Request for Expression of Interest

An Assessment of International Best Practice for the Establishment of Sustainable Information Technology Parks, Including Three Country Studies

Country: International
Notice/Contract Number: 1270
Publication Date: March 21, 2006
Deadline: April 5, 2006
Funding Agency: infoDev
Implementing Organization: infoDev

Eligibility of Bidders:
The consultants are expected to be a team of experts, consisting of personnel with knowledge and demonstrated experience in the development of sustainable Information Technology (IT) Parks\(^1\) in developing countries. The consulting firm should have:
- a minimum of 5 years of relevant experience
- a proven record of expertise showing that they are qualified in the field of the assignment
- a presence in Russia, Jordan and Vietnam, largely responsible for research in the respective countries
- previous experience in similar studies

Expression of Interest (EOI):
The World Bank Group invites eligible consultants to indicate their interest in providing expert services as detailed in the attached Terms of Reference.

The objectives of this assignment are to address 4 interrelated issues by means of the delivery 4 separate documented reports:

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\(^1\) IT Parks are variously known as Techno Parks, Cyber Parks or Science Parks. In this assignment, the term IT Parks should be interpreted as parks whose tenants are involved in the intensified production of information and communications technologies (e.g. software) or the intensified use of information and communications technologies to produce other goods and services (e.g. biotechnology, media goods and service, or even call centers.)
1. Component I requires a “Best Practice Guide”, documenting global lessons learned and best practices in establishing sustainable IT Parks and identifying the “critical business success factors” based on the experience of IT Parks in a range of different countries. The consultants can draw on the experience of infoDev with incubators in IT Parks and relevant e-readiness studies.

2. Component II requires the development of a set of guidelines and options for policy makers, for the purpose of Policy Development, based on a review of the effectiveness of public policy in place in selected countries with respect to stimulating substantial private sector investment in the IT sector and spillover into the broader economy (e.g. GDP growth, knowledge transfer development of support services). The “critical policy success factors” for investment and its wider impact (e.g. policy, regulation, infrastructure and human capital) will be identified for Policy Development.

3. Component III entails three in-depth country case studies, which will assess and benchmark each country based on the “critical business success factors” and “critical policy success factors”.

4. Component IV entails the development of an IT Park investment and implementation strategy that is tailored to the specific situation in Russia based on the preceding analysis (more details on Russia provided in Annex II).

Interested consultants must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Consultants may associate to enhance their qualifications.

For this assignment, we specifically request the submission of a 5 page note detailing how the consultants would conduct this assignment if selected. The note should include the following: (i) an analytical framework and a process by which the research will be conducted and the deliverables developed; (ii) a timeline that demonstrates the consultants’ ability to meet the deadlines as noted in the Terms of Reference below; (iii) a brief narrative on resource allocation; and (iv) brief summaries of key personnel to be involved in the work, particularly their experience that directly relates to needs of this study. In order to prepare the note, interested consultants should review the Terms of Reference, which are provided below. The Expression of Interest, including the note and other supporting materials, should not exceed 25 pages in length and should be submitted as a single file (Microsoft Word or PDF file).

The available lump-sum fixed budget for this assignment is USD $180,000.

Selection will be based on the “Consultants Qualifications” (CQ) method of procurement and Consultants will be selected in accordance with the procedures set out in the World Bank's Guidelines: Selection and Employment of Consultants by World Bank Borrowers May 2004 (current edition). Electronic submission of the Expression of Interest is preferred.
Please send your submission to: sayers@worldbank.org, and copy msantiago2@worldbank.org and glocksley@worldbank.org by April 5, 2006 before 23.30h Eastern Daylight Time (EDT).

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Terms of Reference

An Assessment of International Best Practice for the Establishment of Sustainable Information Technology Parks, Including Three Country Studies

Background
In many countries Information Technology (IT) Parks (also referred to as Techno Parks, Cyber Parks and Science Parks) have been established to facilitate the development of IT industries that foster new business development and technological innovation by leveraging synergies within a cluster environment. They provide infrastructure and support services for businesses, particularly high quality (high capacity) communications, real estate and office space. Frequently IT Parks have links to research institutions providing a pipe line of both innovations personnel and advice – the technology transfer function. Some IT Parks offer support facilities for incubator activities as well as established IT companies thereby generating synergies in IT clusters. IT Parks usually entail conducive or attractive working environment for mobile IT professionals in the context of the global search for IT talent. Various models for IT Parks exist, ranging from self-sufficient towns of technology that encompass residential neighborhoods, shopping centers, technical universities, research centers, and often business incubators to relatively small self-contained establishments. Today, IT Parks are present throughout the developing world including India, China, Malaysia, the Philippines, Costa Rica and the Dominican Republic.

Due to the complexity of design and implementation, major IT Parks can often take a number of years to mature and become fully sustainable, as well as requiring a significant investments in infrastructure. For example, the Government of Taiwan invested roughly US$483 million in developing the infrastructure of its 1,000 acre Hsinchu Science Based Industrial Park over a 15 year period, including two major universities and the Industrial Technological Research Institute. The Technology Park Malaysia (TPM), inaugurated in
1996, covers 120 acres and involves a state investment of US$ 80 million and is surrounded by five universities.  

As a result of the commitment and costs associated with the establishment of IT Parks, they are often facilitated by public private partnerships (PPP). PPPs can help to accelerate the provision of infrastructure, improve the distribution of risk and incentives among the parties involved, enhance public management and improve quality of service. In some instances, such as Brazil, Indonesia and Mexico, the challenges of implementing IT Parks has required centralized management to oversee the integration of its various components. PPP can also take the form of partnerships between private sector companies and public sector educational and research establishments.

In addition to facilitating the emergence of IT industries, IT Parks are also intended to enable positive externalities including increased economic linkages between foreign and local industries and spillovers of knowledge and technological capabilities. To reap these benefits, policy makers have implemented target strategies from the outset such as encouraging joint ventures, as well as aimed to strengthen their local human capital to increase the absorption capacity.

Given the potential complexity of these projects and the possible scope of required investments, the growing interest of governments in developing and transition economies in developing and promoting such projects, and their needs for policy advice and financial support from the international donor community in order to pursue these projects, there is a pressing need for a synthesis of best practices and lessons learned (both from success and failure) in developing, financing and sustaining such projects. There is an equally urgent need to provide governments and their donor partners with guidance about the Enabling Conditions/Policy Development (including inter alia policy, regulation, infrastructure, and human capital) required both to attract private investment in such Parks and to assure their sustainability over time.

To address this need, and to help its donors, including the World Bank, in their policy dialogue and investment decisions pertaining to such parks, infoDev, in cooperation with the Global ICT Department of the World Bank Group, will commission a global best practice study on IT Parks which will draw on the experience of several countries, and apply this ‘best practice’ to three countries. The study will also include three country case studies and leverage infoDev’s global network of business incubators, which in many instances are housed within IT Parks.

**Objective of the Assignment**

The objectives of this assignment are:

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1. To deliver a “Best Practice Guide”, documenting global lessons learned and best practices in establishing sustainable IT Parks and identifying the “critical business success factors”. This analysis should include case studies capturing successful and failed experiences with IT Parks in both developing and developed countries; (Component I);

2. To develop guidelines and options for policy makers based on a review of the effectiveness of public policy in place in selected countries with respect to stimulating substantial private sector investment in the IT sector and spillover into the broader economy (e.g. GDP growth, knowledge transfer development of support services). The “critical policy success factors” for investment and its wider impact (e.g. policy, regulation, infrastructure and human capital) will be identified for Policy Development. (Component II);

3. To conduct three in-depth country case studies, which will assess and benchmark each country based on the “critical business success factors” and provide recommendations on Policy Development actions (e.g. policy, regulation, infrastructure and human capital) to be taken to address constraints (Component III ). The first case study will begin with Russia followed by Jordan and Vietnam.; and

4. Based on the preceding analysis the development of an IT Park investment and implementation strategy that is tailored to the specific situation in Russia (more details on Russia provided in Annex II). (Component IV)

Scope of Work
It is anticipated that work on Components I, II and III can commence at approximately the same time. This assignment will include four components:

Component I. Lessons Learned/Best Practices
The consultants will undertake a desk review of relevant literature, as well as selective site visits only as needed to:
1. Identify the “critical business success factors” in the establishing and sustaining the operation of IT Parks (i.e. examine both successful and failed IT Parks in both developing and developed countries, for example, Ireland, Scotland, India, Israel, China, Korea, and Malaysia). Detailed case studies of successes and failures should provide the foundation for developing the “critical business success factors”;

2. These “critical business success factors” should incorporate the perspectives of investors and developers who have financed and developed IT Parks.

Component II: Review of Policy Development
1. Examine the role and effectiveness of Policy Development in selected countries with respect to stimulating substantial private sector investment, including venture capital, in the IT sector and the IT Park (e.g. explore how public policy can enable and/or inhibit the creation of a competitive IT sector; and identify which public policies were instrumental in the success and failure of IT Parks);

2. Determine the impact of IT Parks in supporting the emergence of an IT sector, as well as enabling positive externalities in economic growth and knowledge spillover (e.g. have IT Parks generated “spillover” effects into the broader economy and if so, explore which policies have been effective in promoting such spillover).
explore whether public investment in IT Parks is justifiable (whether the benefits exceed the costs); and
3. Explore and define the role of the public sector and develop best practice guidelines and options for policy makers.

Component III. Country Case Studies
In parallel to developing Component I - Lessons Learned/Best Practices, the consultants will conduct three country case studies, beginning with Russia and then following with Jordan and Vietnam. These country case studies will provide the national context in which policy makers and other key stakeholders will evaluate and benchmark their country on the basis of the “critical business success factors” to design and implement a sustainable IT Park. The consultants will for each of the country case studies:
1. Design and implement a process of wide consultation, by face-to-face and electronic means, with key policy makers and stakeholders (e.g. trade associations), representatives of development agencies, potential and past foreign investors and others.
2. Assess the country’s policy, regulation, infrastructure, as well as human capital (such as levels of education attainment and specialization). For the infrastructure aspects, benchmark the country against the “critical business success factors” identified in Component I.
   a. This assessment should include, but not be limited to, the items noted in Annex I.
3. Review and assess existing and past IT initiatives, including IT Parks. It is important that the views of potential and past foreign investors involved in these initiatives are taken into account to gauge the market’s perception of the country as a viable location for an IT Park.
4. Identify and assess the: (i) constraints to IT utilization for private sector innovation and diversification; (ii) challenges of scaling up successful IT-based businesses; (iii) impediments to entrepreneurship and innovation;
5. Assess the country’s experience to date in attracting investment and strategic partnerships with global IT firms.
   a. The perspectives of investors and developers who have financed and developed IT Parks in the country or in neighboring countries should be assessed (e.g. determine their critical needs and their guidelines for making investment decisions).
6. Recommend concrete actions that the country, in partnership with key stakeholders and donors, can take to address the constraints that limit the country’s ability to provide the “critical business success factors” for designing and implementing a sustainable IT Park.
7. Lead a workshop, organized by infoDev in each country to discuss the findings of this study with key policy makers and stakeholders.

Component IV. IT Park Investment and Implementation Strategy
Based on a benchmark analysis of the “critical business success factors” and “critical policy success factors” against the current environment in Russia, the consultants will
propose an investment and implementation strategy tailored to the specific situation of Russia.

1. The purpose of this strategy document will be to help the government of Russia and its partners in the international donor community (including the World Bank Group) to make informed decisions and commitments about their possible involvement in existing or new IT park projects in Russia, along with other partners including the private sector.

**Preferred Timeline**

<table>
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<tr>
<th>Date</th>
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<tr>
<td>March 20, 2006</td>
<td>Request for Expression of Interests (EOIs) published.</td>
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<tr>
<td>April 5, 2006</td>
<td>Closing date for submission of EOIs.</td>
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<tr>
<td>April 24, 2006</td>
<td>Selection by infoDev and the World Bank Group project team of consultant team and issuance of contract</td>
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<td>April 28, 2006</td>
<td>Submission of detailed work program.</td>
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<td>May 15, 2006</td>
<td>Submission of first draft of Component I and the Russian elements of Components II and III</td>
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<tr>
<td>June 5, 2006</td>
<td>Submission of second draft of Component I and the Russian elements of Components II and III</td>
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<tr>
<td>Late May to Mid-June, 2006</td>
<td>Workshop with key stakeholders in Russia to present findings from Component I and the Russian elements of Components II and III</td>
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<td>June 26, 2006</td>
<td>Submission of final draft of Component I and first draft Component IV</td>
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<tr>
<td>July 17, 2006</td>
<td>Submission of the first draft of Components II and III for Jordan and Vietnam and the second draft of Component IV</td>
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<tr>
<td>August 14, 2006</td>
<td>Submission of the second drafts of Components II and III for Jordan and Vietnam and final draft of Component IV</td>
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<tr>
<td>September 5, 2006</td>
<td>Workshops in Jordan and Vietnam along with the submission of the final draft of all components.</td>
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**Available Lump-Sum Fixed Budget**

- Consulting fees and related expenses (e.g. travel, audit, overhead, etc.) $180,000
Annex I

Infrastructure
1. ICT
   o Options for broadband connection, e.g. fiber, microwave, satellite
     • For each option:
       • Technical specifications, including capacity
       • Cost (initial set-up plus monthly charges), current and projected
       • Quality of service delivery, e.g. time required to order to set up, maintenance support, reliability
   o Options for voice connection, e.g. landline, mobile, fixed wireless and also conventional versus VoIP
     • For each option:
       • Cost (initial set-up plus monthly charges)
       • Quality of service delivery, e.g. time required to order to set up, maintenance support, reliability

2. Power
   o Adequacy of electricity (e.g. from alternative feeders), water, roads, traffic conditions, etc.

3. Transport
   o Accessibility of location via roads from airport, availability of international flight connectivity
   o Transport facilities for employees

4. Land
   o Real estate laws, costs, title, suitable locations and other relevant land issues.

5. Financial Markets
   o Adequacy of the capital markets both traditional lending and venture capital

6. Quality of Life
   o Adequacy in attracting and retaining skilled employees

IT Park Opportunities
1. Availability and suitability of potential locations for IT Parks
   o Issues
     • Backhaul costs for telecom in the case of alternative locations
     • Real Estate
       • office rental rates (both shell rates and rates for fitted office space)
       • availability and cost of leasing / buying facilities
     • Supply of Employees
       • Wages for IT skilled employees at various levels
     • Business Environment Conducive to local and International Customers
       • Tax treatment for local suppliers of IT
       • Customs procedures; taxes and duties on importation of machinery and equipment
• Intellectual property rights protection; anti-piracy laws and enforcement
• Presence of successful foreign enterprises and business partnerships
• Transparency, low level of corruption
• Minimal “red tape” and bureaucracy
• Open market policies by the government, visibly practiced
• Favorable living conditions for ex-pats; hospitality for visiting business partners
• Legal and regulatory framework with processes that do not pose undue risk for foreign investors
Annex II

Background for IT Parks in Russia
The development of IT Parks is a key component of the program of the Government of the Russian Federation to promote a substantial acceleration of private investment in the IT sector in Russia.

To date, numerous IT Parks have been established in Russia. However, their success has been limited where international best practice has not been applied to the management of these facilities or they have been insufficiently funded or they have failed to attain a sufficient level of commercialization.

Russia possesses a substantial stock of well educated human capital with skills in computing research and development, programming and mathematics\(^4\). This capability provides Russia with a considerable IT potential if it can be retained and employed. During the early 1990s\(^5\), a significant IT industry developed across many activities including telecommunications, hardware assembly, packaged software, IT systems design and integration, offshore software engineering and technology research and development.

In 2004, Russia’s IT goods and services market (excluding telecommunications) was nearly $10 billion\(^6\), achieving growth rates of 25 to 30% annually. Some of the Russian IT companies are world class and have been successful both on domestic and international markets. Equally Russia’s human capital has attracted some foreign direct investment by leading global IT companies.

Despite impressive growth rates, the IT performance in Russia is modest in comparison to China, India, Ireland and Malaysia. The IT Offshore business of India is over 40 times larger than Russia’s and China’s is ten times larger. There is further evidence that Russia lags its peers and competitors in the production and diffusion of IT by a sizeable margin\(^7\). IT accounts for 8% of EU GDP while in Russia the figure is less than 5%.

IT has been given a high priority by the President of Russia\(^8\) and ambitious goals have been set. In order for the Russian IT sector to achieve the objectives set by the GOR (by 2010 IT’s share of GDP at 10% and of exports at 5%) and for the Russian IT sector to match the performance of other countries, the IT sector will have to experience high sustained rates of growth.

\(^4\) [http://www.russoft.org/docs/?doc=1098](http://www.russoft.org/docs/?doc=1098)

\(^5\) [http://www.american.edu/initeb/nb2224a/russia.html](http://www.american.edu/initeb/nb2224a/russia.html)


\(^7\) ibid