information resources on RCS activities and decisions *(US)*

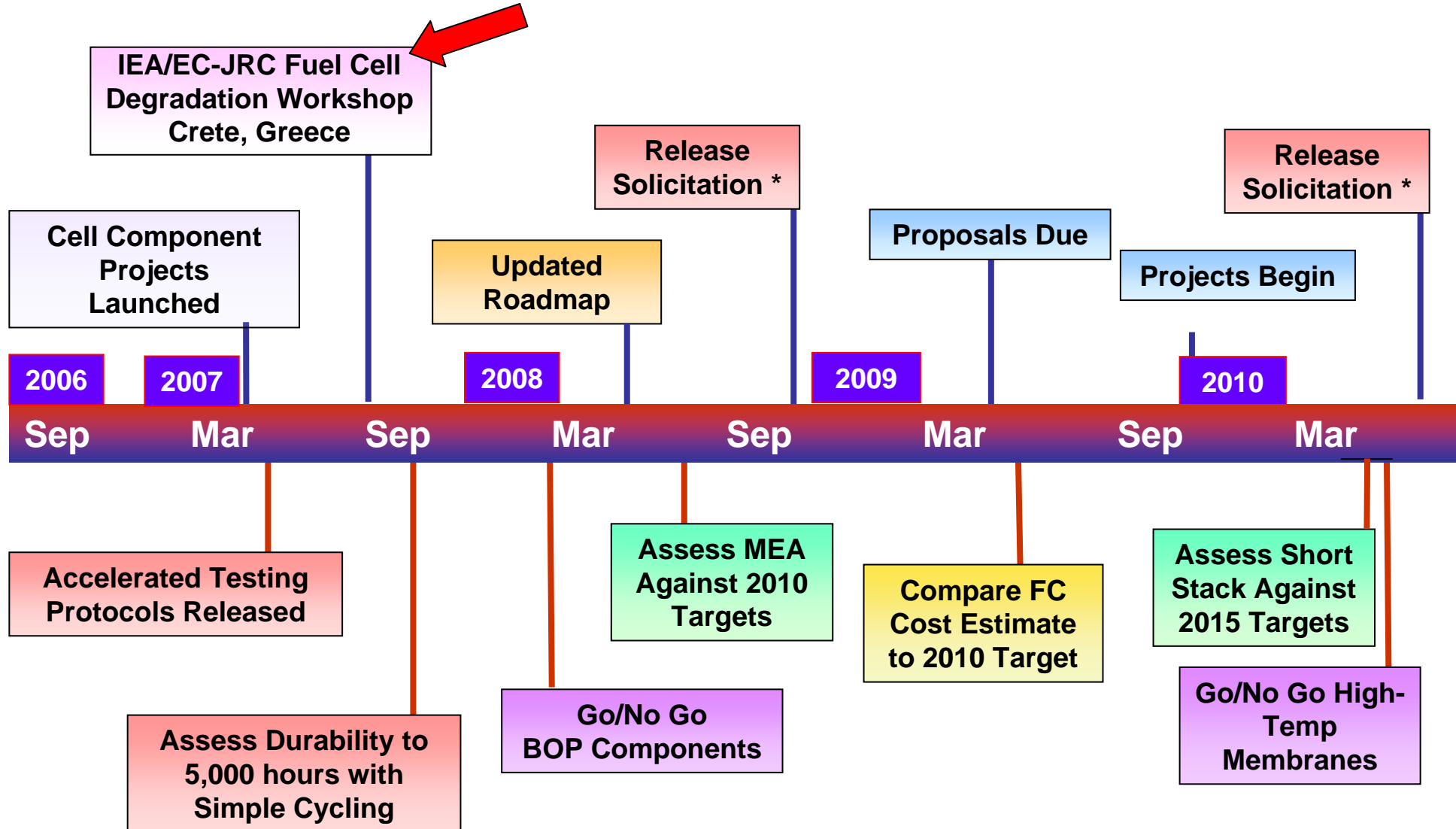
- collection of relevant web addresses
- expansion of geographical coverage of US “regulatory map”
- optimisation of US-DoE and EC-HySafe websites on hydrogen incidents and accidents and on bibliographic safety data



IPHE-labelled events under auspices of RCSWG

- First and Second International Hydrogen Safety Conference (Pisa, 2005 – San Sebastian, 2007)
 - ☞ *international outreach through IPHE beyond HYSAFE*
- International Workshop on Degradation mechanisms in fuel cells (Greece, 2007)
- Dutch Workshop on Hydrogen and Fuel Cells for national, regional and local policy-makers and authorities (NL, 2006)
 - ☞ *educational purpose*
 - ☞ *dedicated section on RCS issues and activities*

Fuel Cells – Future Plans (US presentation ILC 2007)



Links and interactions with ISDO

IEC TC 105

- through international cooperative PNR within IPHE endorsed projects FCTEDI and FCTESQA
- glossary: joint NWIP (EC, US, JP)
- single cell testing: joint NWIP (EC, US, JP)

ISO TC 197

- H2 safety sensors
- fuel quality

Links with Int'l Regulatory Bodies

UN-ECE WP 29 – GRPE: SGE and SGS

Future Plans

- finalise items in Action Plan
- new international collaborative PNR: accelerated life testing of fuel cells: evaluation of needs (EC-lead)
- planned Workshops: Fuel Cell Diagnostic Methods workshop (EC, NO)
- Interaction ISDO and IRB; discuss how to optimise within RCSWG
- Outstanding topics identified in Scoping Paper:
 - ☞ definition of common safety-cases and scenarios for computational modelling
 - ☞ experimental (large scale) validation of analytical and numerical models required for safe use of hydrogen in different applications

Thank you for your attention!

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