IMPLEMENTATION PANEL

INTERIM IMPLEMENTATION PLAN

IP Public Consultation July 2006
RESPONSE FORM

How to participate in the public consultation:

Enter you comments in this template – preferably with reference to the specific line number you are referring to – save the file and upload it through the dedicated website: https://www.lbstserver.de/ip_consultation/up/index.html

Deadlines for comments:

- preferably before 12 July
- 31 July 2006 noon at the latest

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1. *The need for a Hydrogen and Fuel Cell Research, Technology Development and Demonstration Program (p 4)*

Comment:

We agree with the contents of this chapter. No comments.

2. *The basis for an European Program (p 4)*

Comment:

Lines 92 to 95: It seems that the JTI is the only way of realising public-private research partnerships at European level on H2&FC. The other FP7 instruments which could be used to meet the goals and objectives of the European Programme on H2&FC should be mentioned in this paragraph.
Line 96: The text should read as follows: "JTI could execute **part** of the proposed program" (The totality aspect should be eliminated).
Paragraph 2.2: It would be necessary to clarify that the market is not the only way to advise and direct the EC activities.
Figure 2: Portable Applications are not included. They should be considered in this figure and in the rest of the document, They go unnoticed.
Line 175 to 176: As Defence and Security applications are pointed out in this paragraph, it would be appropriate to mention other applications related to H2 like Environment, Aeronautics, Nanotechnology or Biomedicine.

3. *Program Outline (p 8)*

Comment:

We agree with the structure of this chapter.

3.1. *Market Driven RTD (p 8)*

Comment:

Too many applications are considered in this chapter. It is advisable to give Portable Applications a higher profile in the document.

3.1.1. *Sustainable Hydrogen Supply (p 8)*

Comment:
Figure 3: It seems like the only way to connect the production with the delivery is by liquefaction. It is necessary to explain the figure in detail.
Related to the Short to Mid-term Technologies box, it is necessary to put a

cross in the box of biomass to hydrogen (Gasification/Co-gasification) in large scale.

3.1.2. *Transport systems (p 9)*

Comment:

Figure 4: Captive fleets and Rail are not connected with any box. It would be advisable to connect them with the critical components.

3.1.3. *Stationary systems (p 11)*

Comment:

Figure 5: It implies that in fuel cell technologies only SOFC need Basic and Applied Research and Development. The reality is that all the different fuel cell technologies need Basic and Applied Research and Development.
The time line is not clear.
It is necessary to establish the beginning and the end of the SOFC, PEMFC and MCFC arrows in a similar point.

3.1.4. *Portable, Early and Premium applications (p 12)*

Comment:

It is advisable to include a paragraph for each application considered in this chapter and give Portable Applications a higher profile.
The different applications (Portable, APUs, By-product…) do not have the similar importance.

Line 343 to 344: MW FC plants which use by-product hydrogen should not be considered as Early & Premium Market (in the Annex II related to Portable&Early and Premium Applications -page 25-, 6 of the actions proposed concerning to the Area of By-product H2 are considered in an Applied Research level, far away to become an early market).
By-product hydrogen should be included in the chapter related to Stationary Applications (3.1.3).

3.2. *Synergies (p 13)*

Comment:

Figure 7: It is necessary to include Portable Applications in the figure.

3.3. ***Large Scale Demonstration (p 14)***

Comment:

Is not needed by LPH to be managed only by the JTI, there are other FP7 instruments which could do it too.

The text only approach to LHP for applications. It is necessary to include LHP for production subjects (HYPOGEN)

Line 410: The text should be modified as follows: "Existing demo sites **should be considered** for LHPs…"

Figure 8: the range figures given in the figure are different from those included in the Snapshot 2020.

3.4. ***Preparing for and stimulating the market – Market enabling and Preparatory activities (p 16)***

Comment:

We agree with current content. No comments.

3.5. ***Managerial aspects (p 18)***

Comment:

The information included in the SRA is more complete. It is necessary to summarize it giving more details.

4. ***Prioritisation assessment (p 18)***

Comment:

Table 2: It is necessary to define the meaning of "Matches lead application", included in H2 Supply column.

Annex I:

General comment: the 2nd column should be similar for all the sub-programmes (Hydrogen Supply, Stationary Applications, Transport Applications, Portable, Early & Premium Applications, and Market Enablers – Preparatory Activities).

Page 22: *Sustainable Hydrogen Supply*: HYPOGEN should be included as a demonstration project.

The acronyms should be explained.

Page 23: *Transport Systems*: It is necessary to include lead applications for Railways as demonstration projects.

APUs should be considered in all transport modalities (not only in road

transport).
Page 25: *Portable & Early and Premium Applications*: APUs should be included in Early Markets.
Page 26: Actions related to By-product H2 should be included in Stationary Applications (page 24).

Annex II: It is necessary to explain the specific importance (weight) of each criterion (economy, sustainability and knowledge)
As for the Additional Criterion it would be advisable to clarify what is being considered in it (economic, social aspects…) and why is to be considered as 'additional' and not as a criterion in its own right.

5. *JTI (p 19)*

Comment:

The Implementation Plan is not involved in the JTI proposal (definition of the goals, legal structure, operation…). It is not necessary to include this chapter in the document.

6. *Recommendations (p 19)*

Comment:

The questions are addressed to the Advisory Council..

General comments:

1.- It is necessary to include a **glossary** of the acronyms and abbreviations used in the document to ease its reading and overall understanding.
2.- The figures and tables included in the document should have accompanied by clearer captions
3.- The document should follow the guidelines of the Strategic Research Agenda (SRA) and de Deployment Agenda (DA) of the European Hydrogen and Fuel Cell Technology Platform.
4.- It is necessary to explain in the document the relative weight of the main criteria (economy, sustainability and knowledge) for the actions proposed. It would be preferable to include in the document the list of the prioritized actions. .
5.- It is necessary to define the concept of "lead application" (included in figures 4 y 7 and table 2), which appears to be a central concept in the document.
6.- The document presents a Programme divided into five sub-programmes (Hydrogen Supply, Stationary Applications, Transport Applications, Portable, Early & Premium Applications, and Market Enablers – Preparatory Activities), whilst Annex I includes an unbalanced number of Implementable Actions, some of them close to project definition, some others in a more general way. It is necessary to define how the general sub-programmes are connected with the specific Implementable Actions. A more balanced structure of sub.programmes/areas is

needed showing an equilibrium among the number and nature of the different action lines. In short, the Implementation Plan should offer a Work Programme-like structure.

7.- Related to the Fuel Cells terms, in some parts of the document it is written PEM Fuel Cells and in other parts PEFC. It is necessary to use an only term which should be PEMFC. In general, the text requires a further Quality Assurance iteration in order to ensure its internal consistency in the use of terms and acronyms.