SUMMARY

INTRODUCTION

GENERAL LONG TERM OBJECTIVES IN THE FIELD OF SCIENTIFIC RESEARCH ACTIVITIES

Research programs and projects

Research programs

Research projects

Support to technological development projects

International activities in the field of science

Human resources supporting science, higher education and technological development

Research infrastructure

Infrastructural obligations and research equipment

Scientific publications, databases and meetings

GENERAL ASSESSMENT OF OPERATIONS IN 2011

FINANCING SCIENTIFIC RESEARCH ACTIVITIES
The most important achievements resulting from the performance of the Slovenian Research Agency (hereinafter: Agency) tasks are:

- growth of funds gained by research organizations from international sources and users of knowledge was greater than the year before at 19 %, mostly due to growth of funds from the business sector and the EU at 20 % and 16 % respectively (data for 2010);
- relative impact factor has raised to 0.74 (data for the 2006-2010 period),
- Slovenian citations rating has improved from 13th to 12th place in the EU (data for the 2006-2010 period);
- the number of European patent applications has increased to 67 European patent applications per million of inhabitants while the index of European patent applications has maintained its level at approximately 50 % of EU average (data for 2010);
- the number of ERC projects co-financed in the complementary scheme has increased from 2 to 9 in 2011. Among ESF and ESF and ERC projects, cofinanced through the complementary scheme, 75 % of the funding was received by social sciences and humanities.

- 46 % of assets for international bilateral cooperation in 2011 have been used for bilateral international cooperation with third countries. 13 % were used for cooperation with Western Balkans countries (and Turkey), 34 % of funds were used for cooperation with third countries (USA, BRIC, Japan);
- funds for additional co-financing of programming groups – inclusion in projects of the Framework Programmes of the European Union have increased for almost 7 %;
- the number of libraries offering access to foreign literature and databases has in 2011 surpassed the target value for 2014 (71);
- funding for research equipment has increased by 6 %;
- the scope of Agency electronic operations has increased further in 2011, the Agency uses electronic operations in applying to public tenders and calls for applications, reporting (annual and final reports) and partially in other operations; the share of documents signed using a digital certificate, namely documents submitted solely in electronic form, has surpassed 50 % and is currently between 52 % and 55 %, depending on spheres of operation;
- Agency operations in 2011 can be assessed as successful.

The European Science Foundation (ESF) has in 2011 carried out an evaluation of the Agency as part of its Member Organisation Forum on Peer Review activities. ESF assessed the following areas of Agency operations:

- mission, strategy and scope of Agency operations in national and international frameworks;
- quality and efficiency of financing research activities in Slovenia (from public calls for proposals through project evaluation to financing and monitoring of results);
- quality and efficiency of information infrastructure as a support system for Agency operations;
- suitability and efficiency of Agency cooperates with regard to programme scope and tasks.

The Agency received a positive grade in all evaluated segments. The report of the assessment panel, consisting of six presidents and directors of the most renowned European agencies involved in financing research activities, noted that the Agency has since its inception in 2004 established itself as an efficient and modern agency, comparable to well established agencies involved in financing research activities, with a much more extensive tradition. The ESF report is available at the Agency website.1

The nominal value of scientific research activities financed through the Agency in 2011 amounted to 175,917,614 EUR, almost the same as last year. Division of funds by activity sectors is presented in Figure 1, division by scientific disciplines is presented in Figure 2.

In terms of recipients, the share of funds received by research and other institutions has increased in comparison to last year, while the share of funds granted to higher education institutions has reduced. The share of funds intended for the business sector has remained the same.

The classification of funds by scientific disciplines is mostly consistent with slight differences between separate years.

The Agency is a public law entity subject to the provisions of laws and other regulations applying to public agencies, unless provisions of the Research and Development Act (Official Gazette of RS, no. 22/2006 – official consolidated text, 61/06-Zdra-1, 112/07 and 9/11) provide otherwise. Pursuant to Article 2 of the Resolution on the establishment of the Slovenian Research Agency, the Agency enters into legal transactions independently within the scope of its undertaking with all rights and obligations and acts on its own behalf and for its own account. The Agency was founded by the Republic of Slovenia by the Resolution on the establishment of the Slovenian Research Agency (Official Gazette of the Republic of Slovenia, no. 123/03 and 105/10) for permanent performance of legally prescribed tasks in public interest with the purpose of assuming permanent, professional and independent decision-making on the selection of programs and projects financed from the national budget and other sources of financing.

AGENCY BODIES

The agency bodies are as follows:
- Management Board of the Agency,
- Director,
- Scientific Council.

The Management Board directs and oversees the entire scope of Agency operations. The Board consists of seven members.

The Director represents the Agency, organizes and manages work and operations of the Agency and performs other tasks as prescribed by relevant regulations.

The Director is responsible to the Management Board, the Minister in charge of science and the Government.

The Scientific Council is the highest expert and advisory body of the Agency. It consists of six members who represent all scientific disciplines.

MISSION

Through the pursuance of its mission, the Agency has a decisive impact on the implementation of a new development paradigm which emphasizes the strengthening of the abilities of managing global knowledge and technological progress as the main source of increased labour productivity, national competitive ability and improved quality of individual and social life. Knowledge is a key factor in promoting competitiveness of the national economy while increased investments in knowledge and human development are necessary for transition to a knowledge-based society. Investments in development and research are a key prerequisite for creating knowledge and strengthening the level of technology in the economy which increasingly defines its competitiveness.

By pursuing its mission, the Agency contributes to the achievement of key strategic development objectives:
- creation and transfer of new knowledge and cognizance into the public domain and economic use for the increase of social welfare;
- strengthening the ability to manage social and technological progress as the main source of increased labour productivity and national competitiveness in the global arena.

ACTIVITY

The Agency performs the following tasks in the interest of its founder, the public interest:
- decides on the selection of research and infrastructure programs which represent a public service in the field of research, and provides financing;
- assures the execution of the young researchers programme and other programs and projects the Agency is tasked with in accordance with the National Research and Development Programme and annual policies of the competent Ministry;
- monitors the relevance, innovation, efficiency and quality of operations, competitiveness and professionalism of the work of natural and legal persons that benefit from Agency funding or other incentives;
- monitors and oversees the execution of research programs and projects;
- participates in the planning of national research and development policies;
- assures the acquisition of additional funding for the implementation of the National Research and Development Programme;
- monitors and analyzes the implementation of research and development activities;
- participates in the planning of national research and development policies;
- cooperates with the relevant agency operating in the field of technological development and other agencies and organizations;
- in accordance with regulations, submits annual work programs, financial plans, annual reports and periodic self-evaluation reports on the quality of the Agency’s operations to the Ministry competent for science;
- promotes cooperation of public research organizations with users;
- performs other expert tasks in accordance with the purpose for which it was established.

Tasks are centered on the assurance of conditions for the performance of research activities and monitoring of the purpose of performing research activities. A more sizeable section of operations is represented by the financing of research programs, basic and applied projects and post-doctoral projects. The Agency provides funding from the national budget on a continuous basis and monitors:
- execution of research and infrastructure programs;
- execution of research projects;
- execution of the young researcher programme and the “Science to Youth” program;
- execution of the programme of scientific meetings;
- execution of the “Excellent Foreign Prominent Scientists in Slovenia” program;
- execution of founders’ obligations;
- execution of the programme of information communication systems;
- execution of the programme of scientific meetings;
- execution of the programme of international cooperation.

With regard to its status, the Agency carries out part of the expert, developmental and executive tasks in the realization of specific policy objectives in the field of science and technology and:
- it is the central public organization involved in the financing of research activities in Slovenia;
- it promotes the excellence and applicability of research in Slovenia.
● decides on the selection of research programs and projects on the basis of an independent and internationally comparable research evaluation system;

● transparently organizes and manages research activities in Slovenia;

● promotes international cooperation within the framework of obligations accepted by the Republic of Slovenia;

● analyzes the execution of research and development activities in the Republic of Slovenia and cooperates in the planning of national research and development policies.

Long term Agency objectives are financed from the national budget of the Republic of Slovenia and are therefore specific policy objectives in the field of science and technology. The Agency realizes these objectives through annual objectives detailed within separate measures within policy 02 – Higher Education, Science, Technology and the Information Society.

DOCUMENTS OF LONG TERM DEVELOPMENT PLANNING

Development Strategy of Slovenia;

● Framework of Economic and Social Reforms for Increasing the Welfare in Slovenia;


● Resolution on the Research and Innovation Strategy of Slovenia 2011-2020;


In the implementation of the Scientific Research Activity program, the Agency realizes the actual policies contained in the Framework of Economic and Social Reforms of the Government of RS related to the second development priority, i.e. efficient creation, bidirectional flow and use of knowledge for economic development and quality jobs, particularly through efficient use of knowledge and the implementation of the following specific objectives:

● to increase international recognizability and competitiveness of Slovenian science at a European and global level;

● to increase the share of researchers in the active working population;

● to modernize and link together research infrastructure.

Within the programme of Technology and the Information Society, the Agency finances central research and development activities at Slovenian universities, public and other research institutions and development units in the economy and with private researchers while also promoting the transfer of research findings into the social and economic environment. Within the scope of the program, the Agency cofinances applicative research projects and interdisciplinary targeted research programs. In this area, the Agency is pursuing the following specific objective:

● to increase the impact of R&D in all areas of the native environment (public and private sectors).
GENERAL LONG TERM OBJECTIVES
IN THE FIELD OF
SCIENTIFIC RESEARCH ACTIVITIES

Building of the Slovenian Academy of Sciences and Arts, founded in 1938,
far right the building of the National and University Library,
established in 1774.
GENERAL LONG TERM OBJECTIVES IN THE FIELD OF SCIENTIFIC RESEARCH ACTIVITIES

1. To within four years achieve an accelerated transfer of knowledge in the triangle of higher education, science and the economy, an increase of global competitiveness of Slovenia through promotion of innovation and entrepreneurial investments in research and technological development and a sustainable increase of economic growth through increasing the technological complexity and share of knowledge in products, processes and services.

The Agency monitors its share in the achievement of the common objective with the following indicators:

a) Total scope of Agency funds in the years between 2006 and 2011

![Graph showing the total scope of Agency funds in million Euros from 2006 to 2011.]

Funds for research programs and projects have remained almost unchanged in comparison to last year. Realization amounted to 175,917,614.03 Euros. The trend of growth, observed in previous years, has stopped. The difference in structure with regard to previous years is seen in projects and programs and infrastructure, where the difference amounts to approximately 2 million Euros.

b) Scope of Agency funds by subprograms, activities and measures in 2011

Structure of Agency funds by subprograms is detailed in Figure 4.

The majority of Agency funds are distributed for programs and projects. The subprogramme dedicated to technological development includes funding for applicative projects and targeted research programs. The structure by activities is identical to the structure by subprograms, so it is not presented separately. Structure of Agency funds by measures is detailed in Figure 5.

The greatest share of funding is aimed at research programs (approximately one third), followed by infrastructure obligations and equipment and young researchers with approximately a fifth of the funds respectively. The remaining measures have smaller shares.
Greenhouse at the Botanical Gardens of the University of Ljubljana, in 2010 celebrating its 200th anniversary.
SPECIFIC FOUR YEAR OBJECTIVES

To increase international recognizability and competitiveness of Slovenian science at a European and global level

Indicators: Relative impact factor, to increase the relative impact factor to 0.72 in comparison to the starting year 2009

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year (2009)</th>
<th>Baseline value</th>
<th>Year 2011</th>
<th>Target value</th>
<th>Target value 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative impact factor</td>
<td>No. per million inhabitants</td>
<td>0.52*</td>
<td>0.72**</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The impact of scientific results is measured using the standardized international bibliographic indicator of relative impact factor which measures the ratio between the number of received citations and number of publications with respect to the global average impact factor in a certain field of research. The relative impact factor is calculated on the basis of publications and citations in the Web of Science international bibliographical database. The relative impact factor value for Slovenia has remained the same over three five-year periods prior to the setting of a baseline value, so the setting of a higher target value would be overly optimistic. Greater growth has been achieved in the periods following the setting of a baseline value. This was indicated in the analysis which showed that the growth of the number of citations of publications co-authored by Slovenians has surpassed average growth of EU states by over 20 percent.

RESULTS AND THEIR INDICATORS

Production of internationally comparable and socially relevant knowledge

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year</th>
<th>Baseline value</th>
<th>Year 2011</th>
<th>Target year</th>
<th>Target value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production of new knowledge, directed towards a practical objective or purpose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of patent applications</td>
<td>No. per million inhabitants</td>
<td>2009</td>
<td>59</td>
<td>67**</td>
<td>2014</td>
<td>75</td>
</tr>
</tbody>
</table>

* Last available data is for 2010

The dynamics of the number of patent applications shows that the objective will most likely be reached in the coming years.

As mentioned before, Slovenia has in the past shown an above-average growth of the number of citations. Consequently, the placement has improved by one place. Considering current positive trends, we can expect further improvements in the coming years.

As above for the relative impact factor, similar applies to highly cited publications. No greater shifts were seen over a long period of time in the past. These are publications which make up the top one percent of the most cited publications in a certain area of research.

The share of funds intended for the higher education sector has been high in 2009 also due to a one-time transfer for infrastructure programs in the amount of ten million euros. Due to above, the share of funds in the Agency budget intended for financing research in the higher education sector has in 2009 surpassed the average of the last few years. No such transfers were made in the following years, so the share of funds for the higher education sector is smaller.

In the Public call for proposals for co-financing of research projects for the year 2011 (call in 2010), the Agency has dedicated a large share of funds to financing postdoctoral projects. The share of postdoctoral projects in all the approved projects has been 16 percent. However, the increased share is not yet evident in realized financing for postdoctoral projects in 2011. The public call for proposals also placed special emphasis on projects led by younger Doctors of Science (a maximum of 7 years following the defence of their doctorate). By this indicator the target value has practically been achieved.
**Research Programs**

**Budget Items 6036 and 6564: Research Programs and Project Research Centres**

**Mechanism Description:**

The Agency finances public service in the field of research activities using public budget funding. Research programs represent a coherent area of research work in which is expected to remain current for ten or more years and is important enough for Slovenia to create a public interest in long-term research of the group. For this purpose, the Agency paid out 58,856,747.28 EUR in 2011. The structure of the use of funds by scientific disciplines and activity sectors is shown in figures below.

In 2009, the Agency has begun executing 288 research programs for the second programming period (3 to 6 years) after having completed research programs of the 2004-2008 period.

**Relevance for Slovenia:**

Programs were selected on the basis of a new methodology for the assessment of research programs, adopted in 2008 with the purpose of promoting quality and high impact research work, better cooperation between Slovenian and international research, more efficient links between research and the economy and other public activities and removal of shortcomings in issues with the organization and execution of research work in separate areas.

No new public calls for proposals for research programs have been published in 2011. The annual scope of research programs has remained unchanged.

**Research Projects**

**Measure Description:**

To increase the scope of research in priority fields of research.

The European Science Foundation was reformed in 2011 and will not carry out calls for proposals within the EUROCORES and ECRP schemes. The number of projects with Slovenian participation within the ESR EUROCORES and ECRP schemes includes projects the Agency cofinances with national budget funds as part of the so-called complementary scheme. Two such projects were cofinanced in 2010 and a further 10 in 2011. Nine projects, cofinanced in the complementary scheme in 2011, received a positive grade in international review, but were not selected for cofinancing at public calls of the European Research Council (most are applications for the so-called Advanced Grant call). Another exciting development beside the exceptional increase in the number of Slovenian applications for ERC projects is the fact that the first Slovenian project was selected for financing in 2011 (doc. dr. Nedeljka Žagar, Faculty of Mathematics and Physics of the University of Ljubljana, Department of Physics).

The share of funds for applicable projects in comparison with previous years has not changed in 2011. The Agency has only slightly modified the minimal shares of applicable projects in its public call of 2011. As the procedures of project selection will be completed in 2012, the influence of these changes will only become evident in the coming years.

Support to Technological Development Projects

**Specific Objectives:**

- Increasing the impact of R&D in all areas of the domestic environment (public and private sectors)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting Year</th>
<th>Baseline Year</th>
<th>Target Year</th>
<th>Realis. 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of projects with Slovenian participation within the ESF EUROCORES and ECRP schemes</td>
<td>no</td>
<td>2010</td>
<td>3</td>
<td>2011</td>
<td>13</td>
</tr>
</tbody>
</table>

In 2011 there were 24 users of targeted research programs, which is above the target value.

Results and Their Indicators:

- An improved system of developing and monitoring public policies

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting Year</th>
<th>Baseline Year</th>
<th>Target Year</th>
<th>Target Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of different cases of target research programs</td>
<td>no</td>
<td>2009</td>
<td>20</td>
<td>2014</td>
<td>20</td>
</tr>
</tbody>
</table>

*Last available data is for 2010.*
BUDGET ITEM 6037: RESEARCH PROJECTS

MECHANISM DESCRIPTION

Under this budget item the Agency uses national budget funds to finance key research projects representing original experimental and/or theoretical works aimed at gaining new knowledge on basic phenomena and perceivable facts. The Agency as an important instrument for connecting mobility and movement of researchers uses national budget funds to co-finance post-doctoral research projects in the form of basic or applicative research projects being carried out in order for researchers to gain additional experience and knowledge after receiving their doctorate.

Under this item, the Agency also uses national budget funds to co-finance:

- international projects, proposed and selected within EUROCORES and ERC projects with the European Science Foundation for financing and projects of the so-called complementary scheme (projects of Slovenian applicants which received positive assessments at ERC public calls or within EUROCORES and ERCP programs of the ESF, but were not selected for co-financing).

The purpose of this mechanism is to promote quality applications to the most demanding public calls in the European research environment with the guarantee of national-level co-financing for positively assessed projects.

ANALYTICAL ELEMENTS

a. Basic research projects

In 2010 the Agency has used national budget funds to co-finance a total of 441 basic research projects in a total value of 18,903,964.49 Euros, noting a 2,324,602.99 Euro increase over the year 2010.

b. Postdoctoral research projects

c. ESF and ERC projects

Figure 8

Scope of financed basic research projects by scientific disciplines in Euros and shares in percentage points

See Figure 9

Scope of financed postdoctoral projects by scientific disciplines in Euros and shares in percentage points

BUDGET ITEM 5686: DEVELOPMENT PROJECTS AND INFRASTRUCTURE

MECHANISM DESCRIPTION

This item is used to co-finance applicable research projects and targeted research projects. The purpose of applicable research projects is the acquisition of new knowledge directed at a practical objective or purpose. Projects can be thematic or general in terms of content.

By co-financing targeted research programs, the Agency helps secure research support for various lines tasked with developing of Slovenian strategic development goals and support for deciding on basic development tasks that are of key importance for increasing competitiveness, adaptability and innovation. Targeted research programs are created, executed and financed in cooperation with various ministries and other interested budgetary users.

ANALYTICAL ELEMENTS

a. Targeted research programs

In 2011, 2,690,095.00 Euros have been used for the co-financing of targeted research programs «Competitiveness of Slovenia 2006-2013» and «Assure safe food for tomorrow». The structure of the use of funds by scientific disciplines and activity sectors is shown in figures below.

b. Applicative research projects

In 2011, 11,650,511.37 Euros have been used for the co-financing of applicable projects. The structure of the use of funds by scientific disciplines and activity sectors is shown in figures below.
INTERNATIONAL ACTIVITIES IN THE FIELD OF SCIENCE

BUDGET ITEM 5703: EUROPEAN FRAMEWORK PROGRAMMS AND INTERNATIONAL RESEARCH

MECHANISM DESCRIPTION

The main purposes are greater and faster progress of Slovenia and intensive and quality inclusion of the Slovenian research sphere into international research currents.

The programme and cofinancing from the budget item for this programme encompass the following activities:

a) CEA, cooperation in the European area

The scope of funds for cooperation in the CEA (French Alternative Energies and Atomic Energy Commission) area has reduced in 2011 (294,000.00 Euros, index 7.50), but it has remained well above the 2009 level (index 140.0).

b) International projects - bilateral cooperation

In 2011, 17 bilateral public calls have been carried out in cooperation with 16 countries. 310 projects with 31 countries have been cofinanced with national budget funds. The Agency has used 729,030.68 Euros (without CE) of national budget funds for cofinancing projects of bilateral international cooperation.

The Public Tender for Applications for Cooperation of Slovenian Researchers in the Materials World Network (MWN) was carried out for the second time in 2011 together with the National Science Foundation (NSF). The year also marked the second time the Agency cooperated in the SCEX programme of scientific exchange which is carried out as part of the Convention on Scholarship Fund, made with the Swiss Federal Council. The Swiss side-awarded four one year scholarships in 2011 to Slovenian doctoral students and post-doctoral researchers for work at elite Swiss research institutions.

c) International projects - 7th European Union Framework Program

Beneficiaries of the one-off financial contribution to the costs of project application were Slovenian organizations that lodged an application for a project as coordinators or as partners in a project that another foreign or Slovenian organization has submitted in one of the calls for proposals of the 7th European Union Framework Programme or EURATOM program. Financial contributions to the costs of drafting and applying the project were:

- projects, 2,500 Euros for application of a project a Slovenian organization submitted as coordinator of an international consortium,
- project, 1,000 Euros for applying a project in which a Slovenian organization cooperated as partner in an international consortium or worked independently if so allowed by the EC call for proposals.

The public call shall remain open until applications for the EURATOM programme or the 7th European Union Framework Programme are closed in 2011 and 2013 respectively.

The Agency has dedicated 272,500.00 Euros from national budget funds for cofinancing financial contributions towards the costs of applications for projects in the 7th European Union Framework Programme and the EURATOM programme.

1 The public call received six applications for Slovenian sections of common Slovenian-American projects. NSF has informed us they received six applications of American sections of the same projects, but only two were accepted for assessment. The remaining four were discarded for formal reasons. Pursuant to tender conditions, the Agency may only review applications which are formally appropriate in both the Slovenian and American sections, so only two applications were sent in for review.

2 The public call received six applications for Slovenian sections of common Slovenian-American projects.
HUMAN RESOURCES
SUPPORTING SCIENCE,
HIGHER EDUCATION AND
TECHNOLOGICAL DEVELOPMENT

Grand reading room at the National and University Library, work of renowned Slovenian architect Jože Plečnik.
SPECIFIC OBJECTIVES

Increasing the share of researchers in the active working population

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year</th>
<th>Baseline value</th>
<th>Year 2011*</th>
<th>Target year</th>
<th>Target value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of researchers in active working population in the Republic of Slovenia</td>
<td>%</td>
<td>2008</td>
<td>1.11</td>
<td>2014</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>Number of researchers</td>
<td></td>
<td>2008</td>
<td>10,124</td>
<td>2014</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>Share of women among researchers</td>
<td>%</td>
<td>2008</td>
<td>15.0</td>
<td>2014</td>
<td>18.00</td>
<td></td>
</tr>
</tbody>
</table>

* Last available data for 2009, source: Statistical Office of the Republic of Slovenia

The share of researchers in the active working population in the Republic of Slovenia has in 2009, the latest year with available data, remained at the same level as in 2008. The number of researchers has increased with an index of 101.2, showing that the target number may realistically be reached in 2014. The same applies to the share of women among researchers, which has grown by 0.7 percent.

RESULTS AND THEIR INDICATORS

- Greater share of researchers in the higher education and business sectors

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year</th>
<th>Baseline value</th>
<th>Year 2011*</th>
<th>Target year</th>
<th>Target value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of researchers in active working population in RS - higher education sector</td>
<td>%</td>
<td>2008</td>
<td>0.42</td>
<td>2014</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>Share of researchers in active working population in RS - government sector</td>
<td>%</td>
<td>2008</td>
<td>0.25</td>
<td>2014</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Share of researchers in active working population in RS - business sector</td>
<td>%</td>
<td>2008</td>
<td>0.35</td>
<td>2014</td>
<td>0.40</td>
<td></td>
</tr>
</tbody>
</table>

* Last available data for 2009, source: Statistical Office of the Republic of Slovenia

In 2009 (latest available data), the share of researchers among the entire active working population of the Republic of Slovenia has increased in all the monitored sectors, in higher education, government and business by 0.7 percent. While the share of researchers among the active working population in the government sector has already surpassed the target value for 2014, the remaining two sectors appear to reach the target value by 2014.

BUDGET ITEM 5026: TRAINING AND DEVELOPMENT OF SCIENTIFIC PERSONNEL

MECHANISM DESCRIPTION

An important instrument of the Agency science policy is the financing of postgraduate studies and research training of young researchers with funds from the national budget of the Republic of Slovenia. The programme has been successfully implemented since 1985 and has made significant contributions to increasing the quality and scope of research and to new recruitment for research teams. By funding young researchers, the Agency strives to enhance human resources in research and education organizations, increase the research capacity of groups involved in the implementation of public service through research programmes, basic, applicative and development projects and use the human resources potential complementing the needs of other users from the private and the public sector.

In selecting young researchers, the Agency has been giving a greater role to research organizations since 2005. The Agency selects mentors to young researchers based on a public call. Young researchers are selected by the research organizations themselves.

An important feature of the young researchers programme is that young researchers are employed full time during their postgraduate studies and are involved in research work of research programmes and projects. Funding for the training of young researchers is granted for a fixed term - a maximum of four years and six months for a doctoral degree. Funding includes gross salary for the young researcher, legally prescribed contributions and direct material and non-material costs of the training programme. The Agency selected 211 mentors in 2011 and 251 mentors in 2010. The lower number of mentors applied in 2011 in comparison to 2010 is a result of budget restriction5. The share of female mentors has reduced from 26.0 percent to 22.7 percent. A total of 1441 young researchers have received financing in 2011, slightly over one percent more than in 2010 when 1425 were granted financing.

In selecting young researchers, the Agency has been giving a greater role to research organizations since 2005. The Agency selects mentors to young researchers based on a public call. Young researchers are selected by the research organizations themselves.

The difference between the number of mentors and young researchers is due to the fact that some young researchers who are scheduled to begin training in a certain year actually do not begin training until the following year. The issue often arises with foreigners where the acquisition of work permits is often very time consuming.

ANALYTICAL ELEMENTS

Funding for young researchers in 2011 has remained the same as it was in 2010 at 31.7 million Euros. Distribution of funds among scientific disciplines and activity sectors is presented in the figures below.

3 The Public call for selection of mentors to new young researchers for 2012 - call in 2011 provided for selection of 251 mentors in the annual value of 31.7 million Euros. The public call for selection of mentors to new young researchers for 2011 - call in 2010 provided for selection of 211 mentors in the annual value of 31.7 million Euros.

4 The Public call for selection of mentors to new young researchers for 2012 - call in 2011 provided for selection of 251 mentors in the annual value of 31.7 million Euros. The public call for selection of mentors to new young researchers for 2011 - call in 2010 provided for selection of 211 mentors in the annual value of 31.7 million Euros.

5 The Public call for selection of mentors to new young researchers for 2012 - call in 2011 provided for selection of 251 mentors in the annual value of 31.7 million Euros. The public call for selection of mentors to new young researchers for 2011 - call in 2010 provided for selection of 211 mentors in the annual value of 31.7 million Euros.

6 The number of newly selected young researchers includes young researchers selected by mentors who were in turn selected at the Public call for selection of mentors to new young researchers for 2012 - call in 2011 and have begun receiving financing in 2011 or young researchers selected by mentors who were in turn selected at the Public call for selection of mentors to new young researchers for 2011 - call in 2010 and have begun receiving financing in 2011.
RESEARCH INFRASTRUCTURE

Vega Telescope at the Astronomical and Geophysical Observatory, Golovec, Ljubljana, founded in 1959.
In 2011 the Agency continued its proactive role in the field of promotion of science and innovation in various target publics and has surpassed the target value set for 2011. Agency support for the television show Lets bite into science, produced by the national television station Radiotelevizija Slovenija5, emphasised the promotion of scientific knowledge and work in the general public.

Further activities were directed at increasing recognizability and promotion of cooperation between fields of research in cooperation with subjects of the private sector through the PRO(MO)GRAM campaign - short presentation films of the most excellent programme groups.

Both the PRO(MO)GRAM and Lets bite into science videos are available at the Videolectures.net portal (http://videolectures.net/arrs/).

2011 also saw the continuation of the targeted research project of the Atlas of Slovenian Science, performed by the Jožef Stefan Institute. The main objective of the project is to establish a unified system for simple and one-stop-shop access to research and development data with the aim of promoting new ideas, cooperation between domestic organisations and manufacturing companies, promotion of scientific research achievements in Slovenia and abroad and developing an environment of innovative and creative culture.

### SPECIFIC OBJECTIVES

- To modernize and link together research infrastructure

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year</th>
<th>Baseline value</th>
<th>Year 2011</th>
<th>Target year</th>
<th>Target value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual expenditures for research infrastructure</td>
<td>million EUR</td>
<td>2010</td>
<td>54</td>
<td>44</td>
<td>2014</td>
<td>60</td>
</tr>
</tbody>
</table>

* Agency funds

Funds distributed by the Agency for modernization and connecting research infrastructure in 2010 reached 42,195,848.26 Euros and were increased further to 42,195,848.26 in 2011.

### RESULTS AND THEIR INDICATORS

- Accessibility of the latest scientific knowledge for a wide range of researchers

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year</th>
<th>Baseline value</th>
<th>Year 2011</th>
<th>Target year</th>
<th>Target value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to foreign literature and databases in specific areas through libraries (no. of libraries that enable access)</td>
<td>no.</td>
<td>2009</td>
<td>70</td>
<td>71</td>
<td>2014</td>
<td>70</td>
</tr>
<tr>
<td>Number of foreign databases accessible via the Institute of Information Sciences</td>
<td>no.</td>
<td>2009</td>
<td>7</td>
<td>9</td>
<td>2014</td>
<td>7</td>
</tr>
</tbody>
</table>

Access to international scientific literature and databases has increased in 2011 with 71 libraries being granted access through consortium links. Despite 57 libraries receiving funding in 2011, the number of libraries with access to information sources has increased. The number of foreign databases accessible via the Institute of Information Sciences (hereinafter: IZUM) has increased by two databases in 2011, causing a further increase in the number of database users.

- Realized expert, development and executive tasks in the field of research activities

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year</th>
<th>Baseline value</th>
<th>Year 2011</th>
<th>Target year</th>
<th>Target value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency work programme realization percentage (by accounting principle)</td>
<td>%</td>
<td>2009</td>
<td>96,37</td>
<td>96,09</td>
<td>2014</td>
<td>96,00</td>
</tr>
</tbody>
</table>

The Agency has reached its objective in 2011.

- Increase of public interest in science

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year</th>
<th>Baseline value</th>
<th>Year 2011</th>
<th>Target year</th>
<th>Target value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of events and audiovisual presentations for the promotion of science</td>
<td>no.</td>
<td>2009</td>
<td>20</td>
<td>35</td>
<td>2014</td>
<td>25</td>
</tr>
</tbody>
</table>

In 2011 the Agency continued its proactive role in the field of promotion of science and innovation in various target publics and has surpassed the target value set for 2011. Agency support for the television show Lets bite into science, produced by the national television station Radiotelevizija Slovenija5, emphasised the promotion of scientific knowledge and work in the general public. Further activities were directed at increasing recognizability and promotion of cooperation between fields of research in cooperation with subjects of the private sector through the PRO(MO)GRAM campaign - short presentation films of the most excellent programme groups.

Both the PRO(MO)GRAM and Lets bite into science videos are available at the Videolectures.net portal (http://videolectures.net/arrs/).

2011 also saw the continuation of the targeted research project of the Atlas of Slovenian Science, performed by the Jožef Stefan Institute. The main objective of the project is to establish a unified system for simple and one-stop-shop access to research and development data with the aim of promoting new ideas, cooperation between domestic organisations and manufacturing companies, promotion of scientific research achievements in Slovenia and abroad and developing an environment of innovative and creative culture.

Programming archive is available at the following link: http://www.rtv.si/sprint/mediavod.php?id_mod=mediavod&page=web&link=mediavod_nw=25554.
INFRASTRUCTURAL OBLIGATIONS AND RESEARCH EQUIPMENT

ANNUAL EXECUTIVE OBJECTIVES – INFRASTRUCTURAL SUPPORT TO RESEARCH ACTIVITIES

MEASURE DESCRIPTION

To increase the rate of financing for founders’ obligations in comparison to 2009, to provide researchers in public research institutes with remuneration for work-related costs and premiums prescribed by the Collective Agreement for the Public Sector, to increase infrastructural support to research activities, to carry out acquisitions of research equipment of Package 14 for the 2009 to 2011 period, to carry out a public call for proposals and the first acquisitions of research equipment of Package 15 for the 2011 to 2013 period.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year</th>
<th>Baseline value</th>
<th>Target year</th>
<th>Target value</th>
<th>Realis. 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of units of high-value research equipment acquisitions</td>
<td>no</td>
<td>2010</td>
<td>20</td>
<td>2011</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>Number of executed infrastructural programs</td>
<td>no</td>
<td>2010</td>
<td>30</td>
<td>2011</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Number of public research institutions receiving funding for fixed costs of operation, costs of management and innovation of property</td>
<td>no</td>
<td>2010</td>
<td>15</td>
<td>2011</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

Package 14 was completed in 2011 and it is usual for the realization of equipment acquisitions to be greatest in the final year of the tendering period. The public call for proposals for Package 15 was published in 2011, but there has not been any realization in the framework of this package yet.

BUDGET ITEM 5704: RESEARCH EQUIPMENT

MECHANISM DESCRIPTION

Research equipment provides important research and infrastructural support to research personnel in their performance of scientific research activities in research projects and programmes. For this purpose the Agency cofinances acquisitions of medium and high-value research equipment with funds from the national budget through public calls for proposals.

In order to promote the realization of acquisitions of research equipment, the Agency has in 2008 prepared amendments to the Rules on Cofinancing Acquisitions of Research Equipment, thereby simplifying evaluation procedures and selection of research equipment for cofinancing.

Pursuant to the new Rules on Procedures of (Co)financing, Assessment and Monitoring of the Performance of Research Activities, the share of cofinancing of the purchase value of research equipment is set by a public call for proposals. The public call for proposals for cofinancing acquisitions of research equipment (Package 15), published in 2011 and applying to the 2012 to 2015 period, specified, in line with the guidelines from budgetary documents of the Republic of Slovenia, that the amount of cofinancing for acquisitions of research equipment shall not exceed 80 percent of the purchase value per unit of research equipment.

In 2011, cofinancing for purchases of research equipment amounted to 3,314,504.61 Euros.

BUDGET ITEM 5719: INFRASTRUCTURAL OBLIGATIONS

MECHANISM DESCRIPTION

Infrastructural obligations consist of two areas:

- founders’ obligations towards public research institutes;
- work related reimbursements and premiums of collective supplementary pension insurance.

The purpose of this item is to provide public research institutions with the basic conditions for research work, whereby the Agency uses national budget funds to cofinance costs under three items:

- investment maintenance;
- management costs and
- fixed costs of operations.

Total costs for founders’ obligations have increased minimally in 2011 in comparison to the previous year.

3,940,841.45 Euros were used for (co)financing reimbursements of work related costs and other personal income costs.

The Agency has in 2011 used national budget funds to finance founders’ obligations in the amount of 15,607,384.48 Euros. All the funds allocated for founders’ obligations were received by the government sector.

SCIENTIFIC PUBLICATIONS, DATABASES AND MEETINGS

MEASURE DESCRIPTION

To carry out the most important scientific meetings, to ensure access to foreign scientific literature and databases for the purposes of research activities, professional development work and higher education studies in the Republic of Slovenia.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>Starting year</th>
<th>Baseline value</th>
<th>Target year</th>
<th>Target value</th>
<th>Realis. 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of held scientific meetings</td>
<td>no</td>
<td>2010</td>
<td>150</td>
<td>2011</td>
<td>100</td>
<td>92</td>
</tr>
</tbody>
</table>

Target value of the number of scientific meetings held in 2011 has been realized. Planned obligations were fulfilled and set objectives have been achieved.
GENERAL ASSESSMENT OF OPERATIONS IN 2011

Stairway and ceiling decoration by Slovenian painter J. in J. Šubic at the Slovenian Museum of Natural History, 1821
ASSESSMENT OF THE ACHIEVEMENT OF OBJECTIVES

Agency operations in 2011 can be assessed as successful. The year 2011 was the seventh year of Agency operations in which we further upgraded the normative, organisational, expert and executive system for the performance of tasks in its area of operations. The Agency has carried out its planned tasks and fulfilled annual objectives by separate areas.

OCCURRENCE OF INADMISSIBLE AND UNEXPECTED CONSEQUENCES

No such consequences occurred in the performance of Agency work programs in the period between 1 January and 31 December 2011.

ASSESSMENT OF SUCCESS IN COMPARISON TO 2010

The Agency has met all set objectives in 2011 and 2010.

ASSESSMENT OF EFFICIENCY

The Agency assesses that it has acted economically in its operations, both with regard to core Agency operations and the execution of procedures for financing scientific research activities as specified in implementing regulations. All procurement was made in full accordance with the Public Procurement Act with selection of the lowest bidder without exception.

UNFULFILLED OBJECTIVES

The Agency has fulfilled all its set objectives.

ASSESSMENT OF THE EFFECTS OF OPERATIONS ON OTHER AREAS

Through the pursuance of its mission, the Agency has an impact on the implementation of a new development paradigm which emphasizes the strengthening of the abilities of managing global knowledge and technological progress as the main source of increased labour productivity, national competitive ability and improved quality of individual and social life. Knowledge is a key factor in promoting competitiveness of the national economy while increased investments in knowledge and human development are necessary for transition to a knowledge-based society.

OTHER NOTES (PERSONNEL, REPLACEMENT INVESTMENTS)

Personnel – organisational structure

<table>
<thead>
<tr>
<th>Management Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific council</td>
</tr>
<tr>
<td>Permanent expert bodies</td>
</tr>
<tr>
<td>Temporary expert bodies</td>
</tr>
<tr>
<td>Reviewers</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Organisational structure of the Agency

Staff at the Agency has been coordinated with the Collective Personnel Plan of Legal Persons of Public Law.

<table>
<thead>
<tr>
<th>No. of permanent employees</th>
<th>No. of fixed term employees</th>
<th>Reason for fixed term employment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>2</td>
<td>Substitution – maternity leave – 2</td>
<td>54</td>
</tr>
</tbody>
</table>

The education structure of personnel (permanent and fixed-term) in 2011 has been as follows:
- doctor of science: 5
- specialization, master’s degree in science: 37
- higher education: 1
- post-secondary education: 9

The Agency is experiencing a shortage of personnel in its operations. The issue was also emphasised by ESF in its evaluation of Agency operations where it establishes that we are among the three most burdened agencies in Europe.

INVESTMENTS

The Agency received 102,527 Euros from the budget for the purpose of funding investments in 2011. The Agency also funded investments with the remainder of investment funds from 2010 in the amount of 21,102 Euros and the surplus of receipts over expenditures for 2010 in the amount of 10,000 Euros. 125,088 Euros of the 2011 funds were used in 2011 for acquisition of fixed assets. The share of funds unrealized up to 31 December 2011 is 8,541 Euros.
FINANCING
SCIENTIFIC
RESEARCH ACTIVITIES
The Agency has used funds from the national budget of the Republic of Slovenia to finance scientific research activities within aforementioned programs in accordance to items listed in the work programme. A total of 175,917,614.03 Euros were received from the national budget for this purpose for the year 2011. The Agency distributed 175,917,614.03 Euros of the received funds for scientific research purposes for the year 2011.

To ensure correct recording of expenditures in the national budget by purpose and beneficiary, the Agency proposed the necessary reclassifications between accounts within the item to the Ministry for Higher Education, Science and Technology. Funds received for financing scientific research are not accounted as revenues of the Agency and are recorded in books of account under balance accounts. A more detailed presentation of financing by separate programs is shown in the table below.

The Agency has financed scientific research activities in 2011 with funds from the national budget in a timely manner in accordance with concluded agreements. The listed programming items have provided financing for 4,029 projects, programmes and tasks. The Report on Financing, available at the Agency website (http://www.ars.gov.si/sl/file/finansni/Report/fin-por.aspx?Leto=2011), presents the amount of financing by separate projects, programmes and tasks.

### Table 6: Overview of the financing of scientific research activities in 2011 by budget items

<table>
<thead>
<tr>
<th>Item code</th>
<th>Item title/subitems</th>
<th>Realisation 2010</th>
<th>Financial plan 2011</th>
<th>Realisation 2011</th>
<th>Realisation percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5686</td>
<td>Development projects and infrastructure</td>
<td>14,185,241</td>
<td>14,500,000</td>
<td>14,340,606</td>
<td>98,9</td>
</tr>
<tr>
<td>5694</td>
<td>Programs of international scientific cooperation</td>
<td>304,320</td>
<td>635,000</td>
<td>630,006</td>
<td>91,3</td>
</tr>
<tr>
<td>5701</td>
<td>European Framework Programs and international research</td>
<td>1,360,644</td>
<td>2,770,000</td>
<td>1,295,531</td>
<td>46,8</td>
</tr>
<tr>
<td>5704</td>
<td>Research equipment</td>
<td>4,846,273</td>
<td>6,022,815</td>
<td>5,314,925</td>
<td>85,3</td>
</tr>
<tr>
<td>5706</td>
<td>Training and development of scientific personnel</td>
<td>37,728,444</td>
<td>33,235,594</td>
<td>31,690,412</td>
<td>95,4</td>
</tr>
<tr>
<td>5710</td>
<td>Infrastructural obligations</td>
<td>19,521,957</td>
<td>19,460,445</td>
<td>19,618,026</td>
<td>100,0</td>
</tr>
<tr>
<td>5722</td>
<td>Scientific publications and meetings</td>
<td>559,547</td>
<td>456,937</td>
<td>400,477</td>
<td>81,6</td>
</tr>
<tr>
<td>5724</td>
<td>IZUM and other library information activities</td>
<td>5,940,717</td>
<td>5,500,000</td>
<td>5,500,000</td>
<td>100,0</td>
</tr>
<tr>
<td>5728</td>
<td>Information and communication infrastructure</td>
<td>310,172</td>
<td>0</td>
<td>0</td>
<td>/</td>
</tr>
<tr>
<td>5732</td>
<td>Foreign literature and databases</td>
<td>4,424,175</td>
<td>4,600,000</td>
<td>4,598,869</td>
<td>100,0</td>
</tr>
<tr>
<td>5737</td>
<td>Promotion of international research within the EU</td>
<td>1,618,162</td>
<td>1,900,000</td>
<td>1,812,789</td>
<td>95,4</td>
</tr>
<tr>
<td>5826</td>
<td>Infrastructural programmes</td>
<td>7,915,107</td>
<td>8,962,132</td>
<td>8,873,914</td>
<td>98,8</td>
</tr>
<tr>
<td>6016</td>
<td>Research programmes</td>
<td>28,033,805</td>
<td>28,614,935</td>
<td>28,033,035</td>
<td>98,0</td>
</tr>
<tr>
<td>6037</td>
<td>Research projects</td>
<td>25,042,152</td>
<td>25,638,014</td>
<td>22,961,291</td>
<td>89,6</td>
</tr>
<tr>
<td>6038</td>
<td>Excellent prominent foreign scientists in Slovenia</td>
<td>115,000</td>
<td>184,963</td>
<td>184,000</td>
<td>99,5</td>
</tr>
<tr>
<td>6064</td>
<td>Project research centres</td>
<td>30,881,220</td>
<td>31,232,343</td>
<td>30,823,732</td>
<td>98,8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>176,043,741</strong></td>
<td><strong>183,903,428</strong></td>
<td><strong>175,917,614</strong></td>
<td><strong>95,7</strong></td>
</tr>
</tbody>
</table>