



EUROPEAN COMMISSION  
JOINT RESEARCH CENTRE

# **Joint Research Centre (JRC)**

## **Management Plan 2012**

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## 1. PART 1 – MISSION STATEMENT

"The **mission** of the Joint Research Centre (JRC) is to provide customer driven scientific and technical support for the conception, development, implementation and monitoring of European Union policies. As a service of the European Commission, the Joint Research Centre functions as a reference centre of science and technology for the Union. Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national."<sup>1</sup>

## 2. PART 2 – THIS YEAR'S CHALLENGES

The JRC Management Plan 2012 (MP 2012) reflects the recent repositioning of JRC activities around the Commission's policy priorities. These priorities have been highlighted by the President of the Commission in his State of the Union address and subsequent letter to European Parliament (EP) President Buzek, with key proposals in the Commission's 2012 Work Programme which was adopted by the College on 15 November.

These priorities reflect the **major areas of concern to the EU** at present, i.e. **financial stability and the lack of economic growth and the Union's response to these, in particular through the seven flagships of the EU2020 strategy**. In this context JRC's scientific support will be adapted in order to promptly and adequately respond to the scientific and technical information needs of policy makers in different DGs, to support solutions.

Since last spring the Director General has started a process of meeting all key policy Directorate Generals (DG) in order to well identify these priorities and further feedback. This was completed by a second round of consultations at DG level in order to take customer feedback fully into account at the level of the JRC Management Plan and Work Programme (WP)<sup>2</sup>. Moreover, the new system of single Memoranda of Understanding (MoU) between the JRC and each policy DG covering priority activities for every year will provide a clearer framework for customer support.

In addition, the MP 2012 and Work Programme 2012 integrate the results from ongoing JRC contacts with Member States (MS), European Parliament (EP), the industry and scientific community. Permanent contact has been maintained with the Commissioner and Cabinet on priorities, particularly for Horizon 2020, the new Framework Programme for Research and Innovation (2014-2020).

Generally, these priorities represent a stronger focus on scientific support to policy in particular:

- **Financial stability and the stimulation of economic growth (in particular through support to the Europe 2020 strategy and the new strategic initiatives in the Commission 2012 Work Programme).**
  - Regarding the financial stability and smart growth, the JRC will respond to these concerns by further development of financial and economic models.
  - New avenues to stimulate growth will be pursued, in particular eco-industries and the bio-economy.

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<sup>1</sup> The JRC mission is displayed in JRC publications since 1999 and can be found on the JRC website: <http://ec.europa.eu/dgs/jrc/index.cfm>

<sup>2</sup> The complete draft work programme is available on-line, via the JRC Project Browser (<http://jpb.jrc.cec.eu.int/jpb>)

- In the context of the Innovation Union, Foresight studies will ensure the identification of key sectors and areas and which types of products/markets will open new routes for smart, competitive and inclusive growth.
- Further support will be given to the new strategic initiatives in the Commission 2012 Work Programme (such as those related to the **European Year of Water, review of the REACH** (Registration, Evaluation, Authorisation and Restriction of Chemicals) **legislation**, and the **reform of the Common Agricultural Policy**), as well as a limited number of other priority areas such as, energy, clean transport, environment and climate change, agriculture and food security, and information and communication technologies (ICT) (refer to specific objective 1);
- **Global issues** covering natural disasters and crisis management including **space weather**, newly-developed **crisis alert tools**, and the work on food security and energy for Africa (refer to specific objective 2)
- **Safety and security** including i.e. support to the **post-Fukushima** assessment of European nuclear power plants ("stress tests") as well as new activities related to **public health and nutrition** (refer to specific objectives 3 and 14).

Developments of JRC's capabilities in **economic analysis** and **analysis of policy options, horizon scanning & foresight** and anticipation of new policy needs as well as related **modelling**, the compilation of **facts & figures**, active support to the **standardisation process** and the **dissemination of scientific information** will be key for delivering on the new orientations. Moreover, in 2011 the JRC developed, in association with DG Research and Innovation, its support to the **implementation of the Innovation Union** flagship initiative, and the **European Research Area**. This work will be enhanced in 2012.

Horizon 2020 will play a crucial role for the JRC in supporting Europe 2020. Hence, supporting the **Commission discussion and decision making process of the legislative texts of Horizon 2020 in the European Parliament and Council** will be a key challenge throughout 2012. It is fundamental to maintain active two way-information flows between the JRC and key stakeholders, i.e. decision makers in the European Parliament, the Council of the EU and in the Member States.

Regarding networking related to the scientific Community as well as **innovation**, the JRC will develop a strategy for its recently concluded collaboration agreement with the **European Academies Science Advisory Council** (EASAC) and for the development of a **European Technology Transfer Network** (TTO-CIRCLE) pooling the major public research organisations in Europe. Moreover, in line with a draft Communication in preparation, the JRC will put in place a "**Central Intellectual Property (IP) Service**" to provide technical support to all Commission services in the management of their intellectual property rights (IPR) and promote a culture of protection and respect of IPR in their daily work.

The JRC will also reinforce and streamline the management of **international relations** on a limited number of priorities, by focusing on the countries and international organisations, which have greatest scientific potential. In particular, the letter of intent agreed on 29/11/2011 regarding inter-operability centres on **electric-vehicles** and **smart grids** between the United States Department of Energy (DoE) and the EU will represent a significant priority.

Regarding **organizational efficiency**, the JRC will face two challenges in 2012: a) strengthening the horizontal coordination of its **administrative support functions** in order to maximise their resource efficiency; this will allow research sites and institutes to focus on their core business and facilitate scientific work across sites and institutes on a multi-disciplinary basis; and b) the phasing-in of **upgraded action planning, reporting and evaluation tools**.

Horizon 2020 includes the scope and a clear set of criteria for public-public (P2P) and public-private partnerships (PPP) as implementing tools for research and innovation activities. In addition to PPPs already launched in the 7<sup>th</sup> Framework Programme (FP7), new PPPs and P2Ps are expected to be set up under the Strategic Energy Technology (SET)-Plan, Strategic Transport Technology (STT)-Plan and the Innovation Union Flagship. The JRC will consolidate and where necessary expand its role of supporting these "new instruments" through participation and involvement in strategy setting, monitoring, assessing and providing information for decision-making in PPPs and P2Ps, along with and in addition to the S&T support delivered to these bodies through in-house research and development (R&D).

### **3. PART 3 – GENERAL OBJECTIVE BY POLICY AREA**

#### **3.1. General objective (GO)**

The Joint Research Centre, as the European Commission's in-house science service, has the General Objective to

*“Provide integrated and pro-active scientific and technical support to the European policy making process”.*

The orientations of support of this general objective reflect the recent repositioning of JRC activities around the Commission's policy priorities. The latter have been highlighted by the President in his State of the Union address and subsequent letter to EP President Buzek, with key proposals which are included in the Commission's Work Programme 2012.

The main JRC priorities represent a stronger focus on scientific support to policy in particular:

- **Europe 2020**, including the new strategic initiatives in the Commission 2012 Work Programme (such as initiatives related to the European Year of Water, the reform of the Common Agriculture Policy and the review of the REACH legislation), and other priority areas such as innovation, energy, clean transport, environment and climate change, and ICT;
- **Global issues** including natural disasters and crisis management;
- **Safety and security** including ICT security, public health and nuclear safety and security.

In order to monitor and evaluate its policy support along these orientations, the JRC has developed a series of dedicated impact indicators (see table 1). They are all part of the JRC set of core indicators (see chapter 3.2 below).

Specific objectives and related initiatives of policy support are described in chapter 4.1 alongside the relevant productivity indicators.

### **3.2. Indicators**

Based on the balanced scorecard concept the JRC's set of core indicators comprises indicators on impact, productivity, efficiency and public visibility.

The indicators presented in the MP allow monitoring the implementation of JRC support to the Commission's priorities of Europe 2020, Global Issues as well as Safety and Security. Based on a bi-monthly JRC dashboard monitoring system the new JRC set of indicators is of practical relevance for checking if the organization stays on course with respect to its strategy goals.

The MP2012 core indicators are summarised in the table below and are reflected at the level of the specific objectives throughout this report.

| <b>POLICY AREA:</b><br><b>JRC scientific policy support occurs across almost all policy areas of the EC<sup>3</sup></b>  |   |   |  |   |
|--|---|---|--|---|
| <b>GENERAL OBJECTIVE</b>   | <b>Impact indicators</b>  |   |  |   |
|  | <i>Indicators</i>   | <i>Target (long-term)</i>   | <i>Milestones/ targets for 2012 (In parenthesis target for 2011)</i> | <i>Current situation (In parenthesis value for previous year)</i>   |
| <b><i>“Provide integrated and pro-active scientific and technical support to the European policy making process”</i></b> | Policy support impact indicator (overall)<br><br><b>"The proportion of actions having a tangible impact on EU policy maker"</b>   | Target to be detailed after further investigation   | Total proportion 88% (78%)   | Total proportion 86% (73%)  |
|  | Policy support impact indicator (detailed)<br><br><b>"The number of occurrences of a tangible impact at the level of policy makers using a list of pre-defined criteria"</b><br><br>(Indicator broken down into the different types of impact) <sup>4</sup>                               | Target to be detailed after further investigation   | 250 (n.a)  | 235 (n.a.)  |
|  | Reference reports (total count)<br><br><b>"Number of JRC Reference Reports"</b><br><br>(Scientific/technical reports in support of EU policy-making issued by the JRC that are likely to be used, at high level, as a source of reference in policy or scientific arenas outside the JRC) | 10  | 10 (10)  | 6 (5)   |
|  | Access to JRC websites and publications repository<br><br><b>"Number of visitors to the JRC website and publications repository"</b>  | Since the JRC will also publish a new web-site, no target is given for 2012.  | n.a.   | 1.1million (3.3 million)<br><br>This indicator has been calculated in 2011 with a different methodology than in 2010, hence the figures are not comparable. |
|  | Press coverage<br><br><b>"Number of coverage pieces in top tier media"</b>  | Continued efforts in top tier media will be complemented by new efforts on popular, national and regional media. Hence, the adaptation of the target. | 180(180)   | 99 (120)  |

Table 1: Impact indicators reflecting JRC's General Objective

<sup>3</sup> EC: European Commission

<sup>4</sup> Throughout this document, the definition of the indicators is given in bold face, whereas additional comments are displayed below the definition in parentheses and italics.

**MP 2012 core indicators**

| Management information need                    | Indicators proposed   | Definition   | Value 2010  | Value Nov 2011<br>(in parentheses target for 2011) | 2012 Target          | Target related comments  |
|--|---|--|-------------|--|----------------------|--|
| <b>Perspective 1: Outputs &amp; impact</b>     |   |  |             |  |                      |  |
| <b>Policy support productivity</b>             |   |  |             |  |                      |  |
|  | Policy support deliverables (total count)                   | Number of policy support deliverables  | n.a.        | 1550   | 1586                 | In 2012 the JRC will phase in new deliverable categories. The given figure represents planned deliverables.  |
| <b>Impact of policy support</b>                |   |  |             |  |                      |  |
|  | Policy support impact indicator                             | "Total proportion of actions with tangible policy impact based on JRC's annual internal review"<br><br>And<br><br>"Number of occurrences of tangible specific impacts based on the impact categories used in JRC's annual internal review" | 73%         | 86% (78%)  | Total proportion 88% | In the previous years, there was on average an increase of roughly 5%/a. However, it can be expected that a plateau will be reached soon, and that the values will increase more slowly if at all.       |
|  | n.a.  | n.a.   | n.a.        | 235 (n.a)  | 250 (n.a)            |  |
| <b>Scientific productivity</b>                 |   |  |             |  |                      |  |
|  | Peer-reviewed publications (total count)                    | Number of peer-reviewed publications   | 539         | 508 (640)  | 640                  |  |
| <b>Anticipation function</b>                   |   |  |             |  |                      |  |
|  | Reports and identification of new research areas            | Number of reports  | n.a.        | 1 (3)  | 3 reports            |  |
| <b>Reference reports</b>                       |   |  |             |  |                      |  |
|  | Reference reports (total count)                             | Number of reference reports (Scientific/technical reports in support of EU policy-making issued by the JRC that are likely to be used, at high level, as a source of reference in policy or scientific arenas outside the JRC)             | 5           | 6 (10)   | 10                   |  |
| <b>Income from additional activities</b>       |   |  |             |  |                      |  |
|  | Cashed competitive income                                   | Annual cashed income from activities outside institutional budget  | 15%         | 12,1% (15%)  | 15%                  | The 15% target is fixed under the FP.  |
| <b>Scientific collaboration and networking</b> |   |  |             |  |                      |  |
|  | Peer-reviewed publications co-authored with non-JRC authors | Proportion of peer-reviewed publications co-authored with non-JRC authors/total number of peer-reviewed publications   | 71,20%      | 80,8%  | >80%                 |  |
|  | International collaborations                                | Proportion of peer-reviewed publications co-authored with organisations from countries outside ERA/total number of peer-reviewed publications  | 18%         | 20,46%   | no target defined    |  |
| <b>Public visibility</b>                       |   |  |             |  |                      |  |
|  | Press coverage  | Number of coverage pieces in top tier media  | 120         | 99 (180)   | 180                  |  |
|  | Access to JRC websites and publications repository          | Visitors to the JRC website and publications repository  | 3.3 million | 1.1 million (3 million)                            | n.a.                 | This indicator has been calculated in 2011 with a different methodology than in 2010, hence the figures are not comparable. Since the JRC will also publish a new web-site, no target is given for 2012. |
| <b>Training and visiting scientists</b>        |   |  |             |  |                      |  |
|  | Visiting researchers  | Number of PhD students, post-docs, senior visiting scientists and trainees   | 584         | 743  |                      |  |
|  | PhD students  | Number of PhD students   | 62          | 72   | 80                   |  |
|  | PhD thesis  | Number of PhD thesis published by the JRC  | 7           | 7  |                      |  |

| <b>Perspective 2: Organisational efficiency</b>                  |  |  |   |  |   |
|--|--|--|---|--|---|
| <b>Proportion of scientific staff</b>                            |  |  |   |  |   |
|  | Proportion of scientific staff                 | Total head count of scientific units / total JRC head count (statutory and non statutory staff)  | 68,60%  | 68,2% (69%)  | 69%   |
| <b>Recruitment</b>   |  |  |   |  |   |
|  | Timeliness of recruitment                      | Average of "number of working days from the publication of the deadline of the vacancies or calls until the date of distribution of relevant administrative act";<br>Timelines of recruitment of internal/external procedure | Internal/External<br>60/130                                     | Internal/External<br>55 / 111<br>(60/120)  | 60/120  |
| <b>Payments</b>  |  |  |   |  |   |
|  | Timeliness of payments                         | Proportion of payments done within legal time limits - (Excluded salary, mission, cross delegated, and hors budget payments)   | 95,6%   | 94,25%<br>(100%)   | 100%  |
| <b>Procurement</b>   |  |  |   |  |   |
|  | Procurement timing                             | Procurement time to successful procurements (average days; from the publication date in the Official Journal to the contract signature date)   | 153   | 154<br>(110)   | 110 days  |
| <b>Perspective 3: Working environment</b>                        |  |  |   |  |   |
| <b>Staff satisfaction</b>  |  |  |   |  |   |
|  | Overall staff satisfaction                     | Result from relevant staff satisfaction survey question  | 69%<br>(2007 survey)  | 68%<br>(71%)   | 71%   |
| <b>Staff composition</b>   |  |  |   |  |   |
|  | Proportion of staff on non permanent positions | Number of staff on all non permanent positions / total staff   | 37,50%  | 36,8%<br>(37%)   | 37%   |
| <b>Equal opportunities</b>                                       |  |  |   |  |   |
|  | Gender balance in AD grade recruitments        | Number of women recruited on AD posts / total staff recruited on AD posts  | 19,50%  | 23%<br>(50%)   | 50%   |
|  | Representation of women in organigram posts    | Proportion of (number of women/ (number of women + number of men) ) in organigram posts  | 9% Senior management posts<br><br>15,9% Middle management posts | 10% Senior management posts occupied by women<br><br>14,9% Middle management posts occupied by women | at least 18% senior management posts occupied by women.<br><br>at least 23% middle management posts occupied by women |
| <b>Staff development/training</b>                                |  |  |   |  |   |
|  | Training evaluation                            | Result of the question in the post training questionnaire 'How well were personal objectives met?'<br>Positive answers / total answers * 100%  | 94,70%  | 88,9%<br>(90%)   | 90%   |
| Note: Value 2010 are as presented in AAR 2010 / MP 2011 reports. |  |  |   |  |   |

Table 2: JRC core indicators

#### 4. PART 4 – SPECIFIC OBJECTIVES (SO) FOR OPERATIONAL ACTIVITIES

The main thrust of fulfilling JRC's core objective i.e. the scientific support to European policy making is provided by its 109 scientific actions. Their work is described and structured in the JRC's Annual Work Programme (AWP), outlining in great detail the specific objectives that have been agreed with policy DGs. Whereas the AWP contains a wealth of information, the present Management Plan, in order to provide the readers with a shorter and clear account of the JRC's objectives for the next year, has the following structure:

- Chapter 4.1 describes in a succinct format the specific objectives related to implementing JRC's scientific work programme covering scientific policy support underpinned by long-term research in the service of the Commission's priorities of Europe 2020, Global Issues as well as Safety and Security:

- Areas which will be strengthened throughout 2012 are described in more detail with the appropriate milestones and deliverables.
- Continued actions that derive from long-term commitments are reflected through the JRC's policy support productivity indicator measuring the 'Number policy support deliverables'. The scope of the actions will be adapted annually and where appropriate, to Commission needs. For further details and action level objectives the reader is referred to the JRC Annual Work Programme 2012<sup>5</sup>

- In order to maximize the impact of the JRC's work, new tools aiming at harvesting the benefits of competences synergies across the JRC have been put into place (e.g. modelling, foresight & anticipation) or have been planned (Facts & Figures) for 2012. Enhanced user relations, exploitation of intellectual property rights, as well as networking with relevant actors across Europe and internationally regarding research and innovation play a key role in this respect as well. Specific objectives related to these activities are mentioned in Chapter 4.2.

- Since the 7<sup>th</sup> Research Framework Programme is approaching its end in 2013, preparations for Horizon 2020, the European Union's Programme for Research and Innovation need to be undertaken. This is described in Chapter 4.3.

- Finally, there are a number of further obligations and objectives, which are described in chapter 4.4.

Result indicators and expenditure outputs are indicated where applicable.

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<sup>5</sup> <http://projects.jrc.ec.europa.eu>

#### **4.1. Specific Objectives related to JRC's support of Commission priorities**

The JRC's Annual Work Programme 2012 (AWP 2012, <http://jpb.jrc.cec.eu.int/jpb>) reflects the recent repositioning of JRC activities around the Commission's policy priorities as stated in the Europe 2020 strategy, the President's State of the Union address and the Commission 2012 Work Programme (CWP 2012).

With a view to achieving the JRC's General Objective, the AWP 2012 is structured into 109 scientific actions along three key orientations in terms of priorities and their associated specific objectives:

- Provide scientific policy support to the Europe 2020 flagship initiatives
- Provide scientific policy support to global issues (including security, environment, development aid)
- Provide scientific policy support to Safety and Security (including nuclear safety and security)

The JRC's AWP is financed primarily under the 7<sup>th</sup> Framework Programme (FP) for Research (EC and Euratom) with the former running until and including 2013. After its initial expiration in 2011, the FP7 Euratom is in the decision process for extension until and including 2013. Pending adoption, in 2012 the JRC will start to implement obligations under the FP7 Euratom extension.

**SPECIFIC OBJECTIVE 1:****Provide scientific policy support to Europe 2020 initiatives****Brief description:****1) Smart Growth**

- Ü Scientific support to the *Innovation Union flagship initiative* will be strengthened, with particular attention to the implementation of the relevant Innovation Union commitments; this work will be undertaken in cooperation with DG Research and Innovation.

The scientific support to the Innovation Union will be implemented in 2012 through:

- The elaboration of a joint work plan together with DG Research and Innovation, to support the Innovation Union as well as the European Research Area
- The monitoring of the implementation of the Innovation Union as well as the assessment of its impact
- The definition of drivers of research and innovation and the production of the R&D score board
- The production of a report on the monitoring of university performance in Europe

- Ü Scientific support will also be strengthened for the *regional aspects supporting innovation (Smart specialization)*, focusing on:

- The economic modelling at regional level based on the regional holistic model (RHOMOLO) and its further development to permit a higher degree of sectoral disaggregation

- Ü Directly contributing to the standardisation strategy 2020, the JRC Standardisation Task Force will coordinate the *standardisation process* support focussing on standard methods, pre-normative research, reference materials and reference datasets.

This support will be implemented through:

- The organization of a joint workshop with CEN<sup>6</sup>/CENELEC<sup>7</sup> and ETSI<sup>8</sup>
- The preparation of a progress report on JRC standardisation activities
- The definitions of the design and implementation principles of the JRC Reference Data Infrastructure
- Regarding development of international standards, the European Solar Test Installation (ESTI) will shift its focus towards new and emerging photovoltaic materials and standards towards lifetime extension of PV products to 40+ years. New experimental facilities will be commissioned at ESTI.
- Chairing of and contributing to ISO/IEC Technical Committee 82, Solar Photovoltaic Systems, as well as contribution to CEN/CENELEC parallel Technical Committee 82

- Ü Quantitative and qualitative socio-economic research will focus on the seven pillars of the *Digital Agenda* including the *Digital Single Market*.

The research work will focus on:

- The conceptual, methodological, quantitative and exploratory analysis of the Digital Economy alongside a quantitative assessment of the research and innovation capacities of digital industries and the impact of ICT on society.
- The analysis of the role of ICT as an integral component of both formal and non-formal education, learning, training and skilling processes
- The study of the impact of ICT in the context of immigrant and migrant populations, careers and youth at risk.

<sup>6</sup> CEN: Comité Européen de Normalisation

<sup>7</sup> CENELEC: European Committee for Electrotechnical Standardization

<sup>8</sup> ETSI: European Telecommunications Standards Institute

## 2) Sustainable Growth

Ü In the context of the *EU 20/20/20 energy targets*

- Ø Research on *energy efficiency* and security will be strengthened through the establishment of bureaus with an initial focus on end-use efficiency and monitoring of EU and Member States action plans.
- Ø Support to *renewable energy sources* will be further enhanced
- Ø In terms of energy security, the focus will continue to shift towards networked infrastructures.
- Ø Resource maps for solar and wind energy will be updated, new resource maps on 4 new bio-energy pathways will be produced

Concrete actions that will be taken include:

- The elaboration of guidelines and standard for energy efficiency in buildings and construction materials
- The production of monitoring studies on energy efficiency as well as
- The modelling studies on energy security with a focus on gas supply and smart grids
- The preparation of three studies on shale gas covering the economic and environmental impacts

Ü *E-mobility and clean transport* policies will be promoted through information system development supporting the Strategic Transport Technology Plan whilst research will focus on the production of studies on the *electrification of transport*.

Ü *Sustainable production and consumption* activities will evolve in line with the priorities of resource efficiency and product policies, in particular through the adaptation / consolidation of bureau-type structures. The JRC will respond to the increasing political attention to critical raw materials by the initiation of relevant life-cycle studies.

The expected scientific support efforts to be provided relate to:

- The production of studies on a wide range of issues going from resource efficiency, life-cycle assessment to manufacturing and service sectors, European consumption and international trade, the potential of market based instruments and the assessment on the EU's vulnerability to climate change, including options for adaptation, feasibility and costs
- The completion of the FIDELIO<sup>9</sup> model
- The elaboration of a model-based baseline scenario of water policy and socio-economic scenarios of water use, as well as the analysis of options for balancing competing demands of limited and vulnerable water resources for agriculture, aquaculture, energy, industry, etc. taking into account impacts on ecosystem functions and services.
- The development of an optimisation model allowing the selection of measures affecting water availability and water demand based on environmental and economic considerations.
- The scientific contribution to the preparation of the 2012 Commission's Blueprint for the future of European Waters and the Impact Assessment of the Blueprint.
- The PESETA<sup>10</sup> II study with impact assessments of climate change on agriculture, water resources and ecosystem services

Ü The scientific support to key aspects of *financial stability* will be further enhanced, in particular through:

- The further development of the macro-economic model SYMBOL<sup>11</sup> and the stability analysis of the financial system
- The pursuit of the development of the QUEST III model and the analysis of the stability and growth pact
- The analysis of the deficiencies of the financial sector and of the interconnections between sovereign debt and the banking crisis
- The model-based analysis of the banking stress tests following contacts with the European Banking Authority and the European Central Bank

<sup>9</sup> FIDELIO: Full Interregional Dynamic Econometric Input-Output model

<sup>10</sup> PESETA: Projection of Economic impacts of climate change in Sectors of the European Union based on bottom-up Analysis

<sup>11</sup> SYMBOL: Systemic Model of Bank Originated Losses

### 3) Inclusive Growth

ü New research will be initiated on *indicators for fairness and balance*.

Concrete efforts will be provided for:

- The production of a report on indicator development
- The preparation of studies on composite indicators applied to societal resilience

#### *Main outputs in 2012*

##### 1) Smart Growth

- Consolidated Innovation Union Information and Intelligence System(I3S) and smart specialisation platform
- Standard measurement methods, reference materials and reference datasets provided, as targeted direct support to European policy
- Analysis of all aspects of the Digital Economy and of the global ICT impact on society

##### 2) Sustainable Growth

- Monitoring studies on energy efficiency and of modelling studies on energy security with a focus on gas supply and smart grids
- Support to the Strategic Transport Technology Plan and studies on the electrification of transport
- Bureau-type structures setup
- Life-cycle studies on raw materials

##### 3) Inclusive Growth

Studies on indicators for fairness and balance

| <i>Result Indicators</i>                       | <i>Latest known result<br/>(end November 2011)</i> | <i>Target 2012</i> |
|--|--|--------------------|
| <b>“Number of Policy support deliverables”</b> | 1100   | 1115               |

*Main expenditure-related outputs in 2012 according to FP7 structure: See tables at the end of chapter 4.1*

**SPECIFIC OBJECTIVE 2:****Provide scientific policy support to global issues (security, environment, development aid)****Brief description:**

The main driver for support to **global issues (security, environment, development aid)** will be the further development/use of ICT and geo-spatial capabilities.

**1) Security:** Support to the Global Monitoring for Environment and Security (GMES) and Galileo will be provided along a number of lines: technical services for the preparation of the operational phase of GMES; improved maritime situational awareness, in particular for the fight against piracy.

Research will also focus on the robustness of space-based communications including their sensitivity to **space weather** (electro-magnetic interference caused by solar activity).

New crisis analysis/alerting tools (e.g. tsunami and hurricane inundation modelling and tools for human settlement analysis) will be delivered to EU and international stakeholders, and cooperation with **Brazil** on this matter will be initiated.

In addition, JRC will support scientific support for the EU internal market for security.

Expected outputs in 2012 include in particular:

- The inundation modelling integrated in the JRC/United Nations Global Disaster Alert Coordination System (GDACS) leading to improved impact assessments for tsunamis and hurricanes
- Improved tsunami early warning/alerting capability in the Eastern Mediterranean Sea through joint cooperation with authorities in Greece, Turkey and Italy to share improved tsunami scenario database, adapted JRC tsunami analysis tool and real-time seismic and sea-level data.
- Novel automated information image extraction/analysis tools for human settlement analysis at multi-scale, from city and regional to global.
- Coordination of the technical implementation of the GMES Initial Operations Emergency Management Service (GIO-EMS) and integration in DG ECHO and EEAS services
- Support provided to the Service for Foreign Policy Instruments and the European External Action Service (EEAS) in the implementation of the Kimberley Process Certification Scheme.
- Extension of the coverage of the European Forest Fire Information System (EFFIS): (fire danger, burnt area mapping, fire damage assessment) to EU, EU neighbour countries and Middle East and North African countries
- First pilot operation of the Global Fire Danger system, as an extension of the EFFIS methodology worldwide in collaboration with the European Centre for Medium-Range Weather Forecasts (ECMWF).

**2) Environment/Development aid:** The JRC will consolidate its sector-driven work on monitoring natural resources such as forests, soils, water, food supply and renewable energy sources, to a global scale, by building on its long-standing expertise in space applications (e.g. GMES), bio-physical modelling, standard-setting, hazard prevention and early warning and developing information systems supporting Europe and the EU's development assistance partners. In response to a request by Commissioner Piebalgs, the JRC will step up its work on food security and renewable energy for Africa.

Main efforts in 2012 will be carried out for:

- Training to DG DEVCO, DG ECHO and EEAS services and the EU Member States on the (Transparent Aid) (TR-AID) system which shall also be enriched with data from several EU Member States.
- Completion of the Soil Atlas of Africa
- First implementation of integrated agricultural resource sustainability indicators at a global scale for major production systems (cereals, rice, oilseeds) and food insecure areas
- In collaboration with DG AGRI, feasibility phase of extension crop forecasting system to a global system with a view to operational implementation in 2013.
- Study on the effect of global climate change policies on air quality in different world regions
- Research to develop next generation information infrastructure (Digital Earth) ensuring coherent and integration of on-going developments
- INSPIRE Conference in Istanbul, June 2012
- Renewable Energy: refinement of solar, wind, hydro energy resource maps, development of 4 pathways Bio-Energy resource maps, estimation of costs and comparison with conventional energy sources

*Main outputs in 2012*

**1) Security**

Continued development and use of geospatial capabilities

**2) Environment/Development aid**

JRC's expertise and applications for crisis alert and resource monitoring consolidated and extended to a global scale

| <i>Result Indicators</i>                       | <i>Latest known result<br/>(End November 2012)</i> | <i>Target</i> |
|--|--|---------------|
| <b>“Number of Policy support deliverables”</b> | 175  | 179           |

*Main expenditure-related outputs in 2012 according to FP7 structure: See tables at the end of chapter 4.1*

**SPECIFIC OBJECTIVE 3:****Provide scientific policy support to safety and security****Brief description:****1) Non-nuclear Security**

The main challenges to be addressed in non-nuclear security will remain the protection of critical infrastructures, including development of common testing methodologies for aviation security equipment, performance standards for detection of explosives in general, and due account being taken through research on risks such as **cyber attacks and cyber crime**.

In cooperation with DG HOME, support will be provided to Member States authorities in the use of open source information/analysis tools through training and targeted adapted installations; and support to the new DG HOME "strategic analysis and response" capability.

Support to OLAF<sup>12</sup> and EU Member States in the field of customs anti-fraud will be reinforced.

Policy support outputs planned for 2012 include:

- Next pan European cyber-security exercise
- Experimental exploitation of countermeasures to protect smart grids
- Training and targeted adapted installations of open source intelligence tools
- Improved and operational statistical analysis tools and workshop organised in cooperation with OLAF.
- Conformity testing methodologies for aviation security detection equipment

2) The EURATOM programme will be further shifted towards **Nuclear Safety and Security**: Notable developments include the contribution to the post Fukushima reassessment of safety of the Nuclear Power Plants in Europe, coordinating and assessing lessons to be learned from nuclear accidents or incidents; contributing to assessing reports of the Member States in the frame of the Nuclear Safety Directive; further preparation of training schools in the area of nuclear safety and security; safety performance of fuels and fuel cycles, including nuclear waste management and support to the implementation of the radioactive waste and spent fuel management directive; further development of training and education in the area of nuclear safety and security, and decommissioning.

Following the JRC proposal and with support of the European Parliament and the Council, the JRC will start-up decommissioning research as well as training activities focussing on Nuclear Power Plants.

The JRC scientific support will be implemented through:

- Reassessment of the level of safety of Nuclear Power Plants in Europe (see also Specific Objective 14)
- Assessment of Member States reports in the framework of the Nuclear Safety Directive
- Training schools in the area of nuclear safety and security.
- Decommissioning research strategy 2013-2020

3) **Public health** related activities will be started up, focussing on cancer (Coordination of European cancer network, breast cancer screening standards); there will be a small increase in activities related to genetic testing. At the request of DG SANCO, studies related to the effect of human behaviour on the effectiveness of policy measures in the area of nutrition and health will be initiated.

Preparatory actions will be undertaken for possible JRC activities in the field of medical devices.

***Main outputs in 2012*****1) Non-nuclear Security**

Research undertaken on risks related to the increasing use of ICT and the protection of critical infrastructures

<sup>12</sup> OLAF: Office Européen de Lutte Anti-Fraude

**2) Nuclear Safety and Security**

Reassessment of nuclear security levels in Europe and preparation on trainings on security

**3) Public health**

Studies regarding the effect of human behaviour on the effectiveness of policy measures

| <i>Result Indicators</i>  | <i>Latest known result<br/>(End of November 2011)</i> | <i>Target 2012</i> |
|---|---|--------------------|
| <b>“Number of Policy support deliverables”</b>  | 275   | 282                |
| <i>Main expenditure-related outputs in 2012 according to FP7 structure: See tables at the end of chapter 4.1.</i> |   |                    |

**ACTIVITY 10 02/03****SPECIFIC OBJECTIVE 4:****Maintain scientific excellence in JRC core competences****Brief description:**

In order to fulfil its mission and safeguard the long-term goals of the JRC Strategy, the JRC continues to develop a strong scientific knowledge base in its core areas of work. This will be accomplished during 2012 by means of:

- Carrying out Exploratory Research to strengthen competences and tackle new scientific areas of potential policy relevance.
- Maintaining a high reputation in the scientific community by publishing scientific results in peer reviewed journals.
- Maintaining the corporate target of achieving 15% of total income from additional activities.
- Strengthening and building new strategic partnerships with peer organisations in Europe and beyond.

| <i>Result Indicators</i>   | <i>Latest known result</i> | <i>Target</i>  |
|--|----------------------------|--|
| "Number of publications in peer-reviewed journals"   | 508                        | 640  |
| "Proportion of number of peer-reviewed publications co-authored with non-JRC authors to total number of peer-reviewed publications"                      | 80.8%                      | > 80%  |
| “Proportion of number of peer-reviewed publications co-authored with organisations from non-ERA countries to total number of peer-reviewed publications” | 20.46% <sup>13</sup>       | New indicator; Target to be detailed after further investigation |
| “Cashed competitive income“  | 12.1%                      | 15%  |

<sup>13</sup> During the last five years, the proportion of peer-reviewed publications co-authored with organizations from non-ERA countries has fluctuated around 18% (+/-5%)

### Policy support results indicators according to the FP7 structure

Since the JRC receives its financial resources under the FP7 framework, both EC and Euratom, result indicators are also given according to the FP7 structure (as in the Activity Statements; see tables below). The output indicators in the tables below (taken from the activity statement) are not identical to the new output indicators the JRC intends to implement in 2011 and which are referred to in the results indicator row of the specific objectives 7 to 9.

#### Activity 10 02 (FP7 EC)

| Policy themes  | Number of products and services delivered to EU policy makers (2012) | Appropriations Draft Budget 2012 (EUR million) |
|--|--|--|
| Prosperity in an intensive knowledge society           | 557  | 17,840   |
| Solidarity and the responsible management of resources | 324  | 7,216  |
| Security and freedom                                   | 241  | 4,906  |
| Europe as a world partner                              | 108  | 1,453  |
| <b>Total</b>   | <b>1230</b>  | <b>31,415</b>                                  |

#### Activity 10 03 FP 7 (Euratom)

| Policy theme 5                                    | Number of products and services delivered to EU policy makers (2012) | Appropriations Draft Budget 2012 (EUR million) |
|---|--|--|
| Nuclear waste management and environmental impact | 72   | 3,929  |
| Nuclear safety                                    | 30   | 2,658  |
| Nuclear security                                  | 54   | 3,308  |
| <b>Total</b>                                      | <b>156</b>   | <b>9,895</b>                                   |

## 4.2. Corporate Specific Objectives on new tools and networking related to JRC's support of Commission priorities

### ACTIVITY 10 02/03

#### SPECIFIC OBJECTIVE 5:

Strengthen the integration of scientific advice into policy-making by providing additional inputs to the policy cycle, including:

- Ø Analysis of the economic dimension and policy options
- Ø Anticipation of new policy needs
- Ø Related modelling
- Ø Analytic Facts & Figures

#### Brief description:

The JRC emphasises an integrated approach to preparation and implementation of EU legislation and will reinforce its competences (quantitative economics, statistical analyses, economic tools, horizon scanning and foresight, policy analysis skills, analysis of policy options) in a range of relevant topics.

This will in part be implemented by a dedicated Policy Analysis capacity focusing on science advice to policy, innovation and implementation of horizon scanning and foresight analysis in areas that require horizontal approaches and cross-cutting disciplines. Foresight, anticipatory and horizon scanning analyses will allow the JRC to identify and communicate areas where new scientific developments and socio-economic trends could require new JRC research activities. Through all these actions, the JRC will be in the position to supplement scientific advice, where necessary, with socio-economic analysis and by identifying new policy options.

In doing this, specific and strong interfaces with the Commissioner for Research, Innovation and Science, key JRC customers of the European Commission (DGs), European Council and European Parliament, and Member States representations and research centres need to be ensured.

Throughout 2012, integrated modelling efforts will be expanded into all of the focal areas, namely financial economics, energy, climate change, transport, agriculture, environment, and regional policies.

The integrated models will be modular in nature and will be used to assess policy options provided by policy DGs and to generate additional options by the JRC. The JRC will increase its efforts in quality control of its models including sensitivity and uncertainty analysis (with a new action devoted to this activity as well as support to the Impact Assessment Board of the European Commission). Efforts to define and collect reference data will also increase.

Evidence informed policy and decision making does not only rely on specific quantitative inputs targeted at defining solutions, but also on having a comprehensive view of the underlying data. This is particularly important in the final stages of high level decision making. In order to cater for this particular demand, dedicated Facts & Figures analyses will be elaborated as well as an underlying data infrastructure that can be accessed and consulted by policy support providers, policy decision makers and the public alike.

#### *Main outputs in 2012*

#### **Anticipation** will focus on:

- Final report of the Anticipatory study "NPK (Nitrogen, Phosphorus, Potassium) will there be enough plants nutrients to feed a world of 9bn in year 2050?"
- Two workshops and stakeholder consultation on the foresight studies on 'How standards can benefit innovation' and "Food security"

**Modelling will focus on :**

- Further development and use of sectoral models (i.e. further development of macro-economic models such as QUEST for the analysis of the stability and growth pact; SYMBOL on the analysis of the stability of the financial system, FIDELIO for the analysis of trade policies and market based instruments, and RHOMOLO for regional economic modelling).
- Integrated modelling for sustainability assessment focused on coupling models (e.g., of the Climate and Energy Package, CAP<sup>14</sup> reform and effectiveness of Cohesion Funds).
- The Land Use Modelling Platform integrated with thematic models for agriculture, forestry, water, regional economy (RHOMOLO), energy (POLES<sup>15</sup>) and transport (TRANS-TOOLS<sup>16</sup>).
- Integrated scenarios of European land and territorial developments for sectoral policies (namely regional and cohesion policy) in support to the new Environmental Action Plan.
- Enhanced work on indicator development relevant to monitoring resource efficiency, environmental impacts of goods and services, decoupling from economic growth and crop productivity.
- Completion of the Innovation Union Information and Intelligence System (I3S) and support to smart specialisation for cohesion policies.

**Facts & Figures/Dissemination will focus on :**

- 4 Facts & Figures studies according to high level customer demand
- A methodology for Facts & Figures
- Online catalogue and dissemination infrastructure

**SPECIFIC OBJECTIVE 6:****Improve the transparency of relations with policy DGs through the conclusion of Memoranda of Understanding****Brief description:**

Objective: In the context of the bilateral meetings between the JRC Director General and the Directors-General of the policy DGs, pursue the ongoing work related to the preparation and follow-up of the MoUs (new and ongoing) as the overarching instruments to cover Administrative Arrangements and cross sub-delegations. The objective is to conclude in 2012 (as far as possible) one MoU per policy DG and where necessary merge the existing MoUs with a given policy DG into a single MoU. Where appropriate, (e.g., DG SANCO, DG ENV) the MoU should include an annex dedicated to describing JRC's work in support to the EC's Regulatory Agencies<sup>17</sup>. Furthermore, in 2012 the JRC will need to put in place an archiving repository accessible to all JRC staff for the electronic versions of the documents referred to above as well as for the original paper versions.

***Main outputs in 2012***

- Archiving repository operational

<sup>14</sup> CAP: Common Agricultural Policy

<sup>15</sup> POLES: Prospective Outlook on Long-term Energy Systems

<sup>16</sup> TRANS-TOOLS: TOOLS for TRansport Forecasting ANd Scenario testing

<sup>17</sup> European Centre for the Development of Vocational Training (Regulation (EEC) No 337/73 of 10.02.75); European Foundation for the Improvement of Living and Working Conditions (Regulation (EEC) No 1365/75 of 26.05.75); European Environment Agency (Regulation (EEC) No 1210/90 of 07.05.90); European Training Foundation (Regulation (EEC) No 1360/90 of 07.05.90); European Monitoring Centre for Drugs and Drug Addiction (Regulation (EEC) No 302/93 of 08.02.93); European Agency for the Evaluation of Medicinal Products (Regulation (EEC) 2309/93 of 22.07.93); Office for Harmonisation in the Internal Market (Regulation (EC) No 40/94 of 20.12.93); European Agency for Safety and Health at Work (Regulation (EC) No 2062/94 of 18.07.94); Community Plant Variety Office (Regulation (EC) No 2100/94 of 27.07.94); Translation Centre for bodies of the European Union (Regulation (EC) No 2965/94 of 28.11.94); European Monitoring Centre on Racism and Xenophobia (Regulation (EC) No 1035/97 of 02.06.97); European Agency for Reconstruction (Regulation (EC) No 2454/1999 of 15.11.99); European Food Safety Authority (Regulation (EC) No 178/2002 of 28.01.02); European Maritime Safety Agency (Regulation (EC) No 1406/2002 of 27.06.02); European Aviation Safety Agency (Regulation (EC) No 1592/2002 of 15.07.02).

## **SPECIFIC OBJECTIVE 7:**

### **Develop cooperation with European and national science academies**

#### **Brief description:**

The JRC and EASAC<sup>18</sup> have the aim to facilitate and promote dialogue between policy makers and scientists on strategic and future-oriented policy issues. Through the new collaboration the JRC and EASAC will jointly address global societal challenges in the sectors of economic growth and in line with the Europe 2020 Strategy, such as: energy, clean transport, agriculture and food security, environment and climate change, health, information and communication technologies and safety and security. Joint events will increase the visibility of the cooperation.

#### *Main outputs in 2012*

- Fulfilment of the technical Annex to the Letter of Intent, signed on 18.10.2011 in Brussels, including:
  - § Steering group consisting of 4 persons with a view to a) agree on a work programme, b) define working topics and respective timelines of the cooperation, and monitor the implementation.
  - § 2 meetings of the steering group organised.
  - § Working group consisting of 10 persons with a view to a) define the most important topics and b) decide to develop concrete projects.
  - § Special edition of the JRC briefing provided on a regular basis to the EASAC Secretariat.

## **ACTIVITY 10 01**

## **SPECIFIC OBJECTIVE 8:**

### **Implement effective Intellectual Property Rights (IPR) management measures at the Commission**

#### **Brief description:**

The JRC is in charge of developing and implementing the principles, procedures, actions and measures relating to the management of IPR at the Commission. This includes the setting up of a Central Intellectual Property (IP) Service at the JRC, developing the Commission internal procedures for the handling of IPR-related issues, driving the development of a dynamic inventory to identify and classify the Commission's IP assets, and collaborating for the development of an IPR training strategy for the Commission.

The final goal of the activities undertaken is to have:

- Fully functional Central IP Service and Network of IP officers in operation
- Internal procedures for IPR management Commission-wide established
- IPR training strategy put in place
- Fully-functional dynamic inventory established.
- Exchange of good practices with other EU institutions and EU bodies

#### *Main outputs in 2012*

- The Central IP Service and a Network of IPR officers setup
- Detailed action and implementation plan
- Refined Commission internal procedures for the handling of IPR, and implementation across the Commission launched
- Begin the development of an IPR training strategy in collaboration with Directorate General Human Resources
- Begin the development of the dynamic inventory in collaboration with relevant Directorates General, in particular the Directorate General for Informatics (DIGIT).

<sup>18</sup> EASAC : European Academies Science Advisory Council

## ACTIVITY 10 01

### **SPECIFIC OBJECTIVE 9:**

#### **Coordinate a European Network on Technology Transfer of large Public Research Organisations (TTO-CIRCLE)**

##### **Brief description:**

In the context of the implementation of the Innovation Union and the European Research Area there is a strong need to promote technology transfer and foster the social and industrial uptake of the research results. Together with universities, Public Research Organisations are the major actors in Europe performing cutting-edge research. In 2011, the JRC has put in place a network involving the heads of the technology transfer offices of large Public Research Organisations (PROs) in Europe. The objective is in particular to promote cooperation among them in order to support growth and job creation in Europe.

The vision for the TTO-CIRCLE is to become an important actor of the innovation chain in Europe and a key reference for national Research, Development and Innovation policies. Towards this end, the TTO-CIRCLE will

- share expertise, exchange best practices and develop synergies at the European level in the field of IP and knowledge/technology transfer,
- provide support to EU research and innovation policies, building on the member's collective experience, their catalytic function and role model capacity, and reduce the fragmentation of European research,
- establish strategic links to standardisation and harmonisation processes with regard to enhancing innovation.

##### *Main outputs in 2012*

- Agreement on a multi-annual work programme for the European TTO-CIRCLE network and implementation started
- Implementation of a knowledge hub for the European TTO circle at the JRC. This hub will represent the knowledge and collaboration hub of the entire TTO-CIRCLE
- Two meetings of the coordination office of the network

### 4.3. Horizon 2020 related objectives

#### ACTIVITY 10 02/03

##### SPECIFIC OBJECTIVE 10:

**Support the Commission Horizon 2020 discussions, negotiation and adoption in the European Parliament (EP) and in the Council of the EU**

**Brief description:**

It is crucial to follow-up and support the Commission Horizon 2020 discussions, negotiation and adoption in the European Parliament and in the Council of the EU. This activity will include supporting and actively following the discussions in the respective EP and Council working formations as well as during the EP Plenary sessions and the Competitiveness Council meetings.

Active two way-contacts between the JRC and key stakeholders and decision makers have to be maintained. For this purpose meetings with key Members of the EP (MEP) and Member States representatives have to be organised.

A reporting back to the JRC management has to be ensured.

*Main outputs in 2012*

- Regular meetings organised with MEPs
- A JRC presentation at the Council Research Working Group meeting
- 10 high-level interactions with Member States officials organised

#### ACTIVITY 10 (direct research)

##### SPECIFIC OBJECTIVE 11:

**Address in an active and coordinated manner the JRC's visibility among the key stakeholders within the EU decision making bodies, EU Member States, FP7 Associated Countries, other priority countries, international bodies, scientific associations and business community**

**Brief description:**

In view of the JRC repositioning to be closer to the policy makers in the EU and in the Member States, particular attention will be given to the issue of the JRC's visibility from its target audiences. This will include pro-active two-way communication with representatives of the EU decision making bodies and EU Member States authorities.

Productive working relations with FP7 Associated Countries, including countries aspiring to EU membership, should be maintained.

Relations with the European Neighbourhood Policy Partner Countries and follow-up of the relevant EU policies have to be ensured.

The JRC international cooperation should be strengthened by implementing the International Collaboration Strategy, favouring cooperation with non-EU countries which are members (or potential members) of ERA; and focusing on countries which have greatest scientific potential and on relevant international organisations.

A specific attention should be paid to integrate the relevant business community, especially business associations and horizontal organisations in the various JRC activities and events. The objective is twofold: demonstrate support for the innovation capacity of the European business community and tap into the business viewpoint when providing science advice to the EU policy makers.

*Main outputs in 2012*

- Visits of the JRC Director General to Member States' capitals as well as high-level meetings with key stakeholders organized
- 2 major Council Presidency events in 2012 co-organized and contributions to at least two other initiatives/conferences per Presidency
- Active Participation at the 'Rio+20 conference'
- Invitations for the business community to relevant major JRC events (target: business involvement in at least 3 major JRC events).

#### 4.4. Further specific objectives

##### ACTIVITY 10 04 01-04

###### SPECIFIC OBJECTIVE 12:

###### Complete the previous Framework Programmes and other activities

###### Brief description:

###### **Completion of previous joint programmes (10 04 01)**

For this activity, only payments are foreseen to cover the outstanding commitments from previous joint programmes (to cover commitments entered into prior to the 7th Framework Programme concerning the non-nuclear and the nuclear activities of the JRC). The required appropriations are small amounts calculated according to historical data in order to determine the credits needed for the completion of the previous EC and Euratom framework programmes.

The 2003-2006 EC Framework Programme (direct actions) comprised three themes: food, chemicals and health, environment and sustainable development, and horizontal activities; and covered the participation in shared-cost actions and support activities of scientific and technical nature for Community policies. The 2003-2006 Euratom Framework Programme (direct actions) comprised two themes: radioactive waste management and the protection of nuclear materials as well as the safety of the various types of reactors, radiation supervision and metrology. It also covered the safety of nuclear facilities and waste from the JRC, on all the sites.

###### **Provision of services and work on behalf of outside bodies (10 04 02)**

The main objective driving the participation of the JRC in competitive activities is the development of added value to its institutional programme (acquisition/development of knowledge, networking increase, benchmarking, etc.).

###### **Research Technology and Development support for EU policies on a competitive basis (10 04 03)**

This activity covers expenditure specific to various tasks of research, technological development and demonstration of the JRC - apart from the Institutional Research Framework Programme - and carried out on competitive basis for EU policies (for instance support to DG RELEX for the PHARE and TACIS programmes, to Directorate General Energy for the On-Site Laboratories (OSL)).

###### **Implement the tasks of the first year under the next High Flux Reactor (HFR) Supplementary Research Programme 2012-2015 (to be adopted); (10 04 04)**

Chapter 10 04 04 is a budgetary structure intended to receive appropriations of earmarked nature from the complementary activities of the JRC (i.e. the Supplementary Research Programme of the High Flux Reactor (HFR) in Petten). This Supplementary Programme being fully covered by the financing given by the participating Member States, it requires a budgetary structure but does not require any financing in commitments or payments from the Commission Budget.

The main goal of the supplementary research programme of the HFR is to provide a steady and reliable neutron flux for experimental purposes. The investigated domains are: nuclear materials and fuel science with the aim to improve the safety of nuclear reactors (both fission and fusion), investigations on reactor ageing and life management, research on advanced fuel cycles and waste management. The HFR acts as a training facility hosting doctoral and post-doctoral fellows which perform their research activities through national or European Programmes. The reactor is also used for the commercial production of radio-isotopes which cover more than 60% of all the 10 million medical diagnoses executed each year in Europe. It is a fundamental supplier for European radiopharmaceutical companies in this field. Moreover, through its location in Europe, the production of the reactor is rapidly directed to the European medical centres. This is essential for the most currently used short-life isotopes.

###### *Main outputs in 2012 under 10 04 04*

- Annual Report to Council and EU Parliament on the operation of the HFR
- Started implementation of the HFR Supplementary Research Programme for 2012-2015

**ACTIVITY 10 05**

**SPECIFIC OBJECTIVE 13:**

**Historical liabilities resulting from nuclear activities carried out by the JRC pursuant to the Euratom Treaty**

- Ø **Implement the Decommissioning & Waste Management Programme (see result indicators), and**
- Ø **Implement an external review of the Decommissioning & Waste Management Programme in view of an EC Communication in 2012 (see 'main policy outputs 2012')**

**Brief description:**

The decommissioning activity aims to progressively dismantle the JRC's nuclear installations, either already obsolete (with no foreseen further use) or "future liabilities" (still in use). It also intends to treat "historical" waste (waste accumulated in the past) and waste arising from the dismantling operations. In 1999, the Commission decided to launch a programme to meet this objective. By this choice, the Commission shifted to the practice adopted by most EU Member States, preferring to start the decommissioning immediately after shutdown of the installations rather than deferring decommissioning in the hope that decreasing radiological activity would reduce the financial burden. The programme started in 1999 and is based on the assumption, made for budgetary planning reasons, that the decommissioning of the last nuclear installation and the final disposal of historical wastes will be achieved around 2030.

Due to the status of their facilities and to their respective environment, the Ispra site (IT) is engaged in a wider range of activities than the three other sites Geel (BE), Karlsruhe (DE) and Petten (NL), where most facilities are still operational.

| Result indicators 2012   | Proportion of budget spent for implementation of decommissioning programme<br>(result indicators monitoring progress see next table) |                                     |  |
|--|--|-------------------------------------|--|
|  | Latest known result<br>(Dec. 2011)   | Intermediate Target<br>(end 2013)   | Target (result)<br>Before end of programme |
| 1) Ispra site decommissioning activities <sup>19</sup> including:<br><br>1.1) Commissioning of <b>Ispra</b> waste management facilities<br>1.2) Removal/conditioning/storage of <b>Ispra</b> waste<br><i>(final repository fees budget not included in the percentage calculation)</i><br>1.3) Removal of <b>Ispra</b> nuclear materials<br>1.4) Decommissioning of <b>Ispra</b> nuclear facilities<br>1.5) <b>Ispra</b> general services and "safe conservation" of installations | 33,5% of total Ispra budget (1) to 5)  | 35% of total Ispra budget (1) to 5) | 100%                                       |
| 2) Pre-decommissioning and waste management activities at <b>Karlsruhe</b>   | 14%  | 17%                                 | 100%                                       |
| 3) Pre-decommissioning and waste management activities at <b>Geel</b>  | 18%  | 20%                                 | 100%                                       |
| 4) Pre-decommissioning and waste management activities at <b>Petten</b>  | 25%  | 25%                                 | 100%                                       |

**Main outputs in 2012**

- Communication from the Commission to the Council and the European Parliament on the status of the Decommissioning of nuclear installations and management of radioactive waste liabilities arising from the activities of the Joint Research Centre (JRC) carried out under the Euratom Treaty

<sup>19</sup> Since the beginning of the Programme at Ispra €180 m of €535m (budget exposed in COM 2008 remunerated in Euro current) were committed, which corresponds to nearly 33,5%. In addition there are €70 m (€180 m in Euro current) for the final repository fees, which are not included in the calculation (see point 2 in the Ispra related row in the table

| Main expenditure-related outputs: Budget line 10 05<br><br>Total expenditures refer to indicators and not only to the specified outputs   | 2010                                |               | 2011                                  |               | 2012                                  |               |
|---|-------------------------------------|---------------|---------------------------------------|---------------|---------------------------------------|---------------|
|   | Output (no.)                        | EUR million*  | Output (no.)                          | EUR million*  | Output (no.)                          | EUR million*  |
| 1.1 <b>Ispra</b> : Number of major waste management facilities commissioned/licensed (cumulative numbers)   | 9                                   | 0,877         | 9                                     | 2,750         | 9                                     | 4,000         |
| 2.1 <b>Ispra</b> : Evacuation of alkali metals (Tons = T)   | 0 T                                 |               | 12,5 T                                |               | 1 T                                   |               |
| 2.2 <b>Ispra</b> : Retrieval, characterization and treatment of waste (waste objects) <sup>20</sup><br><br>Note:<br><br><i>"Drums WCS" = "Nr of drums originating from the Waste Storage System WCS"; and</i><br><br><i>"Drums XDRS" : "Nr of drums originating from the X-ray Digital Radiography System (XDRS)"</i> | 354 drums WCS<br><br>936 drums XDRS | 3,576         | 500 drums WCS<br><br>1.000 drums XDRS | 5,000         | 500 drums WCS<br><br>1.000 drums XDRS | 7,800         |
| 3.1 <b>Ispra</b> : nuclear materials :  |                                     |               |                                       |               |                                       |               |
| a) irradiated: retrieval & conditioning - %   | a) 0%                               | 0,988         | a)37,6%                               | 2,500         | a)37,6%                               | 1,000         |
| b) non-irradiated: removal & transfer of ownership - %  | b)98,5%                             |               | b)98,5%                               |               | b)98,5%                               |               |
| 4.1 <b>Ispra</b> : Number of installations characterized, decommissioning and pre-decommissioning actions   | 6 charact. 1 released               | 1,987         | licensing file for 1 facility         | 1,250         | licensing file for 1 facility         | 2,500         |
| 5.1 <b>Ispra</b> : General services (safe conservation; radiation protection, support from the JRC Ispra Site Management Directorate, etc)  | n.a.                                | 12,311        | n.a.                                  | 9,000         | n.a.                                  | 8,500         |
| 6.1 <b>Karlsruhe</b> : Decommissioning at JRC/ITU – number of hot cells treated/glove boxes dismantled  | 1/8                                 | 0,835         | 1/8                                   | 0,990         | 1/8                                   | 1,020         |
| 6.2 <b>Karlsruhe</b> : Management of annual decommissioning waste produced at JRC/ITU, cubic metres evacuated to the waste service contractor   | 67,7                                | 1,570         | 40                                    | 1,250         | 40                                    | 1,050         |
| 6.3 <b>Karlsruhe</b> : Management of legacy waste stored outside JRC/ITU and being prepared for the final repository, and of financial contributions to the German intermediary repository  | n.a.<br><br>(1)                     | 3,585         | n.a.<br><br>(1)                       | 3,430         | n.a.<br><br>(1)                       | 3,519         |
| 7.1 <b>Geel</b> : Mass of nuclear materials evacuated and financial contribution to the Belgian National Institute for Radioactive Waste  | n.a.                                | 0,817         | 0                                     | 0             | 0                                     | 0             |
| 8.1 <b>Petten</b> : Service contract for Decommissioning Plan and Cost Estimation for the HFR at  | 1                                   | 0,100         | 0                                     | 0,100         | 0                                     | 0,015         |
| <b>Total Budget line 10 05</b>  |                                     | <b>26,646</b> |                                       | <b>26,270</b> |                                       | <b>29,404</b> |

\* For each type of output, this is the total cost of the outputs produced

<sup>20</sup> WCS stands for Waste Characterisation System; and WDRS for X-ray Digital Radiography System

## ACTIVITY 10 03

### SPECIFIC OBJECTIVE 14:

**Contribute to the EU Nuclear Power Plant "stress tests" by participating in the peer-review missions and supporting Directorate General Energy for the preparation of the EC reports to the Council and the European Parliament**

**Brief description:**

At its March 2011 meeting, the European Council stressed the need to fully draw the lessons from the accident at the Fukushima Daiichi nuclear power plant (NPP) resulting from the earthquake and tsunami in Japan. It called for a review of the safety of all EU nuclear power plants, on the basis of a comprehensive and transparent risk and safety assessment ("stress tests").

The scope and modalities of these tests were developed by the European Nuclear Safety Regulatory Group (ENSREG) and the Commission in a coordinated framework. The stress tests comprise three steps: a self-assessment by the nuclear power plant operators (Licensees), a review of this self-assessment by the national Nuclear Safety Authority and a peer-review by experts from other countries and from the Commission to ensure the impartiality and credibility of the results. The aim of the tests is to assess whether the safety margins currently used for the nuclear power plants are sufficient to cover various unexpected events.

The role of the JRC in nuclear safety is to support Directorate General Energy for the preparation of the EC reports to the Council, including participation in the peer review missions to all countries participating in the stress tests and providing the secretariat for the planning and execution of the review process. The JRC has participated to the elaboration of the stress test modalities and peer-review methodology (process definition, timetable, format of the national final reports) together with a few key safety authorities.

*Main outputs in 2012*

- Participation in the peer-review missions
- Support to the Directorate General for Energy regarding the preparation of the EC reports to the Council and the Parliament

## ACTIVITY 10 03

### SPECIFIC OBJECTIVE 15:

- Ø **Coordinate the implementation of the Euratom/US, Euratom/Japan and Euratom/China agreements in the field of Nuclear safeguards and security**
- Ø **Coordinate the JRC contribution to international security initiatives: Global Initiative to Combat Nuclear Terrorism (GICNT), Proliferation Security Initiative (PSI) and Nuclear Security Summit in Seoul 2012**

**Brief description:**

The President of the European Council, at the Nuclear Security Summit, Washington DC, 12-13 April 2010 reaffirmed that the EU provides assistance to attaining nuclear security objectives inter alia through: the Instrument for Stability (IfS); the support to international cooperation in view of technological infrastructure; networks necessary to verify the non-diversion of declared nuclear material as well as the absence of undeclared nuclear material and activities.

The JRC contributes to the implementation of the international nuclear safeguards and security system through the agreements Euratom has signed with major actors in the field of safeguards and security (US, Japan, China). Implementation of these agreements is followed up by the JRC and consists of an annual review of the ongoing projects and the signature of new collaborative projects.

The Border Monitoring Working Group established by the International Atomic Energy Agency (IAEA), the US and the EU in 2006 remains an important tool for its members to coordinate their activities with third countries in the field of combating illicit trafficking of nuclear and radioactive materials. The JRC is co-chairing this working group.

The Contribution of the EU to the next Nuclear Security Summit (Seoul 2012) as well as to other international security events relies on an important contribution from the JRC. This contribution is the fruit of the JRC's scientific and technical activities in the area of safeguards, security and non-proliferation.

| Result Indicators  | Latest known result | Target |
|--|---------------------|--------|
| Number of collaborative projects signed by the JRC in the field of nuclear security and EU contributions to relevant international nuclear initiatives | 20                  | 25     |

## 5. PART 5 – SPECIFIC OBJECTIVES FOR HORIZONTAL ACTIVITIES

This chapter groups the objectives for all activities that aim at increasing the overall efficiency and quality of horizontal support functions and/or the overall effectiveness of the JRC. These fall into three categories: the specific horizontal objectives (SHO) 1-3 address the continuous performance development of horizontal administrative functions; specific horizontal objective 4 monitors the development of the JRC's human resource base; the specific horizontal objectives 5 and 6 describe initiatives for developing the JRC's infrastructures (i.e. physical, IT and knowledge management).

| ACTIVITY 10 01   |  |  |
|--|--|--|
| SPECIFIC HORIZONTAL OBJECTIVE 1:   |  |  |
| Improve continuously the efficiency of the organisation through development of horizontal support functions  |  |  |
| <i>Result Indicators</i>   | <i>Latest known result</i>                       | <i>Target</i>  |
| <p><u>Timeliness of recruitment</u></p> <p>defined as:</p> <p>"Average of: number of working days from the publication of the deadline of the vacancies/calls until the date of distribution of relevant administrative act"</p> | <p>internal 55 days</p> <p>external 111 days</p> | <p>internal max. 60 days</p> <p>external max. 120 days</p>   |
| <p><u>Timeliness of payments</u></p> <p>defined as:</p> <p>"Proportion of payments done within legal time limits"</p> <p>(Excluded salary, mission, cross delegated, and hors budget payments)</p>                               | <p>94,25%</p>                                    | <p>100%</p>  |
| <p>"Actual value of contract / estimated value of contract"</p>  | <p>17%</p>                                       | <p>An average deviation of +/-10% from the actual total procurement value relative to the scheduled total procurement value established at the outset of the procedure</p> |
| <p>"Proportion of positive opinions of the Public Procurement Advisory Group (PPAG)"</p>   | <p>90%</p>                                       | <p>&gt;=95%</p>  |

## ACTIVITY 10 01

### SPECIFIC HORIZONTAL OBJECTIVE 2:

**Organisational efficiency, legality and regularity: effectively monitor and follow up prioritised internal control issues and risk management**

**Brief description:**

Effective and efficient monitoring and follow up of action plans established following exercises related to risk assessment, ex post controls, exception reporting, prioritised internal control standards and data protection inspections. The follow-up will take place by means of the JRC developed audit follow up database. Moreover, there will be reporting on the follow-up.

*Main outputs in 2012*

- Adaptation of the audit follow-up data base, to ensure follow up of internal control issues and risk management
- Monitoring and follow up on action plans drafted in response to internal control issues, including the annual risk assessment
- Report on progress in completion of action plans

## ACTIVITY 10 01

### SPECIFIC HORIZONTAL OBJECTIVE 3:

**Organisational efficiency: strengthen the horizontal coordination and efficiency of resource management functions**

**Brief description:**

In the current organisation structure each of the JRC Institutes as well as some sites have separate Management Support Units, providing full support on resource management activities. In order to allow the research sites and institutes to focus on their core business and facilitate scientific work across sites and institutes on a multi-disciplinary basis, the objective is to centralise all resource management functions (except site-related issues) within one Directorate.

*Main outputs in 2012*

- Adapted proposal for changes in the organisation chart, resulting in a more centralised resource management structure before mid-2012.
- Implemented revised resource management procedures, covering financial management, human resource management, recruitment, training and procurement before end 2012.

**ACTIVITY 10 01**

**SPECIFIC HORIZONTAL OBJECTIVE 4:**

**Improve continuously the efficiency of the organisation through the development of its human resources**

| <i>Result Indicators</i>   | <i>Latest known result</i>   | <i>Target</i>  |
|--|--|--|
| <p>“Proportion of scientific staff”<br/>(covering CA FGIV, GH30, GH40, END, ADs in Scientific Units)</p> <p><i>Note: the abbreviations used in this table reflect the various categories of staff with academic background</i></p> | 68,2%  | 69%  |
| <p>“Visiting researchers”<br/>(covering GH 20 30 40, END, ST, CA FGIV)</p>   | 743  | n.a.   |
| <p>“PhD students”<br/>(covering GH20)</p>  | 72   | 80 (to end 2012 – thereafter it will depend upon phasing-out of GH in favour of CA)  |
| <p>“Overall job satisfaction of staff”</p>   | 68% (2011 Staff Satisfaction Survey)   | 71%  |
| <p>“Proportion of staff on non permanent positions “<br/>(covering ST, BN, END, CA,B)</p>  | 36,8% (as of 11/2011)  | 37%  |
| <p><u>Gender balance in management posts</u><br/>defined as:<br/>"Proportion of women recruited/appointed to management posts"</p>   | <p>0% women newly appointed to senior management posts;<br/>(i.e. 0 out of 1 new appointments in total in 2011)</p> <p>0% women newly appointed to middle management posts<br/>(i.e. 0 out of 7 new appointments in total in 2011)</p> | <p>At least 30% of recruitments/ appointments to senior management posts.</p> <p>At least 50% of recruitments/ appointments to middle management posts</p> |
| <p><u>Training evaluation</u><br/>defined as<br/>"Result of the question in the post training questionnaire 'How well were personal objectives met?'<br/><br/>Positive answers / total answers * 100"</p>                          | 88.9%  | 90%  |

## ACTIVITY 10 01

### SPECIFIC HORIZONTAL OBJECTIVE 5:

**Infrastructure development: Develop and implement a detailed plan for the evolution of JRC infrastructures (physical infrastructure, laboratory facilities, information technology (IT) infrastructure)**

**Brief description:**

This action aims at implementing the JRC Strategic Infrastructure Development Plan 2012-2020 for the development of the physical infrastructures at the sites of the JRC (excluding Brussels). Physical infrastructures are understood to encompass all buildings and facilities, including large-scale research installations, as well as utilities, traffic infrastructure and green areas under the responsibility of the JRC site management.

Main drivers for the strategy are recommendations from recent Framework Programme evaluations, the need for renewing the ageing infrastructures of the JRC sites in compliance with Europe's 20/20/20 energy objectives and requirements resulting from the scientific strategy of the JRC.

The JRC Strategic Infrastructure Development Plan 2012-2020 which was adopted in 2011 proposes for all JRC sites a number of structural improvements with a particular emphasis on improving the energy efficiency of buildings, aiming for all new buildings and major refurbishments, where technically and economically viable, at achieving the Climate Class A standard.

Regarding IT infrastructure, a Master Plan covers the definition of the IT strategy and the IT priorities of the JRC for the period 2012-2013. It demonstrates the alignment between the policy and administrative objectives of the JRC and its IT Strategy and IT priorities. It covers all JRC IT activities and projects, independently of their budget sources. The JRC IT Master Plan 2012 is associated to the JRC Management Plan. For further details the reader may refer to this separate document.

### *Main outputs in 2012*

- Progress in the implementation of the JRC Strategic Infrastructure Development Plan 2012-2020, in accordance with the schedule defined therein, with the aim to complete in particular:
  - § two new facilities for Environmental Research and Life Sciences in Ispra;
  - § new office building in Karlsruhe, plus detailed planning for the new nuclear laboratory facility (Wing M) and for the upgrades of the physical protection at the Karlsruhe site
  - § procurement for a new reception and meeting facility, and a new storage building in Petten;
  - § various upgrades to the infrastructure (scientific, administrative and security-related) in Geel, and
  - § adequation of rented office surface to operational needs in Seville
  - § organization/preparation of the office move in Brussels

## ACTIVITY 10 01

### SPECIFIC HORIZONTAL OBJECTIVE 6:

**Infrastructure development: Develop and implement processes and infrastructure for JRC knowledge management, reporting, dissemination and facts and figures**

**Brief description:**

1. Knowledge management and reporting

Following the JRC knowledge management strategy roadmap of 2010, 2012 will mark the completion of various initiatives defined in the roadmap and consequent roll-out of the supporting processes and applications. These include 1) the JRC scientific Annual Work Programme (AWP) definition module in the Project Browser; 2) the new action reporting, monitoring and evaluation module in the Project Browser; 3) the policy deliverables registration function in the publications registrations system (PUBSY); 4) an integrated access and search function of the different JRC project and scientific output sources by means of a new JRC Scientific Knowledge Management portal. The portal will also enhance internal dissemination of JRC activities; 5) Further evolution of the internal information sharing platform (SharePoint).

2. Dissemination infrastructure

This action includes the development and deployment in 2012 of the JRC Science Hub that will provide external access to the JRC knowledge bases, including an inventory of online scientific information systems and databases. The aim is to better promote JRC sources and where possible make their content easily accessible to the external public. This initiative will build on the existing public scientific publications repository (PUBSY).

In addition, advanced data visualisation tools will be implemented for displaying key JRC results.

3. Facts and Figures

Two project concepts will be developed and deployed during 2012: 1) Establishment of a facts and figures data search and briefing capability on key sectors and societal challenges as a service to feed into briefings and policy analysis. This will include the establishment of a data sources catalogue. 2) Development of a dashboard system to monitor in a comprehensive way EU policy objectives.

*Main outputs in 2012*

- New reporting, monitoring and evaluation system
- New Scientific Knowledge Management Portal
- JRC Science Hub
- Facts and Figures Infrastructure
- Further development of the JRC Project Browser for planning and reporting purposes
- Link to repository of Administrative Arrangements
- Feasibility study of a multi-annual planning feature of the JRC Project Browser.

## 6. ANNEX 1 – INTERNAL CONTROL STANDARDS FOR EFFECTIVE MANAGEMENT

An Internal Control review assessing the effectiveness of the JRC internal control system has been carried out in accordance with Internal Control Standard (ICS) No 15. The review has involved staff surveys, interviews, reviews of supervisory reports, results from the JRC's annual risk assessment, the result of *ex ante* and *ex post* controls and audits.

The review involves an analysis of the effectiveness of and compliance with the Commission's 16 internal control standards. Following the review, three internal control standards are proposed for prioritisation in the Management Plan 2012:

| Standard                              | Reasons for prioritisation  |
|---------------------------------------|---|
| STAFF ALLOCATION AND MOBILITY (ICS 3) | <p>The JRC risk assessment highlighted risks of not having the right staff, particularly specialists, in the right place at the right time. Internal Control surveys also indicated that a relatively large proportion of staff does not feel that available skills are optimally used and/or that there are sufficient opportunities to change jobs within the organisation.</p> <p>An effective system for monitoring staff turnover is not yet in place.</p> <p>It is recognised that the control standard is not easily implemented in a decentralised organisation like the JRC.</p>   |
| RISK MANAGEMENT (ICS 6)               | <p>Following the prioritisation of this Standard in 2009, the JRC has carried out comprehensive annual risk assessments. However, the 2010 exercise has evidenced the need for appropriate follow-up actions to be taken.</p> <p>Other weaknesses are linked to a seemingly limited awareness of the Commission's risk management policy amongst management and to the existence of local risk management systems in different parts of the organisation, lacking corporate co-ordination.</p>  |
| BUSINESS CONTINUITY (ICS 10)          | <p>The responsibility and empowerment for regular business continuity has not been clearly designated at the corporate level and associated systems are lacking. The weakness is evidenced by the fact that authorising officers have left the organisation without submitting the annual report on their activities to the Director-General in a timely manner. Moreover, authorising staff have reportedly taken over functions without having the benefit of a complete and/or effective hand-over file.</p> <p>Some of the JRC IT systems (particularly the scientific network ones) do not have the required contingency and back-up plans. There are no guarantees as to the effective back-up of information and data on decentralised systems.</p> <p>The organisation can still improve on the central coordination, testing and control of site-specific Business Continuity Plans.</p> |

## 7. ANNEX 2 – EVALUATION PLAN

| N°   | Title of evaluation<br>(possibly working title) | Intended use of the evaluation, and activity concerned   |  |  | Type of evaluation                         |  |                       | Timing              |  |
|--|---|--|--|--|--|--|-----------------------|---------------------|--|
|  |   | CWP initiative that the evaluation will support  | Other purpose  | ABB Heading  | Prospective (P)<br>Or<br>retrospective (R) | External (E),<br>Internal (I),<br>internal with<br>external<br>support (I&E) | Start<br>(month/year) | End<br>(month/year) |  |
| <b>I. Ongoing evaluations</b>  |   |  |  |  |  |  |                       |                     |  |
| There are no ongoing evaluations   |   |  |  |  |  |  |                       |                     |  |
| <b>II Evaluations planned to start in 2012 or later</b>                          |   |  |  |  |  |  |                       |                     |  |
| 1  | <b>Ex-post evaluation of FP7 JRC activities</b> | Legal obligation to provide independent feedback to the budgetary and legislative authorities, other stakeholders and the general public on the JRC activities in FP7. |  | 10 02 : Directly financed research<br>FP7 (2007 to 2013) — EC<br><br>10 03 : Directly financed research<br>FP7 (2007 to 2011 and 2012 to 2013) — Euratom | R  | E  | 01/2015               | 10/2015             |  |
| <b>III Other ongoing and planned studies/reports with evaluative information</b> |   |  |  |  |  |  |                       |                     |  |
|  | <b>Periodic action reviews (PAR)</b>            |  | The main purpose of the PAR is to provide a corporate-wide assessment of the performance of all JRC scientific actions on an annual basis, focusing on an action's policy support and impact and its scientific output. It should provide a value for the Core Indicator "policy support impact" used in the Management Plan. The PAR is carried out since 2003. | 10 02 : Directly financed research<br>FP7 (2007 to 2013) — EC<br><br>10 03 : Directly financed research<br>FP7 (2007 to 2011 and 2012 to 2013) — Euratom | R  | I  | 01/2012               | 04/2012             |  |

## 8. ANNEX 3 – ACTIONS STEMMING FROM AARS AND THE SYNTHESIS REPORT

| 1. Action stemming from reservations made in AAR  |                |   |  |   |                     |   |
|---|----------------|---|--|---|---------------------|---|
| à not applicable, since there were no reservations in the JRC's AAR 2010  |                |   |  |   |                     |   |
| 2. Actions taken as follow-up to audit recommendations and affecting the DoA  |                |   |  |   |                     |   |
| Recommendation  | ABB activity   | Actions   | Expected result                          | Timetable for implementation  | Responsible service | Mid-term progress review                                      |
| Development of a Procurement Planning Tool  | 10 02<br>10 03 | The follow-up audit by the Internal Audit Service (IAS) has been completed with the conclusion that 16 of 17 recommendations from the audit had been adequately and effectively implemented. A single recommendation (Development of a Procurement Planning Tool) remained open with a new deadline end of May 2012 and was downgraded from "very important" to "important" | Procurement monitoring and planning tool | Ongoing; deadline May 2012  | JRC.B04             | A follow-up audit was implemented by the IAS                  |
| 3. Ongoing actions stemming from the Synthesis Reports  |                |   |  |   |                     |   |
| Action from Synthesis Report  | ABB activity   | Expected result   |  | Timetable for implementation  | Responsible service | Mid-term progress review                                      |
| "The working methods of the Commission 2010-2014" provide that "The Member of the Commission and the Director-General meet at least twice a year in order to discuss the internal control weaknesses highlighted or the caveats expressed in the services annual activity report and the action plans devised in order to remedy them." | 10 02<br>10 03 | A report on sensitive issues is produced at least twice per year, covering internal control reviews, audit follow up, legal cases, cases reported to the European Ombudsman, the Investigation and Disciplinary Office of the Commission (IDOC), European Anti-Fraud Office (OLAF).   |  | These reports are discussed during the monthly meetings of the Director-General with the Commissioner | JRC.B04             | Review and specific actions are determined after each meeting |
| "Implement outstanding IAS recommendations"<br><br>à see chapter 2 of the present table   |                |   |  |   |                     |   |

## 9. ANNEX 4 – COMMUNICATION STRATEGY

| No   | Communication Objective(s)  | Message  | Audience   | Proposed actions / type of activity  | Date/ location   | DG COMM Services <sup>21</sup>                             | Evaluation  | Resources                 |
|--|---|--|--|--|--|--|---|---------------------------|
| <b>Policy objective/Policy output</b>  |   |  |  |  |  |  |   |                           |
| Raise awareness and facilitate the adoption of Horizon 2020  |   |  |  |  |  |  |   |                           |
| 1  | In concerted effort with the other members of the European Commission's research family facilitate the negotiations and ultimate adoption of HORIZON 2020. Engage key stakeholders at Member States and EU level. | At a general level: The importance of science and research to foster smart, sustainable and inclusive growth in Europe. Specifically (JRC): the strong added value of the European Commission having an in-house science service | Policy makers (nationally and at EU level) addressed both directly and via information to media, business associations, interest groups and general public | JRC news releases on scientific achievements and their relevance to society  | Ongoing  | Spokesperson's office                                      | In 2012, JRC will carry out an extensive evaluation of its external communication activities (through contract with an external contractor) | Total: 26 + 2 contractors |
|  |   |  |  | JRC participation in major events and organisation of events with relevance to Member States   | As appropriate, such as the Danish presidency event in March and the Euro Science Open Forum (ESOF) in July. |  |   |                           |
|  |   |  |  | Attractive and well targeted publications (print and digital) that show the added value of JRC work and its relevance                            | Ongoing  |  |   |                           |
|  |   |  |  | Engage with popular press and other media outlets with broad outreach  | Ongoing – place news stories that are topical and invest in long-term relationship building.                 |  |   |                           |
| <b>Policy objective/Policy output</b>  |   |  |  |  |  |  |   |                           |
| Promote science as a major component in the Europe 2020 strategy for smart, sustainable and inclusive growth |   |  |  |  |  |  |   |                           |
| 1  | Support the credibility of the European Commission by raising awareness of the scientific work that supports and informs EU policy  | The European Commission relies on its in-house science service JRC for scientific support in many policy areas. This enhances the quality of EU policy making.   | All audiences with an interest in EU policy  | Commission press releases on policy initiatives in coordination with other Commission services   | Ongoing  | Spokesperson's office                                      |   |                           |
|  |   |  |  | JRC news releases on scientific achievements prepared in consultation with other Commission services to provide the appropriate policy dimension | Ongoing  | Spokesperson's office, Europa website, Audiovisual service |   |                           |
|  |   |  |  | JRC participation in major events and organisation of events with relevance to Member States   | Ongoing  |  |   |                           |

<sup>21</sup> Please consult DG COMM/A1 on how COMM services can best support your activities. The full list of DG COMM services can be consulted here: [http://www.cc.cec/home/dgserv/comm/helping\\_you\\_communicate/index\\_en.htm](http://www.cc.cec/home/dgserv/comm/helping_you_communicate/index_en.htm)

| <b>Policy objective/Policy output</b>  |  |   |   |  |                                       |  |
|--|--|---|---|--|---------------------------------------|--|
| Strengthen the credibility of the JRC as the in-house scientific service of the Commission |  |   |   |  |                                       |  |
| 1  | Demonstrate the JRC's scientific and technical excellence  | The JRC provides scientific and technical work of the highest standards, targeted to the needs of its customers (Commission, other EU bodies, and external customers) | Customers and partners, the scientific community, general public              | Articles in scientific journals  | Ongoing                               |  |
|  |  |   |   | Press work   | Ongoing                               |  |
|  |  |   |   | Publication of technical and scientific reports  | Ongoing                               |  |
|  |  |   |   | JRC participation in major events and organisation of events with relevance to Member States | As appropriate                        |  |
| 2  | Carefully brand the JRC's work   | The JRC is the European Commission's in-house science service, the only Commission service in charge of direct research   | Customers and partners, the scientific community, general public              | Careful and consistent branding of all JRC communication products                            | Ongoing                               |  |
|  |  |   |   | JRC participation in major events and organisation of events with relevance to Member States | As appropriate                        |  |
| <b>Policy objective/Policy output</b>  |  |   |   |  |                                       |  |
| Disseminate JRC's research results   |  |   |   |  |                                       |  |
| 1  | Give a comprehensive overview of JRC's knowledge production and facilitate access to it          |   | All audiences, in particular Customers and partners, the scientific community | Revamp the JRC website (set up JRC Science Hub)  | New website online after summer break |  |
|  | Explore modern tools to reach new audiences, in particular job seekers, general public and media | JRC's work is relevant to EU citizens.  | All audiences, in particular job seekers, media, and general public           | Set up and implement a pragmatic and efficient social media strategy                         | First half 2012                       |  |