INTAS: YOUR PARTNER FOR PRESENT AND FUTURE NIS COOPERATION IN INFORMATION TECHNOLOGY

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INTAS is an Independent International Association supporting scientific collaboration with the New Independent States of the former Soviet Union. Its main funding programmes are presented together with some results from the past, closed calls and with particular reference to Information Technology.

Introduction

INTAS is an independent International Association formed by the European Community, the European Union member states and like-minded countries to promote scientific co-operation between researchers in the New Independent States of the former Soviet Union (NIS) and its member states and to help preserve the valuable scientific potential in the NIS through international co-operation.

INTAS was established in 1993 as an independent international organisation and its membership at present comprises the 25 member states of the European Union, the European Community, Bulgaria, Iceland, Israel, Norway, Romania, Switzerland and Turkey. Its NIS partner countries are Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzia, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

INTAS supports multilateral partnerships between research institutes, universities and industry in the New Independent States (NIS) and the INTAS member states for the benefit of all partners. Projects are submitted in the frame of regular calls and are selected by peer review on the basis of scientific quality, mutual benefit and socio-economic relevance. INTAS offers complementary funding, i.e. grants which are in addition to scientists’ normal funding sources and which are aimed at enabling them to engage in international scientific cooperation. INTAS offers different grants, including:

- Grants for research projects and networks submitted in open, thematic and collaborative calls;
- NIS young scientist fellowships;
- Innovation grants to encourage the dissemination and use of results of scientific research;
- Accompanying measures: Summer Schools, Strategic Workshops and Infrastructure Actions.

INTAS funds joint international scientific research in the natural, technical, and the social and human sciences. Research may be fundamental or applied and may be in any of the following areas:

- Physical sciences: astronomy, nuclear, plasma and condensed matter physics, engineering sciences, space and aeronautics related sciences;
- Chemical/biological sciences: chemistry, life sciences and medicine, earth sciences, environment and energy;
- Economic, social & human sciences and mathematics;
- Information Technology & Telecommunications

INTAS is an activity line for international cooperation in the European Community’s Sixth Framework Programme for Research and Technological Development (FP6), which specifies that "Co-operation activities with Russia and the other NIS countries will be carried out in particular through the INTAS structure set up jointly by the Community and the Member States.” (Decision N° 1513/2002/EC, European Parliament and Council of Ministers, Official Journal L 232, 29.08.2002). For the period 2002-2006,
INTAS has been allocated Euro 70 million from FP6, with additional contributions from member states and organisations which co-fund initiatives with INTAS.

**Participating in INTAS activities**

Calls for proposals for research projects and networks are periodically published on the INTAS web-site, in major scientific journals and the press (http://www.intas.be). While the specifications for each call for proposals can vary, the following principles are common to most:

- project consortia must comprise at least two teams from different NIS partner countries and two teams from different INTAS member states;
- a minimum of 75% of the project funding for research projects is earmarked for the teams from the NIS partner countries;
- a minimum of 50% of the project funding for networks is earmarked for the teams from the NIS partner countries;

INTAS also has a very popular and successful fellowship programme for NIS Young Scientists up to the age of 35, open to PhD students and post-doctoral researchers, to enable them to advance their careers via international collaboration and to create opportunities for future research cooperation. At present, the maximum grants are Euro 16,400 (PhD grants) and Euro 20,400 (post-doctoral grants), both for a two year period.

INTAS innovation grants promote the further development, utilisation and marketing of INTAS research results. The maximum allowable funding per innovation grant is Euro 25,000, depending on the nature of the innovation activities. A minimum of 75% of the total innovation grant is earmarked for the teams from the NIS partner countries.

For efficient and mutually beneficial co-operation, the Association has set up a number of mechanisms including:

1. Simple and effective procedures for submission of proposals, selection and execution of projects and young NIS scientist fellowships. This includes an electronic submission system for research and network proposals and young NIS scientist fellowship grants and an on-line peer review system.

2. A framework for co-operation through Agreements on Scientific Co-operation with NIS partner countries which ensure reliable co-operation mechanisms. Currently INTAS has Scientific Co-operation Agreements with Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzia, Moldova, Tajikistan, Ukraine and Uzbekistan and the Russian Federation (RFBR and RFH).

3. Involvement of eminent scientists from both east and west in the INTAS Council of Scientists in designing and implementing INTAS initiatives;

4. Agreements with NIS banks to provide a unique and reliable payment system thanks to which approved project funds are paid directly to NIS participants in good time via local NIS banks;

5. INTAS FP6 NIS Information Network in order to promote the involvement of the NIS scientific communities in the European Research Area (ERA) and in particular their participation in activities funded by the European Community’s 6th Framework Programme for Research (FP6). Amongst others, a network of FP6 “National Information Points” (NIPs), is active in the NIS. In addition, a network of INTAS Information Desks in the NIS to disseminate information locally and in a tailor-made approach.
Figure 1: NIS teams participating in the projects (1992-2001)

![Bar chart showing number of teams by country from 1992 to 2001.]

Table 1: INTAS funded actions since 1992

<table>
<thead>
<tr>
<th>1992-2001</th>
<th>Number of Contracts</th>
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</thead>
<tbody>
<tr>
<td>Research and Network Projects</td>
<td>2727</td>
</tr>
<tr>
<td>Young NIS Scientist Fellowships</td>
<td>834</td>
</tr>
<tr>
<td>Young NIS Scientist Conference Grants</td>
<td>257</td>
</tr>
<tr>
<td>Summer Schools</td>
<td>30</td>
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<tr>
<td>Strategic Scientific Workshops</td>
<td>251</td>
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<tr>
<td>Infrastructure Actions</td>
<td>29</td>
</tr>
<tr>
<td>Innovation Grants</td>
<td>17</td>
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<table>
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<tr>
<th>2003</th>
<th>Number of contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Call 2003</td>
<td>130</td>
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<tr>
<td>Joint Call Belarus 2003</td>
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<tr>
<td>Joint Call CNES 2003</td>
<td>10</td>
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<tr>
<td>Joint Call CERN 2003</td>
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<tr>
<td>Joint Call GSI 2003</td>
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<tr>
<td>Innovation grants 2003</td>
<td>17</td>
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<tr>
<td>Young Scientist Fellowships 2003</td>
<td>158</td>
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<tr>
<td>Summer Schools 2003</td>
<td>10</td>
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<tr>
<td>Strategic Workshops 2003</td>
<td>12</td>
</tr>
<tr>
<td>Infrastructure Actions 2003</td>
<td>5</td>
</tr>
</tbody>
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Information Technology in INTAS

Field 2 concerns Mathematics, Telecommunications as well as Information Technology. In the years 1992-2003, of the total of 2727 projects, 204 were in field 2, but most of the projects were in the sub-field of Mathematics. A Thematic Call in Information Technology was launched in 2000, where the following projects were selected:

1. Dissemination of data on plankton and environmental characteristics using a CD-ROM based data management system for the Atlantic Ocean and the enclosed seas (Mediterranean, Caspian and Aral Sea); (UK; IT; UA; KZ; AZ)
2. Integration of Russian Satellite Data Information resources with the global network of Earth Observation Information Systems; (UK; IT; RU)
3. ATMOS: A Scientific WWW Portal for the Atmospheric Environment; (AT; UK; RU)
4. Virtual Computational Chemistry Laboratory (VCC-LAB); (CH; IT; CH; DK; UA; RU)
5. Data Mining Technologies and Image Processing: Theory and Applications; (FI; RO; AM; BY; RU; UA)
6. Storage of quantum information in trapped neutral atoms; (DE; DK; RU)
7. Development of Synthetic Aperture Radar Marine Information System (SARMIS) tailored to pollution and fishery application; (NO; FR; UA; RU)
8. Development of an information access system for high latitude climate data, analysis and numerical simulations of climate change - Climate Data Access System (CLIMAS); (NO; DE; RU)
9. Data Mining Algorithm Incubator; (ES; BE; UK; GR; AM; BY; RU)
Concerning the call 2003: approximately 50% of the projects and networks submitted in Field 2 were in Information Technology but, due to budget restrictions and evaluation results, only 11 (9 open call & 2 from the collaborative call with Belarus), could be selected for funding - all of them in Mathematic disciplines.

To help the situation a Thematic Call in Information Technology has been launched in Spring 2004 with a deadline on 3 September 2004 and with a budget of 1 Million Euro. The Call is expected to cover the following topics:

1. New foundations, methodologies and paradigms for information management

Within this topic proposals must refer to new, well founded, theoretical approaches to handle information, including the ability to deal with knowledge that may be incomplete, uncertain and changing, in environments that may be unstructured, evolutionary, adaptive or learning.

2. Audio, video and sensorial information handling

Within this topic proposals must refer to problems of acquisition, representation, reasoning, retrieval and discovery of knowledge, when knowledge takes the form of graphics, images, sounds, signals or coming from sensors.

Concerning the Young Scientist Fellowships: the situation in Field 2 was almost the same in the past: almost all fellowships were in Mathematics. The situation has changed in the last call 2003 where, like for the open call, around 50% of the applications were in Information Technology. Of the 19 fellowships that could be funded 8 were in Information Technology. The applications mostly concerned the following areas:

Pattern recognition; Image recognition & analysis (face recognition); Image databases; Data Mining of images; Human Computer Interaction; Artificial Neural Network often is proposed as the novel approach while the main application area is within Health Care in general. There were some proposals also in Distributed System, Information Retrieval, Decision Support Systems and some on Agent Technology.

Concluding remarks

INTAS activity in 2005 will most probably include a number of calls for research projects and networks, together with a call for Young Scientist Fellowships, Innovation Grants and Accompanying Measures.

It is hoped that there will be good opportunities for project proposals within the domain of Information Technology to be submitted in view of building a stronger collaboration in this area amongst INTAS and NIS countries, in the framework of the European Research Area (ERA).

The discussion concerning the next Framework Programme (FP7) has just started and it will probably last for at least another year. The future activities of INTAS beyond 2006 have not yet been decided in detail. Nevertheless, all possible effort will be made by INTAS to ensure that it remains an instrument for scientific collaboration with NIS countries.