

## **Terms of Reference: Consultant Firm Business Plan for regional Mobile Applications Laboratories**

*infoDev, a donor-funded agency hosted by the World Bank, intends to invite a consultant firm to help in developing a business plan for the Regional Mobile Applications Laboratories it is establishing in Africa, Asia and Eastern Europe and Central Asia (ECA). To respond to this request for expressions of interest, please use the World Bank's eConsult2 System (at <https://wbgeconsult2.worldbank.org/wbgec/index.html>). The selection no. is 1004595.*

### **1. Introduction: Creating Sustainable Businesses for the Knowledge Economy**

*infoDev, a donor-funded ICT for development agency hosted by the World Bank, has formed a public/private partnership with the Ministry of Foreign Affairs of the Government of Finland and Nokia to undertake a joint program on *Creating Sustainable Businesses for the Knowledge Economy*, worth some €12 million, that will run from 2010 – 2012. The program foresees three tracks – on mobile applications, on business incubation and technology entrepreneurship and on hosting of the Global Forum in 2011 – together with a supporting track of analytical work in the field of ICTs and Innovation Systems in Agriculture. The program will be implemented at the country level in Finland's development partner countries; at the regional level in Africa, Asia and in Eastern Europe, Caucasus and Central Asia (ECA) as well as at the global level. More information is available online at: <http://www.infodev.org/en/Article.452.html>.*

This request for expressions of interest is for track 1A of the Finland program on establishing mobile applications laboratories in three regions: Africa, Asia and Eastern Europe and Central Asia (ECA). The purpose of this assignment is to help develop, in phase 1, a business plan that will help the future labs (in all three regions) to achieve sustainability following the two to three years during which they will be recipients of grant funding. In phase 2, the consultant firm may be invited to provide mentoring and technical assistance to the labs. **This TOR is for a fixed price study, with an estimated cost of US\$120'000, for the development of the business plan concept.** In parallel, *infoDev* will be running three separate competitive tendering processes for indentifying future host organizations in the regions covered. Depending on the consultant firm's performance in the first phase, and on progress in launching the planned regional Labs, the consultant firm may be invited to tender for a second phase assignment for providing mentoring and technical assistance to the regional Labs on a time and materials basis. However, *infoDev* reserves the rights to cancel, reassign or change the bidding procedures for the second phase work.

## 2. Objectives, partners and measurement of success

The **objective** of the Mobile Applications Labs is to increase the competitiveness of innovative enterprises in the mobile content and applications area, and to ensure that locally relevant applications are created to meet growing developing country user demands. The labs will provide services both *locally*, serving the local entrepreneurial market, and *regionally*, providing resources to the mobile applications developers elsewhere in each region. To do this, the labs will provide some services in the physical location of the organization (e.g., training, testing, mentoring) while other services will be provided virtually (e.g., developing a website of resources for mobile apps developers throughout the region).

This project will benefit from the experience of the program partners, notably:

- *infoDev's* experience in incubation of ICT enterprises, the regional Incubation Networks, the global ICT business incubation working group, and the global mobile flagship report. *infoDev* helps to animate a network of more than 300 business incubators in some 80 economies around

### What is a mobile application?

A mobile application is a piece of software on a portable device (e.g., a mobile phone handset, a personal digital assistant, a tablet computer etc) that enables a user to carry out one or more specific tasks that are not directly related to the operation of the device itself. Examples include the ability to access specific information, for instance via a website, make payments and other transactions, play games, send messages etc. The application (app) might come pre-installed but more usually is downloaded (for free or for payment) via a wireless network from an online "app store" and may require a live connection to function effectively. Simple apps may make use of the in-built low-speed data communication facilities of digital mobile phones, such as short message service (SMS) or Unstructured Supplementary Service Data (USSD). More complex apps make use of the Internet Protocol-based data communication facilities of higher-speed networks on third or fourth generation mobile phone networks.

In this project, a broad definition of mobile applications is adopted which would cover the full range of types of application, including:

- Standalone software apps downloaded onto a device, such as an iPhone app. As of April 8 2010, there were 185'000 provided by third-party developers with more than four billion downloaded since the iPhone was launched in July 2008, according to Apple's presentation at the iPhone OS 4 media preview event.
- Applications that require an elaborate ecosystem to support them, such as SafariCom's M-Pesa application for mobile payments in Kenya. There are some 15'000 agents for M-Pesa and over 9 million users.
- Applications built upon a specific platform that is itself an application. For instance, the MXit Instant Messaging platform, which began in South Africa, now supports some 250 million messages per day. It provides tools for users to develop their own applications running on the platform.

the globe, and is a leading agency in the field of information and communication technologies for development (ICT4D)

- the Ministry of Foreign Affairs of the Government of Finland, which is thought-leader in the global development community, bringing specialist skills in the field of agricultural and rural development and forestry as well as in the application of mobile phone technology.
- Nokia, which is the leading mobile communications equipment vendor and supplier worldwide, and brings to the program its immense experience in the development of mobile content and applications.
- Mobile Monday, which is a volunteer-run Innovation Network which has established social networking hubs (“chapters”) for the mobile industry in around 100 cities worldwide, including (with *infoDev* support) in Kampala (launched on 8 March 2010) and Nairobi (launched on 11 March 2010).

One measure of success of the Labs is that each one should aim to generate between 8-10 mobile applications by 2012. The program should also result in:

- An increased commercialization rate of innovative m-application ideas that have potential for significant development impact;
- Increased scale and competitiveness of innovative m-applications enterprises leading to greater reach to disadvantaged populations

### 3. Services and functions of the Labs

A mobile application lab is an open space where technology entrepreneurs can interact, work, gain access to tools and expertise, deploy their solutions, and start and grow their businesses. Run and managed by experts together with local developers, a lab provides the infrastructure necessary for the deployment and scaling of mobile applications. To access a lab, local programmers, web designers or mobile application developers can register as members, at no charge or for a nominal fee, depending on a particular lab’s business model. Each lab will provide an environment conducive to the development of solutions that have the potential to scale commercially, by providing state of the art equipment used to develop, test and scale software, technical training and workshops on business skills. Further, the labs will act as gateways to local, regional and international markets and will connect entrepreneurs with seed, venture and angel investors.

The services and functions of the Labs will evolve over time, but it is expected that they will include some or all of the following:

1. **Training and accreditation** for mobile applications developers. The Labs could offer short and longer-courses for potential programmers and others in how to develop mobile applications, and in associated business skills. There are thousands of graduates in ICT from developing country universities each year, but often they lack the skills to be employed in the mobile sector. The Labs could offer courses, with appropriate accreditation, to help students gain employment or to develop

their own applications. A parallel model would be the CISCO Network Academies which offer training in networking and IP skills. In the longer term, the Labs could work with universities to offer formal post-graduate qualifications.

2. **Certification.** Because there are so many different platforms for mobile operating systems (e.g., *Symbian*, *Meego* (the newly-announced Nokia/Intel open systems platform), Apple's *iPhone*, Samsung *bada*, Microsoft *Windows 7*, Google *Android* etc) any application that is to gain scale needs to be able to demonstrate interoperability. In addition, local language versions of popular operating systems will need to be tested and verified. The Labs could offer a certification service for interoperable applications and provide facilities for network operators, service providers and applications developers to test their application under operational conditions.
3. **Competition for ideas.** The Labs could run competitions with prizes to attract submissions from small and medium-sized enterprises (SMEs) and budding entrepreneurs for applications development, including, for instance, a competition for ideas, for business plans, for brand names etc. The competition for ideas would be regional and could run in association with the Mobile Monday social networking hubs that are being established in different cities under the *Creating Sustainable Businesses* program. It should be emphasized that the innovation philosophy of the Labs is that applications should belong to the applications developers and entrepreneurs themselves, not to the Labs.
4. **Business mentoring.** Similar to an incubator, the Labs could assist applications developers with bringing their ideas to market. In this sense, the Labs could serve as specialized business incubators, as the entrepreneurs they serve develop their businesses over time. This may require additional space, and this function may evolve only after the first year or so of operation. The lab should also work with other Incubators in the *infoDev* network to bring start-ups to scale and help with product launches. The business mentoring would provide a more specialized form of training, for a targeted market of entrepreneurs.
5. **Replication of successful applications.** Mobile applications are often specific to individual countries, different operating systems, different languages etc. There exists a requirement, therefore, to assist applications developers in replicating an application that has been successful in one market in other markets. This service would be particularly appropriate for smaller markets or more localized languages that might be late to receive beneficial applications under normal market processes. The focus on replication would be important for those applications that have a social development value (e.g., in education, health, and especially agriculture which is one of the focus areas for the program as a whole etc). The replication service could also be offered to operators on a commercial basis. The intellectual property rights for the applications would belong to the developers, not the lab.
6. **Repository of knowledge in ICT4D.** There is a need in the ICT4D community to create a better basis for learning from past successes and failures. The mobile applications Labs could establish an open knowledge base of ICT4D projects in the mobile space and document what has worked and what lessons can be learned. Content for this repository could come, for instance, from the ICT for Agriculture Sourcebook to be developed under this program. The Repository could also serve as a knowledge base of open source code for developers, similar to the Source Forge (sourceforge.net).
7. **Consumer behaviour research.** While consumer behaviour for mobile users is well-understood in the developed world, there is a lack of understanding of developing country markets, where

cultural, linguistic and historical issues may affect take-up. The success of the M-Pesa mobile payments systems Kenya, or MXit in South Africa as a social networking platform, illustrates the fact that some m-applications are likely to do better in developing countries than in the developed world because there may be no good substitutes or alternative solutions available. The Labs could work with other partners to conduct user-behaviour research, especially among base-of-the-pyramid (BOP) communities, for instance on a single-client or multi-client basis.

8. **Access to finance, access to markets.** The Labs should act as a forum where entrepreneurs and applications developers can meet with potential partners that will enable them to commercialize their ideas and expand their business. These partners should include mobile network operators, equipment manufacturers, app store developers, investors, venture capitalists etc. The value of the Labs is that they will provide a neutral forum where matchmaking of partnerships can take place. They will provide sufficient scale to attract serious partners and, at the same time, a neutral environment where entrepreneurs and applications developers can discuss their ideas with larger organizations. Other components of the program will include activities on access to finance, SME internationalization and business co-incubation.

In addition to these eight potential services and functions, *infoDev* would welcome other suggestions for how the Labs should perform, both from potential host organizations and from consultant firms bidding for this contract.

#### 4. Deliverables

The primary output from phase 1 of this study will be a report, addressed to *infoDev* and the future Labs, containing a business plan on how the future labs can transition from the donor-funded start-up phase to self-financing sustainability within two to three years. The report should, at a minimum, include the following six chapters or deliverables:

1. An analysis of existing mobile applications labs, and similar organizations, based on desk research, telephone interviews and a literature review. The analysis should highlight success stories as well as less successful examples, and the reasons behind the different levels of performance;
2. A typology of labs (e.g., university-based, labs run by operators, labs run by vendors, business incubators, VC-financed labs etc) with appropriate examples of each. Where relevant, the study should draw upon other similar fields (e.g., software development, technology transfer, business incubation) to provide examples of models that work. Again, this typology should be developed on the basis of desk research, telephone interviews and a literature review, and should include an analysis of the pros and cons of each different type of Lab.
3. Recommendations to *infoDev* and the future labs on strategies to be adopted and services to be offered that will increase the effectiveness and the sustainability of the labs. The strategy should include Recommendations for the branding of the Labs and steps for raising awareness of the initiative. The Recommendations should be as specific as possible and will form the basis for the technical assistance to be offered in phase 2. In formulating the recommendations, the consultant firm is encouraged to open dialogue with actual and potential host organizations for

the labs, as well as with the partners in the program, identified in section 2 above. This dialogue could be conducted, for instance, through focus group discussion, workshops, surveys etc. Provision should be made in the bid for likely expenses to be incurred in this consultation phase.

4. Identification of potential revenue streams based on services and functions the lab could offer, such as those suggested in section 3 above. These potential revenue streams should be developed in some detail, including potential price lists and menus of options, and will draw upon the consultation phase referred to in deliverable 3. The work on revenue streams should be adapted to the different country and regional markets in which the planned Labs will operate.
5. Recommendations on how the labs should prepare and equip themselves. For instance, what are the pre-requisite equipment, staffing and competences that they will need to offer to their clients? In this respect, the report should also advise on the sequencing of operations (e.g., which services and functions could realistically be offered from day one, and which others could be added over time).
6. Identification of the likely client base of the Labs, including intermediate clients (e.g., mobile applications developers, SMEs) and end-clients (e.g., app stores, network operators, equipment manufacturers. Governments), as well as potential partners and additional donors. This will draw upon the detailed analysis of trends in the development of the market for mobile applications developed in deliverable 1. Market opportunities could include device-based applications (e.g., Apple's iPhone app store), applications that require an ecosystem to support them (e.g., SafariCom's M-Pesa mobile payments system) and social innovations (such as Ushahidi's crowd-sourcing crisis information application). The report should include forecasts on the likely evolution of the mobile applications market (based on desk research).

The consultant firm that is appointed for this project should be willing to work in an iterative and flexible manner with *infoDev*, the Labs, and other program partners. For instance, the selection of regional labs is taking place in parallel with this procurement process and not all of them will have been established by the time this contract for development of a business plan is awarded. Equally, the requirements for phase 2 (which will require travel for on-site mentoring and assistance for lab managers) will only become apparent as phase 1 progresses and as the Labs are launched.

## 5. Intellectual Property

Consistent with *infoDev*'s objectives to enhance and disseminate knowledge and encourage easy replication of successful projects, *infoDev* retains ownership of all project deliverables (including any intellectual property in such deliverables, but excluding mobile applications) funded by it, and may place such deliverables in the public domain. The consultant firm must recognize and agree with this objective of knowledge sharing and dissemination through *infoDev*.

To the extent that there is any intellectual property previously developed by the consultant firm or by third parties, such previously-developed intellectual property should be clearly identified when responding to the EOI and RFP.

With regard to any mobile applications that are developed under this program, unless otherwise specified, the intellectual property would rest with the applications developer, who may dispose of that property as they wish (for instance, by establishing partnerships with operators, mobile app stores etc).

## 6. Evaluation criteria

In awarding this contract, *infoDev* will be looking for the following qualities and experiences in the consultant firm to be chosen:

- A good analytical understanding of the market for mobile applications, and the trends that are currently shaping it;
- A good analytical understanding of the processes of technology entrepreneurship and the tools that can help promote it, such as business incubation, business acceleration, public private partnership, university/private sector collaboration, technology transfer etc.;
- Experience of working with client organizations in developing countries, especially in terms of providing technical assistance and business mentoring;
- Experience in the design and implementation of business plans, especially for SMEs, start-ups, public/private partnerships etc, and aiding the transition from donor funded to self-sustaining status.

More formally, the evaluation criteria to be used will be:

1. Adequacy of methodology and the proposed work plan in responding to the terms of reference (30%).
2. Experience of the consultant firm specifically related to the assignment (30%).
3. Qualifications and competence of the key staff members in relation to the assignment (40%).

## 7. Timetable and milestones

Phase 1 of this activity is intended to be delivered within six months of launch of the study. The following timetable and disbursement schedule is proposed for phase 1:

Timing	Activity/Deliverables	Disbursement
Activity Signature	Launch of Activity	
Signature + 3 weeks	Inception report: Delivery of annotated outline report, corresponding to section 4 of this TOR, followed by <i>infoDev</i> review (1 week)	10% of budget
Signature + 2 months	Deliverables 1+2 (review of existing initiatives and typology of labs), followed by <i>infoDev</i> review (1 week)	20% of budget
Signature + 3 months	Conduct of consultations (e.g. focus groups, workshops, survey etc) required for deliverables 3 + 4, followed by <i>infoDev</i> review (1 week)	Expenses as required for consultations; to be included in fixed price bid
Signature + 4 months	Deliverables 3+4 (Recommendations on strategies and services to be offered and identification of potential revenue streams), followed by <i>infoDev</i> review (1 week)	30% of budget
Signature + 5 months	Deliverables 5+6 (Lab pre-requisites and client base) plus overall draft report, followed by <i>infoDev</i> review (1 week)	30% of budget
Signature + 6 months	Revised final report and presentation to client ( <i>infoDev</i> ) at a review meeting	10% of budget plus expenses as required for final presentation; to be included in fixed price bid.

Phase 2 of the study, which will involve providing technical assistance to the Labs, will then proceed in 2011-2012, at *infoDev*'s discretion. This will be preceded with a request for proposals on the likely time and expenses to be incurred by the consultant firm and negotiation of a follow-on contract. By this time (early 2011), the award of grants to all the regional labs should have been completed.

The procurement process for the initial study will proceed in two phases, with an open call for expressions of interest (EOI) followed by a request for proposals that will be sent to shortlisted firms. Procurement will be open to firms and will be conducted via the World Bank's eConsult2 eProcurement system (<https://wbgeconsult2.worldbank.org/wbgec/index.html>). **Please respond no later than 11.59pm on Monday 31 May 2010.** The eConsult2 system has a mechanism for submitting questions about the assignment in such a way that both the question and the answer are accessible to all potential bidders. In addition, a web-based public forum (e.g., a *wiki*) will be created to support the program as a whole (see: <http://mobileappslab.wikispaces.com/>).