



FCH 2 JU Programme Review Days 2016 Highlights from the rapporteurs & Concluding remarks

Eden Mamut, Chair of the Scientific Committee



<http://www.fch.europa.eu/>

General remarks

- The quality of the self assessment reports has increased compared to 2015 - nevertheless, there are still examples where the quality of provided data is sometimes limited;
- In most of panels the portfolio of projects is notable in the strength and focus its collective objectives and in the quality of its output, being well-aligned with FCH JU objectives.
- The JU model has resulted in effective collaboration between research and industry, it has enabled effective participation of SME, and many very significant technical advances have been made under the programme;
- The FCH-JU programme is comprehensive and robust and efforts to advance the technology and get value for money are, for the most part, being rewarded.

General remarks

- The assessment of the SoA is a crucial part of the project presentations - this should gain more weight and be updated during the lifetime of the project taking into account new developments worldwide;
- There are very good examples of provided exploitation plans like some of the Transport Demo projects but, many projects should improve their exploitation plans.
- We have followed excellent examples of collaboration and information exchange between the projects but, this topic needs to be improved and encouraged, also the complementarity with other national and international programmes and projects;
- A similar problem might be defined in the area of dissemination and horizontal activities where in some of the cases it seems that information on achievements stay inside the fuel cell community and there is a little information that goes out to the public in media or to the end users.

Specific remarks

- On topics related to Automotive RTD, most of the MEA improvement projects problems arise when scaling up and fabrication of a big cell or stack fails. Obviously, scaling up requires different technological approaches, for which dedicated projects are needed;
- In the area of validation of stationary applications, it seems that the targets as costs of systems or lifetime have possibly been set to optimistic or unrealistic;
- On hydrogen production, the cost targets are rarely met; most assessment reports refer to simulation-based results, and do not seem to be based on measured results; The transient operation of electrolysers are not addressed at all in some projects, as is 'reliability' of electrolyser stacks; Targets are mostly achieved at lab scale but not after scale-up or in full prototype system.

Specific remarks

- Socio-economic and environmental issues for supporting the development of new business models for market penetration of FCH technologies should be supported more boldly; aspects related to recycling & embedment of the FCH technologies in circular economy loops are needed;
- Need for the development of broader information, education and dissemination activities with potential to build political and societal support;
- The outcomes of PNR activities on development and/or harmonization of testing procedures should be compulsorily used by the FCH-JU projects of the different application areas in which such testing takes place.

Concluding remarks

- This is the time to reconsider and better articulate the way of setting the targets for the different topics of MAWP/AWPs;
- Consider the possibility of calling for long-lasting projects devoted to experimentally determination of the durability and lifetime of components and systems;
- Work in RCS should be supported more where sensible and adequate;
- The FCH-JU should make/provide training materials and seminars/courses to support the project partners' on developing exploitation plans and to bridge the consortia of projects with common or complementary topics.

Concluding remarks

- It should be ensured that the results /experiences /lessons learned from past and ongoing projects in the other application areas (both research and demonstration) are duly considered. A mechanism for feeding relevant findings and results from demo projects to define the scope of needed cross-cutting projects (training, PNR, standardization) should be established;
- There is a great potential for cooperation with other programmes but, there is a clear need for some guidelines, dissemination of best practices and promotion of some models for collaboration. Stronger cooperation between stakeholders in Europe, USA, Japan, Korea, China would be beneficial.

On behalf of the SC members, allow me to express our deep gratitude for all your efforts in the reporting and reviewing process!