



TARGETED R&D INITIATIVES

The rationale for, and approach taken in, establishing the Targeted Initiatives Programme (TIP) in Ukraine were discussed and approved at the 19th Board Meeting. At the upcoming meeting, the Board will be brought up to date regarding Ukraine and apprised of developments in Georgia. The TIP is intended to address a number of key challenges which must be overcome in order to create an innovative and competitive environment within the recipient countries. In both Ukraine and Georgia the challenges were identified as the need to;

- accelerate the development of science/technology (S&T) capability and capacity, in key areas, for national competitiveness
- develop a more effective nationwide innovation system
- improve the innovative capacity and performance of key research institutions
- integrate / improve business- attitudes to R&D and innovation
- stimulate demand for new knowledge and innovation
- improve access to knowledge, knowledge flows and knowledge management in both countries
- enhance the transformation of knowledge into products and processes that add-value across industrial sectors for maximum socio-economic benefits
- position the participating countries as technology leaders in key strategic knowledge industries

Ukrainian Initiative - In establishing the basis for success as well as to provide direction and impetus, the STCU is preparing to sign an Agreement to cooperate with the National Academy of Sciences of Ukraine (NASU). In executing said Agreement, the signatories committed \$1,000,000 (in total) during the current fiscal year towards R&D, within the targeted area(s). This landmark agreement is seen as having far reaching implications. It ensured;

- **commitment** by the signatories to S&T that translated into Ukrainian State budget financing (the NASU committed \$500k). This joint initiative is one of the single largest national cooperative science efforts of its kind in Ukraine's history.
- that the STCU had a **supportive and responsive institutional framework** (i.e. NASU) as a active partner
- the signatories could **optimize the utilization of resources** in strategic priority areas – priorities were previously established through consultation with key stakeholders and is reflected in existing legislation
- the STCU could **strengthen Ukraine's innovation capability** through expanding and upgrading of the S&T infrastructure
- **collaboration** by promoting interdisciplinary and multi-institutional partnerships and synergy to enhance the innovation capabilities
- **technology advancement** of competitive products and processes that meet market demands
- the STCU and NASU could promote a **culture of creativity, innovation and entrepreneurship**
- **enhanced quality of scientific proposals** (and hence their competitiveness) through direct consultation with international experts

Given the limited budget, it was not possible to support a full range of skills and capabilities in all the research areas. It was agreed to prioritize the TIP in one of the emerging technologies. Nanotechnology/nanomaterials were selected as the focus for the current fiscal year. The decision was based on relevance, market-driven need, distinctive technical competence and available budget. A

framework detailing the procedure of project submission, review (including host-government concurrence) and financing was agreed by the STCU and NASU, following approval by the Parties. Guidelines have been developed for the project reviewers.

TIP was officially launched on April 2005 with the call for proposals. Given the National focus, programme information was provided through direct mailing as well as being posted on the STCU and NASU websites. In addition, the programme was promoted through visits to Donetsk, Dnepropetrovsk, Odessa, Lviv and Zaporozhye. The TIP was well received by the scientific community within Ukraine and 62 project proposals (short form) were submitted to the NASU within the required two week timeframe. Following review by the NASU, 15 proposals were selected for further development. The full-proposals will be submitted to the STCU in June (together with Host Government Concurrence) at which time, they will be reviewed by the Parties to ensure compliance with STCU's mandate. Simultaneously, the proposals will be reviewed by STCU personnel, STCU Party representatives, and Western scientific collaborators and contributors, with meaningful value-added interactions between the reviewers and the Ukrainian scientists / technical teams. The entire review process is expected to take 4 – 6 weeks. Funding of successful proposals is expected to begin in August of 2005.

The impact of the funding will be the establishment of National focal points for nanotechnology/nanomaterials which is expected to serve as a hub of R&D activity. In support of this goal, we have enacted a series of initiatives aimed at nurturing Ukrainian scientists and institutes in becoming more sustainable as well as encouraging closer linkages between indigenous and external scientists, in the targeted area. This will be accomplished through the interactive project review process as well as supporting the travel of 10 – 12 eminent nanotechnology/nanomaterials scientists from across Ukraine to Canada. Through support from the STCU, the scientists will participate in an advanced NATO ASI Workshop on Nanoscience (Quebec, Canada) in September. Following the Workshop, the scientists will have the opportunity to visit academic and for-profit institutions to facilitate additional linkages. In preparation for the event, the selected scientists will receive specialised training in presentation techniques and negotiation skills.

We will also be assisting in the development of partnerships between Ukrainian research institutions and Western companies for the co-development of technologies with a view to increasing indigenous technology capability. In such an approach, a focused technology CIDA mission of Canadian companies to Ukraine is planned for the end of summer 2005. Scientific research with commercial potential will be identified and linkages established. The incoming CIDA mission is planned to coincide with the rescheduled STCU-NATO Workshop.

Georgian Initiative – In April 2004, the STCU initiated discussions with Dr. Levan Tsintsadze, Director of the Dept. of Science & Technology within the Ministry of Science & Education of Georgia. The STCU was appraised of the existing structures and resulting issues in Georgia regarding conducting and financing scientific research. Not surprisingly, the challenges identified are comparable to those identified in Ukraine (see above). It was agreed that the TIP launched in Ukraine provided an excellent model that could be used within Georgia. Dr. Tsintsadze and the STCU are currently developing an agreement to launch a TIP in Georgia during fiscal year 2005. While Dr. Tsintsadze could not immediately specify or commit to a specific cost-sharing budget figure, he noted that the Ministry, through a National Science Foundation that was being set up as part of the science restructuring efforts, was nevertheless committing itself to determine the Georgian contribution as soon as possible.

Finally, we are working at implement information-age initiatives that will promote optimum connectivity, i.e. greater use of ICT as a means of improving the innovative capabilities within research institutions in Ukraine.