



Project Number:	284941	Project Title:	Human Brain Project
Document Title:	HBP ERP Planning Document		
Document Filename <sup>(1)</sup> :	HBP_SP13_EPFL_140502_D13.4.1_Final.docx		
Deliverable Number:	D 13.4.1		
Deliverable Type:	Planning Document		
Work Package(s):	WP 13.3 (Tasks T 13.4.1, T 13.4.2, T 13.4.4)		
Planned Delivery Date:	M 6 / 31 March 2014		
Actual Delivery Date:	M 8 / 02 May 2014		
Author:	Kathleen ELSIG, EPFL (P1)	<i>Co-wrote paper</i>	
Author:	Chris EBELL, EPFL (P1)	<i>Co-wrote paper</i>	
Contributor:	Annika HJELM, EPFL (P1)	<i>Departmental coordination &amp; review</i>	
Contributor:	Sébastien GOUIN, EPFL (P1)	<i>Contributed IP and Tech Transfer content</i>	
Editor:	Guy WILLIS, EPFL (P1)	<i>Review and edit</i>	
Abstract:	<p>This report outlines the key objectives and plan for the HBP European Research Programme Office (ERPO) during the project's 30-month ramp-up phase.</p> <p>Members of the ERPO are the HBP's in-house experts in industry and government relations. Part of the External Relations Office, the ERPO will lead the HBP's efforts to establish European centres of innovation to facilitate European industry engagement and translate research outcomes into products, services and solutions.</p>		
Keywords:	European Research Programme Office; European Research Programme; Innovation; Commercialisation; Industry partnerships; international relations; European Union; European Commission		



## Document Status

Version	Date	Status	Comments
0.1	20 Mar 2014	Draft	
0.8	10 Apr 2014	Draft	
0.9	11 Apr 2014	Draft	Reviewed, edited and formatted by Guy Willis
1.0	20 Apr 2014	Draft	Reviewed by Henry Markram
1.1-1.3	24 Apr 2014	Draft	Partner types definitions added by A. Hjelm & G. Willis
1.4	28 April 2014	Final	Final copyedit, CL



## Table of Contents

1. Executive Summary .....	5
2. Introduction .....	6
3. ERPO Plan Overview .....	7
4. ERPO Plan Implementation .....	8
4.1 Identification of Relevant Stakeholders .....	8
4.1.1 Outputs .....	9
4.2 Development and Piloting of Different Types of Partnerships .....	10
4.2.1 HBP Core Project Participants .....	10
4.2.2 HBP Partnering Project Participants .....	10
4.2.3 HBP Collaborating Participants .....	10
4.2.4 Engagement categories and options .....	10
4.2.5 Outputs .....	11
4.3 Development and Piloting of Business Development Scenarios .....	11
4.3.1 Outputs .....	12
4.4 Development of Technology Portfolio .....	12
4.4.1 Outputs .....	12
4.5 Development and Testing of Communications Approach and Materials .....	13
4.5.1 Outputs .....	13
4.6 Identification of Relevant EU Departments and Policies .....	13
4.7 Monitoring of Progress and Identification of Key Lessons .....	14
4.7.1 Outputs .....	14
4.8 Development of an Operational Phase Strategy .....	14
4.8.1 Outputs .....	14
5. Critical Success Factors .....	15
6. Conclusion .....	15
Annex 1: KPIs Gantt chart .....	16



---

## *List of Figures and Tables*

Document Status.....	2
Table 1: High-level timeline for implementing the ramp-up phase plan .....	7
Table 1: Target groups and (initial) additional criteria for engagement.....	8



## 1. Executive Summary

In Europe and across the world, diverse initiatives are underway to generate a better understanding of the human brain. The data and information generated by these efforts are extensive, yet unsystematic and in need of integration. The possibilities stemming from a better understanding of the brain are enormous and will benefit the health and wellbeing of citizens around the globe.

The European Commission's investment in the HBP aims to bolster Europe's lead in the global effort to understand the human brain. The HBP is also part of the EU's long-term economic growth strategy. The HBP's European Research Program Office (ERPO) was established to integrate European and international research efforts on the brain, to facilitate European industry engagement, and to translate research outcomes into products, services and solutions.

The primary objective of the ERPO during the ramp-up phase of the project is to develop an ambitious and viable strategy with supporting tools to maximise the HBP's potential and impact. The strategy will be developed in an open process that includes 8 steps:

- 1) Identify relevant stakeholders and initiate dialogue
- 2) Develop & pilot partnership and engagement categories and options
- 3) Develop & pilot business development scenarios
- 4) Develop technology portfolio for discussion with partners
- 5) Develop & test communications approach and materials
- 6) Identify relevant Departments (DGs) of the European Commission, EU Policies, Programs and Instruments
- 7) Monitor progress, assess outcomes and outputs
- 8) Identify key lessons
- 9) Develop strategy for operational phase including KPIs.



## 2. Introduction

The Human Brain Project (HBP) is a ten-year research project, backed by the European Commission (EC), which aims to lay the foundations for a new approach to brain research. The HBP is driving integration of data and knowledge from different disciplines - currently fragmented - and catalysing a community effort to achieve a new understanding of the brain, new treatments for brain disease and new brain-like computing technologies. To support this effort, the HBP is creating an integrated system of ICT platforms and sharing these platforms with neuroscientists, clinical researchers and technology developers

Research in neuroscience, medicine, computing, brain-related research, and robotics benefits from substantial funding by the European Commission and national governments around the world, including Australia, China, EU member states, Japan and the USA. These individual efforts are generating substantial volumes of data, but their efforts have not been coordinated. A more integrated approach is needed if the scientific community is to arrive at a more comprehensive understanding of the brain.

The HBP's European Research Program Office (ERPO) integrates European and international research efforts on the brain, neuromorphic computing, and mental health. It supports alignment of regional, national, European and international initiatives with HBP goals, and associates with complementary programs in academia and industry to maximise the potential and impact of the HBP.

The members of the ERPO team are the HBP's in-house experts in industry and government relations. The ERPO will lead the HBP's efforts to establish European centres of innovation to facilitate European industry engagement and translate research outcomes into products, services and solutions to catalyse the competitive capacity of European industry and enhance the well being of European citizens. To ensure alignment and build synergies with EU strategies and priorities, the ERPO will work in close cooperation with the European Commission.

The ERPO is part of the Relations Office. Annika Hjelm leads the team and the overall strategy; Chris Ebell drives EC and International Relations; Kathleen Elsig leads Industry Relations; and Sébastien Gouin manages Intellectual Property and Technology Transfer. A position dedicated to EC Relations is expected to be filled by June 2014, and will complete the team.

While the HBP Governance structure and the Education Programme also belong to the ERPO within the WP, these topics are dealt with separately and are not covered in this report. The Education Deliverable for Month 6, D13.4.2 "Education Programme Coordination" will be submitted separately. Technology Transfer and IP belong to the Central Support WP, and the corresponding Month 6 Deliverable 13.3.3, entitled "Intellectual Property and Technology Transfer: Plan for use of Results", has also been submitted separately.

This report outlines the ERPO's key objectives and plan for the 30 months of the HBP ramp-up phase. This plan is based on the current knowledge and assessment of the ERPO team. Plans will be further detailed and adjusted as needed over the coming months and as experience and knowledge is gained.

Sections 2 and 3 summarise the ERPO's objectives and plan, while Section 4 includes details of the plan's implementation. Section 5 provides an overview of factors critical to the ERPO's success, and Annex 1 contains a Gantt chart for tracking this success in the form of Key Performance Indicators (KPIs).



## 3. ERPO Plan Overview

The ERPO will pursue the following plan in the ramp-up phase as part of the strategy development process.

- 1) Identify relevant stakeholders in the following target groups based on defined criteria:
  - a) European and international research institutions, initiatives and infrastructures
  - b) EU member states and regions
  - c) European industry including SMEs and large industry
  - d) International organisations including IGOs
  - e) Civil society including NGOs and interest groups
  - f) Funders (FLAG-ERA, EU research funding instruments, Venture Capital Firms, Early Stage funding mechanisms, philanthropy, HNW individuals, business incubators etc.)
- 2) Develop and pilot partnership categories and options for each of the target groups
- 3) Develop and pilot business development scenarios for the HBP
- 4) Develop technology portfolio
- 5) Develop and test an outreach approach and supporting materials for internal and external audiences
- 6) Identify and build relationships with other relevant Departments (DGs) of the European Commission to identify other EU policies, programs and instruments that could add value to the HBP
- 7) Monitor progress, assessing outcomes and outputs, reporting, identify key lessons.
- 8) Develop strategy for operational phase including KPIs.

	Action	Y1	Y2	Y3
1	Identify relevant stakeholders and initiate dialogue	█		
2	Develop & pilot partnership and engagement categories and options	█	█	
3	Develop & pilot business development scenarios		█	
4	Develop technology portfolio for discussion with partners		█	█
5	Develop & test outreach approach and materials		█	
6	Identify relevant Departments (DGs) of the European Commission, EU Policies, Programs, Instruments		█	
7	Monitor progress, assess outcomes and outputs, identify key lessons		█	█
8	Develop strategy for operational phase including KPIs			█

Table 1: High-level timeline for implementing the ramp-up phase plan



## 4. ERPO Plan Implementation

A Gantt chart has been developed describing in greater detail the timeline, milestones and KPIs for each of the activities below. The Gantt is included in Annex 1 of this document.

### 4.1 Identification of Relevant Stakeholders

The ERPO's process for identifying stakeholders, partners and relevant networks/programs will include:

- Discussions with HBP partners
- Working through existing networks
- Conference and event participation
- Internet research
- Tracking European and global trends through internet and literature research
- Following leads, responding to requests.

The ERPO will use the focus areas of the HBP - Neuroinformatics, Brain Simulation, Medical Informatics, High Performance Computing, Neuromorphic Computing, and Neurorobotics - as the main criteria for identifying stakeholders in key target groups. High-level example criteria for ERPO target groups are listed in the table below.

Target group	Additional criteria for engagement
European and international research institutions, initiatives, infrastructures	Working in areas that could add value to the HBP's efforts
EU member states and regions	Innovation policies and programs, research and innovation capacity in HBP core areas or relevant areas, innovation clusters
European industry including SMEs and large industry	Not arms related, Headquarters in Europe, working in core areas of the HBP
Inter-governmental organisations	Focusing on areas that could add value to the HBP's efforts, e.g. health, industry, economy and society, department or platform that HBP could interface with
Civil society including NGOs and interest groups	In Europe (priority), focusing on areas that could add value to the HBP's efforts, e.g. health, advocacy, SMEs, innovation, network in countries that HBP could work with or at the EU level
Funding (FLAG-ERA, EU research funding instruments, Venture Capital Firms, Early Stage funding mechanisms, philanthropy, HNW individuals, business incubators etc.)	Active in areas aligned with HBP

**Table 1: Target groups and (initial) additional criteria for engagement**





From these groups of stakeholders, the ERPO will identify potential partners and initiate dialogues with them (see Section 4.2).

The ERPO will also identify European programs and networks focusing on issues such as innovation, the digital agenda and industry. Programs and networks of particular interest include SMEs, education, and European regions that do not necessarily lie within the core HBP areas but could add value to the HBP. One example is EUREKA, a network fostering European R&D collaboration to strengthen the competitiveness of European industry. Other examples of networks and IGOs contacted to date include IMI, CERN, WHO, WIPO, and the Global Women's Leadership Forum.

An HBP external stakeholder database will be developed that includes the name, contacts and location of the partners; key areas of activity; and future interests as they relate to HBP. For industry, information collected will generate a business landscape that is relevant for the HBP including information on the R&D activities, product areas and priorities, CSR strategies, as well as locations of hubs or clusters in Europe. The ERPO team will use dedicated software for Client Relations Management for the database, which will facilitate linkages and enable the team to easily trace and present progress as the engagement moves from dialogue stage to an eventual partnership agreement.

In addition, the ERPO team will develop a dedicated website on "working with HBP" as part of the HBP portal. The site will be the first level interface and go-to information centre where potential partners can find information tailored to their "sector" and learn about ways to partner with HBP. A plan will be prepared during the ramp-up phase including resource needs.

An industry advisory group will be set up to provide guidance and feedback on the ways the HBP works with industry, including methods and opportunities for identifying and engaging with key industry sectors and market players representing large industry and SMEs in Europe. The group will receive input from the TTC and help define an innovation strategy, which will be launched at the beginning of the operational phase. The strategy will outline a plan and mechanisms for engaging with and integrating industry, for screening and using innovation and for promoting entrepreneurship.

An informal industry group consisting of HBP Subproject managers and Management Team members with experience working with industry will contribute to the initial industry engagement strategy, as well as the innovation strategy.

Additional advisory bodies and plans for engaging with specific groups and "thought leaders" may also be developed if deemed necessary or beneficial.

### **4.1.1 Outputs**

- ERPO 4.1.1 HBP external stakeholder database
- ERPO 4.1.2 Partnering with HBP website linked to the HBP portal
- ERPO 4.1.3 Industry advisory group
- ERPO 4.1.4 Innovation strategy
- ERPO 4.1.5 Business landscape



## 4.2 Development and Piloting of Different Types of Partnerships

As previously stated, the ERPO will identify stakeholder target groups, from which potential partners will then be selected. Three different types of partner are envisaged in the Operational Phase:

### 4.2.1 HBP Core Project Participants

These are full Members of the HBP Consortium (i.e. have signed the Consortium agreement) and participate in Subprojects, Work Packages or Tasks that form part of the Core Projects, as defined in the FPA Proposal that describes the Operational Phase of the HBP. In the Operational Phase, they will be funded by the EC's Horizon 2020 programme via a series of Special Grant Agreements (SGAs). Additional Core Project Participants may be recruited during the lifetime of the HBP.

### 4.2.2 HBP Partnering Project Participants

These are entities that contribute novel scientific and technological solutions facilitating achievement of the Core Projects' objectives; or that perform novel neuroscience, medical or computing research requiring the HBP Platforms and Consortium expertise. They are funded either by the EC's Horizon 2020 programme, or by EU Member States' national funding agencies, under the coordination of FLAG-ERA. They are not Members of the HBP Consortium, but would sign a formal partnership contract with the HBP Coordinator (EPFL) or an HBP legal entity.

### 4.2.3 HBP Collaborating Participants

These are entities that have a working relationship with the HBP, but that do not qualify to be Core Project Participants or Partnering Project Participants. They are funded by mechanisms outside Horizon 2020 and the FLAG-ERA network. They would sign a bilateral collaboration agreement, either with the HBP Coordinator, or with an individual HBP Core Partner. Collaborators are expected to fall into one of the following categories:

- Regional, national or international research programmes that complement the work of the HBP (e.g. the Australian, Chinese, Israeli and US brain research initiatives).
- Commercial companies that collaborate with the HBP, such as on research or commercialisation of HBP inventions and discoveries.
- Bodies outside the Horizon 2020 and FLAG-ERA structure that help to fund the HBP or donate in-kind support.
- Entities doing work for or supplying services to the HBP, for which they are paid by the HBP (e.g. subcontractors and consultants).

### 4.2.4 Engagement categories and options

General engagement categories, and more specific options for partnerships and other relationships, will be developed and piloted during the ramp-up phase. Definitions and criteria for each of the categories and options will be defined in Year 1, with pilots beginning at various times in Year 1 and Year 2. A final report, describing the lessons learned in the pilots, conclusions and recommendations for the strategy will be developed by the end of Year 2.

An important aim of the engagement categories and options will be to allow for diverse forms of engagement with HBP ranging from a general endorsement of HBP's key objective



to contribute to a common understanding of the brain through to strategic cooperation on research, technology development, commercialisation and otherwise.

This flexible approach and menu of engagement categories and options will allow HBP to engage quickly and easily with a diverse array of stakeholders across Europe and internationally and rapidly build a European and international network of partners and other relationships. National partnership events or meetings to foster the relationships and explore deeper forms of collaboration could be organised relatively quickly, for example, when HBP management travels to a certain country.

A description of the engagement options and a set of standard agreements will be developed and made easily accessible to the HBP Management Team along with the outreach material described in section 4.5.

Experience developing partnering or relationship options, for example with international research initiatives and institutes and with industry, is already underway and will be actively used to inform further pilot activities in the ramp-up stage.

Examples of networks and IGOs contacted to date include:

- Allen Brain Initiative
- US BRAIN Initiative
- Chinese Brain Initiative
- Australian Brain Initiative
- International Data-2-Knowledge Initiative

A plan for the pilots that considers on-going efforts will be developed by the end of year 1 including a timeline, success criteria, assessment and reporting and identification of key lessons learned.

#### **4.2.5 Outputs**

- ERPO 4.2.1 Description of engagement categories and options including definitions and criteria and draft governance documents
- ERPO 4.2.2 Partnership pilot plan
- ERPO 4.2.3 Report on experience from pilots, lessons learned, recommendations
- ERPO 4.2.4 Standard agreements
- ERPO 4.2.5 Process for tracking and managing partnerships and other relationships

### **4.3 Development and Piloting of Business Development Scenarios**

Business development models will be designed and piloted to the degree possible during the ramp-up phase. Goals of the business development efforts are to bring in funding to the HBP project to enhance the scope and depth of activities and to build a funding model that will sustain and expand the HBP after the Flagship funding ends.

A pilot will be initiated establishing a thematic HBP Innovation Hub to create a sustainable and enduring “lab-to-market” innovation chain and in a deliberate policy effort to deliver value across Europe. The mechanism for establishing the hub will be designed and tested beginning in year 2.



## 4.3.1 Outputs

ERPO 4.3.1 Business development models and tools (cost models, industry pay-per-use, collaboration agreements, etc.)

ERPO 4.3.2 Plan and pilot for innovation hubs in Europe

## 4.4 Development of Technology Portfolio

The ERPO will begin mapping the HBP innovation and technology in the HBP Subprojects in year 1. The information will be used to:

- Inform the innovation strategy
- Prioritise partner identification activities. For example, in areas where progress is being made most quickly and outcomes are most apparent, partners will be sought first
- Inform discussions with potential partners about needs and opportunities for cooperation, including commercialisation and use of the HBP platforms
- Update the website with information regarding partnering with the HBP
- Prepare a comprehensive portfolio of technologies, IP and commercially relevant innovations, as described in Deliverable 13.3.3 "Intellectual Property and Technology Transfer: Plan for use of Results". The ERPO will also help to generate value propositions and possibly draft business plans, as appropriate.

The process for collecting and compiling the information will include:

- Quarterly calls or meetings with the Subproject managers (building on the quarterly reporting) using a structured questionnaire sent in advance. Initial meetings will be held with the managers of the Subprojects likely to produce the earliest or most technology or IP such as SPs 7,9,10. The discussions will aim to understand possible IP opportunities, possible technology transfer and licensing opportunities, technology readiness levels, challenges, needs (funding etc.), and linkages (industry, other EU policy areas, etc.).
- Occasional participation in Subproject meetings if deemed relevant
- Dialogue with WP12, which is undertaking a survey to identify technologies with a potential impact on society, and the Science and Technology Coordination Committee, which is also monitoring technology developments in the HBP
- Development of a technology portfolio and individual "factsheets" for each Subproject using standard templates. The ERPO would like to identify and use software that allows progress and changes to be easily tracked, facilitates linkages with partner/ potential partner interests and generates the factsheets in the template.

### 4.4.1 Outputs

ERPO 4.4.1 Technology portfolio

ERPO 4.4.2 Quarterly factsheets



## 4.5 Development and Testing of Communications Approach and Materials

The ERPO will develop an outreach plan for the ramp-up phase. This plan will focus primarily on the various types of external stakeholders that comprise the ERPO's target audience. It will build our understanding of their needs and concerns while informing them about the needs and concerns of the HBP. Simultaneously, the ERPO will also inform the HBP Consortium about its work. At the end of the ramp-up phase, the ERPO will refine its outreach strategy for the operational phase, based on lessons learnt in the ramp-up phase. In preparing and executing its outreach activities, the ERPO will coordinate closely with the HBP Communications Team.

ERPO outreach in the ramp-up phase:

- External Stakeholders: the ERPO will begin outreach to its key target audiences. Tools and materials needed to support this activity will include:
  - A structured approach for interfacing with potential partners and collaborators
  - A tailored PowerPoint presentation
  - Value proposition leaflets
  - Material in the HBP website
  - A programme of meetings and events for external stakeholders.
- Internal HBP Audience: the ERPO will brief HBP management, Consortium members and the European Commission about its activities and progress, via periodic reports and *ad-hoc* presentations.

### 4.5.1 Outputs

ERPO 4.5.1 Plan for external outreach and internal briefing in the ramp-up phase

ERPO 4.5.2 Preparation of outreach support material

## 4.6 Identification of Relevant EU Departments and Policies

The ERPO will identify and build relations with relevant Departments of the European Commission such as DG Research and Innovation, DG Enterprise and Industry, DG Regional Policy, DG Education and Culture, DG Joint Research Centre, DG Connect in order to ensure alignment with EU policies and identify possibilities for cooperation with other programmatic areas of the Europe 2020 strategy, which may be relevant for the HBP. Relevant areas that have been identified to-date include: A digital agenda for Europe, an industrial policy for the globalisation area, and an agenda for new skills and jobs. This activity will help to promote the HBP within other EC Departments.

The ERPO will also seek to actively communicate with the HBP focal points in the EC, in cooperation with the HBP Management Team, to keep them updated on ERPO's activities and see input and guidance.

This process will include:

- Request from the HBP focal points in the EC suggestions for contacts and areas of potential synergy in other EC departments



- Meeting with representatives of the other DGs to present the HBP and explore potential synergies and cooperation opportunities
- Review the programs and strategies of the other Europe 2020 “Flagship areas” to understand key programs and identify areas of possible relevance for the HBP
- Identify potential EC funding instruments, such as the FLAG-ERA and CSA, that are part of other program areas

The information collected will be included in the stakeholder database mentioned in 4.1.

## 4.7 Monitoring of Progress and Identification of Key Lessons

In addition to the Gantt chart in Annex 1, an action plan will be developed for each of the eight (8) activity areas in this plan. The action plan will include objectives, actions, KPIs, milestones, individual responsible, resource needs, and a timeline.

The ERPO will produce monthly progress overviews and quarterly reports that also flag risks, highlight opportunities and identify lessons that will be helpful for developing the strategy for the operational phase.

### 4.7.1 Outputs

- ERPO 4.7.1 Eight (8) action plans
- ERPO 4.7.2 Monthly progress overviews
- ERPO 4.7.3 Quarterly reports
- ERPO 4.7.4 Final report on lessons learned and recommendations for the strategy

## 4.8 Development of an Operational Phase Strategy

The process for developing the strategy for the operational phase will be open and inclusive. Input will be drawn from the HBP Management Team, European Commission, HBP Executive Committee, external partners, lessons from the pilots, and others to be identified. A plan will be created for drafting the strategy.

An objective of the process will be to develop a strategy that builds on the experience gained in the ramp-up phase and has broad acceptance and buy-in from key stakeholders within the HBP Consortium, the European Commission, and key external stakeholder. This process may include:

- Develop plan for strategy development process
- Initiate strategy advisory group
- Confirm the primary objectives of the strategy and draft structure of the strategy
- First draft strategy and feedback
- Second draft strategy and feedback
- Final strategy and launch

### 4.8.1 Outputs

- ERPO 4.8.1 Final strategy
- ERPO 4.8.2 Business development manager position defined



## 5. Critical Success Factors

In order to carry out this work and build the framework for cooperation that the HBP Initiative depends on, we must consider the following critical success factors:

- Adequate resources (staff, funding) for the ERPO including for the pilots
- Access to external expertise as needed
- Commitment and support from the Executive Committee/Management Team - regular reviews, progress reports and decisions
- Transparency and openness - with key HBP functions/players to ensure all relevant intelligence/data is shared to move forward
- Clear and stable vision and decision-making.

## 6. Conclusion

This document presents the ERPO's main objective for the ramp-up phase - developing an ambitious and achievable strategy to be implemented at the start of the operational phase - and plan for achieving this objective. It takes into account the nature of the Flagship as a European policy instrument, the unique position of the HBP core program in the ERA, and the global strategic objectives of the HBP. The ERPO intends to work collaboratively and transparently with HBP management, the European Commission and HBP Executive Committee to ensure alignment within the HBP, and with EU policies and priorities in the interest of developing an ambitious yet viable strategy.



## Annex 1: KPIs Gantt chart

ERPO Output No.	Description	KPIs	Y1	Y2	Y3
<b>4.1</b>	<b>Partner identification</b>				
4.1.1	HBP external stakeholder	Database set-up		X	
4.1.2	Partnering with HBP website linked to the HBP portal	Website developed as part of HBP site		X	
4.1.3	Industry advisory group	Group established			X
4.1.4	Innovation strategy	Strategy developed			X
4.1.5	Business landscape	Landscape in draft form		X	
<b>4.2</b>	<b>Develop &amp; pilot engagement categories and options</b>				
4.2.1	Description of engagement categories and options including, definitions and criteria and draft governance documents	Categories, options and governance documents developed and all internally approved.		X	
4.2.2	Partnership pilot plan	Plan prepared and approved		X	
4.2.3	Report on experience from pilots, lessons learned, recommendations	Report prepared			X
4.2.4	Standard agreements	Standard agreements prepared			X
4.2.5	Process for tracking and managing partnerships and other relationships	Process finalized			X
<b>4.3</b>	<b>Develop &amp; pilot business development scenarios</b>				
4.3.1	Business development models and tools (cost models, industry pay-per-use, collaboration agreements, etc.)	Models and tools developed			X
4.3.2	Pilot for innovation hubs in Europe	Pilot plan approved and pilot launched		X	
4.3.3	Report on experience and lessons to date from the hub	Report produced and approved			X





ERPO Output No.	Description	KPIs	Y1	Y2	Y3
<b>4.4</b>	<b>Develop technology portfolio</b>				
4.4.1	Technology portfolio	Technology portfolio developed and format approved			X
4.4.2	Quarterly factsheets	5 factsheets		X X X X X	X
<b>4.5</b>	<b>Develop &amp; test communications approach and materials</b>				
4.5.1	Internal and external communications plan for the ramp-up phase	Communications plan produced and approved	X		
4.5.2	Structured approach and communications kit including PowerPoint value proposition leaflets and other materials	Structured approach (document) produced, communications kits produced for each target audience including PowerPoint leaflet, value proposition and other materials			X
<b>4.6</b>	<b>European Commission DGs and EU Policies, Programs, Instruments</b>				
4.6.1	Include information in the partner database	Information included in the database			
<b>4.7</b>	<b>Monitor progress, assess outcomes and outputs, identify key lessons</b>				
4.7.1	Eight (8) action plans	Action plans produced and approved		X	
4.7.2	Monthly progress overviews	20 monthly progress overviews		X X X X X X	X
4.7.3	Quarterly reports	5 quarterly reports		X X X X X	X
4.7.4	Final report on lessons learned and recommendations for the strategy	One final report, approved			X
<b>4.8</b>	<b>Develop strategy for operational phase including KPIs</b>				
4.8.1	Strategy developed	Strategy approved			X
4.8.2	Business development manager position defined	Business development manager hired			X