



COMMISSION OF THE EUROPEAN COMMUNITIES

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Proposal for a

**COUNCIL REGULATION**

**setting up the Fuel Cells and Hydrogen Joint Undertaking**

(presented by the Commission)

{SEC(2007) 1272}

{SEC(2007) 1273}

## EXPLANATORY MEMORANDUM

### 1) CONTEXT OF THE PROPOSAL

#### • Grounds for and objectives of the proposal

Joint Technology Initiatives (JTIs) are introduced in the Seventh Framework Programme (FP7)<sup>1</sup> as a way of creating public-private partnerships in research at European level. JTIs are an expression of the EU's strong commitment to coordinating research efforts, strengthening the European Research Area and reaching Europe's competitiveness goals.

JTIs arise mainly from the work of European Technology Platforms (ETPs). In a small number of cases, ETPs have achieved such an ambitious scale and scope that they will require the mobilisation of high public and private investments as well as substantial research resources to implement important elements of their Strategic Research Agendas. JTIs are proposed as an effective means of meeting the needs of these ETPs.

The "Co-operation" Specific Programme<sup>2</sup> identifies fuel cells and hydrogen as one of six areas where a JTI could be particularly relevant, alongside aeronautics and air transport, innovative medicines, embedded computing systems, nanoelectronics and global monitoring for environment and security (GMES).

The Fuel Cells and Hydrogen Joint Undertaking resulting from the Technology Platform on Hydrogen and Fuel Cells contributes to the implementation of the Environmental Technologies Action Plan (ETAP) as foreseen in the Communication COM(2004) 38 which included this Technology Platform within priority actions of the ETAP.

Fuel cells are very quiet, highly efficient, energy converters capable of delivering substantial cumulative greenhouse gases (GHG) and pollutant reductions. They offer flexibility to the energy mix as they can be operated on hydrogen and other fuels such as natural gas, ethanol and methanol. Fuel cells using hydrogen are intrinsically clean energy converters because the only exhaust product is steam, while other types using natural gas and other fossil fuels also reduce emissions because they use less fuel owing to their higher efficiency. The introduction of hydrogen as a flexible energy carrier can contribute positively to energy security and stabilise energy prices as it can be produced from any primary energy source, and as such can introduce diversity into the transport mix, which is currently 98% dependent on oil. It can be used in fuel cells or it can be burned either to provide heat or to drive turbines or internal combustion engines for motive and electrical power. Hydrogen can also be used as a means of storing energy. For instance, when renewable electricity production is higher than demand, the excess energy could be used to produce hydrogen by electrolysis, thereby facilitating the integration of renewable electricity into the energy market.

Although significant EU public funds have already been directed to research into fuel cells and hydrogen, and they are already included in the FP7 energy and transport research portfolio as an important component of research, technological development and demonstration (RTD&D) strategy, the technologies are unlikely to be commercially available

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<sup>1</sup> OJ L 412, 30.12.2006, p. 1.

<sup>2</sup> OJ L 400, 30.12.2006, p. 86.

as quickly as is desirable. There is a danger of fuel cell and hydrogen industrial development stagnating and falling further behind global competitors. Contributing factors include:

- the research needed is often so complex that no single fuel cell company or public research institution can perform it alone;
- the absence of an agreed long-term budget plan and strategic technical and market objectives to encourage industry and the research community to commit more of their own resources;
- the sub-optimal application of funds leaving gaps and overlaps in a fragmented research coverage;
- an insufficient volume of funds for an integrated programme from fundamental research through to large-scale EU-level demonstrations;
- the European fuel cell sector is dispersed across different countries and activity areas (academia, new industrial companies, high-tech SMEs) which restricts the exchange and pooling of knowledge and experience;
- and technical breakthroughs are needed to improve performance, materials, reliability and durability and reduce system costs to meet the expectations of potential customers.

Without a focused and coherent industrial RTD&D programme that is able to draw on public and private sources of RTD&D investment at European level, efforts addressing the research bottlenecks and the search for technological breakthroughs will continue in a scattered and unstructured manner. A public-private Joint Technology Initiative implemented through a Joint Undertaking based on Article 171 of the Treaty establishing the European Community, would allow large companies and SMEs throughout the EU including the new Member States to collaborate between themselves and with other stakeholders towards the following shared objectives:

- to enable the market breakthrough of fuel cell and hydrogen technologies, enabling commercial market forces to drive the substantial public benefits;
- to place Europe at the forefront of fuel cell and hydrogen technologies worldwide;
- to reach the critical mass of research effort to give confidence to industry, public and private investors, decision-makers and other stakeholders to embark on a long-term programme;
- to leverage further industrial, national and regional RTD&D investment;
- to build the European Research Area through close cooperation with research carried out at national and regional levels - whilst respecting subsidiarity;
- to integrate research, development and demonstration, and focus on achieving long-term sustainability and industrial competitive targets for cost, performance and durability and overcome critical technology bottlenecks;

- to stimulate innovation and the emergence of new value chains including SMEs;
- to facilitate the interaction between industry, universities and research centres on basic research;
- to encourage the participation of the new Member States and candidate countries;
- to perform broadly-conceived socio-techno-economic research to assess and monitor technological progress and non-technical barriers to market entry;
- to perform research to support the development of new, and review existing regulations and standards to eliminate artificial barriers to market entry and support interchangeability, inter-operability, cross-border hydrogen trading, and export markets whilst ensuring safe operation and not inhibiting innovation;
- to provide reliable information to the general public on hydrogen safety, and the benefits from the new technologies to the environment, security of supply, energy costs, and employment.

- **General context**

Energy is fundamental to modern society and to sustainable development. Any energy shortage or insecurity would have serious implications for individuals, communities and business, both immediately and in their planning for the future. Recent disruptions and future uncertainties in the supply of oil and gas and the resulting price volatility dampen economic growth and raise inflation and unemployment and depress the value of financial and other assets. Oil and gas resources are depleting and, in the view of some experts, peak production will soon be reached<sup>3</sup>; what is certain is that the remaining resources are increasingly concentrated in a few countries to which political access is constrained, and security of supply will be an important problem for most industrialized countries and especially the EU. In the context of competitive and gradually integrating global transport and energy markets, energy demand is growing rapidly in large emerging countries. Globally, we face the major issue of climate change with levels of greenhouse gases rising. There are many uncertainties, but leading scientific opinion is agreed that large reductions in greenhouse gas emissions are needed immediately and must be sustained over a long time<sup>4</sup>.

The present structure of the fuel cell and hydrogen industries in Europe is unsatisfactory and leads to concerns as to its ability to adapt to change. Although the EU has some world-class research facilities and for instance leads the world in fuel cells for large submarines and fuel cell membranes, the industry is in general immature and large-scale manufacturing processes and infrastructure deployment for refuelling and support services such as trained personnel are not yet available. The fuel cell industry worldwide is characterised by very large corporate companies and very small, highly innovative SMEs. Europe has many of the latter, and it is crucial that their innovation potential is realised as these companies can form the future backbone of an EU component supply chain.

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<sup>3</sup> *Stern review on the economics of climate change*, HM Treasury, 2006; [http://www.hm-treasury.gov.uk/independent\\_reviews/stern\\_review\\_economics\\_climate\\_change/sternreview\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm)

<sup>4</sup> Working Group III contribution to the Intergovernmental Panel on Climate Change. Fourth Assessment Report. *Climate Change 2007: Mitigation of Climate Change*. Approved at the 9th Session of Working Group III of the IPCC, Bangkok, Thailand, 30 April–4 May 2007.

The fuel cell and hydrogen industries are strongly inter-related, but not wholly inter-dependent. The nature and degree of competition in the two industries is highly complex. The use of bulk hydrogen in process industries is long-standing and well-established and industrial enterprises see the prospect of new markets in energy and transport opening up through the wider adoption of fuel cell technologies on the one hand and hydrogen combustion engines on the other. At the same time, fuel cell manufacturers, who are very much at the start-up stage, are not wholly reliant on hydrogen because some fuel cells can use alternative fuels including natural gas, methanol and ethanol.

Market entrants employing fuel cell and hydrogen technologies face barriers to entry erected by stakeholders with large economic interests locked into industries and physical infrastructures under threat from a change to the energy mix. Market entry is also made more difficult by the lack of a pricing mechanism to reward internalisation of externalities<sup>5</sup> (e.g. carbon value); the long-term investment needed to change over to a new generation of products and build up infrastructure for fuel cells and hydrogen; and the difficulties of establishing common regulations, codes and standards to facilitate global market development. An integrated strategy is required to maximise the benefits of transition technologies with fuel cells using natural gas, biogas, methanol and ethanol, if possible combined with carbon capture and storage (CCS) in the pathway and exploiting strategic niche markets in a planned and optimised framework to avoid economic disruption.

The annual world turnover of the fuel cell industry in 2005 amounted to about 300 M€, with market shares of 52% for North America, 14% for Japan, 12% for Europe and 22% distributed around the rest of the world. There are relatively fewer companies in Europe compared to North America and Japan developing their own fuel cell stack and component technology – especially for road transport. Private RTD&D investment is estimated at about 700 M€ per year, of which 78% is made in North America and only 10% in Europe. European industry needs additional stimulation to invest in these technologies to become more competitive. Major competitors are pressing ahead with ambitious programmes of integrated research and development designed to bring products to market and establish *de facto* standards which latecomers will be obliged to follow. An EC study<sup>6</sup> estimates that the EU is 5 years behind Japan and North America on the demonstration of fuel cell vehicles. The US and Japanese programmes are strategically managed in close co-operation with the respective industries. The US DoE has developed a 'Hydrogen Posture Plan'<sup>7</sup> - the result of extensive consultation with the main stakeholders. The Ministry of Economy, Trade and Industry (METI) in Japan provides targeted support for basic research. In addition, Japan supports an ambitious programme for demonstration of domestic combined heat and power (CHP) fuel cell systems, the development of hydrogen distribution infrastructure, and the testing of a range of hydrogen production options in their 'Fuel Cell Commercialisation Conference of Japan' (FCCJ)<sup>8</sup>.

The US and Japanese programmes thus have well-developed processes for managing the research and technology validation, which are difficult to achieve in the current nationally-dispersed EU research environment. The Joint Undertaking would put the EU on an equal

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<sup>5</sup> *ExternE – Externalities of Energy* DG RTD JOULE project; see <http://www.externe.info/>

<sup>6</sup> 'HyLights' project DG TREN – see <http://www.hylights.org/>

<sup>7</sup> *Hydrogen Posture Plan – An integrated research development and demonstration plan*; US Department of Energy and US Department of Transportation; December 2006 (update 2004 plan); see: [http://www.hydrogen.energy.gov/pdfs/hydrogen\\_posture\\_plan\\_dec06.pdf](http://www.hydrogen.energy.gov/pdfs/hydrogen_posture_plan_dec06.pdf)

<sup>8</sup> FCCJ – Fuel Cell Commercialisation Conference of Japan; see : [http://fccj.jp/index\\_e.html](http://fccj.jp/index_e.html)

footing by establishing a single legal entity to manage all the JTI funds allocated from the public and private sectors through research, technological development and demonstration contracts to develop the key technologies for fuel cells and hydrogen.

- **Existing provisions in the area of the proposal**

There are no existing provisions in the area of the proposal.

- **Consistency with the other policies and objectives of the Union**

As one of the initiatives launched in January 2007 in the communication 'Energy for a Changing World - An Energy Policy for Europe'<sup>9</sup>, the European Commission is currently developing a European Strategic Energy Technology Plan (SET Plan)<sup>10</sup> to guide the course of energy technology innovation over the coming decades, deliver efficient and low-carbon technologies including fuel cells and hydrogen, and arrive at a more sustainable energy system. The European Parliament adopted a Written Declaration<sup>11</sup> in May 2007 which called upon the EU Institutions to support fuel cell and hydrogen technologies for portable, stationary, and transport applications through a partnership with committed regions and cities, SMEs and civil society organisations.

The proposed Regulation is consistent with Community policies in research. It is also consistent with the renewed Lisbon strategy<sup>12</sup> and the Barcelona objectives for the EU to invest 3% of its GDP in research and development by 2010. The Seventh Framework Programme (FP7) (2007-2013) plays an important role for Europe to meet these objectives. It also reflects a consensus that Europe must re-double its efforts to improve returns from its RTD&D investments in order to equip itself as a competitive and dynamic knowledge-based economy.

The proposed initiative is part of a broad, ambitious Community strategy aimed at tackling the innovation gap which includes the proposal to establish a European Institute of Technology.

## 2) CONSULTATION OF INTERESTED PARTIES AND IMPACT ASSESSMENT

- **Consultation of interested parties and use of expertise**

In the preparation of its proposals for setting up Joint Technology Initiatives, the Commission took into account the views expressed by many stakeholders from the research community and industry in a broad consultation involving the Member States and the European Parliament. The Commission also consulted the European Hydrogen and Fuel Cell Technology Platform (HFP)<sup>13</sup> which produced the Strategic Research Agenda, the Deployment Strategy, and the Implementation Plan 2006, which is the main reference

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<sup>9</sup> *Energy for a Changing World - An Energy Policy for Europe* - COM(2007) 1, 10.1.2007.

<sup>10</sup> *Towards a European Strategic Energy Technology Plan* - COM(2006) 847, 10.1.2007.

<sup>11</sup> *Written Declaration pursuant to Rule 116 of the Rules of Procedure on establishing a green hydrogen economy and a third industrial revolution in Europe through a partnership with committed regions and cities, SMEs and civil society organisations*, European Parliament 0016/2007, May 2007.

<sup>12</sup> COM(2005) 24.

<sup>13</sup> European Hydrogen and Fuel Cell Technology Platform – *Strategic Research Agenda, the Development Strategy Implementation Plan*; see <https://www.hfpeurope.org/hfp/keydocs>

document and which outlines the "Snapshot 2020" technical and market objectives for fuel cells and hydrogen technologies. The Implementation Plan sets out priorities for a comprehensive, integrated programme of RTD&D, with timelines and recommended budget allocations over seven years to accelerate commercialisation of the new technologies. The HFP Member States Mirror Group was also consulted at all stages of the process. In addition to the HFP bodies, information has been widely disseminated through the HFP web-site and newsletters, enabling all stakeholders to contribute to the debate. Stakeholders included Original Equipment Manufacturers (OEMs), fuel cell and energy equipment companies including many SMEs<sup>14</sup>, utilities, industrial gas companies, energy companies, universities and research centres.

The three-year consultation process has involved several hundred stakeholders, public internet consultation on the above-mentioned platform documents, contributions from EC research projects, and studies on the wide-ranging socio-economic and environmental impacts of hydrogen and fuel cell technologies and the economic feasibility of their deployment. The Commission also organised four major conference events (three General Assemblies and the Technical Review Days), and workshops for regions and the research community.

A Peer Review Group of four internationally-acknowledged, independent experts was engaged to help finalise the Impact Assessment<sup>15</sup>.

- **Impact assessment**

This proposal for a Council Regulation has been subject to a Commission Impact Assessment which compared the potential impact of a JTI with the alternatives, in particular the 'Business as Usual' FP7 plus national and regional actions.

Its conclusions are that the Joint Technology Initiative has a number of clear advantages over the Business-as-Usual alternative:

- time to market shorter by between 2 and 5 years - the importance of being first in a new market cannot be over-emphasised, and pays off in reducing the cumulative investment, bringing forward the break-even point, and strengthening the competitive position of the early market entrants, of which many could be SMEs;
- long-term commitment and a clear-cut budget encourage confidence in public and private investors;
- additionality: the co-financing principle will leverage at least 600 M€ more than Business-as-Usual, corresponding to almost two and a half times as much private research investment;
- making correspondingly earlier gains on improving energy efficiency and security of supply and reducing greenhouse gases and pollution.

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<sup>14</sup> Micro, small and medium-sized enterprises or SMEs are defined by the European Commission as: enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 M €, and/or have an annual balance sheet total less than 43 M €.

<sup>15</sup> Impact Assessment Guidelines - SEC(2005) 791, European Commission, 2005.

An increase in RTD&D expenditures as induced by the JTI compared to Business-as-Usual has the potential to reduce the time to reach the break-even point by 2–5 years and reduce the cumulative costs by about 20-30%. The positive effects on EU competitiveness in the short, medium and long term would, as indicated by model simulations, be accompanied by an order of magnitude of tens of billions of euros of benefits to the public good in reductions of greenhouse gases and pollution, improved security of energy supply, more sustainable transport, and higher efficiency and cleaner energy production and end-use over the period 2025 to 2050.

### 3) LEGAL FRAMEWORK OF THE PROPOSAL

- **Summary of the proposed action**

The proposal consists of a Council Regulation on the establishment of the Fuel Cells and Hydrogen Joint Undertaking.

- **Legal basis**

The legal basis of the proposal is Article 171 of the Treaty establishing the European Community.

- **Subsidiarity and proportionality**

The subsidiarity principle applies since the proposal does not fall under the exclusive competence of the European Community.

The objectives of the proposal cannot be sufficiently achieved by the Member States because the scale of the challenge exceeds the capacity of any Member State to act alone. The pooling and coordination of research and development efforts at EU level stand a better chance of success, given the trans-national nature of the infrastructure and technologies to be developed, and also the need to achieve a sufficient mass of resources. The intervention of the European Community will help to rationalise research programmes and ensure inter-operability of the developed systems not only through common pre-normative research to support the preparation of standards but also through the *de facto* standardisation which will arise from the close research cooperation and the trans-national demonstration projects. This standardisation will open a wider market and promote competition. The scope of the proposal should encourage the Member States to pursue complementary initiatives at national level, in the spirit of reinforcing the European Research Area - indeed the very intention of the JTI is to leverage these national and regional programmes to make best use of the combined efforts.

In accordance with the principle of proportionality, the provisions of this regulation do not go beyond what is necessary to achieve its objectives.

- **Choice of instrument**

Proposed instrument: regulation.

Other means would not be adequate for the following reason:

The creation of an undertaking in which the Community participates requires a Council regulation.



#### **4) BUDGETARY IMPLICATION**

The "legislative financial statement" attached to this draft regulation sets out the budgetary implications and the human and administrative resources, and provides indicative figures for the period 2007-2013.

The EC budget, totalling 470 million EUR, will come from the following FP7 "Cooperation" Specific Programme budget lines: Energy; Nanosciences, Nanotechnologies, Materials and New Production Technologies; Transport (including Aeronautics); and Environment (including Climate Change) in DG RTD and Transport in DG TREN.

The running costs of the FCH Joint Undertaking will be covered in equal parts (50/50) by the EC and the Industry Grouping (IG) from the outset. If a Research Grouping is established and applies to join the FCH Joint Undertaking, the Research Grouping shall have one seat in the Governing Board and shall then contribute 1/12 of the running costs.

The research activities shall be jointly funded by the EC, the IG and the participating universities, public research centres etc with the EC contribution paid in cash and the participants contribution paid in kind within the projects.

#### **5) ADDITIONAL INFORMATION**

- **Transition period**

The Work Programme 2007 provides for a Coordination and Support Action as a "bridging" activity to make detailed preparations for the JTI during 2007-2008.

- **Review**

The EC will present an annual report on the progress achieved by the FCH Joint Undertaking. The EC will also perform a mid-term review and a final review at the termination of the JTI.

Discharge for the implementation of the budget of the FCH Joint Undertaking will be given by the European Parliament, upon recommendation of the Council, taking into account the specificities of the JTI as a public-private partnership.

- **Review/revision/sunset clause**

The proposal includes a review clause.

The proposal includes a sunset clause.

Proposal for a

**COUNCIL REGULATION**

**setting up the Fuel Cells and Hydrogen Joint Undertaking**

**(Text with EEA relevance)**

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 171 thereof,

Having regard to the proposal from the Commission<sup>16</sup>,

Having regard to the opinion of the European Parliament<sup>17</sup>,

Having regard to the opinion of the European Economic and Social Committee<sup>18</sup>,

Whereas:

- (1) Decision No 1982/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013)<sup>19</sup> (hereinafter the "Seventh Framework Programme"), provides for a Community contribution for the establishment of long term public private partnerships in the form of Joint Technology Initiatives (hereinafter 'JTI') to be implemented through Joint Undertakings within the meaning of Article 171 of the Treaty. These JTIs were established as a result of the work of European Technology Platforms (hereinafter ETPs), already set up under the Sixth Framework Programme, and cover selected aspects of research in their field. They should combine private sector investment and European public funding, including funding from the Seventh Framework Programme.
- (2) Council Decision No 971/2006/EC of 19 December 2006 concerning the Specific Programme "Cooperation" implementing the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013)<sup>20</sup>, underlines the need for ambitious pan-European public

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<sup>16</sup> OJ C [...], [...], p. [...].

<sup>17</sup> OJ C [...], [...], p. [...].

<sup>18</sup> OJ C [...], [...], p. [...].

<sup>19</sup> OJ L 412, 30.12.2006, p. 1.

<sup>20</sup> OJ L 400, 30.12.2006, p. 86.

private partnerships to accelerate the development of major technologies and large research actions at Community level including, in particular, JTIs.

- (3) The Lisbon Growth and Jobs Agenda underscores the need to develop favourable conditions for investment in knowledge and innovation in the Community to boost competitiveness, growth and jobs.
- (4) In its conclusions of 3 March 2003, of 22 September 2003 and of 24 September 2004, the Council highlighted the importance of further developing actions following the 3% Action Plan for research and the innovation policy<sup>21</sup>, including the development of new initiatives aimed at intensifying co-operation between industry and the public sector in funding research to enhance trans-national public-private links.
- (5) In November 2003 the European Council adopted a European Initiative for Growth, as detailed in a Communication from the Commission<sup>22</sup>. This Initiative, in the Quick-start Programme, includes a Project Area “Hydrogen economy” with a total amount of 2.8 b€ between 2004 and 2015 and possible funding from the RTD&D Framework Programmes and the Structural Funds.
- (6) In May 2003 a Hydrogen and Fuel Cell High Level Group presented a vision report on “Hydrogen Energy and Fuel Cells – a vision of our future”, recommending, *inter alia*, the formation of a fuel cell and hydrogen technology partnership and a substantially increased RTD&D budget, as well as a demonstration and pilot programme to extend the technology validation exercises into the market development arena.
- (7) In December 2003, the Commission facilitated the creation of the European Hydrogen and Fuel Cell Technology Platform, bringing together all interested stakeholders in a joint effort to move towards achieving the High Level Group’s vision. In March 2005, the said Technology Platform adopted a Strategic Research Agenda and Deployment Strategy, aimed at accelerating the development and market introduction of fuel cell and hydrogen technologies in the Community.
- (8) The technology challenge facing fuel cells and hydrogen is of great complexity and scale and the dispersion of technical competencies is very high. Therefore, in order to achieve critical mass in terms of scale of activity, excellence, and potential for innovation, this challenge this needs to be tackled in a focused and coherent way at EU level. This, and its potential contribution to Community policies, in particular energy, environment, transport, sustainable development and economic growth, calls for the JTI approach in this sector.
- (9) The objective of the JTI on "Fuel Cells and Hydrogen" is to implement a programme of research, technological development and demonstration activities in Europe in the fields of fuel cells and hydrogen. These should be carried out with the cooperation and involvement of stakeholders from industry including SMEs, research centres, universities, and regions.
- (10) Taking into account the public private partnership involving major stakeholders and its long term activity, the generated socio-economic benefits for European citizens, the

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<sup>21</sup> COM(2003) 226.

<sup>22</sup> COM(2003) 690.

pooling of financial resources and co-financing in the field of fuel cells and hydrogen RTD&D activity provided by the Commission and industry, the high scientific and technical expertise required, and the input of industrial property rights, it is vital to set up a Fuel Cells and Hydrogen Joint Undertaking (hereinafter the "FCH Joint Undertaking") under Article 171 of the Treaty. This legal entity should ensure the coordinated use and efficient management of the funds assigned to the JTI on "Fuel Cells and Hydrogen". To ensure the appropriate management of activities initiated but not concluded during the Seventh Framework Programme (2007-2013) the FCH Joint Undertaking should be set up for an initial period of 10 years ending on 31 December 2017. This period may be extended.

- (11) The objectives of the FCH Joint Undertaking should be pursued by pooling resources from the public and private sectors to support RTD&D activities with a view to increase the overall efficiency of European research efforts and accelerate the development and deployment of fuel cell and hydrogen technologies. To that end, the FCH Joint Undertaking should be able to organise competitive calls for proposals for projects to implement the research, technological development and demonstration activities. Research activities should respect fundamental and ethical principles applicable to the Seventh Framework Programme.
- (12) The Founding Members of the FCH Joint Undertaking should be the European Community and the European Fuel Cell and Hydrogen Joint Technology Initiative Industry Grouping (hereinafter the 'Industry Grouping'), which represents the interests of industry and is open to private companies. A Research Grouping may become a member of the FCH Joint Undertaking.
- (13) The running costs of the FCH Joint Undertaking should be covered equally in cash by the European Community and the Industry Grouping from the outset. If the Research Grouping is established it should contribute to 1/12 of the running costs.
- (14) The operational costs for RTD&D should be funded by the Community and the private sector.
- (15) The FCH Joint Undertaking should be a body set up by the Community and discharge for the implementation of its budget should be given by the European Parliament on the recommendation of the Council. However, account should be taken of the specificities resulting from the nature of the JTI as a public-private partnership and in particular from the private-sector contribution to the budget.
- (16) The FCH Joint Undertaking should adopt, subject to prior consultation with the Commission, specific financial provisions based on the principles of the Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities<sup>23</sup>. Those provisions should take into account its specific operating needs arising, in particular, from the need to combine Community and private funding.
- (17) The rules for the organisation and operation of the FCH Joint Undertaking should be laid down in the Statutes of the FCH Joint Undertaking as set out in the Annex.

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<sup>23</sup> OJ L 248, 16.9.2002, p. 1. Regulation as last amended by Regulation (EC, Euratom) No 1995/2006 of 13 December 2006 (OJ L 390, 30.12.2006, p. 1).

- (18) The FCH Joint Undertaking should discharge commitments pursuant to international agreements. To this end, it should be considered as an international body within the meaning of Article 22 of Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal service sectors<sup>24</sup>, and Article 15 of Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts<sup>25</sup>.
- (19) The intellectual property rights policy should provide for rights ownership for the participants of the projects as the owners of the industrial property created through the FCH Joint Technology Initiative, and should enable its proper exploitation.
- (20) Appropriate measures should be taken to prevent irregularities and fraud and the necessary steps should be taken to recover funds lost, wrongly paid or incorrectly used in accordance with Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities' financial interests<sup>26</sup>, Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities<sup>27</sup>, and Regulation (EC) No 1073/1999 of the European Parliament and of the Council concerning investigations conducted by the European Anti-Fraud Office (OLAF)<sup>28</sup>.
- (21) As a body possessing legal personality, the FCH Joint Undertaking should be accountable for its actions. When relevant, the Court of Justice of the European Communities should be competent for resolution of disputes arising from the activities of the Joint Undertaking.
- (22) Since the objective of the action to be taken, namely the establishment of the FCH Joint Undertaking, cannot be achieved by the Member States due to the trans-national nature and magnitude of the research challenge, which requires the pooling of complementary knowledge and financial resources across sectors and borders, and can therefore be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve this objective.

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<sup>24</sup> OJ L 134, 30.4.2004, p. 1. Directive as last amended by Directive 2006/97/EC (OJ L 363, 20.12.2006, p. 107).

<sup>25</sup> OJ L 134, 30.4.2004, p. 114. Directive as last amended by Directive 2006/97/EC (OJ L 363, 20.12.2006, p. 107).

<sup>26</sup> OJ L 312, 23.12.1995, p. 1.

<sup>27</sup> OJ L 295, 15.11.1996, p. 2.

<sup>28</sup> OJ L 136, 31.05.1999, p. 1.

HAS ADOPTED THIS REGULATION:

*Article 1*  
***Establishment***

1. For the implementation of the Joint Technology Initiative (hereinafter 'JTI') on 'Fuel Cells and Hydrogen', a Joint Undertaking (hereinafter the "FCH Joint Undertaking") within the meaning of Article 171 of the Treaty is hereby set up for a period ending on 31 December 2017. This period may be extended by a revision of this Regulation.
2. The FCH Joint Undertaking shall have legal personality. In the Member States, it shall enjoy the most extensive legal capacity accorded to legal persons under the laws of those States. It may, in particular, acquire or dispose of movable and immovable property and be a party to legal proceedings.
3. The FCH Joint Undertaking shall be considered as an international body within the meaning of Article 22(c) of Directive 2004/17/EC and of Article 15(c) of Directive 2004/18/EC.
4. The FCH Joint Undertaking shall be located in Brussels, Belgium.
5. The Statutes of the FCH Joint Undertaking are set out in Annex.

*Article 2*  
***Objectives and tasks***

1. The FCH Joint Undertaking shall contribute to the implementation of the Seventh Framework Programme (2007-2013) of the European Community for research, technology development and demonstration and in particular the 'Cooperation' Specific Programme themes for "Energy", "Nanosciences, Nanotechnologies, Materials and New Production Technologies", "Environment (including Climate Change)", and "Transport (including Aeronautics)".
2. It shall, in particular:
  - (a) support research, technological development and demonstration (RTD&D) in the Member States and Associated countries in a coordinated manner to overcome the market failure and focus on developing market applications and thereby facilitate additional industrial efforts towards a rapid deployment of fuel cells and hydrogen technologies;
  - (b) support the implementation of the research priorities of the JTI on Fuel Cells and Hydrogen, notably by awarding grants following competitive calls for proposals;
  - (c) aim to encourage increased public and private research investment in fuel cells and hydrogen technologies in the Members States and Associated countries;
  - (d) conclude service and supply contracts necessary for the functioning of the FCH Joint Undertaking;

- (e) ensure the efficiency and effectiveness of the JTI on Fuel Cells and Hydrogen.

### *Article 3*

#### **Members**

1. The founding members of the FCH Joint Undertaking (hereinafter 'founding members') shall be:
  - (a) the European Community, represented by the Commission, and
  - (b) the European Fuel Cell and Hydrogen Joint Technology Initiative Industry Grouping Aisbl established under Belgian law (hereinafter the 'Industry Grouping').
2. A Research Grouping, representing non-profit research organisations, universities and research centres, may become a member (hereinafter the "member") provided that an entity to represent the research community has been established. If the Research Grouping is set up it shall have one seat in the Governing Board.

### *Article 4*

#### **Bodies**

1. Executive bodies of the FCH Joint Undertaking shall be:
  - (a) the Governing Board, and
  - (b) the Programme Office.
2. Advisory bodies of the FCH Joint Undertaking shall be:
  - (a) the High Level Member States Group<sup>29</sup>, and
  - (b) the Scientific Committee.
3. The Stakeholders General Assembly shall be a forum for consultation on the progress, state of the art, future alignment and direction of the research activities.

The Stakeholders General Assembly shall be open to all public and private stakeholders, international interests groups from Member States as well as from third countries. It shall be convened once a year.

### *Article 5*

#### **Sources of financing**

1. The activities of the FCH Joint Undertaking shall be jointly funded through contributions from its founding members and member. In addition, contributions to

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<sup>29</sup> The High Level Member States Group will include Associated States.

the projects may also be accepted from Member States, Associated States, regions or other stakeholders sharing the objectives of the JTI.

2. The running costs of the FCH Joint Undertaking shall be covered equally in cash by the European Community and the Industry Grouping from the outset. If the Research Grouping is established it shall contribute to 1/12 of the running costs. In such a case, the Commission contribution will decrease correspondingly.
3. The operational costs for RTD&D shall be jointly funded through the financial contribution of the Community and through in-kind contributions from the private legal entities participating in the activities, corresponding to an amount at least equal to the Community's contributions.
4. The maximum Community contribution to the FCH Joint Undertaking running costs and operational costs shall be 470 million EUR. The running costs are estimated not to exceed 20 million EUR. The contributions shall come from the 'Cooperation' Specific Programme implementing the Seventh Framework Programme for research, technological development and demonstration (2007-2013) implementing the Community budget according to the provisions of Article 54(2)(b) of Regulation (EC, Euratom) No 1605/2002. The arrangements for the Community financial contribution shall be established by means of a general agreement and annual financial agreements to be concluded between the Commission, on behalf of the Community, and the FCH Joint Undertaking.
5. Unless funding is provided after 2013 (when FP7 ends) only projects for which a grant agreement has been signed at the latest by 31 December 2013 shall continue in the years 2014-2017.

*Article 6*  
***Participation in projects***

1. Participation in projects shall be open to legal entities and international organisations established in a Member State, and Associated Country or any third country once the minimum conditions have been satisfied.
2. The minimum conditions to be fulfilled for projects funded by the FCH Joint Undertaking shall be the following:
  - (a) at least three legal entities must participate, each of which must be established in a Member State or Associated country, and no two of which may be established in the same Member State or Associated country;
  - (b) all three legal entities must be independent of each other as defined in Article 6 of Regulation (EC) No 1906/2006 of the European Parliament and of the Council laying down the rules for the participation of undertakings, research centres and universities in actions under the Seventh Framework Programme and for the dissemination of research results (2007-2013)<sup>30</sup>;

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<sup>30</sup> OJ L 391, 30.12.2006, p. 1.



- (c) at least one legal entity must be a member of the Industry Grouping or the Research Grouping, if such Research Grouping is established.
- 3. The legal entities wishing to participate in a project shall form a consortium and appoint one of their members to act as its coordinator. Normally the coordinator shall be a member of the Industry Grouping, or a member of the Research Grouping, if such Research Grouping is established. Exceptions shall be approved by the Governing Board.
- 4. The minimum condition for service and supply contracts, support actions, studies and training activities funded by the FCH Joint Undertaking shall be the participation of one legal entity.

*Article 7*  
***Eligibility for funding***

- 1. The Community contribution to the FCH Joint Undertaking for the funding of the RTD&D activities shall be granted following competitive calls for proposals.
- 2. In exceptional cases the FCH Joint Undertaking may issue calls for tenders, if it is deemed appropriate for the effective pursuance of the research objectives.
- 3. Private legal entities fulfilling all the following criteria shall be eligible for such funding:
  - (a) they are established in a Member State or have their registered office, central or principal place of business within a state that is a contracting party to the European Economic Area Agreement or which is an Associated or Candidate country;
  - (b) they have relevant activities in RTD&D, industrialization or deployment for fuel cells and/or hydrogen and/or concrete plans to do so in the near future within the European Union or the European Economic Area.
- 4. The following shall also be eligible for funding:
  - (a) non-profit public bodies established in a Member State, Associated country, Candidate Country or within the EEA, including secondary and higher education establishments;
  - (b) international organisations, which have legal personality under international public law, as well as any specialised agencies set up by such intergovernmental organisations;
  - (c) legal entities from third countries, provided that the Governing Board considers their participation to be of particular benefit to the project.

*Article 8*  
**Financial provisions**

1. The FCH Joint Undertaking's financial provisions shall be based on the principles of Regulation (EC, Euratom) No 1605/2002. It may depart from Regulation (EC, Euratom) No 1605/2002 where the specific operating needs of the FCH Joint Undertaking so require, subject to prior consent of the Commission.
2. The FCH Joint Undertaking shall have its own internal audit capability.

*Article 9*  
**Staff regulation**

1. The Staff Regulations of Officials of the European Communities, the Conditions of Employment of Other Servants of the European Communities and the rules adopted jointly by the European Community institutions for the purpose of applying these Staff Regulations and Conditions of Employment shall apply to the staff of the FCH Joint Undertaking.
2. In respect of its staff, the FCH Joint Undertaking shall exercise the powers conferred on the appointing authority by the Staff Regulations of Officials of the European Communities and on the authority empowered to conclude contracts by the Conditions of Employment of Other Servants of the European Communities.
3. The Governing Board shall, in agreement with the Commission, adopt the necessary implementing measures, in accordance with Article 110 of the Staff Regulations of Officials of the European Communities and the Conditions of Employment of Other Servants of the European Communities.

*Article 10*  
**Privileges and Immunities**

The Protocol on the Privileges and Immunities of the European Communities shall apply to the FCH Joint Undertaking and its staff.

*Article 11*  
**Liability**

1. The contractual liability of the FCH Joint Undertaking shall be governed by the relevant contractual provisions and by the law applicable to the agreement or contract in question.
2. In the case of non-contractual liability, the FCH Joint Undertaking shall, in accordance with the general principles common to the laws of the Member States, make good any damage caused by its staff in the performance of their duties.
3. Any payment by the FCH Joint Undertaking in respect of the liability referred to in paragraphs 1 and 2 and the costs and expenses incurred in connection therewith shall

be considered as expenditure of the FCH Joint Undertaking and shall be covered by its resources.

#### *Article 12*

#### ***Jurisdiction of the Court of Justice and applicable law***

1. The Court of Justice shall have jurisdiction concerning:
  - (a) in any dispute between the founding members and/or member which relates to the subject matter of this Regulation and the Statutes referred to in Article 1(5);
  - (b) any arbitration clause contained in any agreement or contract concluded by the FCH Joint Undertaking;
  - (c) actions brought against the FCH Joint Undertaking, including decisions of its Governing Board, under the conditions provided for in Articles 230 and 232 of the Treaty;
  - (d) disputes relating to compensation for damage caused by the staff of the FCH Joint Undertaking in the performance of their duties.
2. For any matter not covered by this Regulation or by other acts of Community law, the law of the State where the seat of the FCH Joint Undertaking is located shall apply.

#### *Article 13*

#### ***Reporting, evaluation and discharge***

1. The Commission shall present to the European Parliament and to the Council an annual report on the progress achieved by the FCH Joint Undertaking.
2. Two years after the establishment of the FCH Joint Undertaking, but in any case no later than 2010, the Commission shall conduct an interim evaluation of the FCH Joint Undertaking with the assistance of independent experts. This evaluation shall cover the quality and efficiency of the FCH Joint Undertaking and progress towards its objectives. The Commission shall communicate the conclusions thereof, accompanied by its observations to the European Parliament and to the Council.
3. At the end of 2017, the Commission shall conduct a final evaluation of the FCH Joint Undertaking with the assistance of independent experts. The results of the final evaluation shall be presented to the European Parliament and to the Council.
4. Discharge for the implementation of the budget of the FCH Joint Undertaking shall be given by the European Parliament, upon recommendation of the Council, in accordance with a procedure laid down by the Financial Regulation of the FCH Joint Undertaking.

*Article 14*  
**Reviews**

1. The total in-kind contribution of the private organisations, whether members of the Industry Grouping or not, shall be assessed and reviewed for compliance with the requirement to at least match the level of public funding. The first assessment shall be made two years after the adoption of this Regulation. Thereafter the assessment shall be made at the end of each year.

If the assessment establishes that the in-kind contribution from private sources does not reach the required level, the Commission shall reduce its contribution the following year.

If it is established that the in-kind contribution from private sources does not reach the required level for two consecutive years, the Commission may propose to the Council to terminate the FCH Joint Undertaking.

2. The Commission shall initiate and perform a mid-term review and a final review. The mid-term review shall be performed not later than in 2012 and the final review upon the termination of the Joint Undertaking.

*Article 15*

***Protection of the financial interests of the founding members and member and anti-fraud measures***

1. The FCH Joint Undertaking shall ensure that the financial interests of its founding members and member are adequately protected by carrying out or commissioning appropriate internal and external controls.
2. In case of irregularities committed by the FCH Joint Undertaking or its staff, the founding members and member shall reserve the right to recover any amount unduly spent or to reduce or suspend any subsequent contribution to the FCH Joint Undertaking.
3. For the purposes of combating fraud, corruption and other illegal acts, Regulation (EC) No 1073/1999 shall apply.
4. The Commission and/or the Court of Auditors may, if necessary, carry out on-the-spot checks among the beneficiaries of the FCH Joint Undertaking's funding and the agents responsible for its allocation. To that end, the FCH Joint Undertaking shall ensure that grant agreements and contracts provide for the right of the Commission and/or the Court of Auditors to carry out, on behalf of the FCH Joint Undertaking, the appropriate controls and, in the event of the detection of irregularities, to impose dissuasive and proportionate penalties.
5. The European Anti-Fraud Office (OLAF) shall enjoy the same powers in respect of the FCH Joint Undertaking and its staff as it enjoys in respect of Commission services. As soon as the FCH Joint Undertaking is established it shall accede to the Inter-institutional Agreement of 25 May 1999 between the European Parliament, the

Council and the Commission regarding internal investigations by OLAF<sup>31</sup>. The Governing Board shall approve that accession and adopt the necessary measures in order to facilitate internal investigations conducted by OLAF.

*Article 16*  
**Confidentiality**

The FCH Joint Undertaking shall ensure the protection of sensitive information whose disclosure could damage the interests of its founding members and member.

*Article 17*  
**Intellectual property rights**

The FCH Joint Undertaking shall adopt rules governing the use and dissemination of RTD&D results, including provisions concerning the exercise, where appropriate, of intellectual property rights generated in RTD&D activities under this Regulation. These rules shall ensure that RTD&D results are used and disseminated.

*Article 18*  
**Preparatory actions**

The founding members shall take all necessary preparatory actions for the setting up of the FCH Joint Undertaking until its bodies are fully operational.

*Article 19*  
**Support from the host State**

A host agreement shall be concluded between the FCH Joint Undertaking and Belgium concerning office accommodation, privileges and immunities and other support to be provided by Belgium to the FCH Joint Undertaking.

*Article 20*  
**Entry into force**

This Regulation shall enter into force on the third day following its publication in the *Official Journal of the European Union*.

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<sup>31</sup> OJ L 136, 31.5.1999, p. 15.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

*For the Council*  
*The President*

## ANNEX

### STATUTES OF THE FUEL CELLS AND HYDROGEN JOINT UNDERTAKING

#### ***Article I.1***

##### *Name, Location, Duration and Legal Personality*

1. The name of the Joint Undertaking shall be the “Fuel Cells and Hydrogen Joint Undertaking” (hereinafter referred to as “FCH Joint Undertaking”).
2. Its seat shall be located in Brussels, Belgium.
3. The FCH Joint Undertaking shall be established as from the day of publication of this Regulation in the *Official Journal of the European Union* for an initial period ending on 31 December 2017.
4. The initial period may be extended by amending these Statutes in accordance with the provisions of *Article I.23*, taking into account the progress made towards achieving the objectives of the FCH Joint Undertaking and provided that financial sustainability is ensured.

#### ***Article I.2***

##### *Objectives and main tasks*

1. The FCH Joint Undertaking shall work within the scope of FP7 towards enabling the market breakthrough of fuel cell and hydrogen technologies, thereby allowing commercial market forces to drive the substantial potential public benefits.
2. The objectives include:
  - to place Europe at the forefront of fuel cell and hydrogen technologies worldwide;
  - to reach the critical mass of research effort to give confidence to industry, public and private investors, decision-makers and other stakeholders to embark on a long-term programme;
  - to leverage further industrial, national and regional RTD&D investment;
  - to build the European Research Area through close cooperation with research carried out at national and regional levels - whilst respecting subsidiarity;
  - to integrate research, technological development and demonstration, and focus on achieving long-term sustainability and industrial competitiveness targets for cost, performance and durability and overcome critical technology bottlenecks;
  - to stimulate innovation and the emergence of new value chains including SMEs;
  - to facilitate the interaction between industry, universities and research centres including on basic research;

- to encourage the participation of institutions from all, including the new Member States and Candidate countries;
  - to perform broadly-conceived socio-techno-economic research to assess and monitor technological progress and non-technical barriers to market entry;
  - to perform research to support the development of new, and review existing regulations and standards to eliminate artificial barriers to market entry and support interchangeability, inter-operability, cross-border hydrogen trading, and export markets whilst ensuring safe operation and not inhibiting innovation;
  - to provide reliable information to improve the public awareness and create public acceptance concerning hydrogen safety, and the benefits from the new technologies to the environment, security of supply, energy costs, and employment.
3. The main tasks of the FCH Joint Undertaking shall be to ensure the establishment and the efficient management of the Joint Technology Initiative on Fuel Cells and Hydrogen.
4. This includes:
- to establish and implement a multi-annual research activity plan;
  - to commit the Community funding and mobilise the private-sector and other public-sector resources needed to implement its RTD&D activities;
  - to ensure the sound operation of the RTD&D activities and sound financial management of the resources;
  - to cooperate with and consult with the High Level Member States Group;
  - to cooperate with and consult with the Scientific Committee;
  - to organise annual meetings of the Stakeholders’ General Assembly;
  - to communicate and disseminate information on the projects, including the names of the participants, the results from the RTD&D activities, and the amount of the financial contribution from the FCH Joint Undertaking;
  - to notify the legal entities that have concluded a Grant Agreement with the FCH Joint Undertaking of the potential borrowing opportunities from the European Investment Bank, in particular the Risk Sharing Finance Facility set up under the Seventh Framework Programme;
  - to ensure a high level of transparency and fair competition under equal access conditions for all applicants to the research and demonstration activities of the FCH Joint Undertaking, whether or not they are members of the Research Grouping or the Industry Grouping, (in particular small and medium-sized enterprises);



- to follow the international developments in the area and engage in international cooperation when appropriate.

### ***Article I.3***

#### ***Members and interest groups***

1. The founding members (hereinafter referred to as the "Founding Members") of the FCH Joint Undertaking shall be:
  - the European Community, represented by the European Commission, and
  - the European Fuel Cell and Hydrogen Joint Technology Initiative Industry Grouping Aisbl established under Belgian law (hereinafter referred to as the "Industry Grouping").
2. The Industry Grouping:
  - is a non-profit organisation whose purpose is to contribute to achieving the objectives of the FCH Joint Undertaking;
  - is legally established under Belgian law, and operating under its registered by-laws duly adopted to pertain to the Joint Technology Initiative;
  - shall ensure that its contribution to the resources of the FCH Joint Undertaking, according to *Article 5* of this Regulation is provided in advance as a cash contribution to cover 50% of the running costs of the FCH Joint Undertaking and transferred to the budget of the FCH Joint Undertaking before the start of each financial year;
  - shall ensure that industry's contribution to the achievement of the RTD&D activities funded by the FCH Joint Undertaking is provided in kind and covers a minimum of 50% of the total project costs, calculated on a yearly basis;
  - is open to membership by any private legal entity (including small and medium-sized enterprises), formed in accordance with the law of a Member State, Associated country or EEA state and having its registered office, central administration or principal place of business within the above area, provided it is active in the field of fuel cells and hydrogen in Europe, and is committed to contribute to the objectives and resources of the FCH Joint Undertaking.
3. A Research Grouping, representing non-profit research organisations, universities and research centres, may become a member, after the establishment of the FCH Joint Undertaking, provided an entity to represent the research community has been established. The application from the Research Grouping shall be addressed to and decided upon by the Governing Board.
4. The Research Grouping shall:
  - be a non-profit organisation whose purpose is to contribute to achieving the objectives of the FCH Joint Undertaking;

- be legally established under Belgian law and operate under its registered by-laws duly adopted to pertain to the Joint Technology Initiative;
  - ensure that its contribution to the resources of the FCH Joint Undertaking is provided in advance as a cash contribution to cover 1/12 of the running costs of the FCH Joint Undertaking and transferred to the budget of the FCH Joint Undertaking before the start of each financial year;
  - be open to membership by any non-profit research organisation, university or research centre established in a Member State, an Associated country or Candidate country.
5. A Founding Member may terminate its membership of the FCH Joint Undertaking. The FCH Joint Undertaking shall then be wound up as provided for in *Article I.22*.
  6. The Research Grouping may terminate its membership of the FCH Joint Undertaking. The termination shall become effective and irrevocable six months after notification to the Founding members following which the leaving Member shall be discharged from any obligations other than those approved by the FCH Joint Undertaking prior to the membership termination.

#### ***Article I.4*** *Bodies*

The executive bodies of the FCH Joint Undertaking shall be the Governing Board and the Programme Office. The advisory bodies of the FCH Joint Undertaking shall be the High Level Member States Group<sup>32</sup>, the Stakeholder's General Assembly and the Scientific Committee.

#### ***Article I.5*** *Governing Board*

1. The Governing Board shall be composed of six representatives appointed by the Industry Grouping and of six representatives appointed by the Commission.
2. The Commission shall, in case the Research Grouping is established transfer one seat to its representative.
3. At least one of the representatives appointed by the Industry Grouping shall represent small and medium-sized enterprises.
4. The Governing Board shall elect its chairperson. The chairperson shall be elected for 2 years.
5. The Governing Board shall hold its ordinary meeting twice a year. It may hold any extraordinary meeting at the request of the Commission or a majority of the representatives of the Industry Grouping or at the request of the chairperson. The

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<sup>32</sup> The High Level Members States Group will include Associated States.

meetings shall normally take place at the Head Office of the FCH Joint Undertaking. The meetings of the Governing Board shall be convened by its Chairperson.

6. The chairperson shall convene the Stakeholders' General Assembly.
7. The Secretary of the Governing Board shall be the Executive Director. The Executive Director shall take part in the deliberations, but shall have no voting rights.
8. The Governing Board may invite observers on a case by case basis, without voting rights, to attend their meetings, in particular representatives of the regions and of regulatory bodies.
9. Each seat in the Governing Board gives one voting right. The members shall use their best efforts to achieve consensus. Failing consensus, the Governing Board shall take its decisions by a three-quarters majority.
10. The Community shall hold a veto right on all decisions taken by this Board relating to the use of its financial contribution, the methodology for assessing the in-kind contributions, any amendments to these Statutes and the Financial Regulation of the FCH Joint Undertaking and on the issue of coherence of the multi-annual research activity plans with FP7.
11. The representatives of the Founding Members and the Member shall not be personally liable for actions undertaken in their capacity as representatives on the Governing Board.
12. The Governing Board shall adopt its rules of procedure.
13. The role of the Governing Board shall be to take overall responsibility for the operations of the FCH Joint Undertaking.
14. This includes:
  - to take responsibility for the implementation of the FCH Joint Undertaking RTD&D activities;
  - to take responsibility for the appropriate provision of the function entrusted by Article 185(3) of Regulation (EC, Euratom) No 1605/2002 to the Commission's internal auditor.
15. The Governing Board shall in particular:
  - approve the annual and multi-annual research activities plan and the corresponding expenditure estimates, as recommended by the Executive Director after having consulted the High Level Member States Group and the Scientific Committee;
  - approve the annual budget, including the staff establishment plan;
  - approve the annual activity report, including the corresponding expenditure;
  - approve the annual accounts and the balance-sheet;

- arrange for the establishment of the internal audit capabilities of the FCH Joint Undertaking;
- justify and approve any deviation to the Financial Regulation of the FCH Joint Undertaking in accordance with *Article 8*;
- justify and adopt, in agreement with the Commission, the implementing measures of the Staff Regulation of the FCH Joint Undertaking;
- appoint the Executive Director, provide guidance and direction to the Executive Director, monitor the Executive Director’s performance and, if necessary, replace the Executive Director;
- approve the organisational structure of the Programme Office as proposed by the Executive Director;
- approve the methodology for assessing the in-kind contributions;
- approve the guidelines on evaluation and selection of project proposals as proposed by the Executive Director;
- approve the list of project proposals selected for funding;
- approve the model Grant Agreement;
- approve service and supply contracts;
- approve the annual independent assessment of the level of in-kind contribution before it is presented to the Commission;
- agree on proposed amendments of the FCH Joint Undertaking’s Statutes in accordance with *Article I.23*;
- assign any task which is not specifically allocated to one of the bodies of the FCH Joint Undertaking;
- approve procedures of the FCH Joint Undertaking, including the Intellectual Property Rights policy.

***Article I.6***  
***Programme Office***

1. The Programme Office shall be composed of an Executive Director and supporting staff.
2. The Programme Office shall, under the responsibility of the Executive Director, execute all responsibilities of the FCH Joint Undertaking.
3. The Programme Office shall be responsible for the operational, budgetary and financial aspects of the FCH Joint Undertaking.
4. The Programme Office shall in particular:

- manage the launch of the calls for project proposals as foreseen in the annual research activities plan, the evaluation and selection of the project proposals, the negotiation of the selected project proposals, and the follow-up and administration of the Grant Agreements, including their co-ordination;
  - be in charge of the establishment and management of the appropriate accounting system for the calculation of the actual public and private contributions to the projects;
  - provide the Governing Board and all other subsidiary bodies with relevant documentation and logistical support;
  - prepare the multi-annual research activities plan and the corresponding expenditure estimates;
  - prepare the annual budget proposal, including the staff establishment plan;
  - prepare the annual activity report, including the corresponding expenditure;
  - prepare the annual accounts and the balance-sheet;
  - prepare all documents necessary for the mid-term and final review;
  - manage calls for tenders for goods and services according to the Financial Regulation of the FCH Joint Undertaking;
  - perform any other tasks entrusted or delegated to it by the Governing Board.
5. The Executive Director shall be the chief executive responsible for the day-to-day management of the FCH Joint Undertaking in accordance with the decisions of the Governing Board. In that context, he/she shall regularly inform as well as respond to any specific ad hoc requests for information from the Governing Board.
  6. The Executive Director shall be the legal representative of the FCH Joint Undertaking. He/she shall perform his/her tasks with independence, and shall be accountable to the Governing Board.
  7. The Executive Director shall exercise, in respect of the staff, the powers laid down in *Article 9* of this Regulation setting up the FCH Joint Undertaking.
  8. The Executive Director shall be appointed by the Governing Board, from a list of candidates proposed by the Commission, for a maximum initial period of three years. After an evaluation of the Executive Director's performance, the Governing Board may extend the term of office once for a further period of not more than four years.
  9. The Executive Director shall in particular:
    - submit to the Governing Board the annual and multi-annual research activities plan and the corresponding expenditure estimates;
    - submit to the Governing Board the annual budget proposal, including the staff establishment plan;

- submit to the Governing Board the annual activity report, including the corresponding expenditure;
- submit to the Governing Board the annual accounts and the balance-sheet;
- submit for the approval of the Governing Board, the arrangements and guidelines for evaluation and selection of project proposals, including procedures for the dissemination of research results;
- supervise the management of the calls for project proposals;
- submit for the approval of the Governing Board the list of project proposals selected for funding;
- submit for the approval of the Governing Board the list of Grant Agreements to be concluded;
- approve and sign the individual Grant Agreements established in line with the Model Grant Agreement. Grant Agreements with provisions that do not fully correspond to the Model Grant Agreement shall be submitted to the Governing Board for approval;
- submit for the approval of the Governing Board the service and supply contracts to be concluded;
- submit to the Governing Board his/her proposal(s) concerning the organisation structure of the Programme Office and organise, direct and supervise the staff of the FCH Joint Undertaking;
- convene meetings of the Governing Board;
- ensure the secretariat for the Stakeholders' General Assembly;
- attend as appropriate the meetings of the Scientific Committee as observer;
- if appropriate, set up ad hoc expert groups, as decided by the Governing Board, to gather advice from experts;
- monitor public and private financing and have the responsibility to propose to the Governing Board any corrective action necessary to maintain the 50/50 funding balance;
- initiate an annual independent assessment of the level of in-kind contribution (the first one at the end of the second financial year after the start of the FCH Joint Undertaking), and take responsibility for the assessment results being approved by the Governing Board and presented to the Commission within 4 months of the end of each financial year;
- provide to the Governing Board any other information that may be requested;
- provide the Commission with any information and service necessary for the mid-term and final reviews;

- be responsible for risk assessment and risk management;
- propose to the Governing Board any insurance that may be necessary for the FCH Joint Undertaking to take out in order to meet its obligations;
- be responsible for preparing, negotiating and concluding Grant Agreements for the implementation of the RTD&D activities, and service and supply contracts necessary for the operations of the FCH Joint Undertaking;
- be responsible for the annual discharge from the European Parliament.

***Article I.7***  
*Scientific Committee*

1. The Scientific Committee is an advisory body to the Governing Board. The Scientific Committee shall conduct its activities with the support of the Programme Office.
2. The Scientific Committee shall have a chair and [8] members. The chair is member of the Governing Board, normally the one representing the Research Grouping.
3. The Governing Board shall establish the specific criteria and selection process for the members of the Scientific Committee. The Governing Board shall appoint the members on the proposal of the Executive Director. The members shall reflect a balanced representation of expertise. Collectively, the Scientific Committee members shall have the necessary scientific competence, professional knowledge and expertise in fuel cells and hydrogen technology, and related social and economic issues, in order to make strategic scientifically-based recommendations for the implementation of the FCH Joint Technology Initiative.
4. The Scientific Committee shall perform the following tasks:
  - give its opinion on the relevance and progress of the annual RTD&D activities and recommend any amendments;
  - give its opinion on the scientific priorities for the multi-annual RTD&D activities plan;
  - advise the Governing Board on the scientific achievements described in the annual activity report.
5. The Scientific Committee shall meet at least once a year.
6. The Scientific Committee may invite observers, without voting rights, to attend their meetings.

**Article I.8**  
*Sources of financing*

1. The total contribution from the Community to the FCH Joint Undertaking covering running costs and operational costs for RTD&D activities shall not exceed 470 million EUR from the Seventh Framework Programme. The running costs are expected not to exceed 20 million EUR.
2. All resources of the FCH Joint Undertaking and its activities shall be devoted to the objectives and main tasks provided for in *Article I.2*.
3. Any other extraordinary financial contribution in cash, resources and revenues, may be accepted after the approval of the Governing Board.
4. The evaluation and selection process shall ensure that allocation of the FCH Joint Undertaking's public funding follows the principles of excellence and competition<sup>33</sup>.
5. Any interest yielded by the contributions once received by the FCH Joint Undertaking shall be considered to be its revenue.
6. Any interest generated on the advance payment of grants paid out by the FCH Joint Undertaking shall be considered to be a receipt to the project consortium.
7. The private sector, in particular the members of the Industry Grouping, shall contribute in kind to the operational costs of the projects. The in-kind contributions shall as a minimum match the public funding. The total level of the in-kind contributions, calculated on a yearly basis, shall be assessed once a year. The first assessment shall be initiated at the end of the second financial year after the start of the FCH Joint Undertaking. The assessment shall thereafter be performed each financial year by an independent entity. The results of the assessment shall be presented to the Commission within 4 months of the end of each financial year.
8. The FCH Joint Undertaking shall own all assets generated by it or transferred to it for the fulfilment of its objectives provided for in *Article I.2*.

**Article I.9**  
*Participation in projects*

1. Participation in projects shall be open to legal entities and international organisations established in a Member State or any third country once the minimum conditions have been satisfied.
2. The minimum conditions to be fulfilled for projects funded by the FCH Joint Undertaking shall be the following:

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<sup>33</sup> In particular, the evaluation and selection of projects should be consistent with the criteria spelled out in the Community Framework for State aid for Research and Development and Innovation (OJ C 323, 30.12.2006, p. 1) and the Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements (OJ C 3, 6.1.2001, p. 2).



- (a) at least three legal entities must participate, each of which must be established in a Member State or Associated country, and no two of which may be established in the same Member State or Associated country;
  - (b) all three legal entities must be independent of each other as defined in Article 6 of Regulation (EC) No 1906/2006 of the European Parliament and of the Council laying down the rules for the participation of undertakings, research centres and universities in actions under the Seventh Framework Programme and for the dissemination of research results (2007-2013)<sup>34</sup>;
  - (c) at least one legal entity must be a member of the Industry Grouping or the Research Grouping.
3. The legal entities wishing to participate in a project shall form a consortium and appoint one of their members to act as its coordinator. Normally the coordinator shall be a member of the Industry Grouping or, a member of the Research Grouping, if such Research Grouping is established. Exceptions shall be approved by the Governing Board.
  4. The minimum condition for service and supply contracts, support actions, studies and training activities funded by the FCH Joint Undertaking shall be the participation of one legal entity.

**Article I.10**  
*Eligibility for funding*

1. The Community contribution to the FCH Joint Undertaking shall be used for funding the RTD&D activities following competitive calls for proposals.
2. In exceptional cases the FCH Joint Undertaking may issue calls for tenders, if it is deemed necessary for the effective pursuance of the research objectives.
3. Private legal entities fulfilling all the following criteria shall be eligible for such funding:
  - (a) they are established in a Member State or have their registered office, central or principal place of business within a state that is a contracting party to the European Economic Area Agreement or which is an Associated or Candidate country;
  - (b) they have relevant activities in RTD&D, industrialization or deployment for fuel cells and/or hydrogen and/or concrete plans to do so in the near future within the European Union or the European Economic Area.

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<sup>34</sup> OJ L 391, 30.12.2006, p. 1.

4. The following shall also be eligible for funding:
  - (a) non-profit public bodies established in a Member State, Associated country, Candidate Country or within the EEA, including secondary and higher education establishments;
  - (b) international organisations, which have legal personality under international public law, as well as any specialised agencies set up by such intergovernmental organisations;
  - (c) legal entities from third countries, provided that the Governing Board considers their participation to be of particular benefit to the project.

***Article I.11***

*Financial provisions*

1. The FCH Joint Undertaking's financial provisions shall be based on the principles of Regulation (EC, Euratom) No 1605/2002. It may depart from Regulation (EC, Euratom) No 1605/2002 where the specific operating needs of the FCH Joint Undertaking so require, subject to prior consent of the Commission.
2. The FCH Joint Undertaking shall have its own internal audit capability.

***Article I.12***

*Financial commitments*

1. Financial commitments of the FCH Joint Undertaking shall not exceed the amount of resources at its disposal.
2. Unless funding will be provided after 2013 (when FP7 ends) only projects for which a Grant Agreement has been signed at the latest 31 on December 2013 will be continued in the years 2014-2017.

***Article I.13***

*Financial year*

The financial year shall correspond to the calendar year.

***Article I.14***

*Financial reporting and discharge*

1. Each year, the Executive Director shall present to the Governing Board a preliminary draft budget, which shall include a forecast of annual expenditure for the following two years. Within this forecast, the estimates of revenue and expenditure for the first of those two financial years shall be drawn up in such detail as is necessary for the internal budgetary procedure of each Founding Member and Member regarding its financial contributions to the FCH Joint Undertaking. The Executive Director shall

supply the Governing Board with all supplementary information needed for this purpose.

2. The Governing Board shall forthwith communicate to the Executive Director its comments on the preliminary draft budget and in particular on the estimates of resources and expenditure for the following year.
3. Taking into account the comments received from the Governing Board, the Executive Director shall prepare the draft budget for the following year. Before September 1 of each year, the Executive Director shall submit the annual budget to the Governing Board for approval.
4. Within two months after the closure of each financial year, the annual accounts and balance sheets for the preceding year shall be submitted by the Executive Director to the Governing Board for approval.
5. Within two months after the end of each financial year the provisional accounts of the Joint Undertaking shall be submitted to the Commission and the Court of Auditors of the European Communities ('the Court of Auditors'). The Court of Auditors shall, by 15 June after the end of each financial year, make its observations on the provisional accounts of the Joint Undertaking. The annual accounts for the financial year shall be sent in the following year to the Commission's Accounting Officer according to the deadlines fixed by the Framework Financial Regulation so that the Commission's Accounting Officer can consolidate these into the EC annual accounts. The Joint Undertaking's annual accounts have to be prepared and audited following the EC Accounting Rules as adopted by the Commission's Accounting Officer.
6. Discharge for the implementation of the budget shall be given by the European Parliament, upon recommendation of the Council, in accordance with a procedure provided for by the Financial Regulation of the FCH Joint Undertaking.

#### ***Article I.15***

##### ***Annual planning and reporting***

1. The multi-annual research activities plan shall describe the rolling programme of RTD&D activities of the FCH Joint Undertaking. The plan of annual research activities shall include a detailed plan of the RTD&D activities and corresponding expenditure estimates for the coming year.
2. An annual activity report shall describe the RTD&D activities and other activities performed during the previous year and the corresponding expenditure.

### ***Article I.16***

#### ***Staff***

1. The staff resources shall be determined in the establishment plan to be set out in the annual budget.
2. The members of the staff of the FCH Joint Undertaking shall be temporary agents and contract agents and shall have fixed-term contracts, extendable once up to a maximum total period of seven years.
3. The staff expenditure shall be borne by the FCH Joint Undertaking.

### ***Article I.17***

#### ***Liability and Insurance***

1. The FCH Joint Undertaking shall be solely responsible for meeting its obligations.
2. The financial liability of the Founding Members and Member for the debts of the FCH Joint Undertaking shall be limited to their due contribution to the running costs.
3. The FCH Joint Undertaking shall take out and maintain appropriate insurance.

### ***Article I.18***

#### ***Conflict of Interest***

The FCH Joint Undertaking and its bodies shall avoid any conflict of interest in the implementation of their activities.

In particular care must be taken where a conflict of interest may occur for the representatives serving in the Governing Board.

### ***Article I.19***

#### ***Grant Agreement and Consortium Agreement***

1. The FCH Joint Undertaking shall support RTD&D activities following competitive calls for proposals, independent evaluation, and the conclusion for each project of a Grant Agreement and a Consortium Agreement.
2. The FCH Joint Undertaking shall define the procedures and mechanisms for the implementation, supervision and control of Grant Agreements.
3. The Grant Agreement shall:
  - provide for the appropriate arrangements for the implementation of the RTD&D activities;

- provide for the appropriate financial arrangements and the rules relating to intellectual property rights on the basis of the principles as set out in *Article I.24*;
  - govern the relationship between the project consortium and the FCH Joint Undertaking.
4. The Consortium agreement shall:
- be concluded by the project participants prior to the conclusion of the Grant Agreement;
  - provide for the appropriate arrangements for the implementation of the Grant Agreement;
  - govern the relationship between the participants in a project, in particular the Intellectual Property Rights provisions.

#### ***Article I.20***

##### *Service and supply contracts*

The FCH Joint Undertaking shall set up all the procedures and mechanisms for the implementation, supervision and control of service and supply contracts necessary for the operations of the FCH Joint Undertaking, according to the provisions of its Financial Regulation.

#### ***Article I.21***

##### *Protection of financial interests*

1. The FCH Joint Undertaking shall carry out on-the-spot checks and financial audits among the recipients of the FCH Joint Undertaking's public funding.
2. The Commission or the European Court of Auditors may, as necessary, carry out on-the-spot checks among the recipients of the FCH Joint Undertaking's funding. To that end, the FCH Joint Undertaking shall ensure that its grant agreements and contracts provide for the right of the Commission and of the Court of Auditors to carry out the appropriate controls and, in the event of detection of irregularities, to impose dissuasive and proportionate penalties.
3. The European Anti-Fraud Office (OLAF) set up by Commission Decision 1999/352/EC, ECSC, Euratom shall enjoy the same powers in respect of the Joint Undertaking and its staff as it enjoys in respect of Commission departments. As soon as the Joint Undertaking is established, it shall accede to the Interinstitutional Agreement of 25 May 1999 between the European Parliament, the Council and the Commission concerning internal investigations by OLAF. The Governing Board shall approve that accession and adopt the necessary measures needed to facilitate internal investigations conducted by OLAF.

**Article I.22**  
*Winding up*

1. At the end of the period provided for in *Article I.1*, or following a decision by the Council, the FCH Joint Undertaking shall be wound up.
2. The winding-up procedure shall be automatically initiated if one of the Founding Members terminates its membership, unless the request for termination is accompanied by a proposal for the transfer of the membership to a legal entity that can be accepted by the remaining Founding Member.
3. For the purpose of winding up the FCH Joint Undertaking, the Governing Board shall appoint one or more liquidators, who shall comply with the decisions of the Governing Board.
4. When the FCH Joint Undertaking is being wound up, it shall return to the host state [Belgium] any item of physical support made available by the host state in accordance with the host agreement.
5. When any item of physical support has been dealt with as provided in paragraph 4 of this Article, any further assets shall be used to cover the liabilities of the FCH Joint Undertaking and the expenditures relating to its winding-up. Any surplus or deficit shall be distributed among or met by the Founding Members in proportion to their actual contribution to the FCH Joint Undertaking.
6. Remaining assets, debts or liabilities shall be distributed to the Founding Members in proportion to their actual contribution to the FCH Joint Undertaking.
7. An *ad hoc* procedure shall be set up to ensure the appropriate management of any Grant Agreement referred to in *Article I.19* and service and supply contract referred to in *Article I.20*, with duration longer than the duration of the FCH Joint Undertaking.

**Article I.23**  
*Amending the Statutes*

1. Any Founding Member or Member of the FCH Joint Undertaking may make a proposal to the Governing Board for the amendment of these Statutes.
2. Proposals for amendments to the Statutes shall be approved by the Governing Board according to the provisions of *Article I.5* and submitted to the Commission for decision.
3. Notwithstanding paragraph 2, any amendment proposed to *Article I.1*, or *Article I.8* or *Article I.21* shall be considered as an essential aspect and therefore subject to a revision of the Council Regulation setting up the FCH Joint Undertaking.

**Article I.24**  
*Intellectual property rights policy*

1. The FCH Joint Undertaking shall adopt general rules governing its Intellectual Property Rights policy and these will be incorporated into the Grant Agreements and Consortium Agreements.
2. Without prejudice to the competition rules<sup>35</sup> the objective of the Intellectual Property Rights policy of the FCH Joint Undertaking is to generate foreground information, promote its exploitation, use and dissemination for rapid development towards commercial results, to achieve fair allocation of rights, to reward innovation, and to achieve a broad participation of private and public entities in projects.
3. The Intellectual Property Rights policy shall reflect the following principles:
  - Each participant in a project shall remain the owner of the background it introduces into a project, and shall remain the owner of the foreground it generates in a project, unless otherwise mutually agreed by the participants in a project. The terms and conditions of access rights and licenses with regard to the background or foreground, shall be defined in the Grant Agreement and the Consortium Agreement of the project concerned.
  - The participants in a project shall undertake to disseminate and allow the use of foreground under terms and conditions defined in the Grant Agreement and the Consortium Agreement, taking into account the protection of their intellectual property rights, confidentiality obligations and, in particular the specific nature of the FCH Joint Undertaking as a public-private partnership whose private-sector participants have provided a large share of the funding and who have a legitimate interest in protecting their commercial interests.

**Article I.25**  
*Applicable Law*

In any matter not covered by these Statutes or by acts of Community law, the law of Belgium shall apply.

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<sup>35</sup> Community Framework for State aid for Research and Development and Innovation (OJ C 323, 30.12.2006, p. 1).

## LEGISLATIVE FINANCIAL STATEMENT

### 1. NAME OF THE PROPOSAL:

Proposal for a Council Regulation setting up the Fuel Cells and Hydrogen (FCH) Joint Undertaking.

### 2. ABM / ABB FRAMEWORK

Policy Area(s) concerned and associated Activity/Activities:

Research and Technological Development: 7<sup>th</sup> Framework Programme, Specific Programme "Cooperation": themes for Energy, Nanosciences, Nanotechnologies, Materials and New Production Technologies (NMP), Transport (including Aeronautics), and Environment (including Climate Change) in DG Research and the themes Energy and Transport in DG Energy and Transport.

### 3. BUDGET LINES:

#### 3.1. Budget lines (operational lines and related technical and administrative assistance lines including headings:

08.01 04 20 Joint Undertaking – administrative<sup>36</sup>

08.05 01 10 Energy – RTD – operational (181.9 M€)

08.04 01 10 NMP - RTD – operational (47.9 M€)

08.07 01 30 Transport - RTD – operational (67.0 M€)

08.06 01 10 Environment - RTD – operational (19.1 M€)

06.06 01 10 Energy – TREN – operational (119.7 M€)

06.06 02 10 Transport – TREN – operational (14.4 M€)

The total administrative costs will be distributed on each budget line in proportion to the total contribution.

Theme	Estimated administrative cost, M€
Energy – RTD	8.1
NMP – RTD	2.1

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<sup>36</sup> This amount will not be taken into account under the ceiling of the administrative expenditures of the 7<sup>th</sup> Framework Programme (6%).



Transport – RTD	3.0
Environment - RTD	0.9
Energy – TREN	5.3
Transport – TREN	0.6

### 3.2. Duration of the action and of the financial impact:

The Fuel Cells and Hydrogen Joint Undertaking is expected to be established by a Council Regulation early 2008 for a period up to 31 December 2017. Its financial impact on the EU budget will cease after 2013.

### 3.3. Budgetary characteristics:

Budget line	Type of expenditure		New	EFTA contribution	Contributions from applicant countries	Heading in financial perspective
	Non-comp	Diff				
08.05 01 10	Non-comp	Diff	YES	YES	YES	No 1A
08.01 04 20	Non-comp	Non-diff	YES	YES	YES	No 1A
08.04 01 10	Non-comp	Diff	YES	YES	YES	No 1A
08.07 01 30	Non-comp	Diff	YES	YES	YES	No 1A
08.06 01 10	Non-comp	Diff	YES	YES	YES	No 1A
06.06 01 10	Non-comp	Diff	YES	YES	YES	No 1A
06.06 02 10	Non-comp	Diff	YES	YES	YES	No 1A

## 4. SUMMARY OF RESOURCES

### 4.1. Financial Resources

#### 4.1.1. Summary of commitment appropriations (CA) and payment appropriations (PA)

EUR million (to 3 decimal places)

Expenditure type	Section no.		2008	2009	2010	2011	2012	2013	Total
<b>Operational expenditure<sup>37</sup></b>									
Commitment	8.1	a	28.100	70.300	90.100	106.800	73.800	80.900	450.000
Appropriations <sup>38</sup> (CA)									
Payment		b	28.100	70.300	90.100	106.800	73.800	80.900	450.000
Appropriations (PA)									
<b>Administrative expenditure within reference amount</b>									
Technical & administrative assistance (NDA) Personnel costs + 50%	8.2.4	c	1.900	2.700	3.400	4.190	3.705	4.105	20.000
<b>TOTAL REFERENCE AMOUNT</b>									
Commitment Appropriations		a+c	30.000	73.000	93.500	110.990	77.505	85.005	470.000
Payment appropriations		b+c	30.000	73.000	93.500	110.990	77.505	85.005	470.000
<b>Administrative expenditure <u>not</u> included in the reference amount</b>									
Human resources and associated expenditure (NDA)	8.2.5	d	0.117	0.234	0.234	0.234	0.234	0.234	1.287
Administrative costs, other than human resources and associated costs, not included in reference amount (NDA)	8.2.6	e	0	0.200	0.200	0	0.200	0.200	0.800

<sup>37</sup> Expenditure that does not fall under Chapter xx 01 of the Title xx concerned.

<sup>38</sup> It is expected that Commitment Appropriations and Payment Appropriations from the Commission point of view are the same the same year, as the payments on operational/project level will be made from the Joint Undertaking's budget.

### Total indicative financial cost of intervention

<b>TOTAL CA including cost of Human Resources</b>	a+ c+ d+ e	30.117	73.434	93.934	111.224	77.939	85.439	472.087
<b>TOTAL PA including cost of Human Resources</b>	b+ c+ d+ e	30.117	73.434	93.934	111.224	77.939	85.439	472.087

### Co-financing details

The founding members of the FCH JU are:

- The European Community, represented by the Commission, and
- The European Fuel Cell and Hydrogen Joint Technology Initiative Industry Grouping (IG) established as a non-profit association under Belgian law.

The IG shall share the running costs of the Programme Office on a 50/50 basis with the Commission (contributed in cash), as well as to cover a minimum of 50% of the operational costs of the Joint Undertaking's research activities (as in-kind contribution).

The running costs are estimated not to exceed 4.5 % of the total costs.

*EUR million (to 3 decimal places)*

Co-financing body		2008	2009	2010	2011	2012	2013	Total
Industry Grouping for the Fuel Cells and Hydrogen JTI	f	30.117	73.434	93.934	111.224	77.939	85.439	472.087
TOTAL including co-financing CA	a+c +d+ e+f	60.234	146.868	187.868	222.448	155.878	170.878	944.174

#### 4.1.2. Compatibility with Financial Programming

- Proposal is compatible with existing financial programming.

#### 4.1.3. Financial impact on Revenue

- Proposal has no financial implications on revenue

**4.2. Human Resources FTE (including officials, temporary and external staff) – see detail under point 8.2.1.**

<b>Annual requirements</b>	2008	2009	2010	2011	2012	2013
Total number of human resources AD/AST	11	20	20	20	20	20

**5. CHARACTERISTICS AND OBJECTIVES**

**5.1. Need to be met in the short or long term**

The needs are to:

- set up the FCH Joint Undertaking, as a new structure of partnership between the Commission and industry for research funding;
- organise competitive calls for proposals, evaluation and selection of projects where industry will co-fund the selected collaborative research projects performed in a Member State, a Candidate country or a country associated to the Seventh Framework Programme, together with the funds coming from the FCH Joint Undertaking;
- monitor and follow-up financial and scientific aspects of projects having concluded a grant agreement with the FCH Joint Undertaking;
- organise the calls for tender necessary to the operations of FCH Joint Undertaking,
- set up and implement all procedures of the FCH Joint Undertaking, including financial auditing;
- organise the dissemination activities of the FCH Joint Undertaking;
- organise the communication activities of the FCH Joint Undertaking;
- organise any other activity linked to the FCH Joint Undertaking

**5.2. Value-added of Community involvement and coherence of the proposal with other financial instruments and possible synergy**

These issues are addressed in the Impact Assessment document attached to this proposal. The Impact Assessment is based on a socio-economic study, a Commission staff working document, as well as on a "Keys to success" contribution provided by the Industry Grouping. The Impact Assessment has been reviewed by a panel of 4 external independent high level experts.

### 5.3. Objectives, expected results and related indicators of the proposal in the context of the ABM framework

The overall **objective** is to establish an EU-level policy framework to stimulate an integrated research, technological development and demonstration effort in fuel cell and hydrogen technologies of sufficient critical mass to contribute significantly to European energy public policy objectives. The detailed objectives and substantiation are to be found in the Impact Assessment.

Some of the specific **objectives** are to enable the market breakthrough of fuel cell and hydrogen technologies, enabling commercial market forces to drive the substantial public benefits, to reach the critical mass of research effort to give confidence to industry, public and private investors, decision-makers and other stakeholders to embark on a long-term programme, to facilitate the interaction between industry, universities and research centres on basic research and to encourage the participation of the new Member States and candidate countries;

Pre-defined budget of sufficient critical mass and 6-year time horizon raises confidence in private sector investors and allows industry to make long-term investment plans and manage its cash flows.

The expected **results** will be

- a significant increase in private research investment compared to “business-as-usual” levels;
- a continuously updated strategic research agenda to ensure funding is used in an optimal way;
- a shorter time-to-market by 2 to 5 years;
- a broad participation by SMEs and legal entities from the new Member States.

A set of quantitative and qualitative performance **indicators** will be established to follow the implementation of the FCH JTI. These performance indicators will measure the impact of the JTI on EU competitiveness and the research environment for fuel cells and hydrogen. The quantitative indicators will be measured on a large scale in a comparative and systematic manner, while the qualitative approach will include case studies and technical audits. The indicators should be assessed against the baseline of the state of affairs in the years prior to the start of the JTI to help assess additionality effects during its lifetime.

The progress of the JTI will be continuously monitored against a set of objectively verifiable indicators including:

- monitoring of public (EC and other) and private funding
- follow-up of additionality;
- selection of projects and allocation of funding;
- technical monitoring against well-defined specific programme milestones;
- adherence to time schedule;
- quantified monitoring of market penetration in target sectors;

- level of SME participation and of participation from the newer Member States;
- sustainability indicators.

At mid-term, the JTI will be evaluated by independent experts on behalf of the Commission. This evaluation will cover the quality and efficiency of the Joint Undertaking and its progress towards its objectives and make recommendations for any necessary re-adjustment of the programme and if applicable, consideration of an exit strategy. The Commission will communicate the conclusions to the Council. At the end of 2017, the Commission will conduct a final evaluation and the results will be presented to the European Parliament and the Council.

#### **5.4. Method of Implementation (indicative)**

##### ***Centralised Management***

indirectly by delegation to:

- bodies set up by the Communities as referred to in Article 185 of the Financial Regulation

## **6. MONITORING AND EVALUATION**

### **6.1. Monitoring system**

The Joint Undertaking will be monitored as provided in its Statutes.

### **6.2. Evaluation**

#### *6.2.1. Ex-ante evaluation*

These issues are addressed in the impact assessment document. It is based on a socio-economic study completed to an impact assessment with extensive input from the "Keys to success" document provided by the industry. It provides the information required by an ex-ante evaluation for the establishment of the FCH Joint Undertaking.

#### *6.2.2. Measures taken following an intermediate/ex-post evaluation (lessons learned from similar experiences in the past)*

Not applicable.

#### *6.2.3. Terms and frequency of future evaluation*

Described under *Article 19* of the proposed Regulation.

## **7. ANTI-FRAUD MEASURES**

Described under *Article 21* of the proposed Regulation.

## 8. DETAILS OF RESOURCES

### 8.1. Objectives of the proposal in terms of their financial cost

*Commitment appropriations in EUR million (to 3 decimal places)*

(Headings of Objectives, actions and outputs should be provided)	Budget line	Av. Cost for the EC	2008		2009		2010		2011		2012		2013		TOTAL	
			No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost
OPERATIONAL OBJECTIVE <sup>39</sup> - Set up of the Fuel Cells and Hydrogen Joint Undertaking and implementing its Research Agenda																
	08.05 01 10			28.1		30.9		50.2		52.1		9.6		11.0		181.9
	08.04 01 10			0		9.6		9.6		9.6		9.6		9.5		47.9
	08.07 01 30			0		4.8		4.8		14.4		19.0		24		67.0
	08.06 01 10			0		2.9		3.4		3.8		4.3		4.7		19.1
	06.06 01 10			0		19.2		19.2		24		28.4		28.9		119.7
	06.06 02 10			0		2.9		2.9		2.9		2.9		2.8		14.4
<b>Action 1 -</b>																
-Output 1 (*) (**)	Funding of research projects after calls for proposals															
<b>TOTAL COST</b>				28.1		70.3		90.1		106.8		73.8		80.9		450.0

(\*) 50% is funded by the FCH Joint Undertaking and minimum 50% comes as in kind contributions from industry. "Total cost" is the part funded via the EC budget. (See table in Annex). The projects are presumed to have an average lifetime of 3 years.

(\*\*) Contributions from the 6 mentioned budget lines will constitute one single budget in the FCH Joint Undertaking and is not dependent on covered area for a specific project.

<sup>39</sup> As described under Section 5.3.

8.1.1. The estimated distribution of the administrative costs from the budget contributions from DG RTD and DG TREN:

Budget source	2008	2009	2010	2011	2012	2013	TOTAL
Energy, RTD	1.900	1.100	1.800	1.900	0.400	1.000	8.100
NMP, RTD	0.000	0.400	0.400	0.400	0.400	0.500	2.100
Transport, RTD	0.000	0.200	0.200	0.600	1.000	1.000	3.000
Environment, RTD	0.000	0.100	0.100	0.200	0.200	0.300	0.900
Energy, TREN	0.000	0.780	0.780	0.970	1.585	1.185	5.300
Transport, TREN	0.000	0.120	0.120	0.120	0.120	0.120	0.600
<b>TOTAL, M€</b>	<b>1.900</b>	<b>2.700</b>	<b>3.400</b>	<b>4.190</b>	<b>3.705</b>	<b>4.105</b>	<b>20.000</b>

## 8.2. Administrative Expenditure

8.2.1. Number and type of human resources

Types of post		Staff to be assigned to management of the action using existing and/or additional resources ( <b>number of posts/FTEs</b> )						
		Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014 and later
Officials or temporary staff <sup>40</sup> (XX 01 01) ("Service from the Commission")	A*/A D	½	1	1	1	1	1	(1)
	B*, C*/ AST	½	1	1	1	1	1	(1)
Staff financed <sup>5</sup> by art. XX 01 02								
Other staff <sup>5</sup> financed by art. XX 01 04/05(At the JU)	AD	6	11	11	11	11	11	(11)
	AST	3	7	7	7	7	7	(7)
	external	2	2	2	2	2	2	(2)
<b>TOTAL</b>		<b>12</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>(22)<sup>41</sup></b>

<sup>40</sup> Cost of which is NOT covered by the reference amount.

<sup>41</sup> Any administrative expenditures beyond 2013 are only estimates.



8.2.2. *Description of tasks deriving from the action*

The tasks of the FCH Joint Undertaking are described under *Article I.2* of the Statutes. The specific tasks of the Executive Director and the Programme office are described under *Article I.6* of the Statutes.

8.2.3. *Sources of human resources (statutory)*

No new posts will be required from the Commission.

8.2.4. *Other Administrative expenditure included in reference amount*

*(XX 01 04/05 – Expenditure on administrative management):*

*EUR million (to 3 decimal places)*

Budget line (number and heading)	2008	2009	2010	2011	2012	2013	TOTAL
<b>1 Technical and administrative assistance (including related staff costs)</b>							
<b>FCH Joint Undertaking</b>	1.900	2.700	3.400	4.190	3.705	4.105	20.000
<b>Total Technical and administrative assistance</b>	1.900	2.700	3.400	4.190	3.705	4.105	20.000

Calculation– (for the duration of the FCH Joint Undertaking)

The indicative costs referred to in the table above concerns the Community contribution to the running costs of the FCH Joint Undertaking. This contribution represents 50 % of the total running costs.

Staff: average cost of € 117,000 per FTE per year for AD/AST, and € 63,000 per FTE per year for external.

Other running expenditure includes: evaluation by external experts, monitoring of projects, communication activities, organisation of meetings, travel and subsistence, IT development, auditing of projects, etc. These expenditures have been estimated to approximately 50% of the human resources costs.

8.2.5. *Financial cost of human resources and associated costs not included in the reference amount:*

EUR million (to 3 decimal places)

Type of human resources	2008	2009	2010	2011	2012	2013
Officials and temporary staff	0.117	0.234	0.234	0.234	0.234	0.234
Staff financed by Art XX 01 02 (auxiliary, END, contract staff, etc.)  (specify budget line)						
<b>Total cost of Human Resources and associated costs (NOT in reference amount)</b>	0.117	0.234	0.234	0.234	0.234	0.234

Calculation– *Officials and Temporary agents*

The human resources of section 8.2.1 are calculated as 117,000 euros per post FTE for AD/AST, and € 63,000 per FTE per year for external.

Calculation– *Staff financed under art. XX 01 02*

*Reference should be made to Point 8.2.1, if applicable*

It is foreseen that the detailed staffing of the JU and long term/short term budgets will be prepared in a Coordination and Support Action during 2007-2008. However, the setting up of the FCH Joint Undertaking and phasing in will require support from within the Commission. After the establishment of the JU the coordination of the Commission's interests, research topics, coordination with FP7 etc the equivalent of 1 FTE AD posts and 1 AST post is estimated to be required.

The FCH JU shall also be audited by the Commission's Internal Auditing Service in accordance with Article 185 of the Community Financial Regulation. However, no separate post for this need can be provided for in this LFS.

	2008	2009	2010	2011	2012	2013
Missions	0	0	0	0	0	0
Meetings & Conferences	0	0	0	0	0	0
Committees <sup>42</sup>	0	0	0	0	0	0
Studies & consultations	0	0.200	0.200	0	0.200	0.200
Information systems	0	0	0	0	0	0
<b>2 Total Other Management Expenditure</b>	0	0.200	0.200	0	0.200	0.200
<b>3 Other expenditure of an administrative nature</b>						
<b>Total Administrative expenditure, other than human resources and associated costs (NOT included in reference amount)</b>	0	0.200	0.200	0	0.200	0.200

Calculation - *Other administrative expenditure not included in reference amount*

*Consultations/evaluations/reviews*

The Commission shall initiate two evaluations of the FCH Joint Undertaking by independent experts and make two reviews.

Amount budgeted for the year concerned:

[...]

## 5. OTHER REMARKS

[...]

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<sup>42</sup> Specify the type of committee and the group to which it belongs.