



EUROPEAN COMMISSION  
JOINT RESEARCH CENTRE

# **Joint Research Centre (JRC)**

## **Annual Activity Report 2010**



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## PART 1 – Policy Achievements

### 1.1 Introduction

The EU and the world are facing several "Grand Challenges". Amongst these are the need to ensure sustainable growth and development, maintain stability in the international financial structure, provide a safe and adequate food supply, promote environmental sustainability practices across sectoral policies, mitigate and adapt to climate change, decarbonise the economy whilst securing an adequate and secure energy supply, and managing the impacts of fast technological change. In this setting, the European Union, via the Lisbon Treaty, the Europe 2020 Strategy, and the concept of the European Research Area (ERA) has provided a new impetus to European research for the mutually reinforcing priorities of 'smart, sustainable and inclusive growth'. The promotion of scientific and technological advances has become a specific objective of the European Union.

Throughout 2010, the JRC, as both a service of the Commission and the science and technology reference centre of the Union<sup>1</sup>, has taken up this challenge and reoriented itself towards providing pro-active support to all phases of the policy cycle. Along this new course the JRC has integrated its knowledge structure to boost ongoing areas of support; on top of this the JRC has made a specific effort to strengthen its support regarding economic analysis in particular modelling applications to be used for comparative analysis of policy options.

With these changes the JRC was prepared for the task of fully supporting the needs of the European Commission and the "Europe 2020"-strategy in an integrated manner along the full policy cycle. This cycle starts with anticipation and horizon scanning, goes through policy formulation including policy options with socio-economic analysis, to impact assessment, policy implementation, monitoring and evaluation.

The JRC Management Plan (MP) 2010 specified four general objectives. **General objective 1 (GE1) "Provision of robust scientific and technical support to policy makers in the context of the EC and Euratom Treaties"** (so-called institutional budget) follows directly from the mission. In order to cater for the full scale of demand from Commission services for mission related support work, the JRC and several of its clients have signed Administrative Arrangements (AA) that determine content and financial dimension involved (so-called competitive or earned income). The importance of the scientific and technical support provided to customers within the Commission continued to grow with 90 administrative arrangements, signed in 2010.

The services and impacts of this mission related work, financed through institutional and competitive budget, unquestionably attract most attention. In order to give them the room they deserve, and to respect the prescribed format of this report, a list of detailed examples of the JRC's policy support work is described in Annex 8 of this report.

Three inter-related general objectives support GE1: **"Scientific excellence in key areas of competence"** (GE2), **"The JRC as an effective and efficient organisation"** (GE3), and **"The JRC: an attractive place to work"** (GE4). Achievement of the objectives GE1-4 is monitored quantitatively through the JRC's set of MP indicators summarized in Table 1.1-1. Achieved objectives are described qualitatively in chapters 1.2 through 1.6.

Further specific objectives are described in chapters 1.7 (Completion of previous Framework Programmes and other activities, including the above mentioned administrative arrangements) and 1.8 (Decommissioning of obsolete nuclear installations).

**Challenges in 2010:** The key challenge for the JRC was the finalization of a corporate rolling strategy<sup>2</sup>, which positioned the JRC in terms of its support to the Europe 2020 Strategy. Several elements of the strategy were initiated by the end of 2010, including the set-up of an anticipation function and the development of a modelling platform (including socio-economic competence).

**Milestones:** Besides the reorientation task described above, the JRC has achieved a series of milestones during 2010. They were originally planned independently, but received new impetus and enhanced significance throughout 2010 as a consequence of Commission initiatives such as the Europe 2020 strategy and the Innovation Union Flagship initiative. Only a limited list of milestones at corporate level are mentioned here.

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<sup>1</sup> The mission of the JRC is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies. As a Directorate General of the European Commission, the JRC 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>2</sup> The Joint Research Centre Strategy 2010-2020 - Integrating Robust Science for Policy Making.

As a follow-up to an audit on the quality of scientific deliverables a quality assurance system was established and phased-in for reference reports, with planned extension to other types of deliverables. The review of the JRC horizontal services in 2009 was completed with a restructuration during 2010. Finally, the list of follow-up actions of the FP6-Ex-post evaluation (so-called "King-Report")<sup>3</sup> was completed<sup>4</sup> comprising – amongst others the following: Based on the recommendations of an ad-hoc group of the JRC Board of Governors, a working group revised the JRC's set of corporate indicators, which were integrated in the Management Plan 2011<sup>5</sup>. During the last quarter of 2010 the JRC adopted a Knowledge Management strategy that it had developed during 2009-10. As a part of this, the JRC Publications Data base was made public. With these tasks the follow-up action portfolio of the King-Report can be considered completed.

In-line with the stipulations of the Framework Programme for Research EC and Euratom, two interim (mid-term FP7) evaluations<sup>6,7</sup> were implemented by high-level expert panels during 2010. As suggested by the King-Report, the mid-term evaluations were carried out as a series of thematic evaluations starting with the FP7-Euratom evaluation and followed by five thematic evaluations of FP7 EC. The latter's results were summarised in a meta-evaluation report by a panel composed of the chair persons of the five thematic evaluations.

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<sup>3</sup> Ex-post Evaluation JRC - direct actions in the 6th Framework Programme 2002-2006

<sup>4</sup> 92nd JRC Board of Governors Meeting, JRC Ispra, 18 and 19 November 2010

<sup>5</sup> Joint Research Centre Management Plan 2011

<sup>6</sup> Interim Evaluation Seventh Euratom Framework Programme (2007-2011) - direct actions of the JRC

<sup>7</sup> Interim Evaluation Seventh Framework Programme of the European Community (2007-2013) - direct actions of the JRC

General Objectives	Impact Indicators				
	Indicator	Values 2009	Target (as specified in MP 2010)	Milestones	Values 2010
<b>General Objective 1:</b> Provide an integrated and proactive scientific and technical support to our customers	JRC reference reports published	5 per year	15 per year	N/A	5
	Selected components of "result/impact" indicator - Important EU Policy Documents and Decisions bearing the trace of JRC influence - Long-term support to implementation of EU policy - Influence on International standards, agreements, negotiations and legal cases on behalf of the EC	N/A	46	N/A	48
			108		86
			44		43
Level of customer satisfaction using the Global Adherence Index score	73 (2008 survey)*	85	N/A	73 (2008 survey)*	
<b>General Objective 2:</b> Ensure scientific excellence in our core competences	Peer-reviewed scientific articles and major policy support documents	Total Number of Articles:1089 → 1,1 publ./scientist	2 per scientist per year	N/A	Total Number of Articles: 1017 → 0,9 publications/scientist
	Success rate in calls for FP indirect actions in the year	71%	60%	N/A	55%
	Proportion of cashed income from indirect actions in the Framework Programmes per year to total Budget	16,3% budget	15% budget	N/A	15%
<b>General Objective 3:</b> Improve the efficiency and effectiveness of the JRC	a) Payments made on time	a) 93,2%	a) 100%	a) N/A	a) 95,6%
	b) Complete and Linear Budget Consumption	b) 98,4%	b) 100%	b) Specific credits 40% by June 70% by Oct	b) 99.9%
	Recruitment Time average time taken to fill vacancies (from publication deadline to date of distribution of transfer / nomination act)	Internal = 71 days External = 120 days	internal= 60 days; external = 120 days	N/A	Internal = 60 days; External = 132 days
Procurement time	133d	110d	N/A	153 days (For 127 successful procurements scrutinized by the Public Procurement Advisory Group)	
<b>General Objective 4:</b> Make the JRC a better place to work (staff satisfaction, results..)	Staff Satisfaction Survey results	69% (2007 survey)**	75% staff surveyed satisfied with current job	N/A	69% (2007 survey)**

Table 1.1-1: JRC impact and performance indicators 2010; \*Note: The JRC Customer Satisfaction Survey is carried out on a three year basis. The next survey will be implemented in 2011. \*\* The next Staff Satisfaction Survey was launched on 29 March 2011.

## 1.2 General Objective 1 – Provision of robust scientific and technical support

Under General Objective 1 (GE1) the JRC carries out direct actions in the framework of the two Specific Programmes (SP) of the Seventh Framework Programme (FP7)<sup>8,9</sup>, i.e.

- the European Community Framework Programme for research, technological development and demonstration activities (2007 to 2013), corresponding to ABB **10.02 Activity 1 FP7 EC**, and
- the European Atomic Energy Community (Euratom) Framework Programme for nuclear research and training activities (2007 to 2011), corresponding to ABB **10.03 Activity 2 FP7 Euratom**.

2010 being the fourth year of FP7, these direct actions are implemented pursuant to the more detailed multi-annual (MAWP) and annual work programmes (AWP). These specify detailed objectives for roughly 120 scientific Actions.

Roughly three quarters of these Action-level objectives were achieved during 2010; 3% were not achieved<sup>10</sup>; for the rest, delivery is delayed but the objective will be achieved. The JRC monitors its impact on customers via a dedicated multi-dimensional impact indicator. Impact is understood as a tangible major added value at the level of the clients of the JRC, i.e. EU policy makers. To assess this, a series of impact categories are used<sup>11</sup>. According to the JRC's most recent internal evaluation, the impact profile across the different categories of impact as depicted in Fig. 1.2-1 was achieved throughout 2010. 86% of the actions had a tangible impact in 2010. Qualitative descriptions of selected examples of the work performed and the impact achieved are presented in Annex 8.

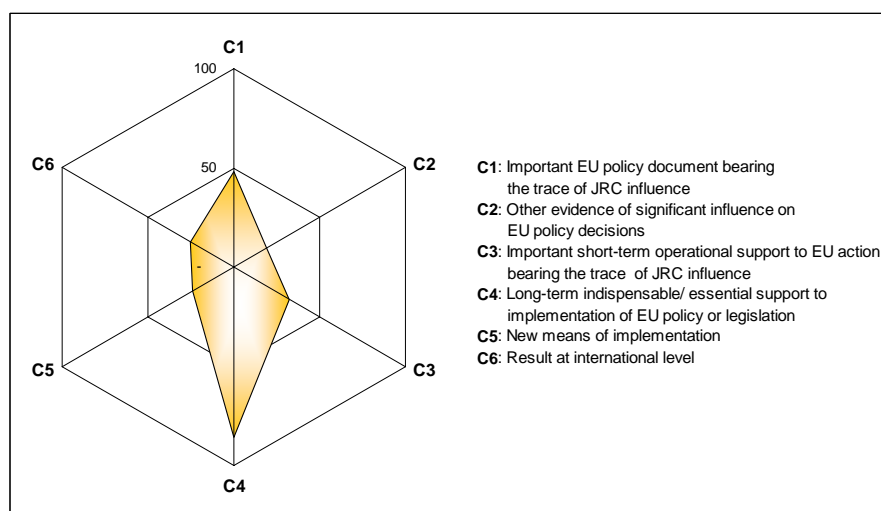


Figure 1.2-1: *Quantitative impact profile of JRC's policy support work during 2010, as identified by JRC's annual internal evaluation, the Periodic Action Review 2010. Note, the numerical values represent lower limits due to conservative application of the assessment criteria. Note: "New means of implementation" include e.g. new reference materials. "Result at international level" include e.g. protocols, algorithms, reference tables, adopted by e.g. international organisations (OECD, IAEA).*

In the MP 2010 the JRC has focused on indicators assessing the impact of JRC's policy support work on the policy making process. In the course of 2010 the corporate indicator system was revised confirming the policy impact indicator and developing a new policy support productivity indicator. The latter will be phased-in during 2011 together with a new system for compiling the information and for retrieving associated documents in the JRC's

<sup>8</sup> 2006/975/EC: Council Decision of 19 December 2006 concerning the Specific Programme to be carried out by means of direct actions by the Joint Research Centre under the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007 to 2013)

<sup>9</sup> 2006/977/Euratom: Council Decision of 19 December 2006 concerning the Specific Programme to be carried out by means of direct actions by the Joint Research Centre implementing the Seventh Framework Programme of the European Atomic Energy Community (Euratom) for nuclear research and training activities (2007 to 2011)

<sup>10</sup> Non-achievement of objectives means that at least one out of several of the deliverables related to an objective was not produced. These cases include cancellation of a deliverable at the request of the client, non-availability of staff (e.g. in case of delayed recruitment), reorganisation of a scientific action in consultation with the client, delayed or cancelled scientific publications

<sup>11</sup> see table also Table 1.1-1. There, the numerical values of impact categories C2 and C5 are merged and shown together with categories C1 and C4. The same set of impact categories is used in the activity statements of the preliminary draft budget procedure.

publications data base. Hence the MP2011 and the Annual Activity Report (AAR) 2010 do not contain policy support output productivity information but they do contain policy impact information.

#### 1.2.1 Title 10.02 - Activity 1 – Directly financed research – FP7 (2007 to 2013) - EC

In FP7 the non-nuclear activities of the JRC are structured into four policy themes representing specific objectives under "General objective 1". Note: a comprehensive list of qualitative examples of JRC scientific and technical policy support is given in Annex 8.

##### 1.2.1.1 Specific objective Policy theme 1: "Prosperity and knowledge intensive society"

The work of the JRC in this area consists of providing specific, mostly technical, contributions underpinning the development and functioning of the single market.

##### 1.2.1.2 Specific objective Policy theme 2: "Solidarity and responsible management of resources"

The work in this area consists of developing monitoring and assessment tools, to produce analyses, forecasts and maps to help the EU address the issue of sustainability in all its dimensions.

##### 1.2.1.3 Specific objective Policy theme 3: "Security and Freedom"

The work in this area consists of providing specific methods, tools and services to assess man-made and natural hazards; to address a broad range of security issues (e.g. border control, privacy, antifraud, critical infrastructures); and to develop and validate methods and materials for the monitoring, control and traceability of food and feed to ensure safety and quality in the EU market.

##### 1.2.1.4 Specific objective Policy theme 4: "Europe as a world partner"

The work in this area consists of providing specific methods, tools and services in support of Commission initiatives related to humanitarian aid, development aid, security and other domains of the external policy areas of the Union.

#### 1.2.2 Title 10.03 - Activity 2 - Directly financed research – FP7 (2007 to 2011) - EURATOM

In FP7 the nuclear activities of the JRC are detailed in three specific objectives. Note: a comprehensive list of qualitative examples of JRC scientific and technical policy support is given in Annex 8.

##### 1.2.2.1 Specific objective 1 – "Nuclear waste management and environmental impact"

In this area, the JRC provided methods, tools, experimental data, technical knowledge on nuclear materials and fuel processes from production of energy to waste storage; developed; measured and monitored radioactivity in the environment; maintained, developed and disseminated knowledge in the nuclear field and provided high-level training for young students and researchers.

##### 1.2.2.2 Specific objective 2 – "Nuclear safety"

In the area of nuclear safety, the JRC continued to contribute to the high safety level of nuclear installations in the enlarged EU and neighbouring countries, including the establishment and operation of a centralised EU office aimed at gathering operational safety feedback data from nuclear plants (so-called Clearinghouse); to evaluate the safety of the fuel cycle in nuclear reactors operating in the EU; and to evaluate the safety, the feasibility and the performance of innovative nuclear systems, including advanced fuels.

##### 1.2.2.3 Specific objective 3 – "Nuclear security"

In the area of nuclear security, the JRC contributed to technical and logistical innovations and improvements in the areas of safeguards and non-proliferation as well as in the fight against illicit trafficking of nuclear material.

### 1.3 General Objective 2 – Scientific Excellence in key areas of competence

General objective 2 receives funding through two Activity Based Budget (ABB)-lines, i.e. **ABB 10.02 Activity 1 FP7 EC** and **ABB 10.03 Activity 2 FP7 Euratom**. In order to fulfil its mission and safeguard its long-term goals, the JRC has developed a strong scientific knowledge base in core areas, which it continued to build on and expand in 2010. The JRC's scientific excellence is reflected primarily in its ability to publish peer reviewed scientific articles, to document its insights in reference reports and to obtain funding for competitive projects.

Matching the overall stability of its resources, the relevant indicators have remained relatively stable with small fluctuations from year to year:

- **"Number of peer reviewed articles and major policy support documents"**: In 2010 the JRC produced 1017 publications in this category which include peer-reviewed scientific articles, general policy support reports for clients, reference reports (see also next bullet) as well as specialized customer targeted publications such as maps. With 0.9 publications per scientist in 2010, the indicator fluctuates around a value of 1,0. A more realistic long term target will be considered.
- **"Reference Reports"**: The "reference reports" were introduced in 2009 as a publication category for scientific policy support synthesis reports to be used as a reference by policy makers and other users. With 5 reports published in each 2009 and 2010 the category has started to become accepted by scientists. The long term target of 15 reports per year appears to be too ambitious and a revision of the target is considered.
- **"Income from additional activities"**: Since its introduction the indicator has shown an upward trend, and with a figure of 15% for 2010, the value now fluctuates around the 15% target fixed in the texts of FP7 EC and Euratom.

### 1.4 Specific horizontal objectives: Policy, strategy and coordination

The JRC has a number of specific horizontal objectives directly supporting General Objectives 1 and 2. They address specific JRC policies aimed at coordinating cross-JRC activities:

**Customer needs:** In order to ensure that the JRC's services always meet the demand of customer DG's, five high level customer meetings were held at senior management level with key DG customers (i.e. SANCO, RTD, ECFIN and MARKT, INFOS, REGIO) to identify mid-term customer needs.

**Stakeholder relations:** A policy paper on international relations was prepared and agreed by the Board of Governors and the Cabinet. More than 90 Members of the European Parliament (EP) attended the EP event in May. Moreover, in the interactions with key partners a special focus was set on the scientific counsellors of the EU delegations.

**Communications:** Regarding External Communication stronger links were developed with the press resulting in the highest media coverage to date; some sixty events and high-level visits took place throughout the year. A highlight was the JRC's representation at the European Science Open Forum (ESOF) 2010 in Turin with 14 scientific sessions and 9 outreach activities. Further outreach activities included 11 visits by schools including the Schools Day in Ispra on 1st March.

**Management of Intellectual Property and Technology Transfer:** 7 patents were filed and 22 new patent proposals received, 5 new software registrations were made, 20 new trademarks registered and more than 20 exploitation agreements concluded. Moreover, training courses on intellectual property (IP) were delivered to staff and a new e-Learning IP module developed. Finally, the 'Innovative Projects Competition' was organised and 12 projects have been selected to receive funding.

**Knowledge Management and Evaluation (KM&E):** The knowledge management strategy and roadmap were adopted by the Directoire. JRC publications were made available to the public through a new on-line JRC Publications Repository<sup>12</sup>. A collaboration platform (using the Sharepoint infrastructure) supporting a variety of JRC user groups and communities of practice was launched. As a first application, a common corporate calendar has replaced many

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<sup>12</sup> <http://publications.jrc.ec.europa.eu>

specific calendars. The platform is also used by the JRC-internal Programme- and Resource Support networks. The Knowledge Management and Evaluation Unit has taken over the function of 'Information Architect' and coordinates implementation of the management information system (replacing the SAP-PS system). The annual internal evaluation was carried out and results fed into the MP2011. Information exchanges between MP, Preliminary Draft Budget (PDB), AAR and AWP processes were synchronized allowing information exchange without redundant reporting.

**Quality Management:** In line with the JRC Quality Management policy, the ISO 9001 certified directorates (9 out of 10) all maintained their certifications in the annual third party maintenance audits. Completion of certification of all 10 Directorates is expected by mid 2011.

**Environmental management:** At the end of 2010 all JRC sites except Brussels have been ISO 14001<sup>13</sup> certified.

**Corporate Indicators:** The first phase of the JRC corporate indicator system revision was completed leading to a new set of MP indicators (already integrated in MP2011) and enabling the redesign of the list of senior management indicators referred to as *Tableau de Bord*. This revision was accompanied by a review of the reporting system leading to a more rational use of JRC output categories, publications and the underlying database system.

**The follow-up of the Ex-post FP6 evaluation.** Work linked to the recommendations of the evaluation was completed (see paragraph "Challenges in 2010" in chapter 1.1 at the beginning of the present document).

#### **Infrastructure development:**

Monitoring timely implementation of the strategic infrastructure investment plan: In 2006, the JRC adopted the "Priorities for JRC Infrastructure Development 2007-2010". At the end of 2010, the construction of two new research facilities at the Ispra site was progressing as planned, whilst the new facility for developing and producing reference materials was inaugurated in November 2010 in Geel. In Karlsruhe, procurement procedures for the construction of a new office building were completed. At the same time, preparations were well underway for the new active laboratories facility in Karlsruhe ("Wing M"), in particular with regard to the design and licensing procedure.

Support Services for IT, Facilities and Infrastructure: **Support Services for IT, Facilities and Infrastructure:** Both the Petten-site and the Ispra-site, have started to implement the concept of "integrated maintenance" aimed at streamlining external assistance in the maintenance of JRC physical infrastructures. The implementation of the European Commission Decision C(2006)1623 for Harmonised Policy for Health and Safety at Work for all Commission staff was continued. Three Institutes (IRMM, IE and ITU) have already achieved the OHSAS<sup>14</sup> 18001 certification.

The consolidation of the role of Corporate IT was pursued with the creation of the Corporate IT unit, the Knowledge Management and Evaluation Unit and the delegation of local IT support functions to the different JRC sites. During 2010 intermediate solutions were deployed to replace the old SAP-PS/CATS<sup>15</sup> system while ensuring business continuity based on existing and simplified systems. A longer term vision for the future of Information Management in the JRC was drafted in 2010. Three sites made additional investments in their local video-conferencing facilities.

### **1.5 General Objective 3 – The JRC as an effective and efficient organisation**

**Human Resource Management (HRM):** Within the ambit of human resources, 2010 was marked by

- the consolidation of the role of corporate human resources and the creation of the Ispra Site Management (ISM) Recruitment and Training unit (in charge of contract agent and trainee recruitments for the Ispra site, the organisation of training for Ispra staff and the welcome desk);
- the successful launch of the JRC AD6/AD7 research competitions on 30/09/2010, which will lead to the creation of reserve lists of more than 270 scientists;
- the drafting of the JRC Equal Opportunity Action Plan 2010-2014, endorsed by Commissioner Geoghegan-Quinn;

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<sup>13</sup> ISO 14001: ISO standard on Environmental Management.

<sup>14</sup> OHSAS: Occupational Health & Safety Advisory Services

<sup>15</sup> SAP-PS: SAP-Project System/ Cross Application Time accounting System

- the postponement of the Staff Satisfaction Survey to end March 2011 due to the launch of the DG HR staff survey in November 2010; and
- the visit of the European Data Protection Supervisor (EDPS) to the Ispra site mid-December to examine *inter alia* the data protection notifications for officials, temporary agents, contract agents, grant holders, trainees and interims.

Gender balance: With a present representation of women in the AD category of 20% the JRC needs to continue to address the issue of gender balance and strive towards the achievement of the goals set forth in the Commission's New Strategy on equal opportunities for women and men (2010-2014). The JRC therefore adopted a new action plan for equal opportunities (2010-2014) which envisages that women are recruited to at least 50% of the new AD non management positions. Thus, it is expected that the JRC will have reached a 22% female representation by the end of 2011 in the AD-non management category.

For the middle management category the current representation of women is 16%. Therefore a positive action is envisaged with a replacement rate of at least 50% for retirements and for nominations to existing empty posts. Currently 10% of senior management positions are occupied by women. Accordingly a replacement rate of 30% is envisaged to increase the female representation.

Further HR-related objectives:

- 92.1% of the available posts for core staff were occupied, which is slightly above the target of 90%.
- Average time taken for filling vacancies has improved. As such the internal target (60 days) was met, whilst the external target (120 days) was only slightly exceeded (132 days)

**Financial Management and Procurement:**

- The 'level of utilisation of institutional commitment appropriations' reached 99.9%.
- 95.6% of payments were made within legal limits.

A project to test the viability of instating electronic workflows for processing payments was initiated. Mid-term milestones have been fixed for the specific credits i.e. to consume 40% of the specific credits budget by June and 70% by October.

Efforts were made to better implement an investment plan for procurement thereby avoiding an "end-of-year rush". Procedures were put in place to allow the launch of call for tenders about 6 months before the starting of the year in order to be able to conclude contracts as early as possible.

In the past, efforts were made to extend the central JRC database JIPSY with a fully automatic email notification system to ensure that there is effective warning of expiring contracts. This notification system is now used by all JRC institutes.

- The result for positive opinions by the Public Procurement Advisory Group (PPAG) is 91% which is slightly below the  $\geq 95\%$  target.
- The variance in the actual value of the contract against their estimated value is 11%, which is quite below the target of  $<20\%$ .
- There were around 170 large value ( $> \text{EUR } 60\,000$ ) contract tenders valued at approximately EUR 190 000 000. 29% of the files subject to the scrutiny of the PPAG were awarded by negotiated procedure, which is lower than in some preceding years.

**Legality and regularity of underlying transactions:**

The following improvements to the internal control system were made:

- Exceptions reporting: Bi-annual reports on exceptions containing recommended actions were produced regularly and made available to the members of the JRC internal Resource Support Network (RSN). A separate point devoted to exceptions linked to procurement and the PPAG is included in the reports on exceptions. The PPAG activity report contains statistics on exceptions such as procedure overrulings.
- Financial document management and ex-post controls: In order to ensure a harmonised approach to financial file management the Minimum Content of a Financial File has been reviewed and the report's conclusions

adopted. In the future, this report will be the reference point for ex-post control exercises and represent the basic minimum documentation to be kept in the files.

- Ex-ante controls: The PPAG regulation has been revised in order to address different Internal Audit Service findings. It is accompanied by a template to ensure the effective follow-up of the PPAG opinions.

**Audit follow-up:** A new decentralised approach was implemented using the JRC Audit Follow-Up Database (AFUDB) for monitoring/reporting on audit follow-up and to meet decentralised users' needs as well as Internal Audit requirements. To boost operational capacity, Directorates/Institutes nominated responsible audit follow-up correspondents (so called IFR). Reporting needs were analysed and developed with the Informatics Unit (JRC B.03) in collaboration with the Internal Audit Unit.

## **1.6 General Objective 4 – The JRC: an attractive place to work**

**Staff satisfaction:** High job satisfaction benefits the whole organisation directly and indirectly. To monitor the staff's satisfaction with various aspects of their professional life in the JRC, a Staff Satisfaction Survey (SSS) is carried out every two to three years. The 69% overall satisfaction revealed in the last SSS in mid-2007, represents a good result. Follow-up actions were deployed in the various Institutes and Directorates and their success will be monitored in the upcoming JRC SSS 2011. The SSS 2010 was originally planned for the end of the year; a call for tender was launched, a contractor selected and the survey prepared. In order to avoid the risk of confusion with the Commission-wide SSS launched by DG HR, which was also carried out at the end of the year 2010, it was decided to postpone the launch of the JRC staff survey to end of March 2011.

**Training:** With the objective to provide harmonised training a variety of JRC corporate courses which are equally accessible for all sites were organised: e.g. newcomers training; horizon scanning techniques; scientific writing.

To provide shorter and more simplified trainings, e.g. through e-learning, workshops on this topic were held with DG HR, resulting in an overall promotion of e-learning and automatic guidance towards e-learning in the Commission training management tool SYSLOG.

To enhance the consultancy role of the training coordinators in each Institute/Directorate, a "Participatory leadership training" and a workshop on impact of training (return on investment) were organised.

With 94.7% of staff giving positive evaluations of JRC training courses the target of 90% was surpassed.

## **1.7. Completion of previous Framework Programmes and other activities - Title (10 04)**

Chapter 10 04 covers the completion of previous framework programmes (request for payment credits only) and is also a budgetary structure intended to receive assigned revenues used to finance specific items of expenditure from the complementary activities of the JRC (competitive activities and the complementary High Flux Reactor programme):

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

For this activity, only payment appropriations are asked for in order to cover the outstanding commitments from previous joint programmes - namely the 2003-2006 (FP6) EC and Euratom framework programmes - to cover commitments established prior to the FP7 concerning the non-nuclear and the nuclear activities of the JRC.

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

The main objective driving the participation of the JRC in third party work (TPW) activities, as requested by the Council, is the development of added value to its institutional programme (acquisition/development of knowledge, networking increase, benchmarking, etc.).

### *1.7.3 Scientific support for Community policies on a competitive basis (10 04 03)*

This activity covers expenditure specific to various tasks of research, technological development and demonstration, apart from the JRC Institutional Research Framework Programme, and carried out on competitive basis for Community policies (Administrative arrangements; for instance support to the former DG RELEX for the PHARE & TACIS programmes, to DG ENER for the On-Site Laboratories, etc.). The importance of this

scientific and technical support provided to customers within the Commission continued to grow with 90 administrative arrangements, with a value of EUR 49.5 million, signed in 2010. A list of examples of the JRC's policy support work including the administrative arrangements is described in Annex 8 of this report.

#### *1.7.4 Operation of the High-Flux Reactor (HFR) and Completion of previous Supplementary HFR Programmes (10 04 04)*

The HFR is used by the Commission in accordance with the agreement between Euratom and The Netherlands of 25 July 1961. The operation of the HFR, which is under the responsibility of the operation licence holder NRG (NL), continued throughout 2010.

Budget line 10 04 04 01 — "Operation of the high-flux reactor" covers the completion of previous Supplementary HFR Programmes, while line 10.04 04 02, "Operation of the high-flux reactor — Supplementary HFR Programmes (2009 to 2011)", covers a three-year Supplementary Research Programme (2009-2011) that was adopted by the Council on 25/05/2009<sup>16</sup>.

The HFR plays an important role in the EU regarding research on nuclear safety, thermonuclear fusion, and fundamental research and training capabilities. The reactor is also used for commercial radio-isotopes production for more than 60% of the 10 million medical diagnoses executed each year in Europe, and is consequently a very important facility for the European medical sector.

### **1.8 Title Historical liabilities resulting from nuclear activities carried out by the JRC pursuant to the Euratom Treaty (10 05; Decommissioning)**

The decommissioning activity aims to progressively decommission JRC Euratom nuclear installations, either already obsolete (i.e. with no foreseen further use) or "future liabilities" (of installations that are still in use). It also intends to treat "historical" waste (i.e. 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. The programme started in 1999 and is based on the assumption, made for budgetary planning reasons, that foresees the decommissioning of the last obsolete nuclear installations and the final disposal of historical wastes around 2030.

Depending on the site, the activity encompasses several of the following specific objectives:

- The construction/refurbishment of waste management facilities in order to characterise, treat, condition and temporarily store historical waste or waste arising from the dismantling operations;
- The retrieval, characterisation, treatment and conditioning of existing old waste;
- The removal, treatment and disposal of unused nuclear materials (fuel and experimental nuclear materials);
- The cleaning-up and dismantling of installations up to the International Atomic Energy Agency's (IAEA) stage 3 of decommissioning, i.e. allowing unrestricted use of the buildings as defined above (so-called brown field) or even the "green field" option, which comprises the demolishing of buildings and the restoration of the land in its initial state;
- The transfer of waste to national sites for disposal.

Progress and achievement of these objectives as well as corresponding budget execution are permanently monitored. The state at the end of 2010 is summarised in Tables 1.8-1 and 1.8-2, below. 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 other sites Geel (BE), Karlsruhe (DE) and Petten (NL), where most facilities are still operational.

Several milestones were noted in 2010 in Ispra: the start of the design phase of the new building for the waste interim storage (ISF: Interim Storage Facility), the completion of the contract with the US company NFS for the taking over and transport of nuclear materials, and the decommissioning and unconditional release of the radiochemistry laboratory. Construction of ISF will start pending the issue of the licence by the Italian regulatory authorities

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<sup>16</sup> Council Decision 2009/410/Euratom of 25 May 2009 (OJ L 132, 29.5.2009, p. 13)

Following the signature of the "Settlement Agreement" between the EC and the Italian government in 2009 related to the handling of the Italian liabilities, the Italian National Repository and the definitive Waste Acceptance Criteria, the Italian Government has not yet appointed the Italian operator to whom the JRC shall transfer the licence of the Ispra 1 reactor (to be decommissioned at charge of the Italian Government in compensation for the Italian liabilities on the Ispra site).

In 2010, the JRC has returned EUR 11.3 million payment credits in the global transfer. The main grounds for the delays in payments are technical issues linked to the implementation of the decommissioning programme mainly relating to the authorisation processes with governmental authorities for the nuclear waste management. In fact, delays in the licensing processes in Italy have obliged the JRC to renegotiate the corresponding contracts, and as a consequence the annual payment forecast could not be respected.

The main transactions affecting the under-spending of payment credits are:

- Two payments for EUR 2.5 million and EUR 2.3 million on existing contracts could not be paid due to delays in the authorisation processes in Italy and are now postponed to 2011.
- Another amount of EUR 2.2 million had to be de-committed in 2010 also due to authorisation problems in Italy, and the corresponding advance payment delayed to 2011.
- In addition, the German authorities predicted the 2010 contribution towards the national nuclear waste repository EUR 1.4 million higher than the final invoice received in 2010.
- Execution delays of several projects in Karlsruhe delayed payments for nearly EUR 2 million foreseen for 2010.

<b>Result indicators</b> (Percentage of budget committed / total budget planned up to full decommissioning)	Result (Dec 2009)	Latest known result (Dec. 2010)	Intermediate Target (end 2013)	Target (result) Before end of programme
1) Ispra site decommissioning activities <sup>17</sup> including: 1.1) Commissioning of <b>Ispra</b> waste management facilities 1.2) Removal/conditioning/storage of <b>Ispra</b> waste (final repository fees budget not included in the percentage calculation) 1.3) Removal of <b>Ispra</b> nuclear materials 1.4) Decommissioning of <b>Ispra</b> nuclear facilities 1.5) <b>Ispra</b> general services and "safe conservation" of installations	<b>59%</b> <b>20%</b> <b>52%</b> <b>8%</b> <b>35%</b>	32% of total Ispra budget <sup>1</sup> (1) to 5)	35% of total Ispra budget (1) to 5)	100%
2) Pre-decommissioning and waste management activities at <b>Karlsruhe</b>	<b>13%</b>	14%	17%	100%
3) Pre-decommissioning and waste management activities at <b>Geel</b>	<b>18%</b>	18%	20%	100%
4) Pre-decommissioning and waste management activities at <b>Petten</b>	<b>25%</b>	25%	25%	100%

Table 1.8-1: Executed and forecast budget execution of the JRC Decommissioning & Waste Management Programme

<sup>17</sup> Since the beginning of the Programme at Ispra EUR 160 million of EUR 500 million were committed, which corresponds to 32%. In addition, there are EUR 170 million for the final repository fees, which are not included in the calculation (see point 2 in the Ispra-related row in the table). Following the advice of the Decommissioning & Waste Management expert Group, this is an estimate based on the current tariffs applied in the EU repositories which cannot be verified at present since a final repository still does not exist in Italy. This lump sum will be paid at the end of the Programme, when the Ispra waste will be transferred to the Italian Centralised National Repository. See also: Communication from the Commission to the Council and the EP: Decommissioning of Nuclear Installations and Management of Radioactive Waste: Management of Nuclear Liabilities arising out of the Activities of the Joint Research Centre (JRC) carried out under the Euratom Treaty COM (2008).

Main expenditure-related outputs: <i>Budget Line 10 05</i>	2009	2010		Target 2011	
	Output (no.)	Output (no.)	million EUR	Output (no.)	million EUR
1 Number of major waste management facilities commissioned/licensed at <b>Ispra</b> (cumulative numbers)	9	9	0.877	9	2.750
2.1 Evacuation of alkali metals (in tons) and radiological sources from <b>Ispra</b>	12.5 t	12.5 t	3.576	12,5 t	5.000
2.2 Retrieval, characterisation and treatment of waste at <b>Ispra</b> (waste objects)	500 drums	1290 drums		1500 drums	
3 <b>Ispra</b> nuclear materials : a) irradiated: retrieval and conditioning (in %) b) non-irradiated: removal and transfer of ownership (in %)	a) 0% b) 98.5	a)0% b)98.5%	0.988	a)37.6% b)98.5%	2..500
4 Number of installations characterised at <b>Ispra</b> ; decommissioning and pre-decommissioning actions	4	6 charact. 1 released	1.987	Licensing file for 1 facility	1..250
5 General services <b>Ispra</b> (safe conservation; radiation protection, support to JRC Ispra Site Management Directorate, expert group service study, etc)	Continuous task	Continuous task	12.311	Continuous task	9.000
6.1 Decommissioning at JRC/ITU – number of hot cells treated/glove boxes dismantled at <b>Karlsruhe</b>	1/7	1/8	0.835	1/8	0.990
6.2 Management of annual decommissioning waste produced at JRC/ITU, cubic metres evacuated to the waste service contractor at <b>Karlsruhe</b>	40	67.7	1.570	40	1.250
6.3 Financial contributions to the German final repository	-	-	3.585	-	3.430
7 Waste management <b>Geel</b> : single financial contribution to design of Belgian final repository <sup>18</sup>	0	0	0.817	0	0
8. Decommissioning service study at <b>Petten</b>	0	1	0.100	1	0.100
<b>Total Budget line 10 05</b>			<b>26.646</b>		<b>26.270</b>

Table 1.8-2: Main expenditure related outputs in budgetary perspective, JRC Decommissioning & Waste Management Programme.  
Note: The mass of nuclear material to be moved in the future is not given here for security reasons

<sup>18</sup> Note: The Commission is obliged to contribute financially to a final waste repository in Belgium to store nuclear waste stemming from Euratom activities in Geel.

## PART 2 – MANAGEMENT AND INTERNAL CONTROL SYSTEMS

### 2.1. Introduction to the JRC

The JRC has a decentralised organisation with seven scientific Institutes, two horizontal Directorates with corporate responsibilities, and a third Directorate responsible for the management of the Ispra site. These are geographically spread over six different sites in five different countries. Given the geographic dispersion of the JRC and the technical nature of the work, the JRC policy is to place as much decision-making responsibility as possible on the operational services. Therefore JRC scientific Unit Heads are nominated as sub-delegated authorising officers for the budget lines specifically related to their research projects. In 2010 there were 100 authorising officers by sub-delegation. Of these, 10 were Directors, and the remainder were Unit Heads, Sector Heads or Advisers (scientific or administrative). Each Institute of the JRC is served by a Management Support Unit (MSU) which provides administrative support to the Institute, primarily in the area of financial and human resources management. MSUs located in Directorates B and C provide support to staff working in the corporate services as well as the Ispra Site Management. The MSUs perform an independent verification of all procurement and financial operations prior to authorisation. This financial verification focuses on regulatory compliance and thereby ensures that direct administrative support and advice is available to the scientific authorising officers.

Given the geographical distribution of the JRC there is a greater risk in the JRC of not applying rules consistently compared to most other services of the Commission. This risk is mitigated by means of regular meetings of corporate networks such as the RSN, the availability of shared information on internal shared folders, and regular contacts between the resource management staff in the MSUs and the corporate resource management Units. In addition, a reorganisation was carried out (with effect from the beginning of 2010) which provides a clearer separation between corporate and site-level responsibilities. This, together with the quality management system, serves to improve the performance (including compliance issues) and monitoring of the relevant processes.

Unlike other Directorates General of the Commission, the JRC must manage scientific infrastructures including nuclear facilities. The potential risks on JRC sites which have to be counterbalanced through effective measures are mainly: accidents, unauthorised access, intentional acts against safety and security including against the protection of sensitive documents. Regular safety inspections are being carried out on JRC sites regarding laboratory facilities and hazardous materials, by the JRC itself, external consultants and visits by national authorities. Organisational measures have been implemented to ensure that access to JRC sites and critical assets are controlled. Personal security clearances are issued to those staff required to deal with classified information. Certification of laboratories and institutes to internationally recognised quality management standards helps to offset risks and ensure compliance with norms and regulations.

The working arrangements between the JRC and the Commissioner were laid down in the document "Working Modalities with the Cabinet". This document is an annex to the document "[Working Methods of the Commission 2010-2014](#)" as distributed by the Head of the President's Cabinet on 10 February 2010. In addition to specific meetings between the Commissioner and the Director-General, regular meetings are held between the Director-General (accompanied by other relevant JRC staff depending on the nature of the agenda) and the Commissioner's cabinet. The Commissioner receives regular reports on important management issues and achievements. Once a quarter, the regular meetings between the Cabinet and the JRC includes the agenda points "Quarterly Report on Audits and Internal Control (including OLAF)" as well as "Upcoming sensitive reports", based on detailed briefing notes prepared by the DG. Independently of these briefing notes, the Director-General reports immediately on significant events related to financial management, staff matters, internal controls and audit or other sensitive matters.

On 1<sup>st</sup> December 2010 Mr Dominique Ristori took over the position as Director-General of the Joint Research Centre from Mr Roland Schenkel. The handover followed the relevant procedure to ensure administrative and business continuity.

#### *2.1.1 The JRC Budget, Institutional, Decommissioning and Competitive Activities*

Most of the JRC budget is associated with its "institutional activities" (i.e. the implementation of direct actions under the FP7 for Research and Technological Development), and decommissioning activities. The overall budget of the JRC in 2010 amounted to some EUR 389 million (see Table 2.1-1). and the most important share was used to cover staff costs. The remainder of the budget covers the costs of running, maintaining and managing the different JRC sites and the operational expenses attributed to the direct actions (i.e. the costs of purchasing scientific equipment, material, consumables etc.). Indeed, the JRC must autonomously provide many of the services that, on other sites of the

Commission, are provided by the Offices for Logistics and Infrastructures or DG Human Resources and Security. A significant proportion of the JRC's non-staff financial operations are directed towards covering these costs.

Credit type	Available Credits (EUR)	Consumed Credits (EUR)	Consumption (%)
Staff Expenses	230.414.065	230.402.599	100,00%
Training, social costs, missions, etc.	12.584.965	12.518.357	99,47%
Means	78.966.796	78.966.796	100,00%
Operational Expenses	40.742.448	40.709.887	99,92%
<b>INSTITUTIONAL BUDGET TOTAL</b>	<b>362.708.274</b>	<b>362.597.639</b>	<b>99,97%</b>
Decommissioning	26.900.000	26.645.741	99,05%
<b>GRAND TOTAL</b>	<b>389.608.274</b>	<b>389.243.380</b>	<b>99,91%</b>

Table 2.1-1: JRC Institutional Budget 2010

The JRC continues to have significant activities in the nuclear field not covered by the Euratom Framework Programme, in the context of implementing the Decommissioning & Waste Management Programme (D&WMP). In 2010, EUR 26.9 million were made available to finance this Programme.

The JRC is required to generate additional income through so-called "competitive activities". Such additional income is generated by the provision of research services to third parties, work provided to other Commission services over and above that provided through its normal institutional programme, and by participating in indirect actions under the Framework Programmes. The JRC participates in indirect actions on the same conditions as institutions in the Member States and participation is subject to a competitive selection process, as well as the provision of counterpart funding.

### 2.1.2 Financial Transactions

Transaction Type	Year							
	2003	2004	2005	2006	2007	2008	2009	2010
Commitments	8.427	8.704	10.150	9.973	9.700	9.266	<b>9.504</b>	<b>9.446</b>
Payments	36.726	39.436	38.150	37.281	43.342	40.722	<b>47.329</b>	<b>48.112</b>
Recovery Orders or 'Invoices' issued	613	495	535	886	1.094	989	<b>857</b>	<b>1214</b>
<b>TOTAL</b>	<b>45.766</b>	<b>48.635</b>	<b>48.835</b>	<b>48.140</b>	<b>54.136</b>	<b>50.977</b>	<b>57.690</b>	<b>58.772</b>
<b>Year on Year Difference</b>	<b>-3%</b>	<b>6%</b>	<b>0%</b>	<b>-1%</b>	<b>12%</b>	<b>-6%</b>	<b>13%</b>	<b>2%</b>

Table 2.1-2: Number of financial transactions carried out in recent years

### 2.1.3 Cross Sub-delegations

The JRC received cross sub-delegated authority to use the budgetary resources of other Directorates General and services of the Commission. Such authorisation is linked to specific research projects or actions. The services and amounts concerned are summarised in Table 2.1-3 below.

DG/Service	Associated Budget in 2010 <i>In 1.000s € (CI commitment consumed)</i>	Nature of Service managed by the JRC
DG AGRI	7.946	Assigned to the Institute for Environment and Sustainability (IES) for the Project of Common Interest "ECIP" and the Institute for the Protection and Security of the Citizen (IPSC) for the projects "Restructuration of agricultural survey systems" and "Actions of control and prevention – direct payments by the European Commission", relating to the "Control with Remote Sensing" work programme.
DG DEV	110	Assigned to the Institute for the Protection and Security of the Citizen (IPSC) and as DG DEV contribution to the Transparent Aid (TR AID 2) project.
DG DIGIT	0	Assigned to the Institute for Environment and Sustainability (IES) for the Project of Common Interest "Lisflood-Alert" in the context of a European Flood Alert System. The project finished in December 2008 and final payments were executed 2009. After de-commitment in 2010 the sub-delegation can be cancelled.  Assigned to the Institute for Health and Consumer Protection (IHCP) – no activities in 2010
DG ELARG	23,7	Assigned for the organisation of events, notably: information days on EU research policy, visits to the JRC by delegates from the candidate countries, etc.
DG ENER	0	Assigned to the Institute for Transuranium Elements (ITU) for projects related to nuclear security.  No financial transactions took place in 2010.
DG ENTR	0	Assigned in former years to the Institute for Health and Consumer Protection (IHCP) for projects linked to the chemicals sector and support for the European Chemicals Agency.  No activities in 2010
DG ENV	0	Assigned to the Institute for Environment and Sustainability (IES) for the Preparatory action "Climate of the Carpathian basin" and for the Pilot Project "Certification of low carbon farming practices".  No activities in 2010
DG MARE	(N/A)	Authority to enter into legal commitments on behalf of DG MARE was awarded to the Institute for the Protection and Security of the Citizen (IPSC) in the frame of the production of scientific advice through the Scientific, Technical and Economic Committee for Fisheries (STECF).

Table 2.1-3: Cross Sub-Delegations received

### 2.1.4 Procurement and Contracts

In 2010 the JRC awarded large value contracts<sup>19</sup> for an estimated total value of approximately EUR 190 million<sup>20</sup>. Prior to awarding such contracts, the JRC requires that they be submitted to the scrutiny of the PPAG. Over half of the contracts assessed by the PPAG were related to the provision of services (57 %). Supply contracts account for 39 % and works contracts 4 % of the total. Out of this total, more than the half (58 %) involves values exceeding EUR 500.000 , which represents an important increase from the two preceding years (around 37 %). To be noted that the relative frequency of different types of procedures – open, restricted or negotiated – tend to remain stable from year to

<sup>19</sup> For the purposes of this report, contracts worth more than EUR 60 000 are defined as 'large-value contracts'.

<sup>20</sup> Note: The procurement amounts may be greater than the amounts committed in the budget because framework contracts are included in the procurement total. These contracts cover several years and they do not constitute financial commitments in themselves.

year, with slightly more than one out of two open procedures (57 % in 2010) and the remainder divided between restricted (14 %) and negotiated (29 %) procedures.

In making highly specific scientific and technical purchases, the JRC sometimes has to operate in a rather limited market environment. This specificity is reflected in a relatively high proportion of contracts awarded on the basis of negotiated procedures<sup>21</sup>. The contracts awarded on the basis of negotiations with a sole contractor constitute around EUR 41 million worth of contracts<sup>22</sup>. The reasons that negotiations have to be opened with just one contractor are mainly associated with restrictive market conditions, e.g. in the nuclear area, or the highly specialised nature of the services or goods required by the JRC. It should be noted that procedures related to the TACIS programme also contribute to increase the share of negotiated procedures.<sup>23</sup>

### 2.1.5 Staffing

As of 31 December 2010, the number of JRC staff totalled 2,822 comprising both core and visiting staff. In more detail, there were 1,803 permanent posts on the JRC staff table; these posts being occupied by "core staff". Visiting staff numbered 1,019 and consisted of contract agents, seconded national experts, grant holders and trainees.

<b>Total core staff</b> (end-of-year situation)	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Officials and Temporary Agents	<b>1733</b>	<b>1758</b>	<b>1771</b>	<b>1803</b>

Table 2.1-4: Core Staff\* end of 2010

<b>Visiting staff</b> (end-of-year situation)	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Contract Agents	867	665	467	388
Seconded National Experts	43	52	53	47
Senior scientists, Post-doctoral and PhD grant holders	76	156	347	521
Trainees	51	41	94	63
<b>TOTAL</b>	<b>1037</b>	<b>914</b>	<b>961</b>	<b>1019</b>

Table 2.1-5: Visiting Staff\* end of 2010

\*Note: Data in the tables above comprise JRC staff alone. Staff members from other Commission services based on JRC sites are not included.

<sup>21</sup> It is important to note that the contracts **awarded** do not coincide with the contracts **concluded** in a certain year (as reflected in the Art. 54 report annexed to the AAR); it is well possible, particularly for contracts concluded at the end of a certain year, that the relevant budgetary and legal commitment is only signed the following year; the same applies to specific contracts under framework contracts, whose indicative value enters into the value of awarded contracts of a certain year but does not correspond to a budgetary commitment.

<sup>22</sup> Around EUR 37 million relate to contracts  $\geq$  EUR 500 000 . Negotiated procedures with a sole contractor refer to different cases under Art. 126 and 127 of the Implementing Rules, whereby only EUR 17 million refer to negotiated procedures under Art.126 of the Implementing Rules. These figures relate in most of cases to framework contracts, with 4 or more years duration.

<sup>23</sup> Of the 114 files presented in 2010, 2 were negotiated TACIS procedures and 1 restricted TACIS procedure.

The occupancy rate (%) of core posts is as follows:

Occupancy rate for core staff (%)	2007	2008	2009	2010
Occupancy rate	91.1	91,0	90.6	92.1

Table 2.1-6: Occupancy rate core staff

### 2.1.6 Events and impacts on reputation

In 2010 there were no major events that had a negative impact either on the reputation of the JRC or the Commission.

## 2.2. The functioning of the entire Internal Control System

In developing its management and control systems, the JRC adheres to the regulatory requirements governing EU administrations as well as the Commission's standards of internal control. The financial circuits in place ensure that the four-eye principle is respected and reinforced through the sub-division of the initiation and verifying functions for both operational and financial staff. The MSUs in the Institutes and Directorates provide administrative support to scientific staff. In particular they advise on regulatory matters and guarantee an independent financial verification of transactions. For all important procurement files, the JRC has an established PPAG to consult on files. In addition to the JRC MAWP, a detailed AWP is agreed which describes not only the research actions to be carried out, but also the resources to be allocated. The work programme is supplemented by additional contract work which has its own resource allocation. A time accounting system is used to follow the allocation of staff to the different activities. This is necessary, in particular, for the proper costing of work. Half way through the year, the JRC senior managers review the progress in the execution of the MP, based on the defined objectives and indicators.

Information on the consumption of resources and achievement of objectives is monitored regularly and presented to senior management in the form of a "tableau de bord". The corporate reporting activity was reviewed and developed in 2010. For effective monitoring and coordination of administrative matters, most senior management meetings are preceded by a meeting of the RSN. As well as reviewing the financial situation, these meetings contribute a great deal to the awareness of critical issues in the administration of the JRC. The meetings also improve and harmonise existing flows, procedures and control mechanisms.

The JRC has an internal financial management system which is implemented across the whole of the JRC, and which provides an interface to the ABAC system of the Commission. Information on contracts is retained in JIPSY. JIPSY has been validated by the Commission's accountant. The Internal Audit Capability carries out audits on processes on the basis of an annual risk assessment. The JRC runs ex-post controls on a sample of payments and commitments each year. Since 2007, additional ex-ante controls on accounting information have been operated on a daily basis. The Internal Control Coordinator conducts regular reviews into the implementation of Internal Control Standards. Reports on issues constituting risks and on the state of implementation of the Internal Control standards are regularly communicated to the Director-General and the Commissioner.

### 2.2.1 Compliance with the requirements of the control standards

Important improvements have been noted in the internal control standards (ICS) related to human resource management (ICS 3 & 4) and risk management (ICS 6). These standards were prioritised in the Management Plan 2011 since the JRC could not declare to fully comply with all of the baseline requirements. This year there are again three standards whose baseline requirements are not fully implemented in the JRC (see Table 2.2-1 below). The standards requiring more attention are linked to operational structure, document management and information systems. For these standards there is a relatively good degree of compliance with many of the requirements and the weaknesses are of a minor nature, not endangering the overall effectiveness. To address these weaknesses in 2011, the JRC must essentially focus its efforts on 1) improving the management of its sensitive functions, 2) document management and 3) data management and data protection. The opinions of key staff who hold responsibilities for internal control coordination, implementation or reporting at the corporate level have been used to assess the compliance with the standards (see Figure 2.2-1). Detailed action plans are being finalised to address all the above issues identified to require attention. Compliance with the identified standards is expected by end of 2011.

Internal Control Standard	Compliant	Comments
<b>Mission and Values</b>		
ICS 1. Mission	✓	The JRC and its Institutes, Directorates and Units have up-to-date mission statements. Moreover in recent years surveys have evidenced that staff perceived the standard as being implemented well.
ICS 2. Ethical and Organisational Values	✓	The JRC fully satisfies its duty to promote good ethical values. Sustained efforts are made to ensure that staff are aware of the systems in place and support available to deal with poor conduct, e.g. the whistle-blowing procedure.
<b>Human Resources</b>		
ICS 3. Staff Allocation and Mobility	✓	This internal control standard was prioritised in 2010. The JRC ensures that each year the organisational structure and resources are aligned with priorities and workload. The JRC actively promotes mobility and has developed support services to help integrate new staff in the organisation. In 2010 competitions were launched to help ensure that qualified scientific staff will be available for JRC research activities.
ICS 4. Staff Evaluation and Development	✓	This internal control standard was prioritised in 2010. In 2010 efforts were made to ensure that staff assessments were carried out in line with Commission policy. The JRC's performance as regards this standard is on a par with that of the other DGs and services of the Commission. The JRC still has weaknesses as regards participation in compulsory training. Increased efforts will be made to monitor this aspect of the standard. It is recognised that the decentralised nature of the organisation somewhat limits the access to the courses.
<b>Planning and Risk Management</b>		
ICS 5. Objectives and Performance Indicators	✓	The JRC's objectives are clear and up-to-date. They are detailed in the MP each year and monitored using Key Performance Indicators. The indicators and associated reporting systems were developed in 2010.
ICS 6. Risk Management Process	✓	This internal control standard was prioritised in 2010. A risk assessment exercise was carried out using the guidance issued by the Commission's central services. The results were elaborated and included in the JRC's MP 2011. Proposals for the risk response have been formulated and presented to top management.
<b>Operations and Control Activities</b>		
ICS 7. Operational Structure	✗	Not fully compliant: The standard was prioritised in the MP  The JRC has a clear and transparent approach as regards the delegation of authority and powers to staff and authorising officers. Managers occupying sensitive functions are subject to enforced mobility or reinforced controls. Improvements are needed as regards the implementation of the sensitive functions policy for staff who are not necessarily in management positions. This is the main reason that the JRC cannot declare full compliance with the requirements of the control standard. An action plan has been drawn-up to address the weaknesses. It is anticipated that the JRC will have completed risk assessments of its sensitive functions by the end of May 2011 and will achieve full compliance by the end of the year.
ICS 8. Processes and Procedures	✓	There is generally a good level of implementation of this standard. The main operational and financial processes have been documented thanks in part to ISO 9000 quality certification which has been achieved by JRC Institutes and Directorates. Procedures comply with regulatory requirements and there is an appropriate segregation of duties. The JRC has established a formal procedure to ensure that exceptions are recorded in a central register. In 2010, the exceptions procedure was updated in line with requirements from the Internal Audit Service.
ICS 9. Management Supervision	✓	The JRC's financial circuits ensure that there is a verification of both the operational and legal aspects of financial operations. In 2010, the system for monitoring audit recommendations and the implementation of related action plans was reviewed and improved.  Each quarter the DG informs the Commissioner of any significant issues related to internal control, audits and/or investigations which might be significant as regards the attainment of objectives set.

Internal Control Standard	Compliant	Comments
<b>Operations and Control Activities (continued)</b>		
ICS 10. Business Continuity	✓	In a recent survey a high proportion of staff affirmed that adequate measures are in place to ensure continuity in case of business-as-usual interruptions.  The JRC issued a new version of its Business Continuity Plan on 1 <sup>st</sup> December 2010. The plan must be reviewed to check that the relative ICT requirements are incorporated. The Business Continuity Plan is currently being tested in the different locations of the JRC. Recent tests in Brussels were successful.
ICS 11. Document Management	✗	Not fully compliant: The standard was prioritised in the MP.  The Document Management Officer (DMO) has noted certain weaknesses in registering, filing, and retaining documents. It appears that increased awareness raising and training is needed on all aspects including those related to security markings on documents. The JRC is currently reviewing processes to ensure it adheres to data protection legislative standards. A detailed action plan is being drawn-up to address the control weaknesses. It is anticipated that full compliance will be achieved by the end of 2011.
<b>Information and Financial Reporting</b>		
ICS 12. Information and Communication	✗	Not fully compliant: The standard was prioritised in the MP.  The JRC has implemented appropriate communications policies and a strategy for external communication and over recent years, management scoreboards have been regularly published. However there are known weaknesses regarding: the respect of data retention periods, data backup, data access and archiving. The Commission's ICT security policy is not fully implemented throughout the JRC. Finally, the JRC is aware that it must make further efforts to improve its data protection compliance rate. An action plan has been drafted to address the control weaknesses and particularly to ensure the effective implementation of the information systems security policy, to improve data management systems including data protection legislative requirements. It is anticipated that compliance will be achieved by the end of 2011.
ICS 13. Accounting and Financial Reporting	✓	The JRC has adequate procedures and controls in place to ensure that accounting data and related information used for preparing the organisation's annual accounts and financial reports are accurate, complete and timely. The accounting correspondent is the coordinator and acts as helpdesk within the JRC.
<b>Evaluation and Audit Controls</b>		
ICS 14. Evaluation of activities	✓	The JRC has an effectively organised evaluation function.
ICS 15. Assessment of Internal Control	✓	Management assesses the effectiveness of the Internal Control System. Three internal control standards were identified for prioritisation in 2011.
ICS 16. Internal Audit Capability (IAC)	✓	The JRC's IAC was one of the first in the Commission operating under a formally defined charter. The IAC functions effectively and is adequately resourced. The Head of IAC changed function at the end of 2009 as part of the mobility scheme. The new unit head joined the organisation recently.

Table 2.2-1: Compliance with the requirements of the internal control standards

## 2.2.2 Effectiveness of implementation of the prioritised control standards

The JRC conducts surveys to assess the effective implementation of the internal control standards. In the surveys managers are asked to agree or disagree with positive affirmations related to the control standards, covering issues such as experiences with the functioning of the control systems, the knowledge and capacity of staff in managing risks and the availability of procedures and systems. This year 141 staff members were petitioned and 79 responses were received.

In order to analyse the responses, full agreement was translated to the maximum score of 5 points and partial agreement scored 3 points. Only one point was awarded if respondents 'somewhat disagreed' with statements. No points at all were awarded in cases where the staff wholly disagreed with statements. Scores of 3 or more therefore indicate effective implementation and the results, shown graphically below, demonstrate that no standards had an average score of under 3 points. Indeed the overall average score of 3.65 out of 5.0 indicates that in general all standards are perceived to be effectively implemented (see Figure 2.2-1).

A year-on-year comparison indicates that there has been an overall improvement in the perceived implementation of the control standards. Significant improvements were noted in the effectiveness of two standards that were prioritised last year (ICS 4: Staff Evaluation and Development and ICS 6 Risk Management Processes). Nonetheless the JRC recognises that efforts to improve the effective implementation of the controls must be sustained.

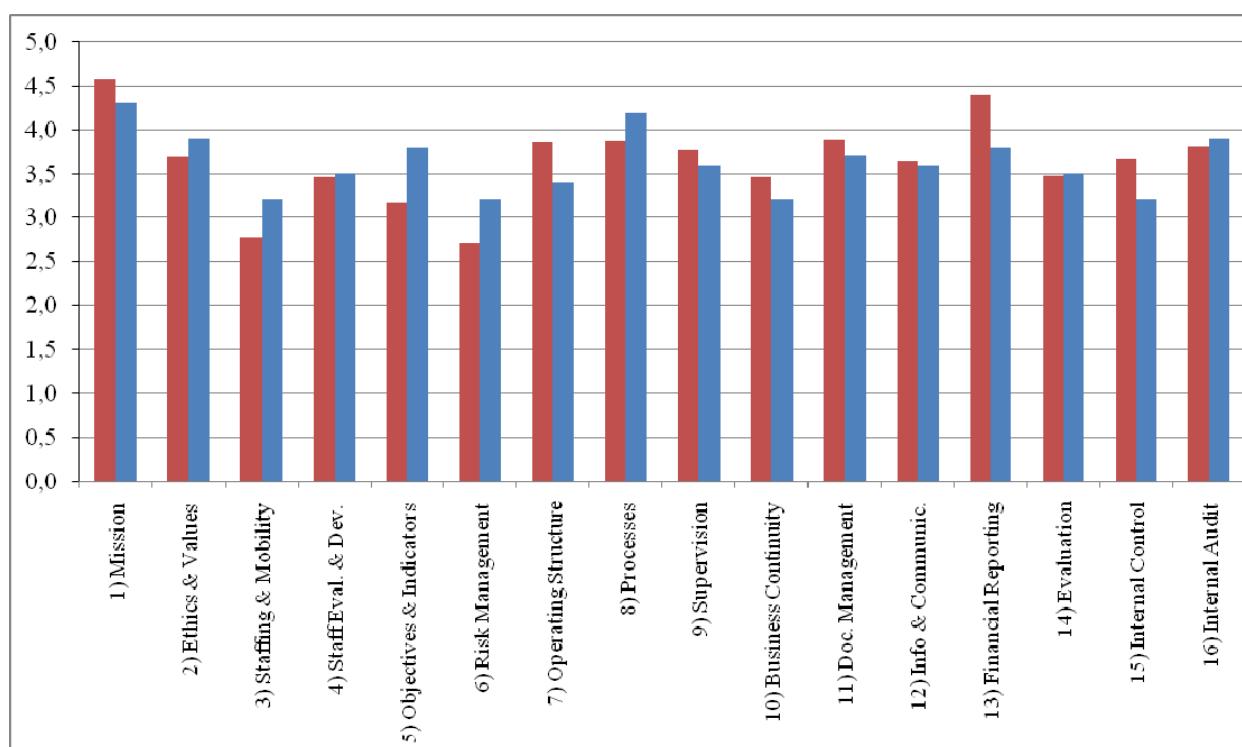


Figure 2.2-1: Results of the survey on perceived implementation of the internal control standards; red/left bars represent results of the 2009 survey; right/blue bars the 2010 results

In 2010, the JRC placed emphasis on developing the effectiveness of three priority control standards that were highlighted in the MP. As follows:

**ICS 3 Staff Allocation & Mobility:** The effective implementation of this standard has long been recognised as a weak point for the JRC. This is mainly due to difficulties encountered by the organisation to recruit qualified staff in a timely fashion. The decentralised nature of the organisation has led to difficulties in implementing an effective mobility policy.

- In 2010 significant efforts were made to organise open competitions in order to have potential scientific staff included in reserve lists for selection. The JRC also developed a Multi-Annual Recruitment Plan to ensure systemic updates to the staff planning process.

- A reorganisation of administrative services was accompanied by the implementation of a number of important mobility measures at the beginning of 2010.
- The JRC carried out risk assessments of functions that were hitherto defined as 'sensitive'. The exercise will be finalised end of May 2011. Meanwhile, there has been a reduction of the number of functions flagged as sensitive.
- Significant improvements in the perceived effectiveness of the standards have been noted.

**ICS 4(1) – Staff Evaluation & ICS Training:** In 2009, the JRC had to deal with many appeals linked to the implementation of the appraisal and promotion (CDR) process. In 2010 action was taken to ensure a smoother implementation of the process in compliance with the Commission guidelines. The number of appeals on the CDR process has dropped by nearly 5% compared to the previous year, and is now only slightly above the Commission average.

**ICS 6 – Risk Management:** At the end of 2010, the JRC completed a risk assessment exercise using the methodology and guidance provided by the Commission's central support services. Work must continue to ensure that there is an effective follow-up to the risk assessment by implementing realistic risk management action plans.

### *2.2.3 Conclusion*

The results of a review of the effective implementation of Internal Control were generally positive and they do not suggest that there are problems in effectively implementing any of the control standards (see Figure 2.2-1). Good progress was made on developing the effectiveness of the prioritised standards and, whilst recognising that improvements can still be made, the JRC is convinced that it has no serious control weaknesses linked to its organisation.

In 2011 the JRC will focus on the development of the three internal control standards where it cannot demonstrate full compliance with the baseline requirements. These have been included in the MP.

## **2.3 Information to the Commissioner**

The main elements of this report and assurance declaration, have been brought to the attention of Commissioner Máire Geoghegan Quinn.

## **PART 3 – BUILDING BLOCKS TOWARDS REASONABLE ASSURANCE**

### **3.1. Building blocks towards reasonable assurance**

In 2010, the JRC effectively deployed resources to carry out its mission and core activities in the context of the Research Framework Programmes. The organisation has key controls in place to manage risks and no significant events were noted that would adversely affect the reputation of the organisation. There is a reasonable assurance that the Internal Control Standards are in place and working effectively.

In this section the building blocks towards reasonable assurance will be explained with an overall review of the effectiveness of the controls. This review is essentially based on 1) an assessment by management using the results of control measures that have been put in place; and 2) the results of audits that have been conducted by the JRC's own Internal Audit Capability and other auditing and control bodies.

Finally, the information on the effectiveness of controls will be put into context as regards its completeness i.e. the coverage of the budget and activities assigned to the JRC and the reliability of the information.

#### *3.1.1 Building block 1: Assessment by management*

The JRC has made use of five main indicators to assess the legality and regularity of its work.

- a. Exception Reporting,
- b. The Public Procurement Advisory Group (PPAG),
- c. Ex-Ante Accounting Controls,
- d. Ex-Post Controls on Financial Transactions, and
- e. The Assurance Statements from Sub-Delegated Authorising Officers

##### *3.1.1.a Exception reporting*

The processes and procedures used for the implementation and control of activities include arrangements to track control overrides or deviations from standard policies and procedures. Such deviations are recorded as reports in the register of exceptions. In line with the JRC quality management policy, these exceptions constitute an important source of information for organisational learning. Managers are instructed to register exceptions, to identify their causes and to propose corrective measures. Each year the exceptions are analysed and presented to management with recommended follow-up actions.

In the JRC the obligation to report an exception focuses on three cases: 1) Operations in which the correct procedural steps were not followed; 2) Cases where the Authorising Officer in charge ignores the advice of the financial verifying agent; 3) Cases where the Authorising Officer signs a contract without obtaining advice or a 'go ahead' from the PPAG

In past years, there has been a drop in the number of exceptions reported and in 2010, a total of 157 exceptions were filed in the corporate register.

Almost all of the exceptions were linked to non respect of rules which exposed the JRC to risks. However, only one exception can be directly associated with a material loss and in this case the organisation had to pay interest because a payment was late. The JRC dealt with almost 60,000 transactions. Most of them (48,000) were payments; almost 9,500 were commitments. The exceptions amount to 0,27 % of the total number of transactions.

Year	No of exceptions registered
2008	191
2009	165
2010	157

Table 3.1-1: Exceptions reported by number

***The annual target of having <1% of transactions subject to exception was met***

Over 63% of the exceptions relate to procedural deviations or errors in which the JRC failed to earmark sufficient funds in the budget before entering into a legal agreement with a third party. Such exceptions represent a risk to the organisation since funds might not be available to cover legal obligations. This risk is felt to be extremely unlikely and such cases do not necessarily mean that the money was lost.

Over 20% of exceptions were linked to legal, contractual or procurement issues. This type of exception included situations where the Authorising Officer decided to award the contract without fully respecting the public procurement rules e.g. asking for offers from fewer economic operators than required by the rules or extending the scope of services indicated in the contract. In such cases the Authoring Offices provided justification for going against the rules in the interest of the service.

### 3.1.1.b The Public Procurement Advisory Group (PPAG)

114 files were assessed by the PPAG, representing contracts worth almost EUR 183 million. The share of favourable opinions has increased constantly during the last three years, and reached 91 % of opinions issued in 2010, which is an indicator showing a high degree of compliance with procurement rules. Conversely, the share of negative opinions continued to decrease to a mere 4 % (5 opinions).

Follow-up of critical remarks in files presented to the PPAG is being monitored by way of reporting, within a deadline to the PPAG Secretariat by means of a specific template. All corrective actions requested until end of the year were implemented and reported according to schedule. Further reporting deadlines were set within the current and next year and are expected to provide important elements for an ex post evaluation of the underlying economic operations.

### 3.1.1.c Accounting controls

The main aim of the accounting controls is to assure the quality and reliability of the accounts and underlying transactions through thorough checks on the accounting records (data) and timely communication and correction of the errors with the responsible Institutes/Directorates. The methodology of accounting controls was changed from controls performed on a daily basis to controls performed three times per year. The purpose of this new methodology of accounting controls is to avoid the weaknesses of the previous ex-ante controls and thus to increase the efficiency and effectiveness of the accounting controls and the quality of the accounts.

With the new methodology the accounting controls were conducted on 23.139 payments out of a total of 32.379 payments during the year representing 85% of the total amount paid (PMO payments for JRC staff and regularisation payments are not taken into account). The total number of errors is 358 or 1,56% of the sample.

As regards the nature of errors, in the majority of the cases 332 (1,43% of the sample) one type of expense General Ledger (GL) account was chosen instead of another expense account. It should be noted that accounting controls were followed by corrections in 99,92% of the cases; the remaining 0,08% were not corrected due to the low value and low impact on the accounts.

Apart from the above mentioned measures, some other accounting controls have been performed during the year (pending invoices, analysis of the asset transitory account, supplier contracts, pre-financings, guarantees and recovery orders) in order to give additional assurance that the accounts give a true and fair view of the financial position and the economic outturn.

2010			
Issue	Number of findings (% of sample)	Amount concerned in K€ (% of total amount)	Impact
<b>General Ledger:</b> Incorrect GL account <b>(Expense vs. Asset)</b>	26 (0,13%)	1224 (0,89%)	N/A
<b>General Ledger:</b> Incorrect GL account <b>(one type of expense vs. another expense)</b>	332 (1,43%)	2542 (1,54%)	N/A
<b>Findings not corrected</b>	28 (0,12%)	133 (0,08%)	Possible effect on Economic Outturn Account

Table 3.1-2: Findings of accounting checks

#### 3.1.1.d Ex-post controls on financial transactions

Ex-post controls on financial transactions were carried out by the JRC corporate services on 100 randomly sampled payments<sup>24</sup> and fifty contracts made in 2010. The checks cover all JRC Institutes and Directorates and they were designed to determine whether there had been material losses e.g. due to error and to determine whether financial rules and procedures were respected.

The total size of the payment sample corresponds to an estimated 8% of the value of all payments made and 9% of the institutional budget available for procurement. The checklist for performing the controls was developed in line with recommendations from recent audits.

The results demonstrate that payments are eligible and accurate in 94% of cases. The errors noted were relatively minor, amounting to 0.4% of the associated claims. This would indicate that material error in payment is around 0.02%. The checks on procurement revealed one error, out of 50 files, which was associated with 6% of the contract value. This would indicate errors associated with procurement

<sup>24</sup> Excluded: Payments done by the Paymaster's Office in Ispra (PMO6) (mainly related to salaries and business travel); Salary payments done by the JRC to non-statutory staff; Incomplete and negative payments; and "Hors Budget" Payments i.e. payments made to consolidate accounting data.

weaknesses amount to 0.12%. Collectively the material errors associated with payment and procurement activities are estimated at 0.14%.

Whilst a variety of formal errors were noted, no systematic errors or weaknesses in the JRC's control system were observed.

### ***Material errors < 2% of value of all controlled payments***

#### 3.1.1.e Assurance statements from sub-delegated authorising officers

Assurance statements were provided by the JRC's authorising officers in compliance with the reporting requirements detailed in the '*Charter of tasks and responsibilities of authorising officers by sub-delegation*<sup>25</sup>. The officers concerned include all JRC Directors, most of the Unit Heads and other key decision-making staff. 99 out of 100 officers provided an assurance statement and all of them have assured the DG that in exercising their duties:

- ◆ they have effectively managed the risks associated with their activities;
- ◆ they were not aware of any matters of importance which might compromise the sound management of appropriations or prevent the attainment of objectives;
- ◆ they have not noted incidents which could damage the reputation of the organisation;
- ◆ they have not requested a written confirmation of an instruction<sup>26</sup> from the delegated authorising officer.

More than half of the officers have participated in the training in internal control. The DG will ensure that all officers will have participated by the end of 2011. Only three officers had not yet participated in the mandatory financial training (Expenditure Lifecycle). They are expected to participate in 2011.

Three authorising officers left the JRC during 2010. Two of them provided handover reports which included the assurance statement<sup>27</sup>.

#### 3.1.2 *Building block 2: Results from audits during the reporting year*

The main source of audits is the JRC's Internal Audit Capability (IAC). The IAC published 10 audits in 2010 consisting of 2 new audits and 8 follow-up audits. The follow-up audits assess the effective implementation of the recommendations of audits related to former years. All together 35 recommendations were issued, being distributed as depicted in Table 3.1-3 (for details regarding the recommendations see paragraph "Summary of issues raised by the IAC" below the box "Quote from the IAC"):

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<sup>25</sup> With particular reference to sections 4.8 and 4.9 of the charter.

<sup>26</sup> As per Article 66(2) of the European Commission's Financial Regulation.

<sup>27</sup> Efforts to obtain the assurance declaration from the third officer were not yet successful at the end of March 2011, but continue to be followed-up.

Type of recommendation	Nr of recommendations
Critical	0
Very important	13
Important	20
Desirable	2

Table 3.1-3: Recommendations from IAC audits

**Quote from the IAC Opinion on state of control:**

"I believe that based on the results of our audits as described in the objectives and scope of the engagements carried out by the IAC of DG JRC during 2010, the internal control system in place in DG JRC provides reasonable assurance regarding the achievement of the business objectives set up for the processes audited, except for the issues detailed below.

I declare that I am not aware of anything not reported below which may lead to a potential reservation in the Annual Activity Report."

Summary of issues raised by the IAC:

**Quality Assurance of scientific deliverables for policy support:** The JRC produces a variety of scientific deliverables for policy support. The audit analysed the methodologies applied to ensure the quality of these deliverables. 63 deliverables were analysed and in line with the report's suggestions the JRC is developing a corporate quality management system to cover the scientific deliverables it produces.

**Follow-up audit into the Organisation of scientific events:** Improved co-ordination between corporate and local services in drawing up and implementing action plans and increased dissemination of rules developed at corporate level could contribute to a better control of the process. A second follow-up audit is planned for 2011, as well as a review by the JRC of its overall communication strategy.

**Follow-up audit into the Maintenance of infrastructure and buildings:** Although controls have improved, explicit participation of the Infrastructure Services in the authorisation procedure of significant new investments of infrastructures and equipments as well as regular upgrading of safety plans and their communication to the JRC safety and security coordinator could help to improve the control over the processes involved. A second follow-up audit is planned for 2011.

**Follow-up audit into Safety and environmental management at JRC-IE:** Overall, the controls have improved. This is in particular due to the implementation of safety and environmental management systems (OHSAS 18001 and ISO 14001). Scientific units should implement safety objectives in a coherent and systematic way. In 2011 an overall audit on the safety and security aspects will be carried out.

3.1.3 Building block 3: Follow-up of previous years' reservations and action plans for audits during the reporting year.

3.1.3.a Follow-up of previous years

i) AAR for 2007, 2008 and 2009: These AAR did not contain any reservations.

ii) Synthesis report: There are no actions on the JRC from the synthesis reports.

iii) Progress in completing Action Plans for audits from previous years: The JRC monitors its progress in addressing recommendations from audits prepared by the IAS, the IAC and the Court of Auditors. Improvement measures to ensure a complete follow-up to audits of the Internal Audit Capability in particular were initiated in 2010; this reinforcement activity needs continued management attention.

iv) Follow-up to audits of the Internal Audit Service (IAS)

The IAS concluded an audit into procurement in the JRC on 30 April 2009. The objective of this audit was to assess the adequacy of the design and effective application of the Internal Control Standard on risk management and governance processes related to procurement. The audit concluded that the internal control system in place provides reasonable assurance regarding the achievement of the business objectives set up for the procurement preparation process, except for some very important issues related to the decommissioning activities, and the planning, monitoring and control aspects of procurement.

Throughout 2010 the JRC worked to address all 17 recommendations raised by the auditors and described in its action plan. Management is satisfied that most of the recommendations (13 out of 17) have been addressed and the remaining ones which essentially relate to more fundamental governance structures are being dealt with. It is envisaged that the associated follow-up actions will have been successfully concluded by summer 2011. To fully address the outstanding recommendations, the JRC is in the process of developing a common tool for procurement planning and of finalising a JRC Procurement Strategy. A definition of the JRC policy for scanning and filing procurement documents is equally under development.

<b>Criticality of recommendation</b>	<b>Number of recommendations made</b>	<b>Number of recommendations still to be fully addressed by the JRC at the end of 2010</b>
Critical	0	N/A
Very Important	11	2
Important	6	2

Table 3.1-4: Recommendations from the IAS audit

v) Follow-Up to audits of the Internal Audit Capability

The JRC has undertaken actions to address an estimated 74% of the 81 recommendations issued by the Internal Audit Capability in recent years<sup>28</sup>. Follow-up on these audits will be completed by the end of June 2011.

Recently there has been an apparent improvement in the follow-up of audit issues. Indeed there is an 82% completion rate for the action plans related to the last 5 audits issued. This reflects increased attention to audit follow-up in 2010.

<sup>28</sup> The estimation is made considering that recommendations partially addressed may be approximated as being 50% complete.

SUBJECT OF FOLLOW-UP AUDITS	Date of issue	Recommendations Issued	% implemented
COMPETITIVE ACTIVITIES	Jun-07	16	63%
MAINTENANCE OF INFRASTRUCTURE AND BUILDINGS	Jan-08	15	90%
ORGANISATION OF SCIENTIFIC EVENTS	Oct-08	19	58%
ASSET MANAGEMENT	Dec-08	2	100%
SAFETY AND ENVIRONMENT MANAGEMENT	Feb-09	12	79%
RECRUITMENT PROCEDURES	Apr-09	8	81%
EX-POST CONTROLS	Apr-09	8	94%
ISOTOPE MEASUREMENT ACTIVITIES	Nov-09	1	100%
<b>Total</b>		<b>81</b>	<b>74%</b>

Table 3.1-5: Follow-up of IAC audit recommendations in follow-up audits

The follow-up to an audit into competitive actions warrants particular attention as it was mentioned by the internal auditor to qualify his assurance.

The SAP-PS system was implemented in the JRC during the period 2003 – 2007. It was an integrated project management system meant to assist the JRC in addressing the Activity Based Management requirements by supporting the JRC research actions and competitive activities.

The introduction of the system was also addressing a critical audit recommendation on the lack of an integrated management tool for competitive activities.

In September 2009 the JRC management decided to stop any further development of SAP-PS, since the system did not fulfil the expectations in terms of functionalities and reporting.

Following the decision to discontinue SAP-PS, an ad hoc project group was set-up; they focused on guaranteeing business continuity with regard to action and resource management functions. The phase out of SAP-PS was concluded in June 2010; by that time all SAP-PS functionalities were taken over by other JRC systems (mostly existing systems that were upgraded).

The final report by this ad hoc project group brought the auditors to conduct their final follow-up audit on the management of competitive activities. The audit concluded by downgrading the initial 'critical' recommendation to the level of 'very important' and it is anticipated that all recommendations will be concluded by end of 2011.

In summary, in the old audits there was one 'critical' recommendation, which was downgraded after a follow-up audit (as a result of some actions taken) to 'very important', and 15 very important ones. Two of these very important recommendations have not yet been addressed and a further six have been addressed partly but they are not yet finalised.

#### vi) European Commission - DG Research (RTD) Audit on JRC's participation in indirect actions

The audit of JRC participation in three FP6 indirect actions resulted in a number of recommendations in order to improve the systems of internal control relevant to the JRC's participation in such contracts. The auditors recommended that the time recording system used by the JRC for staff cost billing should be improved and traceability of the figures used to calculate the average personnel costs should be enhanced.

The JRC has concluded that it is necessary to switch to a method involving the calculation of actual staff costs and is in discussion with DG R&I on the related details.

### 3.1.3.b Follow-up of European Court of Auditors findings and recommendations

**Assets management:** During 2010 the improvements achieved since 2006 in the field of asset management and accounting have been further consolidated and as last year there are presently no particular concerns in this field for the JRC. With respect to physical inventory checks, Geel and Karlsruhe will finalize a full physical inventory of their respective site in 2011 to be compliant with the minimum frequency foreseen in the regulation. Corrective actions are foreseen in 2011.

### 3.1.3.c Follow-up of any weaknesses reported by the IAC, IAS, and in previous synthesis report

**Follow-up of weaknesses - Synthesis report:** There are no actions on the JRC from the synthesis reports.

### 3.1.4 Building block 4: Assurance received from other Authorising Officers in cases of crossed sub-delegation

The JRC has provided sub-delegations to other Directorate-Generals of the European Commission for budget line 10 01 05—Support expenditure for operations of 'Direct research, policy area', Item 10 01 05 03—Other management expenditure for research. The implementation of this budget item covers as well the expenditure on social and medical infrastructure. Statements of assurance on the effective and sound use of these funds were provided by the Directors-General concerned.

<b>DG/Service</b>	<b>Associated Budget in 2010</b> <i>(C1 commitment consumed)</i> <i>In 1.000s €</i>	<b>Nature of service managed by the other services</b>
DG BUDG	200,0	Contribution of the JRC to the costs of ABAC
DG HR	155,5	Contribution of the JRC to the social costs of Ispra
OIB	126,2	Contribution of the JRC to the costs of Ispra related to canteen, childcare and lodging

Table 3.1-6: Cross Sub-Delegations given

In addition to the cross-delegations given and according to the Internal Rules<sup>29</sup> the payments of core staff expenditure are co-delegated to the PMO and to DG HR for interim staff in Brussels.

The cross-delegation to OIB has been changed to a co-delegation in 2011.

### 3.1.5 Completeness and reliability of the information reported in the building blocks

<sup>29</sup> Internal Rules on the implementation of the general budget of the European Union, Annex I, Section C2 - Commitment of expenditure and management of appropriations.

The MP Objective to maintain 25 person-years dedicated to verification and control was met.

The JRC has adopted a risk-based strategy to its control measures, notably by limiting empowerment to authorise by hierarchical position in the organisation and by focusing ex-ante checks on the more risky transactions, e.g. large value contract procurements, being subjected to extra PPAG controls and/or payments subject to accounting controls. In addition to the controls, the JRC has a strong internal audit capacity and coverage.

There are no critical issues outlined in audits prepared by the JRC's Internal Audit Capability. Similarly no critical recommendations related to the JRC have been issued by the European Court of Auditors or the Commission's Internal Audit Service.

The JRC has improved the implementation of the Commission's control standards and does not consider that it is ineffective in applying any of them. The JRC believes that there is a healthy openness in reporting exceptions and notes that these occur rarely (0.27% of transactions). They generally do not involve a monetary loss.

Input	<ul style="list-style-type: none"> <li>Financial Verification (payments and commitments) = 15 person years</li> <li>Verification of Accounting data = 3 person years</li> <li>PPAG) = 4.5 person years</li> <li><i>Ex-post</i> controls = 2.3 person year</li> <li>Register of exceptions = 0.2 person years</li> </ul>
Output	<ul style="list-style-type: none"> <li>All transactions (payments and commitments) undergo ex-ante verification</li> <li>Over 23,000 payments, representing 87% of the total value of all payments in the population tested, were checked for accuracy by the accountant.</li> <li>The most important procurements (114 files worth EUR 183 million in 2010) are checked for correct application of procurement rules prior to awarding the contract (PPAG checks)</li> <li>An estimated 9% of commitments entered into in 2010 were subject to an independent ex-post control for general regulatory compliance. The amounts of payments checked represent 8% of the value of the population.</li> </ul>
Result	<ul style="list-style-type: none"> <li>All sub-delegated authorising officers, who responded to the request for assurance statements, reported reasonable assurance and none requested instructions in writing.</li> <li>The ex-ante accounting checks revealed errors amounting to around 1.56% of the value of the sampled invoices. Most errors (97%) would not have an impact on the presentation of the general accounts. These errors were corrected in 99.9% of cases.</li> <li>91% of favourable opinions were issued by the PPAG.</li> <li>Findings of the <i>ex post</i> controls allow for the estimation of errors in payments and commitments at 0.14% and demonstrate no significant material losses or systemic weaknesses.</li> <li>99.7% of all transactions (98.3% of all commitments) were regular and not subject to 'exceptions'.</li> </ul>
Impact	Savings made through control systems are not measurable at present.

Table 3.1-7: Summary of key indicators supporting assurance

### 3.2. Reservations

There are two main strands of information for the analytical work related to the identification of reservations:

- 1: On 1<sup>st</sup> December 2010 Mr Dominique Ristori took over the position as Director-General of the Joint Research Centre from Mr Roland Schenkel. The handover followed the relevant procedure to ensure administrative and business continuity. The handover file did not identify any areas regarding potential reservations for the upcoming AAR 2010.
- 2: On 15 February 2011 the Joint Research Centre organised a meeting with participation from various actors involved in the four building blocks towards the reasonable declaration of assurance, e.g. the Director for Resources, the Director for Programmes and Stakeholder Relations, the Internal Audit Capability and the Evaluation function. The purpose of this meeting was to analyse and to discuss in detail the evidence collected based on these four building blocks. The group concluded that there are a) areas with weaknesses and b) areas with risks, both of which are described in the present report. Most importantly, the group concluded that there are no reservations.

**Conclusion:** Based on this fact base, the group has proposed to the Director-General to sign the declaration of reasonable assurance without reservations

### 3.3. Overall conclusions on the combined Impact of Reservations on the Declaration of Assurance as a whole

Not applicable

**PART 4. DECLARATION OF ASSURANCE**

*I, the undersigned,*

*Director-General of the Joint  
Research Centre*

*In my capacity as authorising officer by delegation*

*Declare that the information contained in this report gives a true and fair view<sup>30</sup>.*

*State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.*

*This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the work of the internal audit capability, for years prior to the year of this declaration.*

*Confirm that I am not aware of anything not reported here which could harm the interests of the institution.*

*Place ....., date .....*

*.....(signature)*

D. Ristori  
Director-General  
JRC

Signed

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<sup>30</sup> *True and fair in this context means a reliable, complete and correct view on the state of affairs in the service.*