# Innovation Labs

A Do-It-Yourself Guide









Innovation Labs create global interoperability. They are physical spaces that allow for collaboration among private sector, academia and civil society. The labs profiled in this guide allow UNICEF to convene dynamic, new partners around specific local issues—and, importantly, allow the solutions that are created to go to global scale.

The lab in Kosovo works with technology created in Prishtina, in Kampala, and elsewhere, and adapts it to the needs of a young, determined population. The lab in Uganda connects academia from the US, Europe, and Kampala, and creates system change at a national scale. The CCORE lab in Zimbabwe takes best practices from the world of operational research and applies them to pressing programmatic issues. These are just the beginning.

This document gives you the information you need to create your own lab. This could be a UNICEF lab—or could simply be a space of creativity that is aimed at solving significant global problems through the application of dedicated local resources.

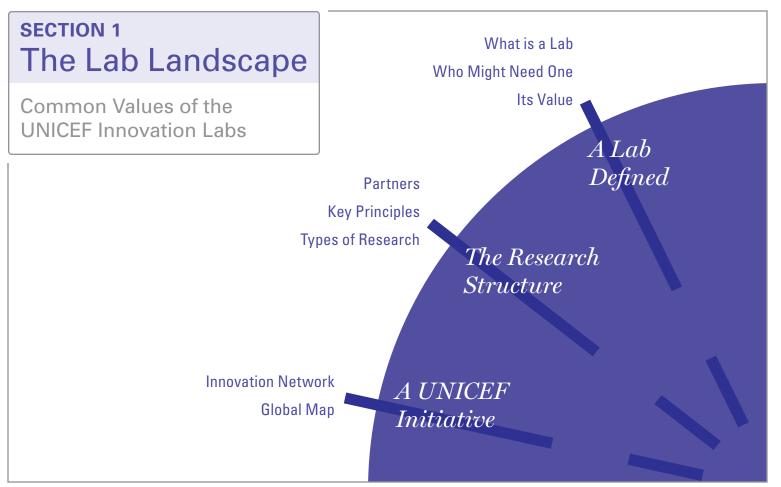
There is no ego in the concept of a lab. Pioneers like the iHub in Nairobi, INSTEDD in South East Asia, the Global Pulse in Jakarta, and Un Techo para mi Pais in Chile show the demand for methodologies of openness, collaboration, and experimentation.

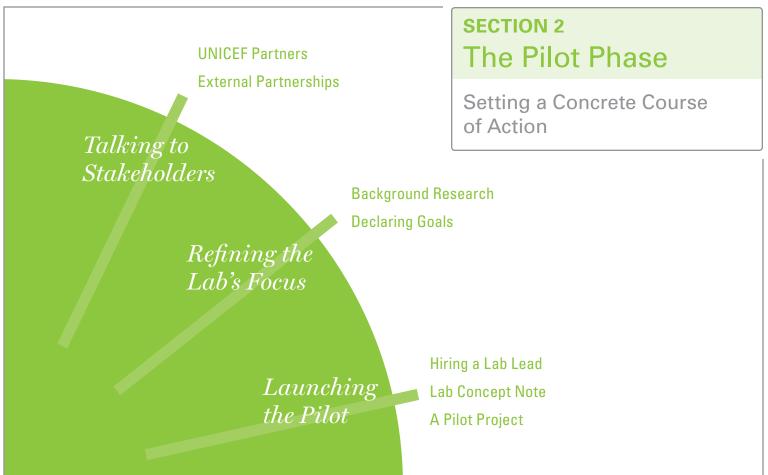
The document is structured to give a sense of what a lab contains, to provide the specific, operational steps needed to get a lab up and running, to provide a few examples of existing labs, and finally to provide the technical documents (terms of reference, partnership agreements, etc.) that you can adapt for your own use. Most importantly, it is designed to be extended.

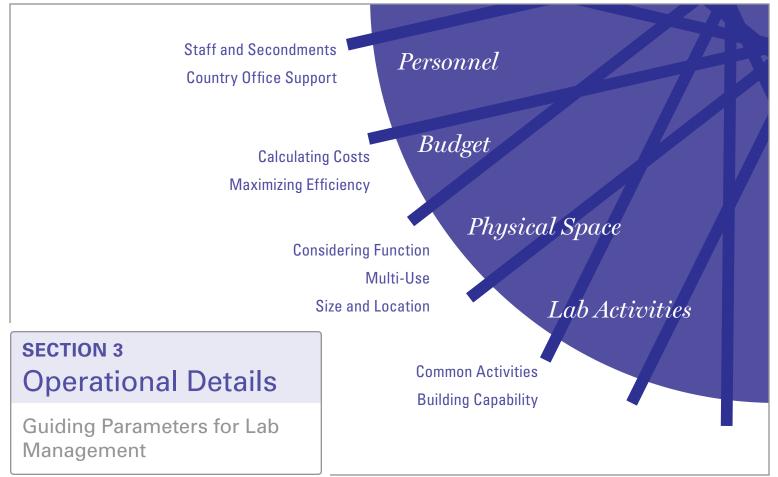
This is the first version of this Do-It-Yourself Guide—and we invite you to submit your lab structures, your documents and your knowledge to the project so that future versions can grow, learn, and build. You can submit your input to both <code>innovateforchildren@unicef.org</code> and to the UNICEF Innovation blog at: <a href="http://unicefstories.org/submit/">http://unicefstories.org/submit/</a>.

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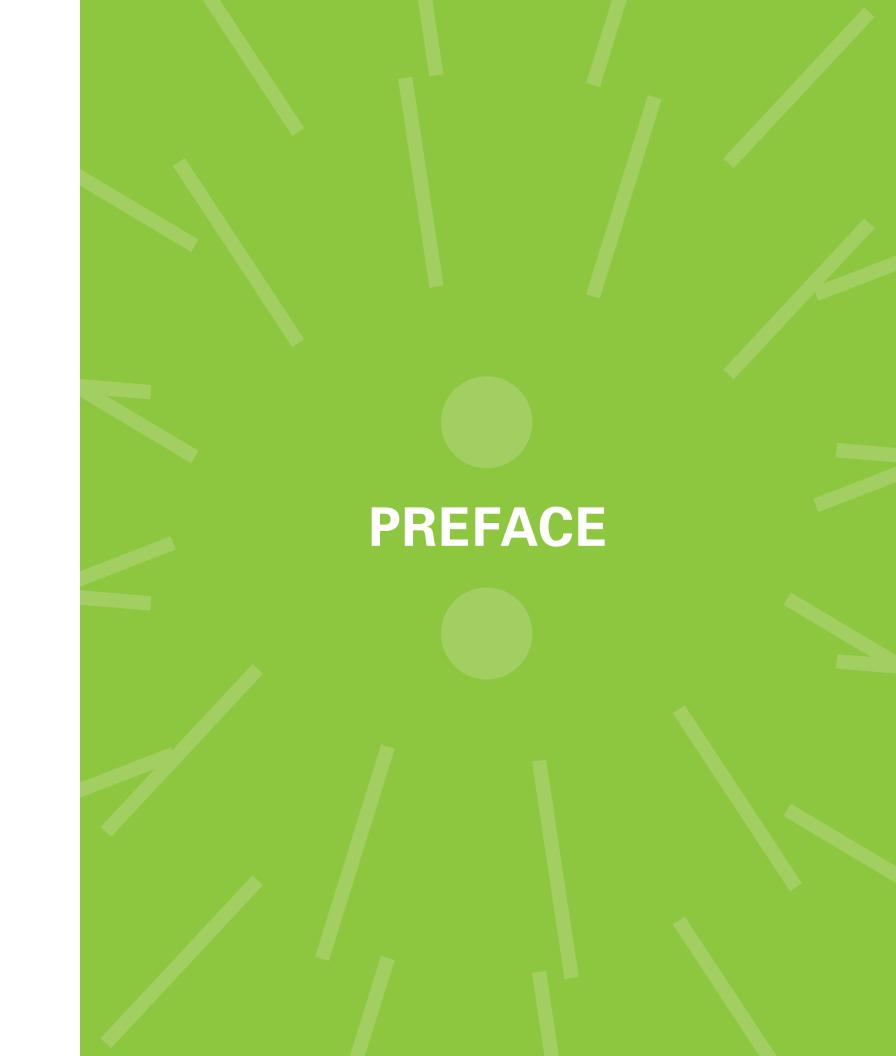






"I believe UNICEF's most important contribution has been innovation. Technical innovation, of course, but also innovation in how we think about development."

Anthony Lake, UNICEF Executive Director



Preface Innovation Labs: A Do-It-Yourself Guide







Innovation Labs: A Do-It-Yourself Guide was created in collaboration with the Innovation Unit in UNICEF's New York Headquarters and crucial partners in the UNICEF Innovation Lab Network.

Creating this resource involved interviewing, gathering documentation, and interpreting the information shared by experienced stakeholders. This was made possible by the participation of innovation labs in Copenhagen, Kosovo, Madagascar, Uganda, and Zimbabwe, in addition to contributions from a preparatory-stage lab in Botswana, and input from other Country Offices.

### WHO IS THIS GUIDE FOR?

Country Offices that are looking for new ways of engaging partners and solving difficult problems.

Since their inception in 2010, the interest in innovation labs and the impact of their work has been increasing. However, until now there was no cohesive document available that would explain the work, processes and methods for project staff to refer to and gain from. The report will benefit those who are planning to start their own Innovation Lab. Furthermore, this guide may be useful for anyone interested in the subject of innovation in large organizations.

### THE GOALS OF THIS GUIDE

Help streamline and accelerate this growing endeavour as UNICEF's Innovation Network extends to multiple countries.

This guide provides an analysis of innovation lab practice—the successes, failures and the lessons of UNICEF Innovation Labs. It includes interactive documents: worksheets, visual aids, and TOR templates to assist a developing innovation lab in getting up to scale. The expectation is that the information provided makes implementing a lab easier, and constitutes a central resource with which the UNICEF lab network can collectively grow and engender an even greater spirit of collaboration with one another.

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"If innovation is key to the new child survival revolution, partnership is certainly the key to innovation."

Anthony Lake, UNICEF Executive Director

# SECTION 1 The Lab Landscape









Innovation labs combine UNICEF's hyperlocal knowledge with global scale.

UNICEF is undergoing a transformation that will strengthen the innovation culture within the organization, build collaborative networks to facilitate new technologies and approaches, and apply them in the field. By making local communities a part of the innovation process, we can better identify, adapt, and scale solutions.

In 2010, UNICEF initiated an ambitious network of innovation labs, recognizing that best practice applications requires an intimate understanding of challenges at the grassroots level.

### UNICEF and its partners have an extensive history of developing sustainable innovative solutions to challenges faced in the field.

In the 1950's, the first midwifery kit was developed to help women in developing countries give birth in safer conditions; in the 1960's, the India Mark II was piloted as the first affordable water pump; in the 1970's, Oral Rehydration Salts were introduced as the most cost-effective intervention for children with Diarrhoea; in the 1990's, School-in-a-Box kits were deployed to help Rwandan children get back to school after the genocide. Recently, Project Mwana has more than halved the turnaround time for delivering early infant HIV diagnosis results back to rural and underserved communities in Zambia and Malawi through Rapid SMS.





India Mark II

School-in-a-Box





Oral Rehydration Salts

RapidSMS

### WHAT IS AN INNOVATION LAB?

A lab is a space and set of protocols for engaging young people, technologists, private sector, and civil society in problem-solving.

By using new technology and ideas in its **programme** work, UNICEF reaches out to communities and the most vulnerable children and families.

UNICEF also brings innovation to its **products**, not by creating new interventions for end-users, but by supporting

### **UNICEF Innovation** definitions—

**Innovation in Programmes**: Using new technology and ideas to serve the hardest to reach and the most vulnerable communities.

**Innovation in Products:** Creating processes that support the efficient and transparent creation, adaption or uptake of products. These process innovations have a strong equity focus, ensuring that process is driven by the needs of the most vulnerable populations.

**Innovation in Processes:** Increasing efficiencies in difficult economic environments. Improving our ability to target resources to monitor and manage results.

**Innovation in Partnerships:** New collaborations with donor and partner governments, other UN agencies, National Committees, civil society, the private sector and with young people themselves to improve results for children.

the competitive market and supply chain of countries to afford them. Innovation is embedded in every **process**—from improving the ability to focus on resources, to better monitoring the results—eventually leading to better management. Innovation happens through new modes of **partnership**. The innovation labs support all of these corporate responsibilities.

In each country with an innovation lab, partners from the private sector, NGOs, academia, government ministries, civil society, and youth co-create solutions for the most pressing challenges facing children. UNICEF convenes these actors and

binds them by pointing towards an inarguable need and focusing on a specific and collectively binding project.

### **Cultivating An Innovation Culture**

What makes for a successful innovation lab involves a culture that supports innovation. This may require an openness to change in procedural and problem-solving approaches. An innovation culture embraces experimentation, and constantly evaluates and recognises failure as something to be learned from. In fact, failure viewed in the proper light often leads to novel solutions. Risk is stemmed by performing research and groundwork in advance of resource-intensive implementation, and continuing to test and evaluate as an integral process throughout a project's lifecycle.

### WHO MIGHT NEED A LAB?

An innovation lab can be useful for UNICEF Country Offices looking to branch out in their research and innovation-driven ventures, and for finding new ways of alleviating tough problems.

In many communities, there is often no shared venue or established collaborative working method. Sometimes there is a societal bottleneck that places a population in a persistently vulnerable state. The participatory atmosphere invites partners to join in collective problem identification and solving, thereby increasing the relevance of solutions to the local community.

A lab offers a meaningful launching pad to engage with a wide range of youth and partners. A lab also extends UNICEF's own capabilities, and facilitates an open exchange between UNICEF and the community.



# AN INNOVATION LAB HAS VALUE BECAUSE:

### 1 It represents a new method for developing solutions.

The rapid growth of technology creates new opportunities to lower the barriers for solution-building among co-creators. The projects generated by a lab are made more cheaply, more aptly, and more sustainably than if imported from a top-down approach. As more labs come online, identifying and adapting success models in one context and applying them to another situation becomes much more streamlined. The implications for innovation are great, and it is a blueprint for collaboration that has profound impact across the world.

# 2 Greater diversity of skill means greater possibility.

Lab ventures invite the participation of partners like government ministries to work toward achieving broad-scale programmatic initiatives. The lab also provides challenges that can benefit from the fresh perspective and enthusiasm of local university students and international student teams. It provides a space that respects the creativity and promotes the agency of youth—providing mentorship and connecting them to relevant partners in helping them to develop their own ideas and unique voice. These labs also showcase the value of partnerships, and the strength of UNICEF's network to the private sector.



The Uganda Innovation Lab

# 3 It encourages a collaborative physical environment.

A lab provides a space for various partners and resources to come and work together under a single roof. This allows for person-to-person collaborations like brainstorming sessions, workshops, and skills training. The participatory atmosphere invites partners to join in collective problem solving—and also problem identification—thereby increasing the relevance of solutions to the local community.

# 4 It progressively builds local development.

The direct interaction among a community of end-users makes the effort of identifying needs and testing the impact of projects, products, and services in real-time more sustainable and scalable. Projects can learn and develop from previous successes and failures. Accordingly, experience breeds more ambitious project goals, and the breadth of impact in the community extends to other areas as well.

This type of home-grown network is optimised for problem identification, adaptive solutions, and taking implementations to scale.

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### WHO ARE THE PARTNERS OF A LAB?

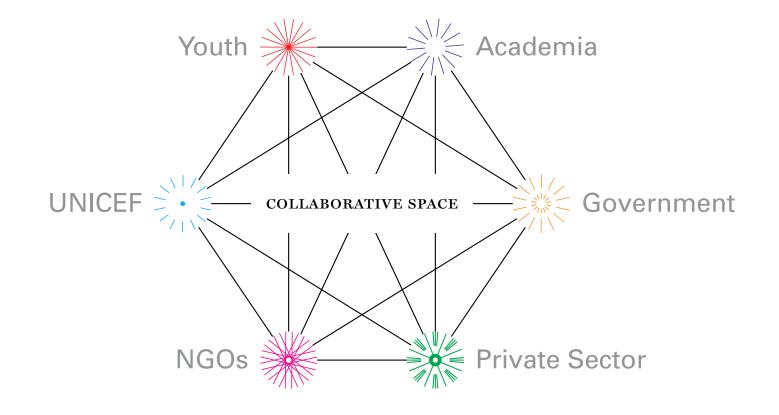
The following is a sampling of partners often involved in collaborative lab environments, and the roles they might play.

### Government

Government can collaborate with innovation labs in executing national initiatives by sharing their data, experience, or resources. In some cases, the public sector has its own research laboratories, providing a ready network and collaborative partner. Sharing research can go two ways, when researching the scope and nature of a local issue in order to develop a project implementation to address it, a government partner can have useful quantifiable data to share. In another circumstance, if the focus of the lab itself includes quantified operational research, the data collected by a lab can benefit government partners as they seek to reform or launch initiatives.



Academia has strengths in technical knowledge, capacity for research, and enthusiasm. Academic partnerships often include an agreement with a local university, where students from partnering departments have an opportunity to gain real world experience by helping to build projects that make a difference in their community. Local or international academia may also have a research lab, or recurring academic courses that can share resources—including inviting student teams to work with UNICEF in developing solutions to pervasive challenges. The lab also presents academia with an opportunity to work closely with the government and private sector.



### NGO

A lab is an opportunity to benefit from the existing network and specialised experience of local NGOs. The type of expertise that a collaborating NGO can bring to the innovation lab includes youth outreach, an open source technology community, or an operation that works in a development sector that merges with the lab's own focus.

A partnership of this kind can lead to UNICEF focusing on its strategic strengths while a partner provides its own distinct value, and connects the lab to specific communities and issues.



Private sector can contribute to the lab experience in a variety of ways, with a few possibilities listed here. Mobile or technology providers can partner around the lab's services. Manufacturers can produce physical products that are implemented in the field. A company could also offer space or equipment in return for a supplied service. Additionally, the private sector can share their professional know-how when hosting a skills workshop in the lab. This provides a mutual benefit as companies help build the skills of youth seeking experience through lab activities, with the idea of finding motivated people for hire.



Young people benefit from having a lab in their community. Many of the labs rely on the support of young developers and thinkers to create ideas and solutions. Youth can contribute ideas, spearhead their own projects and provide the energy and optimism that leads to constructive progress within the community. A lab closes the physical and cultural gap between institutions and individuals that desire to voice their concerns about their own community. Youth become more active contributors in their own society, which leads to greater understanding and targeted problem-solving.

### UNICEF Lab Network

All the labs in the UNICEF Innovation Lab network support one another. Each lab shares its experience and advice with the others, communicating the factors that lead to success and those that resulted in failure. Additionally, each lab carries the potential to generate project models to be adapted by other labs. Every implementation is a proving ground for potential results that seek to address pervasive problems. The model being developed is that all the labs together constitute an optimised innovation network.



### **KEY PRINCIPLES**

The following are the guiding principles that inform all of UNICEF's innovation work.

### **User-Centered and Equity Focused**

- Respond to user needs, be context appropriate and design in collaboration with end users.
- Develop incrementally, using iterative user testing and modifying as appropriate.
- Design for the most difficult to reach first, and build solutions that can go to global scale.

### **Built on Experience**

- Build upon previous experience and incorporate best practices into the design of products, services and processes.
- Make knowledge gained around the innovation publicly accessible and prioritise openness as an approach to solving problems.

### Sustainable

- Be viable in the long term, factoring in support infrastructure, maintenance, and running costs.
- \* Involve governments in the development of solutions.
- Encourage the involvement and training of local experts (technical and otherwise).

### Open and Inclusive

- Build technology that is free and open source so that it can be shared with interested parties and adapted by others.
- Facilitate access to information. Documentation, content and learning can be shared and accessed by anyone.

### Scalable

- \* Be replicable and customisable in other countries and contexts
- \* Factor partnerships from the beginning and start early negotiations.
- Look towards locally available technologies and use what already exists in the ecosystem.

### TYPES OF RESEARCH

The UNICEF Innovation Labs' respective areas of developmental research divide into three disciplines.

### **Product and Service Development**

This type of innovation research involves the development and eventual deployment of tools; whether that be physical hardware or service-oriented software. It involves a need to rapidly prototype and repeatedly refine functions. The design is adjusted by project managers and engineers performing field tests, and by reforming programming and manufacturing standards according to situational constraints. These efforts are applied to make implementation cheaper and more quickly attainable.

### Community Engagement

A lab is oriented towards community engagement when working with local youth is determined among the primary goals. This involves the development of activities that are co-creative in nature, with an emphasis placed on mentorship, welcoming ideas and input from participants, skills training, and facilitating youth so that they can positively impact their own community. This effort is aimed at giving young people the agency to be more firmly in charge of their future.

### **Operational Research**

Operational research involves working with strategic partners so that there is a coordinated method of data and information collection in a particular context. This disciplined and large scale effort generates the quantifiable data required to identify the roots of problems, and allows a research entity of this sort to make concrete recommendations on the steps to be taken.

The process for Operational Research involves:

7 proposing a hypothesis 3 collecting data

2 testing the hypothesis 4 sharing data

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### WHO MAKES UP THE LAB NETWORK?

There are currently four UNICEF Innovation Labs: Kosovo, Uganda, Zimbabwe, and Copenhagen. Each lab has a unique focus, strategy, and partners.

### **Innovations Lab Kosovo**

- \* Launched in 2010
- Primary Research Direction: Community Engagement
- Partners: University of Prishtina, University of Business and Technology, IPKO, Disney, MIT, Kosovo institutions, UN Agencies in Kosovo
- Project Example: Youth-driven projects designed to catalyze positive social change
- \* Contact: contact@ kosovoinnovations.org

### **Uganda Innovation Lab**

- \* Launched in 2010
- Primary Research Direction:
   Product and Service
   Development
- Partners: Council for Scientific and Industrial Research (CSIR), Makerere University, Aalto University, ThoughtWorks, UNICEF, WHO, Global Pulse, Art Centre College of Design, NYU ITP
- Project Example: solarpowered computer kiosks for rural areas (unicefstories.org)
- \* Contact: Terra Weikel, T4D co-lead

The recent emergence of UNICEF Innovation Labs signals a significant opportunity. The currently operational labs have made significant headway in their respective research directions.

Uganda Innovation Lab developed the Digital Drum, voted by Time Magazine as one of the best inventions of 2011. Uganda is also a major partner in helping to deploy and develop the RapidSMS series of projects, such as the mTrac project, which is a disease surveillance and tracking system for the benefit of both health stakeholders and citizens that will soon reach national coverage.

At the time of writing this resource, Innovations Lab Kosovo has worked with over 3,600 youth on 48 different past and current projects. They have also hosted workshops, undertaken mapping and data collection projects, and initiated satellite labs that have broadened their impact into a national scale.

The research facility in Zimbabwe called CCORE (Collaborating Centre for Operational Research and Evaluation) dedicates its efforts towards helping to advance the knowledge of partners and stakeholders by collecting and disseminating actionable data and information. One example of CCORE's work is their SITAN project, which is a comprehensive situational analysis on the national status of women's and children's rights, something that high-ranking government officials in Zimbabwe see as a blueprint for social policy.

### CCORE Zimbabwe Innovation Lab

- \* Launched in 2010
- Primary Research Direction:
  Operational Research
- Partners: Ministry of Health and Child Welfare, Directorate of Pharmacy Services, DFID(Department for International Dev.), ECHO (European Commission Humanitarian Aid), Planning and Monitoring Unit (PMU)
- Project Example: Vital Medicines and Health Services Survey (VMAS)
- Contact: Dr. Susan Laver, Lab Lead

### Copenhagen Innovation Lab

- \* Launched in 2012
- Primary Research Direction: Supply & Operation Logistics
- Project Example: Emergency Simulation, RUTF Analysis, Vaccine Market Dynamics
- Contact: Jonathan Howard-Brand, Lab Co-Lead. jhowardbrand@unicef.org

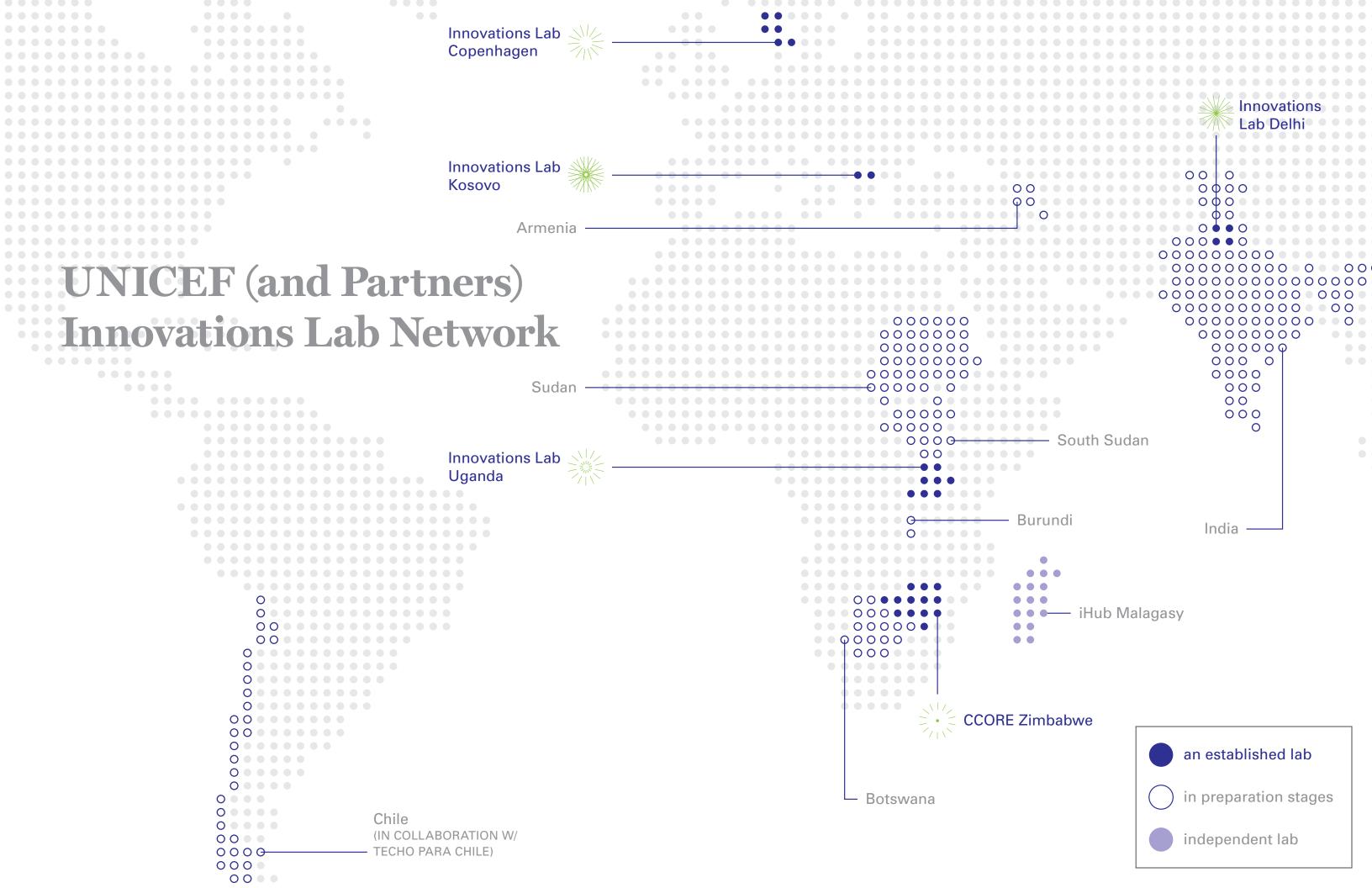
The Copenhagen Innovation Lab leverages its influence as market shapers and expertise with supply chain operations to engage collaborators on issues of partnership, process, supply, and logistics. Begun in 2012, the lab has the potential to become a hub of innovation around emergency response.

An example of a pilot phase lab is demonstrated by the activities at UNICEF Botswana. Currently, a small team is conducting research on the best innovative practices in maternal and child health to resolve gaps in the field. UNICEF Botswana also held a stakeholder workshop to convene partners on the problems they face, and discussed how to improve the local innovation framework.

Innovation labs are preparing to launch in 2012 in Armenia, Botswana, Burundi, Chile (in collaboration with Techo para Chile), India, South Sudan, and Sudan. Given the support and progress made thus far, more labs are certain to appear on the map.

Innovations Lab Kosovo. Photo by Prabhas Pokharel





"The first challenge is to re-purpose technology that the private sector is developing and apply it to our own purposes. The second challenge is to take these innovations to scale."

Anthony Lake, UNICEF Executive Director

# SECTION 2 The Pilot Phase

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The four existing labs have identified key attributes necessary to ensure survival of a new lab. A lab needs actionable goals and defined benchmarks for success. A lab also needs staff within UNICEF to support it, and it needs to foster a strong relationship in its local environment.

The optimal way to launch a lab is to launch a pilot project that defines its early focus and goals. A lab involves a lot of groundwork and research, but also a process of 'learning by doing.' Results improve through the iterative process of innovation.

### PILOT PHASE STEPS

WORKSHEET	
Pilot Lab Timeline p. 98	
Lavorada A Lada da constituir	
Launch A Lab Inquiry	
Identify the internal stakeholders who may support and contribute to a lab creation endeavour.	
contribute to a rap creation endeavour.	
Optional: Perform a Scoping Mission	
A scoping mission is research that identifies the feasability	
and opportunities at hand for a potential new lab.	
Narrow a Lab's Focus Area	
Engineer a lab focus that is predicated upon a Country Office's established	
expertise, consensual stakeholder support, or a pressing societal bottleneck.	
Hire a Lab Lead	
The lab lead oversees the day-to-day lab operation, including managing the budget, project timelines, and maintaining communication with the network of stakeholders.	
<u> </u>	
Refine a Lab Concept Note	
A concept note is the defining statement of a lab's focus and clarified direction at its outset. The	
document describes the research performed and how it justifies the direction chosen.	

### **Select and Launch a Pilot Project**

A pilot project needs to have a clear objective, and should employ a concrete strategy for achieving it. Every element of a pilot project requires disciplined evaluation and adaptation as a result of learned experience.

### LAUNCH A LAB INQUIRY

*Identify the internal stakeholders who may support* and contribute to a lab creation endeavour.

> A UNICEF Country Office focal point is an individual who becomes the point of reference regarding interfacing with the partners who need to come together for a lab's creation. A focal point should be in a position where they have experience working cross-sectorally in the Country Office. A focal point keeps the lab creation process moving forward, and after the lab has started, is the primary point of contact between Country Office and lab.

### Identify UNICEF Section Partners

Interface with UNICEF sections to find out major areas of need. The lab should be a common space where multiple sections have the opportunity to collaborate on shared projects.

### PERFORM A SCOPING MISSION

An Optional Step: A scoping mission is research that identifies the feasability and opportunities at hand for a potential new lab.

**DOCUMENT EXAMPLE** Scoping Mission TOR p. 212 A scoping mission is an exercise in helping to analyze and prioritise the array of issues a lab may choose to address at its onset. Many projects can benefit from a collaborative approach, and so this establishes much of the value of a scoping mission. A field mission works to gauge the interest and the value that other stakeholders may provide against the backdrop of a potential lab focus area. In addition to making strategic choices towards the lab operation, a scoping

### WHAT ARE THE GOALS OF A **SCOPING MISSION?**

- \* Identify local partners government, academic, private sector, NGOs, youth groups
- \* Interact directly with end-users, and narrow the focus concerning the pilot project
- Identify local issues that can benefit from the collaborative perspective of an innovation lab
- \* Cohere interest in a particular direction for the lab, and communicate with stakeholders how they can be a part of that effort

mission should also interface with potential end-users in order to make informed recommendations regarding project implementations that coincides with local need.

This mission involves identifying the stakeholders that constitute the local network for innovation, as these will become the resource pool for collaboration. The scoping mission should identify the government ministries with an interest in participating in the lab, and/or ministries already undertaking their own research

lab operations. The mission can involve interviews with private sector and academic research labs, in order to determine their research focus, and identify areas where collaboration may occur.

A scoping mission adds clarity in addressing a given issue, by performing research that helps to quantify the overall scale of the issue, as well as answers many of the 'why's' that explain the persistence of the issue. Researchers take this

information, and refer to their experience in making recom-

### WHAT ARE THE QUALITIES OF A **GOOD LOCAL PARTNER?**

- \* Shares resources space, talent, supplies, etc.
- \* Has a passion for change and openness for innovation
- \* Is already undertaking research in a similar context
- \* Provides contextual knowledge through insights on acute and addressable issues.

mendations regarding what strategy or project focus the lab can start to form its mission around. In addition to making project recommendations, researchers also need to specify a project's inherent limitations and metric for realistic expectations.



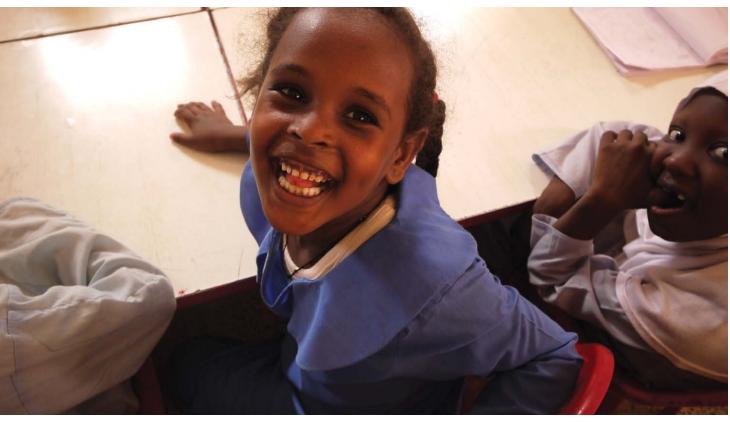


Photo by Panthea Lee

# Scoping Mission Methods

User-centered research employs the following methods.

- Assessing and researching work currently being done in innovation programmes from the local government, private sector, and academic stakeholders.
- ## Employing user-centred research by speaking with citizens who would be affected by an innovation project and determining their needs.
- Prioritizing the main areas of development for a pilot project, in order to pave the way for required groundwork, and identify relevant stakeholders.
- Observing how the local population uses informal methods to overcome a difficulty that the focus area seeks to address.
- 3 Creating a general set of questions to be posed to key stakeholders, with encouragement to elaborate on the particular areas where they have more specialty.
- Working with local partners in determining how they can build technical capacity as it concerns the particular aims of a potential pilot project.

### NARROW A LAB'S FOCUS AREA

A lab's focus should be based upon a Country Office's established expertise, stakeholder support, and a pressing societal bottleneck.

There are a few factors to weigh when narrowing a lab's particular focus area. Often, a lab has already dedicated resources, expertise, and effort toward a particular area. In UNICEF's case, this is often an issue affecting women and children. The creation of a lab would then potentially be able to approach this issue differently, and bring more collaborators to the table.

Another important factor to assess is whether there are persistent bottlenecks that prioritise the focus area for a beginning lab. In such situations, there is often a plurality of stakeholders dedicated to helping resolve the problem. A lab then has an opportunity to provide a locus point for collaborators to support their community, and further their own individual goals as well.

Ample secondary research also helps a lab to know in what way they can effectively launch their own lab. Other research labs may have existing project structures to approach similar pervasive problems, and can be useful models to adapt.

### A Template for Creating a Lab Statement

We suggest focusing this lab around [Specific subject area] – and specifically building support for [more specificity] – a project that is being initiated [linked to something in other countries works best] to [impact goes here].

### HIRE A LAB LEAD

The lab lead oversees the overall day-to-day operation and lab activities.

WORKSHEET
TOR – Lab Lead p. 100

DOCUMENT EXAMPLE Lab Lead TOR p. 134 Before a pilot phase can begin, the lab needs a manager who oversees the focus point project, as well as all resulting projects, the day-to-day lab operation (including but not limited to drawing up a lab budget and timeline), and remain in close contact with other lab leads in the UNICEF Innovation network. The lab lead is also instrumental in creating the lab's concept note, which supports the Country Office programmatic initiatives.

In addition, a lab lead is the overall manager of the operation's logistical affairs, and the primary communicator regarding all manners of lab status in the Country Office and with external collaborators.

# WHAT ARE THE **ON-THE-JOB ACTIVITIES OF A LAB LEAD?**

- coordinate with programme counterparts in UNICEF and local partners
- consult and work with the local open-source community, as well as advise on negotiation with service providers
- contribute to and oversee the monitoring and evaluation framework
- provide measurable outputs and delivery dates for the work assignment(s)
- \* report monthly progress to the local office and NYHQ
- \* blog and report regularly the lessons learned as the lab progresses, to become a resource for others

### REFINE A LAB CONCEPT NOTE

A concept note is the statement of a lab's defining focus at its outset. The document describes the research performed and justifies the direction chosen.

WORKSHEET
TOR – Lab Concept Note p. 106

DOCUMENT EXAMPLE
Lab Concept Note/Plan of Action p. 215

The concept note is a statement of intent and a well-researched plan. It identifies the primary partners who will collaborate to reach stated goals, it delineates the preparatory background research performed, and it describes the focus area and immediate goals for the newly formed lab.

A concept note should detail the prior experience that the host Country Office has in the particular focus area chosen. The lab's concept note should also establish the overlying lab mandate, and the strategic areas of research. In addition, the concept note should identify the future or present staff that will work towards these goals, the listing of collaborating partners, and the avenue for funding this burgeoning venture.

# Excerpts from UNICEF Zimbabwe's CCORE 2011 Lab Concept Note

"An exhaustive situational assessment process was undertaken with over 40 identified stakeholder organizations from the government, para-statal, donor, NGO, United Nations, and academic sectors."

CCORE has "5 key thematic areas, including (but not limited to) the areas of maternal newborn child health and nutrition, health systems strengthening, social protection including livelihoods, water and sanitation and basic education with HIV..."

"The CCORE offers support for the advancement of operational/intervention and evaluation in five strategic areas. Expected outcomes, activities, expected outputs and estimates costs for each of these five strategic areas are fully described in the AWP attached."

The expectation is that this document clearly sets the focus, goals, and strategic plan for the specified time period. It is a necessary step for every new lab to complete.



# SELECT AND LAUNCH A PILOT PROJECT

A pilot project needs to have a clear objective, and should employ a concrete strategy for achieving it.

A pilot project should clearly evaluate the potential end-user benefit, and describes a concrete strategy for realizing that objective. This first project should be relatable to and learn from other innovation implementation programmes, whose problem set, goals and audience are similar. At the outset, a lab is represented by its pilot project, and the lab becomes the vehicle to optimise this project's success.

### Launching a Pilot Project

Different labs will have different stakeholders with input regarding the pilot phase operation. One of the things to remember about a pilot project is that it is an opportunity to collaborate but also to iterate. It is paramount that lab operation always be asking itself how it can improve its

methods, with a mind towards scalability, and involving the end-user to the greatest extent possible.

Part of this evaluation phase is to gather feedback during the pilot period from the lab members and also to gather input from participants and end-users on ways to improve the operation. In many cases, the challenge is to correctly strike a balance

between keeping the operation malleable and accessible enough to allow participants to feel free to speak their minds about better solutions, while also keeping lab objectives concrete, on task, and problem-focused.

# KEY OBJECTIVES FOR A RECENTLY LAUNCHED PILOT PROJECT

- \* Constantly evaluate
- \* Iterate
- \* Work steadily to scale-up
- \* Show results

### **Excerpt from Kosovo's First Lab Lead**

'So, a challenge for the Innovations Lab is to build appropriate mechanisms for fostering the creation of problem statements (like, create more jobs in Kosovo), ideas that contain possible avenues of attack (like, create SMS job boards), in addition to projects (which would contain a plan for how to launch the job board, who to target, the budget, etc.)."

—Prabhas Pokharel

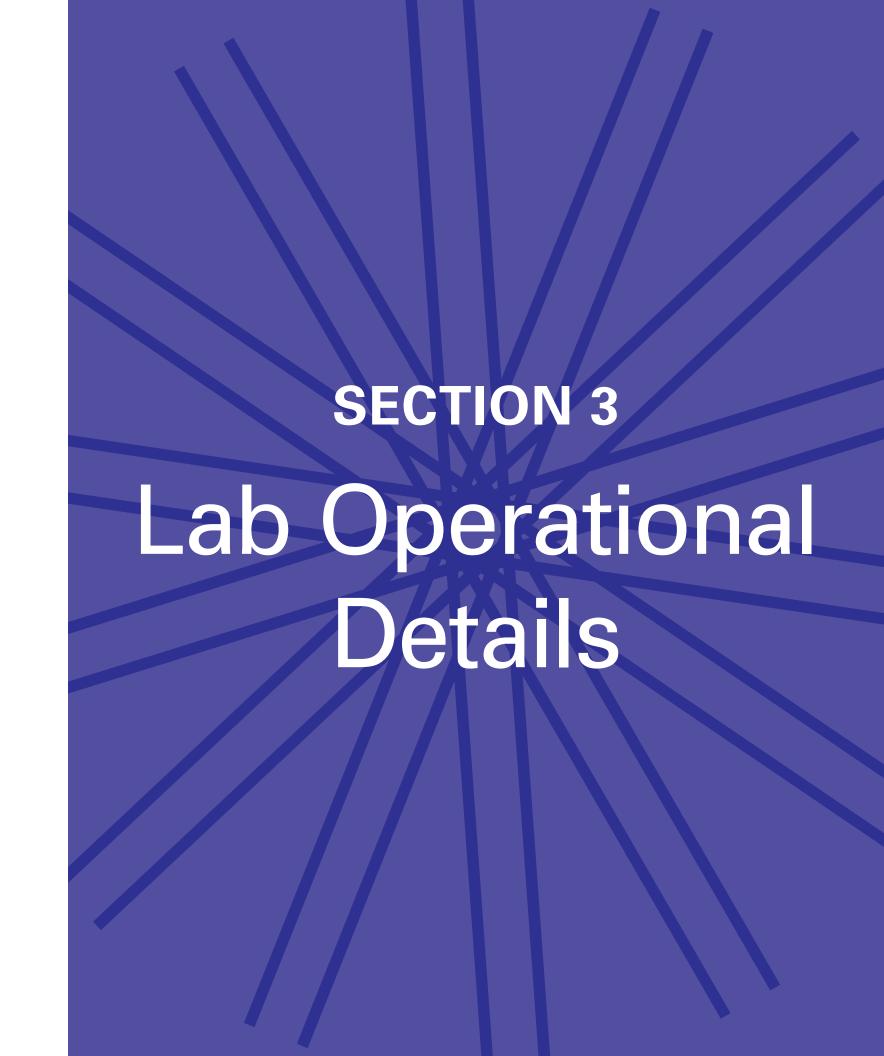
By way of example, during the Kosovo lab's early phases, they solicited feedback from staff members and local NGO lab partners during regular review meetings. Some of the biggest debates dealt with the optimal way to strike a balance between a creative and open atmosphere for all the actors involved, and leading an outcomefocused structure. Strategies for achieving

it included brainstorming sessions with youth, which helped to highlight the issues from the varied perspectives of participants. Another tactic that the lab implemented was an 'idea wall,' a whiteboard surface on the walls that youth could write and contribute their thoughts with no barrier to access. In the interest of focusing on outcomes, youth collaborators were expected to set project goals, deadlines, and budgets—and meet those obligations.

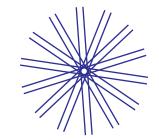
In the case of Kosovo, they have developed past those early concerns, and as they have broadened, been met with new challenges. This is the case for every lab. The winning strategy is to perform the necessary groundwork and plan well, but to be intuitive, creative, and opportunistic when it comes to the growth of their operation.

"We need to consider more universal goals, and focus on finding the most effective—and the most cost-effective—ways to reach the children in greatest need."

Anthony Lake, UNICEF Executive Director









This section provides greater operational detail on the day-to-day workflow, staffing, and physical space determinations. This will shed light on the logistical details that every lab must manage, and reduce the uncertainty when taking a pilot lab to scale. Reference the material provided for managerial and administrative guidelines, and benefit from the paths already forged by other UNICEF Innovation Labs. Momentum gathered from project advancement and collaborator involvement are the keys to achieving a fully-operational and likely sustainable lab.

### GOING FROM A PILOT TO A LAB

The principles to abide when scaling up a lab into a fully fledged innovation operation.

WORKSHEET
Activity Evaluation p. 114

UNICEF has set goals for an Innovation Network that will be far-reaching within the coming years, including 30 participating countries by the end of 2014. Country-level innovation requires local leadership, problem-solving, and evaluation—yet it does so as a part of a sweeping global endeavour.

In order for a burgeoning lab to establish a foothold within the participant community, lab leadership should set clear parameters for identifying a barrier or bottleneck that can be addressed, the feasibility of scale up, and generate accurate costing methodologies. These determinations should refer to existing implementations, and deftly adapt a lab's definitive pilot project to fit one's own circumstances. Refer to **Section 4's Lab Models** section to view a sampling of current and past successful projects. The nature of innovation dictates that iteration and adaptation breeds other implementations,

furthered development goals, and compatible scaling that benefits both individual efforts and the lab network as a whole.

### Excerpt from the Innovation Scale-Up Plan

- "UNICEF can guard against significant risk and ensure the effectiveness of innovations through action at two critical stages:
- **a** During the piloting stage, to make sure the innovation has sufficient evidence to warrant being taken to scale, or alternately to be asked to continue prototyping and piloting.
- **b** Within the implementation phase, to determine if the benefits projected to accrue to children and their families and communities are in fact arriving, whether there are unintended consequences, and whether the innovation is as efficient as had been forecast."

### LAB STAFF AND SECONDMENT OPTIONS

The following briefly describes a sample of the personnel options concerning lab operation. A lab often begins as a very small enterprise, and may add secondments as needs arise.

### Lab Lead

A lab lead manages all of the lab's operational details, oversees project developments, and is the main liaison regarding programme section needs.

DOCUMENT EXAMPLE Lab Lead TOR p. 134

### **Project Officer**

A project officer mentors youth participants on their community-building projects, and oversees that stakeholders are progressing toward the stated project goals on schedule and on budget.

DOCUMENT EXAMPLE
Project Officer TOR p. 162

### Hardware Developer

A hardware developer builds physical prototypes, field tests them, and refines the design until suitable for production by a local manufacturer.

**DOCUMENT EXAMPLE**Hardware Developer TOR p. 186

### Administrative Assistant

An administrative assistant helps to maintain the lab finances, clerical duties, and everyday affairs.

**DOCUMENT EXAMPLE**Administrative Assistant TOR p. 148

### Tech4Dev Coordinator

In smaller labs, a lab lead also acts as a Tech4Dev coordinator. If a separate position, a coordinator has a more hands-on technical role, managing all of the technology-related aspects of development projects.

DOCUMENT EXAMPLE
Tech4Dev Coordinator TOR p. 138

### Designer

A designer can aid the Innovations lab's communications and publicity efforts, and/or develops prototypes and frameworks integral to lab projects and processes.

DOCUMENT EXAMPLE
Designer TOR p. 200

### Software Developer

A software developer codes scalable and open-source knowledge-sharing or data collection solutions. Refining the design and resolving usability concerns is facilitated by code jams and user testing in the field.

**DOCUMENT EXAMPLE**Software Developer TOR p. 183

### **COUNTRY OFFICE SUPPORT**

Below are personnel resources that can be contibuted by the Country Office in support of the lab. If that is not possible, these roles can be brought on as secondments, if needed.

# Monitoring and Evaluation Officer

This position monitors and evaluates all the lab projects, by collecting data demonstrating the impacts of the project measured against its stated goals. The M&E officer should also create documents that help lab participants—especially youth—track their own project progress.

DOCUMENT EXAMPLE
M&E Officer TOR p. 150

### **Administrative Officer**

An administrative officer maintains the lab's budget, oversees the creation of financial contracts, and assists youth in managing the budgets of their own projects.

DOCUMENT EXAMPLE
Administrative Officer TOR p. 148

### **Communication Officer**

A communication officer is charged with promoting the visibility of the innovation lab by engaging media both locally and abroad. This position should also support young people in sharing their lessons and successes.

DOCUMENT EXAMPLE
Communication Officer TOR p. 152

### LAB BUDGET

The budget plan needs to be drawn up so that the lab spends resources as efficiently as possible.

WORKSHEET
Budget Plan p. 111

In the interest of making sound fiscal and goal-oriented decisions, estimated costs should be negotiated based on research. A lab requires resources in order to be operational, many of which may be offset through local collaborations and sponsorships. An effective lab manager will need to create opportunities as a result of constraints.

### Staff

The beginning stages of a lab necessitate the hiring of a lab lead, other personnel can be brought on as the needs of a project dictates.

**TIP:** Volunteers and UNICEF Fellows are eager to work on the challenges that development work poses and can be a very valuable resource. They can also reduce personnel costs.

POSITION	SALARY (MONTHLY)
lab lead	

### Equipment

Identifying the array of equipment needed at the outset is integral to creating an accurate budget plan.

**TIP:** Materials can often be donated to the lab in support of the lab's mission. Barter is also possible, in exchange for services provided by the lab or its participants.

ITEM TYPE	COST
furniture	
technology	
supplies	

### **Physical Space**

A physical space involves overhead like rent, utilities, and maintenance costs.

TIP: Seek out possible sponsorships from a local stakeholder or a donation of space. Also, identify any UNICEF assets that may be repurposed into an innovation lab space.

COST

### **Project Expenditures**

In the initial stages, a project budget may also represent the lab budget. As a lab scales up, each project would necessitate its own budget planning.

TIP: Individual project costs are more streamlined and collaborators expand project goals as a result of a lab. One project builds upon another within the innovation model.

ITEM TYPE	COST
mobile contracts	
consultants	
event hosting	
youth grants	

TOTAL Staff			
Equipment		+	
Physical Space		÷	
Project Expend		+	
	BUDGET ESTIMATE	=	
	DODGET LOTTIVIATE		-

### **SPACE MANAGEMENT**

The decisions regarding the space are dictated by the functions the lab must fulfill. In order to maximise flexibility, engineer the layout so that it can accommodate multiple uses.

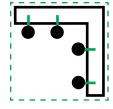
WORKSHEET
Floorspace Plan p. 116



### brainstorming sessions

Seating is oriented so that everyone has a good view of presentation materials, and so that it can facilitate discussion.

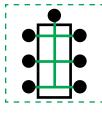
space density = high



### prototyping workshop

A workshop is a specialised space, a mechanic's shop or garage can be used for this purpose. The space needs larger access doors, ventilation, noise and debris tolerance.

space density = low



### meetings

A formal space to meet and evaluate, host conference calls, set agendas, and strategise with stakeholders.

space density = medium



### office space

Workspace dedicated to staff and regular volunteers, for necessary deskwork.

space density = medium

### **Functional Considerations**

Physical space allows for a shared venue for community engagement or collaborative work. Brainstorming sessions and meetings call for an open space that can accommodate a group of people for easy discussion and presentation.

If a lab participates in hardware prototyping, this necessitates a properly-equipped workshop space. Safety protocols should be heeded, and the space needs to be large enough to allow for the construction of Tech4Dev prototypes.

Desk space is also a component of a lab, both for employees to accomplish necessary tasks, and for volunteers and participants to have a shared workspace.

### Size Considerations

A lab manager must reconcile practical constraints against the type of interactions the lab will most often host, and how many participants are expected to commonly share the space.

### Location

When possible, the location of a space should be in close proximity to public transportation. The lab should also be located near where lab collaborators already go. For example, Oman's pilot phase involved the exploration of putting the lab in a shopping mall to situate the lab near where youth congregate.

### **Building in Flexibility**

A lab needs to accommodate a wide variety of activities, often including brainstorming sessions, skills workshops, formal project reviews, office duties, meetings, and presentations. With that in mind, a space should be easily reconfigurable in order to maximise adaptability.

### **Creative Environment**

A creative communal space should be fostered in a co-creative lab environment. In order to encourage this attitude, try filling the space with: whiteboards, couches, some open carpeted space, and other physical facilities that promotes creativity.

### Furnishings/Equipment

The space should be furnished according to lab needs, by considering the respective equipment needs for office, workshop, and collaborative spaces. Also, be sure to factor in equipment costs, such as computers and other technology.

### Excerpt from Kosovo's Pilot Project Equipment List

"The lab will have computers, mobile phones, GPS devices, cameras/videocameras, and other equipment youth may need to engage in projects. In addition, we will also build up "informational infrastructure" in the form of easy web hosting, access to SMS gateways, and/or software to do projects."

—Prabhas Pokharel

### uide

### **ACTIVITIES LIST**

The list of activities that a lab can host is long, and can grow as the lab develops and diversifies its capabilities. Described below is a sample of the more common events.

### **Prototyping Session**

Prototyping sessions often begin with something as simple as paper mockups, and advance in complexity from there. Design decisions are prioritised by having a concrete objective, which a designer, engineer, and project manager can work together on to help achieve balanced and optimal results.

Usability and durability is a concern for both service and product prototypes. User testing in the field reveals gaps and identifies solutions to apply for a more advanced prototype. A practical consideration regarding simplicity of construction and ease of implementation is crucial for a prototype to go to scale.

### FROG DESIGN: PROJECT MWANA

designmind.frogdesign.com/blog/a-different-way-to-design-no-imacs-or-lofts-necessary.html

### **Communication Strategies**

Dedicating a portion of the operational focus towards the creation of a communication outlet is important to inform stakeholders and interested parties of the activities going on in the lab, and to improve fundraising efforts for project goals or lab operation.

Setting up a blog with information on lessons learned and project development details, creating a strong social media presence, and engaging local television or radio outlets are all a part of a communication strategy to raise the profile and expand contributions toward a lab.

SOCIAL MEDIA STRATEGY IN ACTION www.facebook.com/KosovoInnovations

### Workshop Event

The host of the workshop issues the participants a challenge or problem to work on, and provides some concrete examples or stories that speak to these goals. The environment needs to provide an accessible entry point for participants to voice and sketch out their ideas. It is usually advisable for workshop participants to break into smaller teams, so that each person has the ability to discuss their ideas within that unit.

### Hosting Academia

Labs can host an academic group either locally or from abroad in order to benefit from a particular skillset, or to gain a fresh perspective.

As host, the lab shares its facilities and research, while encouraging the students to understand the environment for which they are performing development work. The lab supplies the problem, but otherwise allows groups to manage, design, and test their own project. Student groups regularly brief and integrate feedback from lab personnel and participants as the project progresses.

AALTO UNIVERSITY AT THE UGANDA INNOVATION LAB www.aaltoglobalimpact.tumblr.com

### Skills Training

One of the many benefits of an innovation lab is that it provides a more informal, accessible space to interface with the local population. The lab can host an event that teaches a particularly pertinent skill on an as-needed basis. Participants that come in to learn are then more likely to become engaged with the other pursuits of the lab.

### Reviews

Project reviews are common practice for a lab with a youth engagement focus, where youths submit independent project ideas. A review committee analyses the proposal, evaluates the feasibility within budgetary and time constraints, and approves or rejects the proposal. Also critical is that the review committee make specific recommendations to describe how an individual can adjust his/her proposal for eventual resubmission, or provide recommendations as he or she goes forth with an approved project idea.

### **Content Production**

Media production ventures often directly support government initiatives, whether to promote public knowledge of health, education, or other pressing topic. Deftly tailoring educational subjects lets UNICEF target content to the expressed need and audience.

A joint pursuit of this nature involves the collaboration of experts in the specific content being broadcast, as well as local cultural experts, and experienced media producers (whether it be for video, television, radio, or software). Specialised equipment and dedicated space is also needed to accomplish this task.

### **Brainstorming Session**

A brainstorming session is an opportunity to identify potential issues and voice opinions on ways to strengthen the lab. Every collaborator is a stakeholder in the lab's pursuits, so regular meetings that allow for everyone to discuss ideas is a sound working strategy.

Sessions can often revolve around a presentation on an in-progress or recently completed project. This is an opportunity for the presenter to gather feedback and get help on a potentially difficult issue that they are experiencing, and bolsters a culture of sharing and discussing what every member and collaborator is working on.

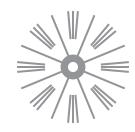
"In all that we do, we must also do a better job monitoring our progress, so we can learn from our successes and setbacks, and identify new obstacles that stand in our way."

Anthony Lake, UNICEF Executive Director

# **SECTION 4** Project and Lab Models

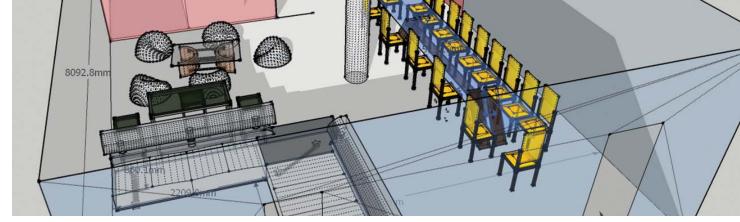






Profiling both the innovation labs and their projects informs the future development of the network. Each lab has particular strengths, and are shaped by the challenges specific to their local circumstances.

Each lab began with a pilot project that had concrete goals, and each lab learned from the progress of their peers. As new labs develop, they will expand their focus incrementally with successive projects and partnerships, and will continue to contribute to the lab network.



A 3-D sketch of the initial space plan, generated by Kosovo's pilot project lab lead Prabhas Pokharel

# Project Models Lab Models

### 1 OUTREACH/TRAINING

Community engagement is about making the lab an open, accessible, co-creative space.

- a. Youth Outreach
- b. Advanced Skills Training
- c. Co-Creative Workshops
- d. Lectures

### ${\it 2}$ PRODUCT DEVELOPMENT

Designing and producing a physical product in the cause of Innovation for Development.

Designing and producing a service in the cause of Innovation for Development.

- a. Realtime Information Services
- b. Youth Opinion Forum (uReport)

### 4 OPERATIONAL RESEARCH

Providing analysis and solutions to streamline or improve an existing process.

### **BROADCASTING CONTENT**

Broadcasting information of value to the community.

### INNOVATIONS LAB KOSOVO

Community outreach to foster active engagement with the community.

### **UGANDA INNOVATION LAB**

**Expanding Technology for Development** implementations to a nation-wide scale.

### **CCORE ZIMBABWE LAB**

Assessing the scale and root causes of an issue in order to develop appropriate solutions.

### COPENHAGEN INNOVATION LAB

Extending Supply Division's experience with market shaping, supply chain operations and creating collaboration among various partners.

### **IHUB MALAGASY AND UNICEF**

Promoting the value of information technology, and bridging the digital divide.

# Project Models

The following is a listing of the different categories of innovation projects that a lab may undertake.

# 1 OUTREACH/TRAINING

The essential component to a community engagement approach is to make the lab an open, accessible, co-creative space. The services that the lab provides are a resource for the greater community, and the community contributes their enthusiasm, talent, and unique insights.

### a. Youth Outreach

The labs are a setting where youth can take initiative, propose their own ideas, and have more productive agency in their society.

### **Key Strategies**

Youth come together in this space, and are prompted for input or ideas regarding community outreach and revitalization. The next step is to provide youth with the tools and opportunity to spearhead their own peer-approved projects. Labs that are focused on youth outreach should provide positive mentorship, and create a failure-friendly yet structured environment where participants can learn to manage all the aspects of a project that they themselves have created.

### Lessons Learned

Successful labs strike a balance between having an open atmosphere for brainstorming, while also creating a structured environment that ensures projects stay on task. There needs to be a rigid process for a youth participant to submit their project idea for funding. The lab encourages the open sharing of experiences from contributors as youth projects develop, and serves as a mentor along every step of the project. Youth learn to draw up a budget plan, and the ability to evaluate their own results. As a result, youth gain valuable experience and confidence to pursue other endeavours.

### YOUTH OUTREACH IN ACTION

Innovations Lab Kosovo's By Youth For Youth pillar. www.kosovoinnovations.org/byfy

In two and a half years time, BYFY has completed over forty one youth-led projects. Among them are:

- \* the creation of a community garden
- \* a campaign to raise environmental awareness
- \* a grassroots anti-smoking campaign
- an open-source mapping of the bus transit system



Recycle smART, Innovations Lab Kosovo

### b. Advanced Skills Training

Skills training structures the learning environment to provide a vulnerable or disadvantaged population with valuable skills, turning graduates of the program into resources for their society.

### **Key Strategies**

**Research:** To determine what skills are needed in the community, and to then gain knowledge about ways to build those high-demand skills in the lab participants.

**Organise Trainings:** The lab is a venue for bringing in external mentors and experts. This creates an inclusive environment that can be used for a variety of skills-building purposes for the practical education of young people.

**Skilled Contributors Become a Resource:** The skills that participants learn can lead to vital contributions in building out more structured projects—both in the service of lab projects and for individual endeavours.

### Lessons Learned

Individuals learn differently and at different rates. Have some one-on-one time built into the session, and pause often for questions. The measure of success for a training session is to take care in letting people know that it is taking place, and to target the most motivated and potentially beneficial audience. A concerted effort is needed to advertise the event amongst your collaborative network and local youth groups.

### **SKILLS TRAINING IN ACTION**

### Programmabilities, UNICEF Sudan

ProgrammAbilities is a joint effort in development by the innovation labs in Kosovo, Zimbabwe, and the pilot lab in Sudan. The project aims to provide high-value computer programming training to deaf children as a prototype for an equity-based innovation for disabilities approach. The pilot can help turn their disabilities into assets, and enable them to become critical stakeholders in an emergent technological community.



The Amal Institute, a school for deaf children in Khartoum. Photo by Panthea Lee

### c. Co-Creative Workshops

A workshop is a short event that challenges participants to come up with ideas to overcome certain barriers, and also involves team-building skills as the participants break off into groups and explore their solutions more fully.

### **Key Strategies**

A workshop proposes a challenge and asks for quick-and-rough solutions. The final challenge should be an actionable solution requiring creative input and teamwork to think through details and present them. Challenges for a UNICEF-run workshop should relate to the local context and the focus of the lab hosting the event. A workshop can vary from a few hours to a few days, but teams should have a role presenting ideas, and possibly a rough prototype by the conclusion of the event.

### Lessons Learned

Participants can be more goal-oriented if the event is organised to have a longer-termed concrete objective in mind. With a competition element in place, the winning teams are often awarded the opportunity and funding to turn their idea into a developed project. A workshop is then an idea incubator, and gets local citizens interested and excited about working with the lab. Publicizing an impending workshop can be accomplished by promoting the event on a radio broadcast, making posters, or using a grassroots network to get the word out—the more people that know about the workshop, the more likely the degree of success.

### COLLABORATIVE WORKSHOPS IN ACTION

Innovation Camp, Innovations Lab Kosovo www.kosovoinnovationcamp.wordpress.com

Modeled upon the successful global Social Innovation Camp model (www.sicamp.org), this 48-hour event involves social innovation camp experts, local and international software developers, designers, and importantly the young people who have first-hand knowledge of Kosovo's existing social challenges. The objective of this camp is to develop ideas that bring about positive social change using web and mobile technologies.



Innovation Camp, Innovations Lab Kosovo

### d. Lectures

Lectures are valuable because they bring people together to learn about a compelling or useful topic, and can be easily recorded and distributed among a broad network of interested people.

### **Key Strategies**

The key to a lecturing event is to bring diverse groups together into one place—something that UNICEF is uniquely able to do. In the shared pursuit of Innovation for Development, a lecture can bring competitors into one room for the first time, or bring specialists from widely disparate fields together to share their ideas. Diversity is often an important catalyst for a good lecture.

### Lessons Learned

A consequence of the value of diversity is that there are often different languages spoken and dramatically varied specializations among participants. Accordingly, a lecture often benefits from pre-event familiarization to get everyone understanding similar terms and goals. This effort can go a long way to making the lecture understandable to all.

### **LECTURES** IN ACTION

### Tech Talk, Innovations Lab Kosovo www.facebook.com/events/201633526611803/

Tech Talk is a series of evening seminars about technologies, software, social media, and open-source/content applications. The objective is to facilitate the interaction of interested youth with tech experts in order to share their knowledge, achievements and experience. This event takes place once a month in the Innovations Lab space.



Tech Talk #1 by Terrence Dwyer

# 2 PRODUCT DEVELOPMENT

Product Development is where a physical product is designed and produced in the cause of Innovation for Development. The primary value of a product for UNICEF is often to develop a proof of concept, and then solicit the input of other stakeholders to collaborate on making it better.

### **Key Strategies**

Product design is extremely difficult, requiring a great deal of technical know-how, resources, and patience. After some initial research, product development involves conceiving of a design, creating a rough prototype, and field testing it. Based on those findings, iterate. It is important to get concrete quickly on the main design challenges. Isolate the main hurdles to your particular product's objective, and form your development process around those. For example, the computer kiosk known as the Digital Drum needed a durable yet commonly available casing to house the fragile computer. The

idea to repurpose oil drums into a case made their objectives more readily feasible, and made the design plans replicable wherever the materials and workshops existed.

The development cycle should be geared towards building something that the (optimally local) private sector can adopt, manufacture and profit from. Be mindful that a successful product can scale up and be implemented for other applications, and in other communities.

### Lessons Learned

The principles for product development are the same as those for all of UNICEF innovative ventures:

- User-Centered and Equity Focused
- \* Open and Inclusive

\* Built on Experience

\* Scalable

Sustainable

Successful deployment depends on a wholly supportive programme that complements the hardware being developed. This often includes: organizing a product training program, researching optimal deployment locations, informing the community of the value of the programme, developing the appropriate accompanying software and/or educational curriculum, in addition to other challenges.

Because product development is difficult, success is never assured. Implementation takes a long time and a particular capacity for fortitude, but the potential payoff in innovation can also be great.

### PRODUCT DEVELOPMENT IN ACTION

### Digital Drum, Uganda Innovation Lab

The Digital Drum is a solar-powered rugged multicomputer kiosk deployed at youth centres, schools, and teacher training colleges across Uganda. This device supplies critical information access to children and their communities, and helps to serve and educate the most vulnerable. This device also provides a proof of concept—that access to information in the most rural and underserved areas is achievable.



Prototyping the Digital Drum, Uganda Innovation Lab

# 3 SERVICE DEVELOPMENT

Services developed by labs cross boundaries of theme and discipline: and often the same "service" can provide new ways of doing business to colleagues across the office. Realtime information loops for better delivery of services are an example of solutions that are being used in health, education, child protection and other sectors.

### a. Realtime Information Services

RapidSMS (**www.rapidsms.org**) is an open source framework for building mobile applications. Labs, other country offices, and partners use RapidSMS to create systems for better and faster movement of critical information.

### **REALTIME INFORMATION SERVICES** *IN ACTION* mTrac, Uganda Innovation Lab

**Health:** mTrac track the stocks of health facilities of essential medicines like the anti-malarial drug ACT. Launched by the Ministry of Health with support from UNICEF and their partner FIND Diagnostics.

### eduTrac, Uganda Innovation Lab www.edutrac.blogspot.com/

cvs.rapidsms.org/

**Education:** eduTrac targets the improvement of key education indicators such as teacher absenteeism, availability of textbooks, and the functionality of water points and latrines. This is accomplished by collecting routine data from head teachers, school management committees, and youth organizations via SMS.

### RapidFTR, Uganda Innovation Lab www.rapidftr.com/

**Child Protection:** Developed for Family Tracing and Reunification activities, aid workers collect and share information via mobile phone about children and families in emergency situations. This system has been used in Uganda during joint simulations with UNHCR, UCRC, Save the Children and World Vision.

### **Key Strategies**

The primary challenge is about managing complex human systems. The technology is a useful tool, but these projects are about addressing human problems first.

### Lessons Learned

Assess the need before attempting a real-time information project. Design the testing pilot around the existing infrastructure. For example, for a health programme deployment, work with the health workers so that they can test and implement the project along with their normal duties, with little extra effort required of them. Monitoring and evaluation should be addressed from the beginning, especially in new and innovative areas. It is important to have solid baselines to measure results against (whether positive or negative).

Access the "How to RapidSMS" guide at this link: www.rapidsms.org/get-ting-started/. It covers most of the information necessary to get started.

### b. Youth Opinion Forum (uReport)

uReport is an open source system built off RapidSMS that UNICEF Uganda is using to hear from children and young people in remote areas. The system involves sending poll questions to 150,000 young people (as of September 2012, the number increases daily as new users join). Young people can respond to these questions, and the respondents get information sent back to them, creating a true information loop.

The poll results and responses are aggregated and shown in newspapers and a dedicated television program, engaging government leaders in the debate. This type of engagement lets youth—even those who would otherwise not be heard—put a stake down and lay a claim to their own future.

### **Key Strategies**

An advisory group of partners that guides the forming of questions is critical for buy-in and legitimacy.

The forum should first serve the needs of the end-user (young people), and serve information needs second. This type of information loop can also help UNICEF and partners better focus work in times of shrinking resources.

### Lessons Learned

In order to involve as many people as possible in collective discussions, topics broached via the system can be discussed through regularly scheduled radio or television broadcasts and newspaper articles. Another method to promote public discourse is to host open forum events that take place in a physical

location and online simultaneously, and post the discussion and results publicly.

YOUTH OPINION FORUM IN ACTION
uReport, Uganda Innovation Lab
www.ureport.ug/

uReport is a toll-free SMS-based system that allows young Ugandans to speak out on what's happening in communities across the country, and work together with other community leaders for positive change.

# 4 OPERATIONAL RESEARCH

Operational research analyses the way a particular development programme is operated and provides solutions to streamline, improve, or augment the existing process. It is also a method that uncovers actionable and concrete evidential data in order to more objectively define the matter at hand.

### **Key Strategies**

Operational research allows for programme colleagues to quickly pose hypotheses and test them—getting answers and then sharing those answers with partners. This allows staff to propose assumptions and test ideas. This research is carried out through a systematic rollout of surveys and standardised interviews carried out by trained data collectors. Ensuring the participation of as many study subjects as possible increases the overall accuracy of the initiative. When armed with the analysed data, operational researchers can make informed recommendations on ways to proceed in order to improve programmatic results.

### Lessons Learned

Quality control procedures should involve a rigorous effort to detect inconsistencies in the data collection, any detected anomaly is pointed out to data collectors so that they can improve data quality. Every questionnaire should feature only straightforward and closed-ended questions. Beyond performing interviews, enumerators should also arm themselves with a checklist noting other qualitative details of an on-site location, in order to evaluate other possible challenges or liabilities in performance. Future evaluations should learn

### OPERATIONAL RESEARCH IN ACTION

Vital Medicines and Health Services Survey (VMAS), CCORE Zimbabwe Innovation Lab

A study commissioned in order to obtain data concerning expected and actual deliveries of vital medicines to Government, Mission, and Local authority health facilities in the ten provinces of Zimbabwe.

from current efforts, in order to achieve a more intensive research objective, and also to be able to track key indicators more completely over a longer period of time.

# 5 BROADCASTING CONTENT

The Uganda Innovation Lab set up a video production set for the express purpose of creating and broadcasting content normally taught in Uganda's primary schools. The educational content will be available on all rugged solar powered computers that are deployed from the Innovation Lab.

Broadcasting information can be valuable to the community, whether it be to disseminate educational content for youth without adequate access to the national curriculum, or to broadcast useful information relating to health or crisis response/prevention.

### **Key Strategies**

Broadcasting content through various technology channels can be an effective mechanism to engage the audience with pertinent topics, and can provide an immediate conduit of information when 'traditional' means of knowledge transfer is falling short.

- \* Information transference should be clear but engaging.
- Engineer a standard broadcast format so that viewers/listeners know what features to tune into.
- Build in a level of interactivity in the form of polls or discussion points that participants can SMS about.

### Lessons Learned

Work with local government ministries when forming educational syndicated content, and when creating a programme for purposes like keeping out-of-school youth engaged with the national educational curriculum. If

### **BROADCASTING INFORMATION IN ACTION**

### Video production for education, Uganda Innovation Lab

In order to help alleviate the problem of districts with poor teacher and student attendance, Uganda Innovation Lab is producing videos of primary school educational curricula and dispersing the educational content throughout Uganda.

there is an on-site location at the lab where a production set can be organised rather than having to rent a space, it lowers the cost of production, and extends the time, care, and scale of the broadcasting effort.

# Lab Models

Existing UNICEF Innovation Labs can serve as a model to direct subsequent lab directions and objectives. What follows is a brief description of their respective circumstances and operations.

### INNOVATIONS LAB KOSOVO

Organizing youth outreach and advocacy, and creating an open-source data hub for the region.

Innovations Lab Kosovo encourages the positive civic participation and professional development of youth though innovative project designs; and the lab also creates open-source technological platforms that serves to benefit the region. It was formed to be a co-creative space, encouraging young people to act on the ideas that directly impact their own lives and those of their peers. Kosovo's implementing partner in this pursuit is the local NGO called PEN (Peer Educators Network), due to their experience in this area, and because of the existing relationships PEN has forged with the community.

In the interest of focusing on the respective programmatic pursuits for the lab, it is managed in three separate 'pillars'—By Youth For Youth, Youth Advocacy Platform, and Design Centre. By Youth for Youth is a mentorship program, offering grants and guidance to youth participants with an approved project idea to make a difference in their communities. The Youth Advocacy Platform works to partner youth participants with key consultants and experts that give young people the agency to advocate for their own causes. The Design Centre leverages their technical expertise—along with the help of academic and communications technology collaborators—to work toward making Kosovo an open-source technology hub for the region.





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### Building an Outreach Network

**Social Media:** Kosovo's facebook (**www.facebook.com/kosovoinnovations**) and twitter (**www.twitter.com/KosInnovations**) profiles provide an outlet for making lab announcements for events like the Innovation Cafés, promoting project successes, spreading knowledge of the lab among social mediaactive youth, and inviting input and ideas from youth participants

**Blogging:** Posts by UNICEF Innovations declare accepted projects, project statuses, abridged meeting minutes, and describe how activities are supporting lab goals. The blog (**www.kosovoinnovations.org/blog**) is also a forum for youth project leaders to explain their process and outcomes.

**Implementing Partner's On-the-Ground Network:** Leverage the network of other community- and education-oriented groups, whether that be from NGO's, teachers and professors, student groups, or community volunteers.

**Innovation Cafés:** Cafés are regular biweekly meetings held at the lab space. These events highlight the value of discussion and collaborative work that the lab facilitates. Team members developing projects through the innovation lab are required to attend these Cafés, in order to share thoughts and experiences. These meetings involve presenting progress on current projects, showing outcomes of recently concluded projects, and hearing new ideas that will emerge as project proposals.

### Internship Programme

The Kosovo internship programme allows skilled university students to gain valuable practical experience—supplementing a primarily theoretical education—by working with the innovation lab to address community problems.

UNICEF has been building a partnership with the University of Prishtina, specifically with the Electrical and Computer Engineering and the University of Business and Technology (UBT) departments. Students receive academic credit for the work they perform with Innovations Lab Kosovo, and create connections to innovation within and outside Kosovo. By supporting existing classes with outside lectures, supporting existing labs, and integrating the work done at the UNICEF Innovations Lab with University coursework and theses, UNICEF has been gradually building a strong base of innovation at the University as well.

### Core Staff, Secondments, and Volunteers

### Operations Coordinators

A coordinator oversees the operational details of each lab section.

DOCUMENT EXAMPLES
T4D Coordinator TOR p. 138

### 2 Project Officers

Project officers are the primary youth mentors and point of contact.

DOCUMENT EXAMPLE
Project Officer TOR p. 162

### Administrative Assistant

Administrative assistants help draw up contracts and perform clerical duties as required.

**DOCUMENT EXAMPLE**Administrative Assistant TOR p. 148

### \* Designer

A designer aids in the communications and publicity efforts, and/or develops prototypes and frameworks integral to lab projects and processes.

DOCUMENT EXAMPLE
Designer TOR p. 200

### 1 Monitoring and Evaluations (M&E) Officer

The M&E officer checks that project implementations are performed as described, and measures project results against stated goals.

DOCUMENT EXAMPLE
M&E Officer TOR p. 150

### 1 Local Software Developer

A software developer builds technological platforms necessary to support the lab's project goals, and manages their progress.

DOCUMENT EXAMPLE
Software Developer TOR p. 183

### \* Local Interns

Interns support the software developer in coding projects.

DOCUMENT EXAMPLE
T4D Volunteer TOR p. 196



### Local Consultants

Local consultants host workshops, provide youth mentorship, and organise events.

DOCUMENT EXAMPLE
Local Consultant TOR p. 168

### International Consultants

International consultants advise on specialised topics and participate in training events as necessary.

**DOCUMENT EXAMPLE**International Consultant TOR p. 172

### Social Media Officer

The social media expert advises youth on building public interest and promotional tactics.

### Innovations Lab Kosovo: By Youth For Youth

In full collaboration with the Peer Educators Network, By Youth for Youth (BYFY) is a section of the lab that describes their sponsorship and mentorship of small-scale youth project implementations. The process for every youth project is standardised.

### **PROJECT PROCESS**

### 1 Youth Submits Project Ideas

The first point of contact is a project officer. Project officers sometimes work with potential project leaders, and make suggestions prior to submitting the proposal. A fully formed template is then formally submitted to the project officer. The document is then reviewed at an Innovations Review meeting.

### 2 Internal Innovations Review

The committee is made up of lab management, who make recommendations regarding changes to the proposal, and then vote on whether to accept the project. A consensus vote is required for an acceptance of a project proposal.

### 3 Announcement

Youth project leaders for accepted proposals are informed of the lab's general workflow. Project leaders are expected to provide a schedule of activities, are required to work and closely communicate with lab personnel, must attend Café meetings and other events, and are expected to be a member of the collaborative environment within the shared space.

Participants whose proposal was rejected are counselled on how to revise their submission, in order to prepare it for reconsideration at the next review.

### 4 Interaction with Financial Officer

Project leaders provide a budget. The ceiling figure for any project is up to 5,000 Euros, and there is no option to apply for further funds. The financial officer divides transfers for the amount that has been approved. The first phase involves a small amount of the total budget, to gauge how project leaders deal with finances. The financial officer goes over the financial report template. In advising, the officer tries to make the financial part as simple as possible, and prepares a contract together with the youths.

### **5** Final Report

The project leader assesses the overall effectiveness and lessons learned from the project. This process involves enumerating the obstacles encountered during the project, and the strategies for overcoming them.

### Innovations Lab Kosovo: Youth Advocacy Platform

The Youth Advocacy Platform (YAP) is dedicated to local policy engagement among youths. It matches social entrepreneurs with relevant experts and supports motivated youth to develop sustainable web-based apps and data visualization tools that amplify offline advocacy.

YAP employs a variety of alternative evidence-based tools, training sessions, and 'access-points' that enable young people to directly advocate for themselves and their communities. It also advances youth capabilities through partnering project leaders with relevant UNICEF staff members and experts; in the process linking different skillsets together to promote more ambitious project goals.



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One example of a project organised for this initiative is **Youth Advocacy Training** (in collaboration with European Youth Parliament).

The training focuses on advocacy skills (issues identification, evidence-based advocacy, campaign development, and digital activism/outreach). The trainings are facilitated by a combination of experienced international and local trainers, and aim to link other current/potential youth leaders with existing EYP national and international delegates and resources.

### Youth Advocacy Training's Activities:

- Five-day intensive formal advocacy training held at the Prishtina Lab (modules include: group dynamics, project planning, time management, media and public relations, crisis management, leadership, political communication, evidence-based advocacy and an introduction to digital advocacy tools)
- Five on-site public advocacy workshops
- Five mobile advocacy workshops (in Prizren, Peja, Gjakova, Ferizaj, Mitrovica and Gracanica)

### Youth Advocacy Training's Expected Results

- 50 participants in a week-long joint advocacy training gain the skills to engage in EYP events across Europe, become competent session/event organisers, advocate with digital media tools, and participate in policy-level advocacy.
- 150 youth participants in public advocacy workshops are introduced to the formal advocacy skills needed to participate in policy-level advocacy

### Innovations Lab Kosovo: Design Centre

The initiative dubbed the Design Centre aims to help grow Kosovo into an open-source technology hub for the region. In this pursuit, the lab extends local technological capacity and the data collection network.

### DETERMINING THE PROGRAMMATIC FOCUS

**Data Management and Software Development:** The Design Centre team at Innovations Lab Kosovo first had to identify some of the region's most pressing needs, and measure them against the capacity of the group to affect the greatest amount of positive change.

In the case of Kosovo, there is a lack of statistical and internationally-comparable digitised data. The decision was made that the Design Centre be a platform to launch projects that leverages advances in mobile, open source, and social technology, and to develop software that serves the vulnerable sector of the population.

The process of defining a focus is not always rigid. What is asked is: what are the greatest areas of need, and how can they be prioritised? This helps to narrow the discussion into certain topic areas. The process involved gathering 50 issues from locally-relevant public institutions and UN agencies, and through discussion and debate with convened partners, narrowing those 50 issues into a few key areas. A starting point is forged when a consensus is reached regarding a project that deals with one specific key area, and yet still keeps the objectives of the organization broad enough that it can address other related areas as the initiative grows.

### **Examples of Programmatic Focus Points:**

### Birth Registration

Innovations for Increasing Birth Registration is a project aimed at increasimng the rate of birth registration in Kosovo, where 7-10% of births still go unregistered. The project is in the concept phase, and provides an opportunity for inter-lab collaboration. MobileVRS is a birth registration system developed by the Uganda Innovation Lab, and so elements of that platform may provide an alternate use (or at least guiding principles) with Kosovo's intended application.

### \* Kosovo Youth Map

The Kosovo Youth Map presents resources available to Kosovo's youth on a map. The purpose is two-fold. First, it makes the resources serving youth (and their locations) apparent to them. Second, it aims to assist decision makers to easily identify focal points of youth centres, and establish connections with youth and youth NGOs that could contribute to planning, strategising and finalizing municipal and national strategies. The Kosovo Youth Map is built upon Free and Open Source Software Ushahidi.

### Vaccine Management

Innovations for Vaccine Management is a project aimed at improving the management system of vaccinations overseen by Kosovo's National Institute of Public Health. It will be conducted in collaboration with the UNICEF Innovations Lab Kosovo, the National Institute for Public Health, as well as Vaccination Unit team members in Family Medicine Centres throughout Kosovo. At the time of writing this resource, the Innovations for Vaccine Management project is still in the research and design phase.

### Data Visualizations

Visualization of various data about the municipalities of Kosovo is a necessity that has been presented on multiple occasions in studies and reports of UNICEF. Consequently, the goal of this project is to provide a simple-to-use interactive map, where users can click on the municipality about which they desire to view information. The project is to be implemented by the Design Centre, with possible help from interns of the University of Prishtina.

# **UGANDA INNOVATION LAB**

Expanding and accelerating Technology for Development implementations to a nation-wide scale.

The Uganda Innovation Lab is a physical prototyping workshop, a RapidSMS service development hub, an electronics workshop, a video production set, a place for hosting skills workshops, and an informal, accessible venue that allows for greater co-creation between UNICEF and community.

The principal focus for UNICEF Uganda is to close the opportunity gap for the most marginalised and hard-to-reach sections of the population. The lab's strategy to accomplish this is to develop technology in the form of physical products and mobile services that provide the end-user with an unprecedented level of access to information and also create opportunities for real-time feedback loops and improved data collection methods.

The operation of the UNICEF Uganda Innovation Lab supports the UNICEF T4D Section. The form and pursuits of the physical lab is largely dictated by the Country Office of UNICEF Uganda's programmatic agenda. It is invaluable as a flexible, multi-use space that provides added functionality and dimension to the organisational operation.

The Uganda T4D team existed before the forming of a lab. As concerns the lab, the team worked with programme colleagues to define needs and priorities for the office which new partnerships, technologies or processes could help address. They wanted to work on a Tech4Dev model that operated on a bigger scale (implementations for a country-wide scale) and for projects that





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could span a longer time frame, while using local talent and industry as a vital part of that operation.

The T4D Team researches and sets the project agendas when conceiving of Tech4Dev implementations. Every project is helmed by a project manager, and often contractors are brought in to achieve project goals, as different skillsets are required on a per-project basis. The efficiency and agility of the lab's operation calls for the development of innovative solutions in an accessible, cost-effective manner. Building and developing solutions in-country also leads to greater opportunities for interventions that are rugged and self-reliant, as it is being tailored to the unique environment in which it resides.

# Core Staff, Secondments, and Volunteers

### 2 T4D Team Co-leads

Section co-leads oversee the T4D department, and coordinate with other sections on particular projects.

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DOCUMENT EXAMPLE
T4D Coordinator TOR p. 138
```

# Production Coordinator

A production coordinator oversees the workshop team, and ensures the quality of hardware, software and manufacturing processes.

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DOCUMENT EXAMPLE
Production Coordinator TOR p. 178
```

# Project Managers

Project managers stay on top of the day-to-day details and the personnel working on specific T4D project implementations.

# Software Developers

Software developers build and manage the progress of technological platforms necessary to support project goals.

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DOCUMENT EXAMPLE
Software Developer TOR p. 183
```

# Hardware/Software Engineer

The engineer prototypes and codes projects, field tests, and iterates the product or service.

```
DOCUMENT EXAMPLE
Hardware/Software Engineer TOR p. 186
```

# Industrial Designer

The industrial designer works on the design and usability testing of a particular product development.

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DOCUMENT EXAMPLE
Industrial Designer TOR p. 202
```

### Student Volunteers

Student volunteers support the engineers, supplying assistance in coding and building a particular project.

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DOCUMENT EXAMPLE
Student Volunteer TOR p. 196
```

# 2 Workshop Assistants

A workshop assistant supports the engineers and helps to maintain the lab space and project progresses.

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DOCUMENT EXAMPLE
Workshop Assistant TOR p. 193
```

# The Shared Experience of the Uganda Lab

The Uganda Innovation Lab maintains a blog (mbuya.unicefuganda.org) that is vital as a knowledge sharing portal, replete with engineering tips for fabrication and programming. The lab blog shares the engineers' processes in building physical constructions, publishes tips on how to overcome network limitations, shares code, assesses ways to improve implemented technology, and provides other useful posts detailing the array of work being done at the lab. Any subscribers to the blog can use the blog as inspiration to build low-cost planters that grow more productive tomato plants (mbuya.unicefuganda.org/?p=254), to learn the proper angle towards the sun to install solar panels (mbuya.unicefuganda.org/?p=109), and exercise their own constructive ingenuity in general.

# Collaborations with Academia

Uganda Innovation Lab has hosted teams of academic institutions from different parts of the world, for the fresh perspective and enthusiasm they bring to a problem that has traditionally evaded adequate solutions. Additionally, international students often bring with them resources, training, and capabilities that UNICEF may not have in abundance.



When a student team arrives in the project locality, the T4D Unit gives them a brief that they feel the group can work to address (an example brief—this is the problem: water sanitation at primary schools is inadequate). The second step is to bring the team out in the field to observe the issue first hand and talk to locals about their experiences, and perform other means of user-centered research.

When it comes to teams designing and developing their own solutions, they often have a large degree of freedom in their working method. Aside from sharing the same space, sharing resources, and presenting regular project progress reports, there is a significant degree of autonomy in order to ensure that the unique expertise brought to the table is exercised. Depending on the particular skillset of the team, they can be expected to design, prototype, and implement a pilot project within a full academic year. It is heartening for collaborators to become a part of the long term strategic plans of UNICEF innovation work, and their passion contributes to the pursuit of forward-moving social innovation.

# **CCORE ZIMBABWE**

The assessment of a particular issue's scale and causes in order to develop the appropriate solutions.

The Collaborating Centre for Operational Research and Evaluation (CCORE) began from the recognition of a need for a research lab dedicated to information and data; specifically regarding the collection, dissemination, analysis, and management as it relates to improving the conditions of Zimbabwe's most vulnerable. A resource of this nature informs and directs public policies, programming, and practices based upon a concrete, evidence-based approach. In addition to the lab's particular research focus, CCORE recognises the value of a lab as a locus point for collaborations both with the public sector and with existing research institutions.

CCORE's strides in operational research are illustrated by projects like the Situational Analysis of Children and Women in Zimbabwe (SITAN), and the Vital Medicines and Health Services Survey (VMAS). SITAN is a report that

compiles and analyses the current situation of women's and children's right in Zimbabwe. This assessment reveals the pervasive effects of poverty and vulnerability to imperil access to social services, education, and protection. Government officials have stated that SITAN is a blueprint for social policy going forward, demonstrating the important role that a comprehensive and objective report of this nature often occupies. VMAS is a nationwide survey regarding the expected and actual deliveries of vital medicine to Zimbabwe's health facilities, an assessment whose need was articulated by the donor community and the Ministry of Health and Child Welfare. Similarly to SITAN, the assessment functions to support and strengthen government initiatives in the shared interest of improving the health network for the entire population.

Alongside the focus on operational research, CCORE is also building an expertise into the Technology for Development field. This technological capacity-building directly concerns knowledge and data management and real-time monitoring. CCORE has grown by modelling other Tech4Dev engagements, as experience has taught them to learn and build upon the experience and successes of others, rather than needlessly repeating the same growing pains. Like other established labs, CCORE is following the logical arc that a lab should first focus on a specialty with which they have a degree of experience, build upon those experiences with the help of collaborators

and stakeholders, and then branch out and expand their ambitions from that initial focus point.

# CCORE ZIMBABWE LAB AT-A-GLANCE www.unicef.org/zimbabwe

CCORE offers support for the advancement of operation/intervention research and evaluation in five strategic areas.

- **1** Collaboration and partnerships with existing research institutions and the public sector.
- **2** Capacity building to enhance and improve evidence based approaches to programming, by enhancing data management and data use.
- **3** Collaboration and technical support for evaluation research in key areas of the thematic focus.
- **4** Technical and financial support for Operational Research in key areas of the thematic focus.
- **5** Knowledge management and dissemination by providing a platform for routine dissemination of current operational/intervention research and evaluation.

# **COPENHAGEN INNOVATION LAB**

Bringing together partners to understand UNICEF's needs and supporting global innovation projects.

A new lab in Copenhagen is part of the recent physical move of Supply Division to a new facility, as well as the expansion of its warehouse operations. UNICEF's Supply Division has extensive experience with market shaping, supply chain operations and creating collaboration among various partners—so a natural extension of this capacity is to use the innovation lab to explore issues of partnership, process, supply, and logistics.

UNICEF also has one of the world's largest and best humanitarian logistics networks, geared to respond to both large and small emergencies. The lab also has the potential to become a hub of innovation around emergency response.

The first project out of the innovation lab was to run a prototype Emergency Simulation, designed, pro-bono, by UNICEF partner frog design. This simulation involved more than 20 UNICEF staff from Copenhagen, three designers from frog design, and a two hour immersion into the world of UNICEF's supply and logistics work. This prototyping led to further needs identification on the simulation, and engagement of a wide cross-section of UNICEF's staff.

The lab will also be used for a series of workshops on a range of topics. Upcoming subjects include: open-source hardware, intellectual property around innovation, supply tracking and data for M & E, temperature control during shipping, product R&D in school furniture, feminine hygiene, water purification, water transport, and pneumonia diagnostics. Its ICT facilities also allow for sharing discussions and collaborations with UNICEF's other innovation labs.



# Core Staff, Secondments, and Volunteers

### \* 2 Lab Co-Leads

Provide lab management, scheduling, stakeholder liaison and overall administration.

DOCUMENT EXAMPLE Lab Lead TOR p. 134

# Communication

Managed by the Supply Division Knowledge Management Unit

# Operations Research Function

Managed by the Supply Division Knowledge Management Unit

# **IHUB MALAGASY AND UNICEF**

Promoting the value of information technology in education and bridging the nation's digital divide.

iHub Malagasy is a good example of a local NGO contracting with and helping to support the mission of a UNICEF Country Office while maintaining their operational autonomy. The collaboration between iHub Malagasy and UNICEF Madagascar first began through the adaptation of a project originally developed by Uganda Innovation Lab called uReport, for implementation in Madagascar.

The NGO also carries forth its own mission independent of UNICEF. The core members of iHub Malagasy have created an NGO called SEHATR'IT, which defines it mission as empowering youth through education, solving social challenges with ICT and bridging the digital divide between Madagascar and the world.

iHub Malagasy has a dedicated space with the possibility for extension, and contribute to the continental momentum in ICT through the events they organise and participate in. The organization also spreads local awareness about the implications for new media. iHub Malagasy is still growing as an organization, and their project goals will diversify and change in time. The



NGO has enjoyed many successes, such as the organization of events like Bar Camp, and participating in the continental-wide event Apps4Africa—but there have also been significant challenges. iHub Malagasy looks forward to working more with UNICEF in the future, as iHub's network of ICT practitioners and promoters of technology is a valuable resource for the region.

# Key Challenges for iHub Malagasy

- \* Lack of funding from both public and private sector.
- Language barrier and absence of local language content and resource materials.
- \* Limited capacity and interest amongst the population regarding new technology.
- \* Absence of a market leader to drive technological innovation and exploration.
- Barriers in access to global networks and initiatives in the domain (due to language, location, and national identity)

# SUBMIT YOUR OWN LAB

Plans and preparations are presently underway for several more innovation labs, originating from Country Offices and UNICEF collaborators across the globe. There are no one-size-fits-all solutions when it comes TOR – New Lab Profiles p. 125 to developing innovation, because a lab responds to the press-

ing needs in its own environment, in addition to capitalizing upon its own particular strengths. Being able to adapt to these circumstances provides the UNICEF Network with another unique and effective model for collaboration and growth, and we invite lab stakeholders to contribute to that dialogue.

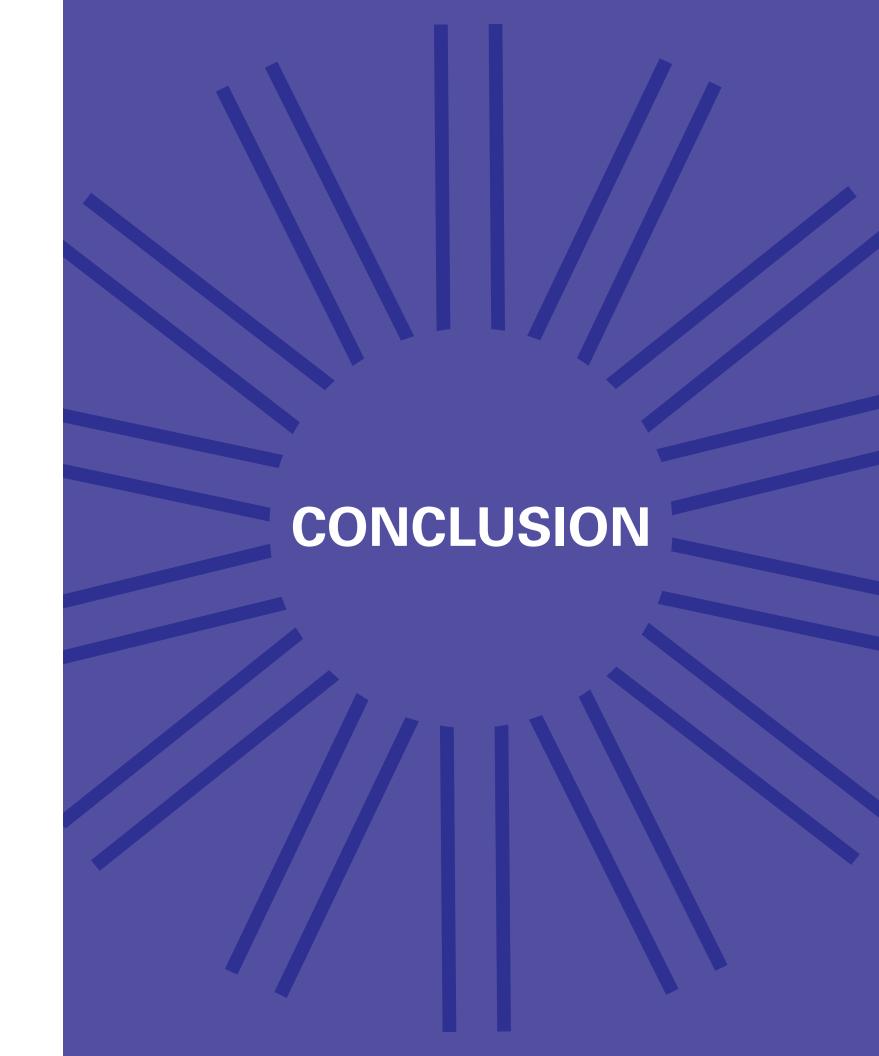
Constraints and challenges are opportunities for creativity and innovation. Ingenuity is the vehicle that overcomes obstacles—problems that are often prevalent in other parts of the world. Difficulties encountered and resourcefulness in practice always has lessons to share for others.

The implications for building upon ever more prevalent open-source technology offers new hope in reaching the traditionally hardest to reach. Equally important is that the culture of collaboration is greater than it is has ever been. Lessons learned, focus areas, and research documents provided by new labs ensures that the network keeps learning and growing. The structure and worksheets that are a part of this resource assists in sharing those efforts.

**WORKSHEET** 

"Traditional development thinking has held that attempts to reach the very poorest, especially in remote areas, are too costly and too difficult. But new technology and innovations are making it easier to reach the most deprived... Focusing on the most disadvantaged is right in principle and right in practice."

Anthony Lake, UNICEF Executive Director



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Creating a lab is not easy. The concept of a lab is one of "interface." These spaces allow for connections to be made among systems that may not always work together easily. There will be obstacles, hardships and growing pains. The best way to start a lab is to have a concrete, easily measurable first project, or small set of projects. Creating these—achieving initial small wins—allows for the learning among partners to happen, and starts to develop strategies that will be useful in larger, more drawn-out collaboration.

# **CLOSING REMARKS**

With steady leadership, support from stakeholders, good planning, and flexibility in the face of adversity, a lab can accelerate Innovation for Development efforts, create new partnerships and adapt ideas across national and regional borders.

This guide is a foundation that will grow as the number of labs in UNICEF's lab network increases. Innovation is most effective when tailored specifically to the environment in which it is being applied, or where it is needed. It is most effective when it is developed by stakeholders guided by direct user testing and first-hand observation. An innovation lab physically encourages these processes—and connects hyper-local efforts to UNICEF's global machinery and networks.

Every success or failure in a lab is a lesson to be learned from and shared; the value of having a network of labs is that that learning can happen globally, and mistakes can be caught early on and corrected quickly in the future.

This guide could not have been created without the vision and dedication of the many UNICEF staff and partners pushing for innovation in their respective fields. Whether in programme delivery or new ways of engaging young people, in creating collaborations with new partners or delivering health results to the point of need—colleagues in the field have driven the work of the innovation labs, and we thank them for their time in helping create this guide. Future versions will include new labs and new strategies and documents as the organization learns; we look forward to being part of this journey with you.

# SECTION 1 | The Lab Landscape

# **A Lab Defined**

# What is a Lab

A space and set of protocols for innovation in programmes, products, processes, and partnerships.

# Who Might Need One

A Country Office in need of a vanue and process to mobilize collaborators in solving persistent social problems.

# A Labs Value

New methods for developing solutions.
Greater diversity of skill.
A collaborative physical environment.
Progessively builds local development.

# **Research Structure**

# **Partners**

Government | Academia | NGOs Private Sector | Young People UNICEF Lab Network

# **Key Principles**

User-Centered and Equity Focused Built on Experience | Sustainable Open and Inclusive | Scalable

# Types of Research

Product and Service Development Community Engagement Operational Research

# section 3 | Operational Details

# **Managing the Lab Operation**

# Personnel

A lab often begins as a small enterprise, and may add secondments as needs arise.

# **Physical Space**

Engineer the layout so that it can comfortably accommodate multiple common uses.

# **Budget Plan**

The lab lead will likely need to be resourceful within particular budget constraints.

# Lab Activities

A lab's hosted activities will grow as the lab develops and diversifies its capabilities.

# SECTION 4 | Project & Lab Models

# **Project Models**

# Outreach/Training

Defined by youth outreach, skills training, workshops, and lectures.

# Product Development

Involves the design and production of a physical product.

# Service Development

The design and delivery can involve technology and/or human services.

# **Operational Research**

Providing analysis and solutions to streamline or improve processes.

# **Broadcasting Content**

Broadcasting educational content or information of community value.

# **A UNICEF Initiative**

# **Innovation Network**

Operational labs: Copenhagen, Delhi, Kosovo, Uganda, Zimbabwe. Preparing labs: Armenia, Botswana, Burundi, Chile, India, South Sudan, Sudan.

# Global Map

# Meeting with Stakeholders

# Launch a Lab Inquiry

Reach out to internal stakeholders.
Establish opportunities for collaboration among UNICEF Sections.

# SECTION 2 | The Pilot Phase

# Launching the Pilot

# Hire a Lab Lead

Oversees the overall day-to-day lab activity.

# Refine the Concept Note

The defining lab document that describes the research performed, and explains the direction chosen.

# Launch a Pilot Project

Constantly evaluate | Iterate
Work steadily to scale-up | Show results

# Researching the Background

# **Scoping Mission**

Identify local partners. Solicit input from end-users. Identify local issues. Cohere interest in a particular direction for the lab.

# Narrow a Focus Area

Based upon a Country Office's established expertise, consensual stakeholder support, or a pressing societal bottleneck.

# Lab Models

# Innovations Lab Kosovo

Organizing youth outreach and advocacy.

# Uganda Innovation Lab

T4D implementations at a nation-wide scale

# **CCORE** Zimbabwe

Assessing an issue's scale and causes

Copenhagen Innovation Lab

iHub Malagasy

# Global innovation projects & logistics support.

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Bridging the nation's digital divide.



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Chelsey Lepage, Youth Advocacy Consultant, UNICEF Kosovo

Arbnor Hasani, Design Center Officer, UNICEF Kosovo

Valentin Muharremi, Financial Officer, Peer Educators Network

**Terra Weikel**, Technology for Development Specialist, UNICEF Uganda

Stefan Bock, Technology for Development Specialist, UNICEF Uganda

Stuart R. Campo, Innovative Programming Specialist, UNICEF Madagascar

**Andrew Clutterbuck**, Project Manager, UNICEF Finland and Aalto University Design Factory

**Panthea Lee**, UNICEF Innovation Consultant and Co-Founder of Reboot Inc.

**Andriankoto Ratozamanana**, Environmental entrepreneur and leader of the i-Hub and SEHATR'IT initiatives, Madagascar

Patrick Codjia, Nutrition Specialist, UNICEF Botswana

# **DOCUMENT REFERENCES**

Ethiopia RapidSMS Lessons Learned

Sean Blaschke

2009

**PCA Agreement: UNICEF** 

and PEN

**UNICEF Kosovo Innovations Lab** 

2010

Vital Medicines and Health Services Survey Round 7

**CCORE Zimbabwe** 

2010

**CCORE Plan of Action** 

Susan M.L.Laver (PhD)

January 2011

Project Mwana: 3 Year

Outline Erica Kochi

February 2011

Concept Note/Letter of Intent to the Rockefeller

**Foundation** 

The U.S. Fund for UNICEF

August 2011

Technology for Development:

**Opportunities for UNICEF** 

Sudan Panthea Lee

October 2011

October 201

Final Report:

Administration of Young People's innovations

**Projects** 

**UNICEF Innovations Lab Kosovo** 

November 2011

UNICEF Madagascar
Innovative Programming

Stuart Campo

November 2011

Mobile Technologies & Community Case

Management

**UNICEF & Frog** 

mobilemandate.frogdesign.com/ pdf/UNICEF playbook.pdf

2011

**Oman Innovation Lab** 

Action Plan Christopher Fabian

2011

Pulse Lab Uganda: Mission

Report

**Christopher Fabian** 

2011

A Situational Analysis on the Status of Women's and Children's Rights in

**Z**imbabwe

**CCORE Zimbabwe** 

www.unicef.org/zimbabwe/ SitAn\_2010-FINAL\_FINAL\_01-

02-2011.pdf

2011

Statute of SEHATR'IT

Andriankoto Ratozamanana

2011

UNICEF Uganda Innovations

Stefan Bock, Terra Weikel

January 2012

**Innovation Scale-Up Plan** 

Christopher Fabian

2012

**UNICEF Tech Innovation** 

Report, version 10

Christopher Fabian, Erica Kochi, John Ryan

91

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# **ONLINE REFERENCES**

# ARTICLES/VIDEOS

# Interview with Anthony Lake, UNICEF Executive Director

### **USAID FrontLines**

 $transition.usaid.gov/press/front-lines/fl\_may12/FL\_may12\_U5\_\\LAKE.html$ 

May/June 2012

# Programmabilities: Training Young Deaf Computer programmers

### Panthea Lee

www.unicefstories.org/2012/03/28/ programmabilities-project-createa-cohort-of-young-deaf-computerprogrammers-2/

March 2012

# "Design without Hubris" RapidFTR Thesis Presentation

### Jorge Just

www.vimeo.com/13399528 July 2010

# One day at UNICEF Innovations Lab Kosovo

### **Innovations Lab Kosovo**

www.youtube.com/watch?v=2jBaSZ GhIGs&feature=relmfu July 2011

# Empowering Youth to Generate New Ideas at Innovations Lab Kosovo Matthew Bane, UNICEF USA

fieldnotes.unicefusa.org/2012/05/ empowering-youth-to-generatenew-ideas-at-innovations-lab-kosovo.html

May 2012

# Mobile Technologies & Community Case Management

# frog design and UNICEF

mobilemandate.frogdesign.com/

# Children's Involvement in the Design Process

# HCIL, University of Maryland Dr. Allison Druin, Professor, College of Information Studies

www.cs.umd.edu/hcil/kiddesign/design\_process.shtml

# Transitioning RapidFTR from New York to Kampala

### Jorge Just

 $www.human itarian innovation.org/\\blog/rapidFTR/uganda/$ 

June 2012

# **GENERAL LINKS**

### **UNICEF**

### **UNICEF Innovation Blog**

www.unicefstories.org

### **UNICEF Innovation Website**

www.unicefinnovation.org

### **Innovations Lab Kosovo**

www.kosovoinnovations.org www.facebook.com/ kosovoinnovations

# **Kosovo Innovation Camp**

www.kosovoinnovationcamp.word-press.com

# **Uganda Innovation Team**

mbuya.unicefuganda.org

### **Project Mwana**

www.projectmwana.posterous.com

### RapidFTR

www.rapidftr.org

### RapidSMS

www.rapidsms.org

# **UNICEF Collaborators**

### **Global Pulse**

Harnessing today's new world of data to gain a real-time understanding of changes in human well-being. www.unglobalpulse.org

### **Prabhas Pokharel**

Prabhas' personal blog detailing adventures in practising and studying Technology for Development. www.prablog.posterous.com

### Malagasy iHub

Malagasy i-Hub aims to promote the use of ICT and reduce the digital divide in Madagascar.

www.i-hub.mg

# **Aalto University Global Impact**

Rallying design, business and engineering to address extensive societal challenges

www.aaltoglobalimpact.tumblr.com

### **Art Centre DesignMatters**

Providing the know-how and aspiration for a more sustainable and equitable world.

www.designmattersatartcenter.org

### frog design

The desire to improve the world by humanizing technology is at the core of frog design's company mission.

www.frogdesign.com/services/ expertise/social-innovation.html

### **Mobile Active**

MobileActive.org connects people, organizations, and resources using mobile technology for social change. www.mobileactive.org

### Un Techo Para Mi Pais

TECHO is a youth led non-profit organization present in Latin America & the Caribbean.

www.techo.org/en/

### **Praekelt Consulting**

Praekelt believes that mobile technology has the power to improve the lives of people living in poverty. www.praekelt.com

# Other Resources

# **OpenIDEO**

OpenIDEO is a place where people design together for social good.

www.openideo.com

### IDEO.org

IDEO.org's mission is to bring human-centered design to the people who need it most — those facing poverty every day.

www.ideo.org

### IDEO HCD Toolkit

The Human Centered Toolkit is a free innovation guide for social enterprises and NGOs worldwide.

www.ideo.com/work/ human-centered-design-toolkit

### Ushahidi

A non-profit tech company that specialises in developing free and open source software.

www.ushahidi.com

### \*iHub

Nairobi's Innovation Hub is an open space for the technologists, investors, tech companies and hackers in the area.

ihub.co.ke/pages/home.php

### Twitter links:

twitter.com/unickf twitter.com/ericakochi twitter.com/KosInnovations twitter.com/RapidFTR twitter.com/malagasyihub twitter.com/iHub twitter.com/UnTecho

# **ANNEX 1**

# Worksheets

# Annex 1: Worksheets

This Annex provides worksheets to aid in the preparation, maintenance, and operation of a lab. It is mainly intended for use by lab leads, and facilitates the easy sharing of information for similarly involved participants. Upon filling out a form that describes lessons learned or similarly pertinent information, save the document and email it to the New York Innovation Unit for knowledge sharing.

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106

111

### 1a Pilot Lab Timeline

This worksheet is an aid that helps to lay out a timeline for the stages of a lab.

### 1/2 – Focal Point Research

The initial steps involve research and preparation spearheaded by the lab focal point.

### 2/2 – Lab Lead Priorities

A lab head is hired to help direct and manage the steps involving the operational lab setup.

# 1b TOR – Lab Lead

This worksheet is a template to use if seeking to fill an open lab lead position. This form helps to describe a Lead that can fulfill the particular needs of a lab operation.

# 1c TOR – Lab Concept Note

This worksheet is a template to use to describe the planning and objectives for a lab operation. It should enumerate the research undertaken, the focus area(s), the stated goals, and a budget for the given time period.

# 1d Budget Plan

This worksheet is an aid that helps to lay out a budget for a lab and it's projects in a given period.

# 1/3 – Lab Planning

Lab expenditures go directly to supporting and improving project outcomes.

### 2/3 – Project Planning

Project expenditures go directly to supporting and realizing the stated lab objectives.

### 3/3 – Total Calculations

Totaling the expenditures for both the lab and project(s) provides a comprehensive lab budget.

# 1e Activity Evaluation

114

This worksheet is intended to be used to cultivate continued lab and project advancement, and to routinely write down and share respective lab actions/lessons.

# 1/2 – Setting Realistic Goals

Establishing concrete goals and acknowledging limitations helps to direct a project.

# 2/2 – Analyzing Outcomes

Describing a project's evolution informs future projects, and shares lessons for the benefit of other labs.

# 1f Floorspace Plan

116

This worksheet helps to prioritise different functional considerations when engineering a lab floorplan.

### 1/2 – Lab Function Options

Considering the specific activities for a lab will help to inform the respective spatial and equipment needs.

# 2/2 – Space Size and Allocation

Sketching out and determining the specific size and layout needs will help in the design of a more functional lab space.

# *1g* TOR – \_\_\_\_

118

This worksheet is a template to use if seeking to fill an open staff or consultant position. This form helps to describe the applicant that can fulfill the particular needs of a lab operation.

# 1h New Lab Profiles

125

Fill out this worksheet to describe the focus and background of a new innovation lab that is being added to the UNICEF Network.

Annex 1 • Worksheets

# 1a PILOT LAB TIMELINE

**UNICEF Innovation Lab DIY Guide** 

1/2 – Focal Point Research

LAB:			
			_

Background research is initially spearheaded by the lab focal point.

DATE:

# Internal Partners/Resources

PARTNER	CONTRIBUTION

### RESEARCH TIPS:

- Inquiry spearheaded by Country Office focal point.
- Interface with UNICEF sections for major areas of need.
- Encourage follow-up and collaboration on joint projects with stakeholders.

# External Partners/Resources

PAH	KINEK	CUNTRIBUTION

### **RESEARCH TIPS:**

- Develop a standard questionnaire for stakeholders.
- Prioritise the major development areas.
- Encourage stakeholders to elaborate on their specialty and particular input.
- Directly involve end-user participation.

# Narrow the Focus Area

1. GENERAL SUBJECT AREA:			
2. SPECIFIC SUBJECT AREA:			
3. PROJECT EXAMPLE(S):			
4. STATED GOAL/IMPACT:			

# 1a PILOT LAB TIMELINE

**UNICEF Innovation Lab DIY Guide** 

2/2 – Lab Lead Priorities

LAB:		
DATE:		

Continued lab development is managed by the newly-hired lab lead.

Retine	Concept	Note	(Refer to:	1C. Lab	Concept Note	Template)
NOTEC						

NOTES:		

# Create Detailed Budget Plan (Refer to: 1E. Budget Plan)

NOTI	ES:			

# Select and Launch Pilot Project

DESCRIBE THE ADDRESSED CHALLENGE:

DESCRIBE THE PROJECT STRATEGY:
220000200000000000000000000000000000000

# PROJECT TIPS:

- Identify an urgent yet addressable problem.
- Focus on the end-user benefit.
- Establish a concrete goal.
- Know which stakeholders are interested and able to collaborate on the project.
- Describe an explicit strategy for realizing objectives.
- Set realistic goals, and acknowledge the inherent limitations of a project.
- Research and identify similar innovation projects.

101



Attack rale wast de auga antation ar a cura a
DATE:
AB:

Attach relevant documentation or sources, or extra pages for further elaboration.

1. Objective and Targets
We are seeking an Innovations Officer to lead the development of the innovation lab in We imagine this lab to be a newly established space that focuses on
cultivating Innovations for the benefit of
The lab lead will need to map the landscape of current innovation efforts in, in collaboration with the CO, the Representative and with support of the Technology for Development team in NY. After that mapping, the lab lead will work to put together concrete plans for the lab, including creating the necessary operational documents for partnerships, a framework for monitoring it, and sustainable connections to the other UNICEF Innovation Labs via blog posts and other regular communications.
The officer will continue to work with UNICEF partners (and formalise those partnerships) to identify innovative projects based on open source, mobile, and social technologies; work with youth to develop and implement innovative projects that meet their needs; develop partnerships with a wide range of stakeholders including academia, technologists, public an private sectors; connect with global T4D (Technology for Development) efforts to ensure that the lab is in touch with global conversations.
BACKGROUND:

# 1b TOR – LAB LEAD (2/6) **UNICEF Innovation Lab DIY Guide**

# As such, the Innovations Lab(s) will be set up as spaces to:

- Connect partners to each other, and to UNICEF's areas of need
- Engage young people in those partnerships

Collaborate and share knowledge on innovation with other UNICEF labs
2. Duration
months Starting date:
3. Duty Station
, with possible travel.
4. Supervisor (must be a staff member)
The developer will be supervised by the Deputy Head of Office for
with support from the UNICEF Innovation Unit in New York wil
provide supervision at regular intervals in consultation with
5. Description of Assignment (provide detail and add pages if required)
Scope of Work:
• Under supervision of Head of Office (and in co-ordination with UNICEF Tech4Dev globally), manage overall innovation lab strategy/action plan, including formulation, design, planning and management, with a strategic focus on leveraging work being done with partners in
• Develop partnerships with a broad range of stakeholders involving youth, technology and innovation, both in (example: universities, ICT association, open source community, micro-grant funders, etc.) and internationally (example: UNICEF Tech4dev units, academic institutions abroad).

- Support the lab team in implementing scheduled projects and activities through identification and adaptation of institutional modalities and procedures
- Provide ongoing programmatic liaison and overall coordination between the lab and **UNICEF** sections

Annex 1 • Worksheets

# 1b TOR – LAB LEAD (3/6) UNICEF Innovation Lab DIY Guide

• Work with UNICEF sections and partners to formulate, design, implement, test, and scale appropriate technological interventions to solve data and information needs of UNICEF partners, with a focus on user-centered technology design.

# **Specifically:**

•	Understand UNICEF	priority areas.
•	Form existing lab material into an	specific 2-page lab document
•	Come up with a mapping structure for par	tners

- Identify the academic and private sector partners already doing work in: youth engagement, technology innovation, incubation, social development, mentoring, PPPs, etc.
- Describe possible focus areas for lab based on CO priority areas plus possible entry-points from partners (i.e. where there is mutual interest) and suggest three to five possible focus areas and which partners would be connected with them, and how young people would be engaged (i.e. as researchers, technologists, recipients, etc.)
- Plan convening meeting where UNICEF brings together the major possible stakeholders a) Bind them around the idea of youth enagement + innovation+ technology
  - b) Present the focus areas
  - c) Document this meeting
- Work with CO to identify best possible home for lab (where should it physically and contractually sit) particularly with reference to the fact that it could easily take advantage of work others are doing and should not duplicate effort, but possibly make more coherent or add onto existing work.
- Finalise TORs for the lab and hand them off to CO.
- Document all this work in bi-weekly blog posts.

# 6. Tangible & Measurable Outputs of the Work Assignment

•	specific 2-page lab document, with relevant appendices, or	outlining
	needs and possibilities.	

- 5-10 page partnership mapping
- Organised workshop with stakeholders in \_\_\_\_\_\_\_
- Operational documents needed for lab (1 major partnership document with government, academia and private sector completed)

# 1b TOR – LAB LEAD (4/6)

**UNICEF Innovation Lab DIY Guide** 

- TORs for lab, lab staff, and main projects (as per standard UNICEF TOR)
- Weekly documentation on a blog of this work.

# 7. Performance Indicators for Evaluation of Results

•	Delivery of products on dates specified to	
•	Communication with	and team about work
•	Quality of products (do they fit the needs a	as defined)

# 8. Qualifications or Specialised Experience Required

It is required that the lab lead has at least \_\_\_\_\_\_ years of experience with demonstrated results in the majority of the following areas:

- Advanced university degree in development, social policy, ICT technology, communications or related fields
- Five years of progressively responsible professional work experience in complex project management
- Language Requirements: Fluency in , and

# It is required that the lab lead has:

- Strong leadership skills; capacity to prioritise and manage a diverse range of staff members, projects and activities
- Demonstrated ability to do user-centered technology design and implementation
- Project management skills including task prioritization, budget monitoring and donor reporting, with support of Programme Assistant (based on agile methodology?)
- Ability to work with a diverse set of partners to create problem specifications, system requirements, and then implement software and technology innovations on a national scale (understanding constraints of working with various partners, but also the strengths of representing an international organization)
- Excellent communication and documentation skills; ability to represent the lab to a variety of stakeholders in a range of forums
- Ability to produce consistent operational documents (like TORs) which are clear, engaging and fit within UNICEF Rules and Regulations.

# 1b TOR - LAB LEAD (5/6) UNICEF Innovation Lab DIY Guide

12. Approved by		Signature Date:
11. Prepared by Section:	Title:	Signature Date:
10. Special Notes		

# 1b TOR — LAB LEAD (6/6) UNICEF Innovation Lab DIY Guide

# **HOW TO APPLY**

Qualified candidates are requested to submit a cover letter, CV a	nd UN Personal History
form (which can be downloaded at:	
to (email address):	
with subject line:	
by (date):	
Please indicate your ability, availability, and daily rate to underta	

UNICEF IS A SMOKE FREE ENVIRONMENT / QUALIFIED FEMALES AND MINORITIES ARE ESPECIALLY ENCOURAGED TO APPLY

**Established Date:**\_

# 1c TOR – LAB CONCEPT NOTE (1/5)

**UNICEF Innovation Lab DIY Guide** 

	LAD.	
	DATE:	
1 Overview	Attach relevant documentation or sources,	
1. Overview	or extra pages for further elaboration.	
Problem Statement:		
Strategic Focus Area(s)		
1.		
2.		
3.		
4.		
5.		
<b>Expected Outputs</b>		

Implementing Period:\_

# 1C TOR – LAB CONCEPT NOTE (2/5)

**UNICEF Innovation Lab DIY Guide** 

# 2. Pilot Phase

Describe the preparation phase:
3. The Lab Mandate
Example: The lab offers support for the advancement of in strategic focus areas.

Annex 1 • Worksheets

# 1c TOR – LAB CONCEPT NOTE (3/5)

**UNICEF Innovation Lab DIY Guide** 

4. Structure and Governance			
Oversight to the lab and its operation is currently provided by UNICEF.			
Oversight is performed in collaboration with implementing partner			
Direct leadership is provided by the Country Representative.			
The lab is managed by a Senior Technical Advisor working with a small team of staff employed on a contract basis. All staff is recruited according to UNICEF regulations and subject therefore to conditions of service stipulated by the United Nations.			
Currently the staff comprises of:			
5. Collaborating Partners			
The lab has established a strong network of local partnerships, including:			

# 1C TOR – LAB CONCEPT NOTE (4/5)

**UNICEF Innovation Lab DIY Guide** 

6. Planned Activit	ies
	rails of activities and outputs by specific time frame (in this case with an estimated budget for expected outcomes for each domain
listed below:	with an estimated budget for expected outcomes for each domain
7. Review Process	
A regularly scheduled progress against intended t	review process will be employed to monitor argets and results.
The	_ Innovation Lab is also subject to and compliant with, internal
(UNICEF) review processe	s.

# 1C TOR – LAB CONCEPT NOTE (5/5)

# **UNICEF Innovation Lab DIY Guide**

# 1d BUDGET PLAN UNICEF Innovation Lab DIY Guide

1/3 – Lab Planning

LAB:	
DATE:	
PROJECT:	
Develop an accurate lab cost analysis.	

# Staff

POSITION	SALARY (MONTHLY)

**EXAMPLES**: lab lead, software developer, etc.

### **SMART BUDGET OPTIONS:**

- Lab personnel must fill a multitude of roles.
- Seeking out and capitalizing upon project partnerships often fills necessary roles and increases productive collaborative input.
- A mutually valuable and sustainable asset is created by developing volunteer and training programs.

# Equipment

ITEM TYPE	COST

**EXAMPLES**: furniture, technology, office supplies

# SMART BUDGET OPTIONS:

- Equipment needed should be a vital part of normal lab operation.
- Materials can often be donated to the lab in support of the lab's mission. Barter is also possible, in exchange for services provided by the lab or its participants.
- Procure bids from approved UNICEF vendors. Local vendors provide mutual value and are often more economically sustainable.

# **Physical Space**

ITEM TYPE	COST (MONTHLY)

**EXAMPLES**: rent, utilities, maintenance

### **SMART BUDGET OPTIONS:**

- Presently unused space can be utilised as a lab, or space can be donated by a collaborating partner.
- Utility rates and/or internet connectivity can also be negotiated or donated.
- Start small—as project ventures grow and diversify, look for lab expansion opportunities.

# 1d budget plan

**UNICEF Innovation Lab DIY Guide** 

2/3 – Project Planning

LAB:			
DATE:			
PROJECT:			

Provide an accurate project cost analysis.

# Consultants

POSITION	SALARY (MONTHLY)

**EXAMPLES:** Field Researcher, Project Manager

### **SMART BUDGET OPTIONS:**

- Consultants often perform a multitude of roles, and can be added to the operation in order to fulfill particular project demands.
- Volunteer consultants or academic fellows can be important assets to lab operation.

# **Project Contracts**

ITEM TYPE	COST

**EXAMPLES**: mobile providers, youth grants

### **SMART BUDGET OPTIONS:**

- MoU's or contracts with mobile and technology providers can result in lower negotiable rates.
- Grant funding can sponsor projects by youth lab participants, whose efforts also publicise the lab's activities.

# **Project Events & Supplies**

ITEM TYPE	CO	DST
	_	
	_	

**EXAMPLES**: content development, event hosting

### **SMART BUDGET OPTIONS:**

- Develop content and training with resources and consultants shared by partners, where possible.
- Take advantage of sponsorships, grants, and donations when organizing and hosting public events.
- Materials can often be donated in support of the particular project. Barter is also possible, in exchange for services provided by the lab or its participants.
- Procure bids from approved UNICEF vendors. Local vendors provide mutual value and are often more economically sustainable.
- Perform surveys with existing field participants, and tailor studies to align with existing practices.

# 1d BUDGET PLAN

**UNICEF Innovation Lab DIY Guide** 

3/3 – Total Calculations

# Lab Planning

Staff		
Equipment	_ +	
Physical Space	+	
	=	

LAB:
DATE:

PROJECT:

Totaling both budgets provides a clear picture of the pilot lab's cost expectation.

### **SMART FISCAL PLANNING:**

Lab expenditures provide a platform for project successes. A lab is an investment made in order to bring collaborators together, and to help innovation grow more sustainably.

A lab is also a tangible product that can attract partners and sponsorships. This provides a model to optimise the relationship between funding and results.

# Project Planning

Consultants		
Contracts	+	
Events & Supplies	+	
	=	

### **SMART FISCAL PLANNING:**

Individual project costs are more streamlined and collaborators expand project goals as a result of a lab. Experimentation carries less risk and provides more opportunities for reward.

One project builds upon another within the innovation model. Labs across UNICEF Innovation Network share mutual successes, reducing the waste of resources.

**ESTIMATED EXPENDITURES** 

PLANNING PERIOD (MONTHS)

**ESTIMATED LAB BUDGET** 

113

NOTES:

# 1e ACTIVITY EVALUATION LAB

**UNICEF Innovation Lab DIY Guide** 

1/2 – Setting Realistic Goals

:	
E:	

PROJECT:

Attach relevant documentation or sources.

Descri	ption	of	Ac	tiv	rity
--------	-------	----	----	-----	------

INCLUDE: RELATION TO AN EARLIER PROJECT OR ACTIVITY

# **Established Goal**

INCLUDE: A SPECIFIC BENCHMARK, ACKNOWLEDGED LIMITATIONS	

# 1e ACTIVITY EVALUATION

**UNICEF Innovation Lab DIY Guide** 

# 2/2 – Analyzing Outcomes

DATE:			

Attach relevant documentation or sources.

# Actual Outcome

INCLUDE: OBSTACLES ENCOUNTERED, ANY CHANGES IN PROJECT STRATEGY AND WHY

# Opportunities for Improvement

INCLUDE: FUTURE DIRECTIONS TO BE TAKEN, LESSONS LEARNED	

# 1f FLOORSPACE PLAN

**UNICEF Innovation Lab DIY Guide** 

AB:		
ATE:		

# 1/2 – Lab Function Options

# **Prioritise the Functional Considerations**

The spatial layout is dictated by the most fundamental lab activities (brainstorming, prototyping, meetings, office work). Plan out multi-use spaces that maximises flexibility in a fixed amount of space.

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	•			9	
		<u>\</u>	<b> </b>		

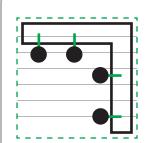
# brainstorming sessions

Seating is oriented so that everyone has a good view of presentation materials, and so that it can facilitate discussion.

people density = high

OURS	
ER WEEK:	

**NUMBER OF PEOPLE:** 



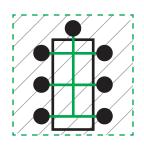
# prototyping workshop

A workshop is a specialised space, a mechanic's shop or garage can be used for this purpose. Needs larger access doors, ventilation, noise and debris tolerance.

people density = low

Н	0	U	RS	3			
P	E	R	W	E	E	K	:

**NUMBER OF PEOPLE:** 



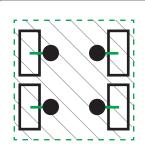
# meetings

A formal space to meet and evaluate, host conference calls, set agendas, and strategise with stakeholders.

people density = medium

HOU	RS	
PER	WEEK:	

NUMBER	
OF PEOPLE:	



# office space

Workspace dedicated to staff and regular volunteers, for necessary deskwork.

people density = medium

HOU	IRS
PER	WEEK:

**OF PEOPLE:** 

NUMBER

1f FLOORSPACE PLAN

**UNICEF Innovation Lab DIY Guide** 

LAB:		
DATE:		

# 2/2 - Space Size & Allocation

# Size Requirements

# **Space Allocation**

Draw the parallel lines signifying different lab functions to plan what activities can go where in the space

Draw the paralle			+	
brainstorming				
prototyping	1	sketch out the size	and space allocation	
meetings				
office space				

10 TOR –	(1/7) <sup>L/</sup>	AB:
	<u>D</u>	ATE:
UNICEF Innovation Lab DIY Guide	PI	ROJECT:
1. Objective and Targets		ttach relevant documentation or sources, rextra pages for further elaboration.
f you are a committed, creative professional and erence for children, the world's leading children ou. For 60 years, UNICEF has been working of promote children's survival, protection and detactions for developing countries, UNICEF supund sanitation, quality basic education for all befrom violence, exploitation, and AIDS.	n's rights on the grou levelopme ports chil	organization would like to hear from and in 190 countries and territories nt. The world's largest provider of d health and nutrition, good water
om violence, exploitation, and AIDS.		
Background		
Background		

<i>1g</i> TOR –	(2/7)
UNICEF Innovation Lab DIY Guide	
2. Duration The contract will cover a period of	months.
This spans from to	·
3. Duty Station	, with possible travel.
4. Supervisor (must be a staff member) The developer will be supervised by the Deputy with support from the UNICEF Technology for Supervisor:	y Head of Office for UNICEF, r Development Unit in New York.
Frequency of performance reviews:	
5. Description of Assignment (	provide detail and add pages if required)

<i>1g</i> TC	)R –	 (3/7)

**UNICEF Innovation Lab DIY Guide** 

Specifically:

<i>1g</i> TOR – .	(4/7)

**UNICEF Innovation Lab DIY Guide** 

6. Tangible & Measurable Outputs of the Work Assignment Include delivery dates and details as to how the work must be delivered (e.g. electronic submission, hard copy, what computer program should be used, etc.)
7. Performance Indicators for Evaluation of Results

1g TOR -	(5/7)
19 1011	(3/1

# **UNICEF Innovation Lab DIY Guide**

8. Qualifications or Specialised Experience Required

g TOR –	 (6/7)

# **UNICEF Innovation Lab DIY Guide**

9. Payment Plan		
,		
10. Special Notes		
11. Prepared by		
Section:	_ Title:	_ Signature Date:
12. Approved by		

Section: \_\_\_\_\_ Signature Date: \_\_\_\_

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<i>1g</i> TOR –	(7/7)
O	

UNICEF Innovation Lab DIY Guide	
HOW TO APPLY  Qualified candidates are requested to submit a cover letter, CV and UN Personal History form (which can be downloaded at: to (email address): with subject line: by (date):	)
Please indicate your ability, availability, and daily rate to undertake the terms of reference above. Applications submitted without a daily rate will not be considered.  UNICEF IS A SMOKE FREE ENVIRONMENT / QUALIFIED FEMALES AND MINORITIES ARE ESPECIALLY ENCOURAGED TO APPLY	

<i>1h</i>	NEW LAB PROFILES (1/3)
	UNICEF Innovation Lab DIY Guide

LAB:			
DATE:			

Attach relevant documentation or sources.

This form can be used to decribe the activity and background of a new lab. Attach any supporting documentation if further explanation is necessary, and also include representative photography of the new lab in order to complete the profile. Refer to the existing lab profiles for examples.

The Lab-at-a-Glance	
Launch Date:	
Primary Research Direction:	
Partners:	
Pilot Project Title:	
Lab Contact:	
Local Context	
Describe a longstanding bottleneck or societal issue that the new lab is intended to address	ess.



# Programme Background and Development Area Focus

Describe the particular programme background and how that is translated into a development area focus for the new innovation lab.
An Innovation Project that Informs the Lab's Pilot Project Enumerate the innovation project(s) that the objectives of the pilot project are based upon.

# 1h NEW LAB PROFILES (3/3)

**UNICEF Innovation Lab DIY Guide** 

The Lab's Pilot P	ro	iect
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Describe the expected out	new lab's definitive pilo omes.	ot project, takin	g care to includ	le specific objecti	ves and
Core Sta	ff/Secondmen	ts/Volunte	ers		
	personnel that const			nd their respectiv	e roles.

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# Primary Lab Leadership

# LAB LEAD TOR

# 1. Objective and targets (Attach background documents, if necessary)

We are seeking an Innovations Officer to lead the development of the innovation lab in **[Country\_Name]**. We imagine this lab to be a newly established space that focuses on cultivating Innovations for the benefit of **[Country\_Office\_Name]**'s youth and children, and supports other innovation labs in UNICEF.

The lab lead will need to map the landscape of current innovation efforts in **[Country\_Office\_Name]**, in collaboration with the CO, the Representative and with support of the Technology for Development team in NY. After that mapping, the lab lead will work to put together concrete plans for the lab, including creating the necessary operational documents for partnerships, a framework for monitoring it, and sustainable connections to the other UNICEF innovation labs via blog posts and other regular communications.

The officer will continue to work with UNICEF partners (and formalise those partner-ships) to identify innovative projects based on open source, mobile, and social technologies; work with youth to develop and implement innovative projects that meet their needs; develop partnerships with a wide range of stakeholders including academia, technologists, public an private sectors; connect with global T4D (Technology for Development) efforts to ensure that the lab is in touch with global conversations.

# **Background:**

[Country\_Name] has a large youth population with high levels of unemployment and low levels of participation in decision-making processes. Second, [Country\_Name]'s institutions are looking for ways to engage young people to develop new systems to collect, manage, manipulate, visualise, and disseminate data and to create other innovations. Meanwhile, globally, it has emerged that open source, mobile, and social networking technologies can provide an unprecedented opportunity to solve problems on behalf of vulnerable populations.

As such, the innovations lab(s) will be set up as spaces to

- Connect partners to each other, and to UNICEF's areas of need
- Engage young people in those partnerships
- Collaborate and share knowledge on innovation with other UNICEF labs

2. Duration:		
mont	ths Sta	rting date:
3. Duty station:		

[City\_Name], [Country\_Name], with possible travel

# 4. Supervisor (must be a staff member):

The developer will be supervised by the Deputy Head of Office for UNICEF [Country\_Name], with support from the UNICEF Technology for Development Unit in New York. [Supervisor\_Name] will provide supervision at regular intervals in consultation with

# **5.** Description of assignment (provide detail and in quantitative terms, add pages if required)

# **Scope of Work:**

- Under supervision of Head of Office (and in co-ordination with UNICEF Tech4Dev globally), manage overall innovations lab strategy/action plan, including formulation, design, planning and management, with a strategic focus on leveraging work being done with partners in [Country\_Name]
- Develop partnerships with a broad range of stakeholders involving youth, technology and innovation, both in [Country\_Name] (example: universities, ICT association, open source community, micro-grant funders, etc.) and internationally (example: UNICEF Tech4dev units, academic institutions abroad).
- Support the lab team in implementing scheduled projects and activities through identification and adaptation of institutional modalities and procedures
- Provide ongoing programmatic liaison and overall coordination between the lab and UNICEF sections
- Work with UNICEF sections and partners to formulate, design, implement, test, and scale appropriate technological interventions to solve data and information needs of UNICEF partners, with a focus on user-centered technology design.

# **Specifically:**

- Understand UNICEF [Country Name] priority areas.
- Synthesise existing lab material into an [Country\_Name]-specific 2-page lab document
- Come up with a mapping structure for partners
- Map out existing academic and private sector partners who are already doing work in the spaces of: youth engagement, technology innovation, incubation, social development, mentoring, PPPs, etc.
- Describe possible focus areas for lab based on CO priority areas plus possible entrypoints from partners (i.e. where there is mutual interest) and suggest three to five possible focus areas and which partners would be connected with them, and how young people would be engaged (i.e. as researchers, technologists, recipients, etc.)
- Plan convening meeting where UNICEF brings together the major possible stakeholders
- Bind them around the idea of youth enagement + innovation+ technology
- Present the focus areas
- Document this meeting

- Work with CO to identify best possible home for lab (where should it physically and contractually sit) particularly with reference to the fact that it could easily take advantage of work others are doing and should not duplicate effort, but possibly make more coherent or add onto existing work.
- Finalise TORs for the lab and hand them off to CO.
- Document all this work in bi-weekly blog posts.

# **6.** Tangible & measurable outputs of the work assignment (End Products):

- [Country\_Name]-specific 2-page lab document, with relevant appendices, outlining needs and possibilities.
- 5-10 page partnership mapping
- Organised workshop with stakeholders in [Country\_Name]
- Operational documents needed for lab (1 major partnership document with government, academia and private sector completed)
- TORs for lab, lab staff, and main projects (as per standard UNICEF TOR)
- Weekly documentation on a blog of this work.

### 7. Performance indicators for evaluation of results:

- Delivery of products on dates specified to [Supervisor\_Name]
- Communication with [Supervisor\_Name] and team about work
- Quality of products (do they fit the needs as defined)

### 8. Qualifications or specialised knowledge/experience required:

# It is required that the lab lead has at least [number] years of experience with demonstrated results in the majority of the following areas:

- Advanced university degree in development, social policy, ICT technology, communications or related fields
- Five years of progressively responsible professional work experience in complex project management

• ]	Language Require	ments: Fluency in	, and

### It is required that the lab lead has:

- Strong leadership skills; capacity to prioritise and manage a diverse range of staff members, projects and activities
- Demonstrated ability to do user-centered technology design and implementation
- Project management skills including task prioritization, budget monitoring and donor reporting, with support of Programme Assistant (based on agile methodology?)
- Ability to work with a diverse set of partners to create problem specifications, system requirements, and then implement software and technology innovations on a national

- scale (understanding constraints of working with various partners, but also the strengths of representing an international organization)
- Excellent communication and documentation skills; ability to represent the lab to a variety of stakeholders in a range of forums
- Ability to produce consistent operational documents (like TORs) which are clear, engaging and fit within UNICEF Rules and Regulations.

### 9. Payment Plan

# 10. Special Notes:

# 11. Prepared by:

Section: Title: Signature Date:

### 12. Approved by:

Section: Title: Signature Date:

# UNICEF-TECH4DEV COORDINATOR (TOR)

# 1. Objective and targets (Attach background documents, if necessary)

UNICEF [Country\_Name] wishes to hire a "Mobiles for Development" coordinator to manage the various T4D projects across the Country Office.

Objective: Coordinate and launch various T4D initiatives for UNICEF **[Country\_Name]**. Project coordinator will need to work across all sections in UNICEF Sudan, and interact with necessary Government, UN, NGO and private sector partners.

Targets: T4D initiatives demonstrate value and utility for the UNICEF [Country\_Name] country programme. (Baselines = rapid development of projects, partnerships, new data sets, failures, successes, national scalings)

2. Duration:		
months	Starting date:	
3. Duty station:		

[City\_Name], [Country\_Name], with possible travel

# 4. Supervisor (must be a staff member):

The developer will be supervised by the Deputy Head of Office for UNICEF
[Country_Name], with support from the UNICEF Technology for Development Unit
in New York.[Supervisor_Name] will provide supervision at regular intervals in con
sultation with

# **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

- Technical oversight and coordination of UNICEF [Country\_Name] Technology for Development initiatives:
- Coordinate the pilot with programme counterparts in UNICEF [Country\_Name], and in consultation with UNICEF NYHQ Tech Innovation
- Coordinate with other local partners in the mobiles for development area to look and exploit synergies.
- Coordinate with programme colleagues, local and international developers to ensure that technical components are identified and developed, partner relationships forged and maintained, mechanisms for sustainability developed and addressed, and other programmatic goals met in a timely manner.
- Consult, coordinate and achieve buy in from open source mobile system of choice on technical and non-technical community during the duration of the pilot
- Advise on negotiation with mobile phone providers, in consultation with UNICEF NYHQ Tech Innovation efforts in this area

- With Country Office, coordinate training and roll-out of demonstration project
- Provide ongoing and final documentation of implementation and scale up process, including challenges encountered and lessons learned, and Government and partner involvement in provision of technical, financial, and other programmatic support.
- Coordination and sharing of lessons learned across the organization in consultation with supervisor and UNICEF NYHQ Tech Innovation
- Contribute to overall monitoring and evaluation framework of the UNICEF country programme
- Documentation and setting up of clear monitoring and evaluation mechanisms for the projects including baseline data collection, necessarily on-going monitoring, as well as end of pilot phase data collection and analysis.
- Feeding of lessons learned into UNICEF knowledge management process:
- Input information on process, lessons learned, outcomes etc into relevant communities of practice.
- Participate and feed in to guidelines on how to standardise the process of using mobiles for development to amplify programmatic outcomes for other Country Offices
- Will be asked to travel in line with UNICEF rules and regulations to perform tasks outlined.
- · May be asked to work weekends

# 6. Tangible & measurable outputs of the work assignment (End Products):

- Online documentation in blog format of process and key findings
- Monitoring and evaluation framework
- Support to UNICEF [Country\_Name] for T4D scaleup
- Ongoing and final documentation of implementation and scale up process, including challenges encountered and lessons learned, and Government and partner involvement in provision of technical, financial, and other programmatic support.
- Integrated, deployed and hosted systems in UNICEF [Country\_Name]
- Local developer(s) hired and mentored through project deployment sustainability measures planned and budgeted for
- End user focused tool and documentation that can be relayed using Training-of-trainers
- Costed plan for scale up endorsed by UNICEF and appropriate partners
- Use of SMS to strengthen realtime reporting operational in various districts
- Delivery dates and details as to how the work must be delivered (e.g. electronic submission, hard copy, what computer program should be used, etc.): <To be determined by UNICEF [Country\_Name]>
- Consultant will provide weekly delivery of materials (or delivery based on schedule arranged with supervisor, if other than weekly)
- Will ensure that any and all system code used in [Country\_Name] CO's T4D projects are submitted to GitHub, as well as on accessible servers.

- Work will be licensed in the public domain (Creative Commons or other appropriate licenses)
- Monthly report on the progress of work to both UNICEF [Country\_Name] and NYHQ

### 7. Performance indicators for evaluation of results:

- Delivery of products on dates specified to [Supervisor\_Name]
- Communication with [Supervisor\_Name] and team about work
- Quality of products (do they fit the needs as defined)

# 8. Qualifications or specialised knowledge/experience required:

# It is required that the project coordinator has at least 5 years experience with demonstrated results in the majority of the following areas:

- Innovative uses of Technology for Development, particularly in the areas of data, mobiles, open source and health.
- Identifying a baseline, and measuring improvements in coverage and uptake, geographic expansion, etc.
- Training experience
- Programme communication / Communication for Development experience
- Background experience with the UN, especially UNICEF is desirable
- It is required that the project coordinator have:
- Demonstrated communication and relationship building skills
- Good oral and written presentation skills
- Experience in creating spaces and environments that are conducive to team participation and effective coordination
- Proven capacity to work with and lead collaborative teams across different locations and with different technical skills
- Experience in budgeting and coordinating large scale projects
- Clear upward communication and management skills

## 9. Payment Plan:

Monthly payment based on outputs to deliverables, certified upon monthly review and report with supervisor. UNICEF recourse in case of unsatisfactory performance: Payment will only be made for work satisfactorily completed and accepted by UNICEF.

# 10. Special Notes:

11. Prepared by:

12. Approved by:

# UNICEF - SUDAN: TERMS OF REFERENCE (TOR)

# TECHNOLOGY FOR DISABILITIES PROJECT COORDINATOR

# 1. Objective and targets (Attach background documents, if necessary)

### **Background**

Vocational training in computer programming and engagement with the open-source community can uniquely empower children with disabilities. These activities can help them potentialise their abilities, turning them into assets, and enable them to become critical stakeholders in an emergent technological community. UNICEF Sudan is interested in training hearing-disabled youth, both in Sudan and as part of a larger global initiative.

# **Objective**

Support UNICEF Sudan's work on Innovation and T4D for disabled individuals. Specifically, teaching modern and in-demand programming skills using open source programming languages. This pilot project will have a very specific focus, and day-to-day support needs. This consultant will need to respond to the daily needs while creating the necessary draft documents for scaling the projects to other areas, with larger focus.

# 2. Duration:

### 3. Duty station:

Khartoum

### 4. Supervisor (must be a staff member):

The staff member will be supervised by the relevant Sudan CO Section, with support from and collaboration with the NYHQ Innovation Unit (SD) and DPP / Disabilities.

# 5. Description of assignment: (provide detail and in quantitative terms, add pages if required)

- Sudan CO focal point for open source technology training project including administration of necessary tasks, recommending of, and monitoring of partnerships and supporting the Country Offices as necessary.
- Collaborate with NYHQ and other COs as necessary to ensure there is frequent and constructive communication and collaboration between UNICEF's T4D disabilities projects worldwide.

- Support Sudan CO in crafting TORs and other necessary documents.
- Input into strategy around disabilities work in innovation labs.
- Support to Child Friendly Technology framework to include several worksheets on disabilities and to finalise materials coming from CFT mission to Sudan.
- Support HQ in planning meetings in 2011 and 2012 in order to bring experts together to discuss this topic.
- Provide day-to-day monitoring of Country Office projects.
- Produce 200-300 word blog posts every two weeks on major issues on technology and innovation for /with disabilities at UNICEF.
- Monthly two-page progress reports on T4D Disabilities project.
- Produce framework documents explaining how to replicate successes and apply lessons from failures in the pilot Country Office projects to other projects.
- Produce relevant communications materials (presentations, documents etc.) for internal and external stakeholders.
- Produce drafts of key documents (budgets, logframes, M&E frameworks, partnership agreements, etc).

# 6. Tangible & measurable outputs of the work assignment (End Products):

- Documentation of full process (what worked, what didn't, what documents were used) so that other COs can replicate and scale.
- Blog posts (every two weeks).
- Monthly two-page updates on two Country Office projects, and HQ's involvement in them.
- Draft "Disabilities in Lab" document for Sudan (5 pages plus visuals).
- Update to CFT worksheets produced by NYHQ based on experience of Sudan CO.
- Final consultancy report.

### 7. Performance indicators for evaluation of results

The Consultant will be responsible for ensuring the timely completion of all deliverables meeting defined and agreed quality standards

# 8. Qualifications or specialised knowledge/experience required for the assignment

- Understanding of disabilities issues.
- Knowledge of and experience with international development.
- Experience working with ICT projects and policy
- Ability to coordinate and effectively communicate with multiple organizations
- Excellent communication skills in Arabic and English
- Prior work with children-focused projects
- Experience with open source technology.

### 9. Payment Plan:

Payment to be made monthly upon receipt of signed invoice, based on the number of actual working days.

Notes: These dates will be adjusted to reflect the actual starting date of the consultancy. The consultant will not be paid for UN holidays or days not worked.

10. Special Notes:

11. Prepared by:

12. Approved by:

# Administrative

### PROGRAMME ASSISTANT (TA, GS-6)

### 1. Objective and targets (Attach background documents, if necessary)

Under general supervision of Innovation Officer, performs data collection and processing, assists Innovation Officer in monitoring of innovations lab activities, provides technical and administrative services, in support of innovations lab activities.

2. Duration:		
months	Starting date:	
3. Duty station:	Paratus Namal mith marible torrel	
[City_Name], [C	country_Name], with possible travel	
4. Supervisor (m	ust be a staff member):	
Project Coordina	tor:	
Frequency of per	formance reviews:	

### 5. Description of assignment: (provide detail and in quantitative terms, add pages if required)

- Build and manage a repository of information materials which includes PowerPoint presentations, guidance, concept notes, reports, proposals, photographs and documents.
- Organises data and information, prepares and maintains records, documents and control plans for the lab activities.
- Participates in internal meetings with UNICEF (i.e. IRC meetings) as well as meetings with public institutions, UN organizations, NGOs, and other stakeholders.
- Contributes to the preparation of reports, project documents and submissions to other departments and projects by providing information, preparing tables and drafting relatively routine sections.
- Prepares background information for use in discussions with partners, public institutions, UN organizations, NGOs, and other stakeholders.
- Scrutinises plans of operations and takes appropriate follow-up action.
- Assists in the administrative process of other departments requests for assistance.
- Carry out specific administrative, financial, and operational tasks to support Innovations lab programmes and activities.
- Perform other duties, as required

### 6. Tangible & measurable outputs of the work assignment (End Products):

Delivery dates and details as to how the work must be delivered (e.g. electronic submission, hard copy, what computer program should be used, etc.)

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

### **Required Qualification:**

- Completion of secondary education, preferably supplemented by technical or university courses in a field related to the work of UNICEF and innovation labs.
- Ability to understand and use complex computer software.
- Fluency in English and local working languages of the duty station.
- Core Competencies: Communication, Working with People, and Drive for Results
- Functional Competencies: Following instructions and procedures, Analyzing, Applying Technical Expertise and Planning and Organizing

### **Work Experience:**

9. Payment Plan:

12. Approved by:

- Six years of progressively responsible clerical or administrative work, of which at least one year is closely related to support of programme activities.
- Experience working in the UN or other international development organization, and field work experience.

•	
. Special Notes:	
. Prepared by :	

## FINANCE & ADMINISTRATION ASSISTANT

2. Duration:

### 1. Objective and targets (Attach background documents, if necessary)

The main focus of the Finance & Administration Assistant is to assist and support the Finance & Administration Officer of PEN's project UNICEF Innovations Lab Kosovo – By Youth for Youth pillar.

months	Starting date:	
3. Duty station:		
[City_Name], [Co	ountry_Name], with possible travel	
4. Supervisor (m	ıst be a staff member):	
Financial and Adı	ministration Officer and Project Coordin	ator
Frequency of perf	ormance reviews:	

### **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

- Helping the Finance and Administration Officer to maintain the finances of the Innovations Lab and of the BYFY projects.
- Preparing the contracts for approved BYFY projects in accordance with the financial documents.
- Providing financial and administrative advice to the BYFY beneficiaries during each stage of their project.
- Assisting the Finance & Administration Officer in budget planning and tracking expenses for each project (involving PEN's financial involvement (BYFY or Innovations Lab).
- Under the Financial and Administration Officer, the F&A Assistant will mentor and support project leaders in the development of their project, he/she will assist in the development of appropriate material and help document the financial and administrative work of the lab. The F&A Assistant will show patience and resourcefulness while working with inexperienced youth.
- The Finance and Administrative Assistant will be responsible to accomplish all his/ her duties with the utmost attention to details, communicating effectively with the BYFY team and UNICEF Youth Office when necessary.

### 6. Tangible & measurable outputs of the work assignment (End Products):

Delivery dates and details as to how the work must be delivered (e.g. electronic submission, hard copy, what computer program should be used, etc.)

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

- At least 3-year experience working in finance and administration
- Experience working with Civil Society Organizations, preferably with young people.
- Experience in budget planning

12. Approved by:

- Excellent interpersonal and representational skills
- Fluency in written and spoken English and Albanian
- Academic degree in relevant field or relevant experience

9. Payment Plan:		
10. Special Notes:		
11. Prepared by:		

### MONITORING AND EVALUATION TEAM

### 1. Objective and targets (Attach background documents, if necessary)

**The m**ain focus of the Monitoring and Evaluation team is to monitor and evaluate all the By Youth for Youth projects, by meeting high monitoring standards.

### 2. Duration:

### 3. Duty station:

### 4. Supervisor (must be a staff member):

**Project Coordinator** 

Supervisor and frequency of performance reviews:

### 5. Description of assignment: (provide detail and in quantitative terms, add pages if required)

- Monitoring and evaluating all the By Youth for Youth projects
- Collecting a wide range of data showing the impact of the By Youth for Youth projects and supporting the strengthening of the BYFY pillar.
- Developing appropriate monitoring material and system to help BYFY team leader be accountable to the innovation lab and follow reports' deadline
- Monitoring and supporting the establishment of the Regional Focal Persons and help them in their outreach
- Outreaching throughout Kosovo, with a special focus on rural areas and most the excluded communities

### 6. Tangible & measurable outputs of the work assignment (End Products):

Delivery dates and details as to how the work must be delivered (e.g. electronic submission, hard copy, what computer program should be used, etc.):

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

- A minimum of 2 years' experience working on the monitoring and evaluation of project
- $\bullet$  At least 3 years' experience working with Civil Society Organizations, preferably with youth

- The ability to work as a part of a small and a big team including responding to ad hock request outside the job description
- High level of motivation, ability to show initiative and work independently
- Excellent interpersonal and representational skills
- Fluency in written and spoken English, Albanian and Serbian (desirable)
- Driving license desirable
- Academic degree in relevant field or relevant experience
- 9. Payment Plan:
- 10. Special Notes:
- 11. Prepared by:
- 12. Approved by:

### **COMMUNICATION OFFICER**

### 1. Objective and targets (Attach background documents, if necessary)

The main focus of Communication Officer is to keep the visibility of the Innovations lab high by engaging various media throughout Kosovo and abroad as well as to support young people in developing good communication strategy.

- 2. Duration:
- 3. Duty station:
- 4. Supervisor (must be a staff member): Project Coordinator

Supervisor and frequency of performance reviews:

- **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)
- Preparing a communication strategy for the Innovations Lab By Youth for Youth, in liaison with UNICEF Communication Section
- Keeping the communication material of the Innovations Lab up-to-date and being at the vanguard of innovative communication tools
- Writing press releases, articles and blogs to promote By Youth for Youth projects, as well as to support the overall communication strategy of the Innovations Lab, keep the Facebook and Twitter page updated, and taking care of the content of the website
- Providing communication advice to By Youth for Youth project leaders
- Producing several visual materials to support the documentation of the lab, e.g.
  produce different interviews with By Youth for Youth project leaders, develop a portfolio for the lab etc.
- 6. Tangible & measurable outputs of the work assignment (End Products):

Delivery dates and details as to how the work must be delivered (e.g. electronic submission, hard copy, what computer program should be used, etc.):

7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

- At least 3 years experience working on communications, public relations and/or journalism
- At least 1 years experience working with Civil Society Organizations, preferably with vouth
- The ability to work as a part of a small and a big team including responding to ad hock request outside the job description
- High level of motivation, ability to show initiative and work independently
- Excellent interpersonal and representational skills
- Fluency in written and spoken English, Albanian and Serbian (desirable)
- Academic degree in Communication, Journalism or other relevant field

9. Payment Plan:		
10. Special Notes:		
11. Prepared by :		
12. Approved by:		

### LOGISTICS OFFICER

### 1. Objective and targets (Attach background documents, if necessary)

The main focus of the Logistic Officer is to maintain the physical space of the Innovations Lab (lab's assets).

2. Duration:

3. Duty station:

4. Supervisor (must be a staff member):

### **Project Coordinator**

Supervisor and frequency of performance reviews:

### **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

- Maintain the physical space of the Innovations Lab, including the lab's assets and its two cars
- Following up with the procurement procedures of different equipment
- Driving the Innovations Lab's staff on field and official trips
- Be able to face unexpected tasks and find appropriate and creative solutions to problems

### 6. Tangible & measurable outputs of the work assignment (End Products):

Delivery dates and details as to how the work must be delivered (e.g. electronic submission, hard copy, what computer program should be used, etc.):

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

- At least 5 years' driving experience
- At least 2 years' experience working in logistics
- The ability to work as part of a small and a big team including responding to ad hock request outside the job description

- High level of motivation, ability to show initiative and work independently
- Excellent interpersonal and representational skills
- Fluency in written and spoken Albanian and Serbian English (desirable)
- Driving license (Category A, B)

9.	Paym	ent	$\mathbf{P}$	lan:
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10. Special Notes:

11. Prepared by:

12. Approved by:

### UNICEF - UGANDA: TERMS OF REFERENCE (TOR)

### SYSTEMS ADMINISTRATOR, T4D UNIT

### 1. Objective and targets (Attach background documents, if necessary)

### **Background**

Overview: UNICEF Uganda in Kampala is recruiting a Systems Administrator consultant to its Technology for Development Unit. The candidate should have proven experience in installing, supporting and maintaining Linux-based servers and applications, and planning for and responding to service outages and other problems promptly and efficiently to support the work of an international organization.

The consultant will be responsible for serving as Systems Administrator and offer related programming and testing support for all Information Systems currently set up for UNICEF Uganda's T4D projects, including:

- Maintenance and trouble-shooting of Database and Web Servers running different RapidSMS application, LAMP and Map Servers
- Managing and maintaining two small office networks
- Support the setup and configuration of Linux based Server and Desktop systems at the UNICEF Innovation Center
- Administration of servers running the ProxMoxserver hardware virtualization platform
- Support and running of the servers hosting the DevTrac system

### **Purpose of Assignment**

#### ASSIST UNICEF'S T4D UNIT IN:

- Maintenance and trouble-shooting of Database and Web servers running different RapidSMS and CMS applications, LAMP (Linux, Apache, MySQL and PHP) and Mapping server, including:
- Administration of a variety of database systems including Microsoft SQL Server, PostgreSQL, MySQL, MongoDB and MS Access
- Administer a variety of web server systems including Apache, Lighttpd, Nginx
- Administer several application server systems including WSGI application servers e.g uWSGI, Gunicorn, etc
- Evaluates database and web servers integrity and security
- Maintenance and Administration of mapping servers/platforms especially GeoServer
- Regular reports and documentation of installed systems and applications
- Manage and maintain two small office networks
- Support T4D Software engineer at Mbuya workshop in setup and configuration of Linux based Server and Desktop systems for the rugged computer kiosk project, including the development of small software programs for specific needs

- Prepare testing manuals and implement regular testing procedures for all RapidSMS applications
- Carry out research and investigations on latest database and web server applications and fine tuning tools and techniques to increase accessibility, scalability and efficiency of existing systems
- Develop and perform regular server backups
- Develop and implement regular servers performance assessments
- Reviews technical designs, reports, documentation, and other materials produced by staff
- Directly participates in the Data warehousing and Business Intelligence Projects
- Design and implement procedures for the creation and visualization of website usage data and traffic analysis (i.e. analysis of log files, etc.)

### 2. Duration:

4 months

### 3. Duty station:

Kampala - Mbuya workshop and UNICEF office

### 4. Supervisor (must be a staff member):

### 5. Description of assignment:

### Task 1

Regularly backup RapidSMS and DevTracServers. Monitor and analyze web and SMS traffic. Maintain and administer UNICEF RapidSMS and DevTrac servers/virtual machines. Perform regular server performance checks. Regularly manage and maintain two small office networks.

#### END PRODUCT/DELIVERABLES

1-2 page summary documentation of regular backup status.1-2 page summary documentation of web and SMS traffic analysis. 1-2 page summary documentation of server performance status

#### Task 2

Develop tools for website usage / traffic analysis and monitoring. Develop and document server backup and recovery tools and protocols

### END PRODUCT/DELIVERABLES

2-3 page summary report of implemented solution for traffic analysis / monitoring, server backup and recovery protocols. Software code and documentation pushed to

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github.com and the T4D wiki page. Backup and recovery tools developed and deployed on UNICEF's DevTrac and RapidSMS servers.

#### Task 3

Install new U-Report server and deploy the U-Report system on it. Setup and configure a Linux Server and Desktop systems for the rugged computer kiosk project, including the development of small software programs for specific needs

### END PRODUCT/DELIVERABLES

1-2 pages summary documentation of the setup procedures and experience. U-Report system deployed on new server hardware and running properly with proven scaling capability. A new Linux server fully installed and functional at the Mbuya Kiosk project and all necessary software installed on both server and desktops.

### Task 4

Upgrade Database server to PostgreSQL 9.1. Fine tune PostgreSQL optimizing it for security and scale for all UNICEF RapidSMS implementations

#### END PRODUCT/DELIVERABLES

1-2 page summary documentation of upgrade and downgrade procedure. Technical documentation and software code uploaded to github.com.

### Task 5

Prepare testing manuals and implement regular testing procedures for all RapidSMS applications. Carry out research and investigations on latest database and web server applications and fine tuning tools and techniques to increase accessibility, scalability and efficiency of existing systems

### END PRODUCT/DELIVERABLES

1-2 page summary documentation of regular testing procedures and protocol for all RapidSMS applications. 1-2 page research findings and recommendations for database, web and applications server efficiency, scalability and tuning tools.

- **6.** Tangible and measurable outputs of the work assignment (e.g. end products)
- 7. Performance indicators for evaluation of results

### 8. Qualifications or specialized knowledge/experience required for the assignment

### **Education and Training**

- Any combination of education and training equivalent to possession of a Bachelor's degree in Computer Science, Statistics, Engineering or Mathematics that demonstrates the ability to perform the duties and responsibilities as described.
- Sufficient formal and/or informal training experience in Database Management Systems (DBMS),Linux and windows system administration, maintenance, design, analysis, and management of scalable web services.

### **Experience:**

- Setup, administration and maintenance of Linux servers (especially Ubuntu servers)
- Setup, administration and maintenance of Windows servers (windows NT-based)
- Setup, administration and maintenance of WSGI application servers.
- At least two years' experience with PostgreSQL, MySQL, MS SQL Database Systems
- Setup, administration of a variety of web server systems (including Apache, Lighttpd, Nginx)
- Server hardware and software technologies including hardware virtualization tools
- Standard computer hardware and software
- Setup and OS customization of Linux Server and Desktop systems
- Internet connectivity and networking technology (including DHCP, DNSmasq, iptables)
- Object Oriented Programming in Python, Java, PHP5, C / C++
- Familiar with ProxMox hardware virtualization tools

#### Skills and Ability to:

- Communicate effectively in both oral and written forms; interact with users and office staff in non-technical, clear terms.
- Assist consultants and staff with difficult technical tasks
- Work independently and as a team member.
- Set priorities and organize work to meet strict deadlines.
- Make decisions on a variety of complex matters
- Establish and maintain cooperative working relationships with those contacted during the course of work.
- Research and evaluate computer applications and database server hardware and software.
- Manage hardware/software configurations including set-up, maintenance, and back-up.
- Ability to adapt to changes in technology.

9.	Payment Plan:
	Monthly payment based on outputs to deliverables, certified upon monthly review with supervisor.
10.	Special Notes:
11.	Prepared by :
12.	Approved by:

# Youth Engagement Personnel

### PROJECT OFFICER

### 1. Objective and targets (Attach background documents, if necessary)

The main focus of project officers is to develop and support the management of By Youth for Youth projects, as well as to mentor and support project applicants in all steps of their project development and implementation.

### 2. Duration:

### 3. Duty station:

### 4. Supervisor (must be a staff member):

**Project Coordinator** 

Supervisor and frequency of performance reviews:

### **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

- Generating a considerable number of the project proposals to be submitted at the innovation lab
- Developing the By Youth for Youth projects by advising and mentoring project applicants
- Assisting in project proposals writing and editing before they are submitted to the Innovations Review Committee
- Mobilizing young people to develop their ideas and turn them into innovative actionable projects that will benefit the life of their peers.
- Building the capacity of young people by providing small workshops and training in project management or other relevant topics.
- Be able to design new creative projects, events and activities and implement them alone or as part of a team.

Under the Project Coordinator and together with the Monitoring team, the project officers will aim to reach out to a significant number of young people to keep a substantial number of project proposals being submitted each month at the lab.

The project officers will have good writing skills to mentor young people in proposal writing and submit well-written project proposals to the Review Committee.

They will show dedication and dynamism as well as the ability to multi task and keep track of a various range of ideas and projects.

### 6. Tangible & measurable outputs of the work assignment (End Products):

Delivery dates and details as to how the work must be delivered (e.g. electronic submission, hard copy, what computer program should be used, etc.):

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

- A minimum of 3 year experience working on project management
- A minimum of 3 year experience working with Civil Society Organizations, preferably with youth
- The ability to work as a part of a small or a big team including responding to ad hock requests outside the job description
- High level of motivation, ability to show initiative and work independently
- Excellent interpersonal and representational skills
- Fluency in written and spoken English and Albanian, good Serbian speaking and reading skills preferable
- Academic degree in relevant field or relevant experience

9. Payment plan:		
10. Special Notes:		
11. Prepared by :		
12. Approved by:		

### UNICEF - KOSOVO: TERMS OF REFERENCE (TOR)

### YOUTH ADVOCACY OFFICER (NOA)

### 1. Objective and targets (Attach background documents, if necessary)

Recognizing the need and opportunity for direct participation of Kosovo youth in the policy decision-making process on issues that affect them, the UNICEF Office in Kosovo will be launching the Youth Advocacy Platform as the 'third pillar' of the existing UNICEF Innovations Lab Kosovo.

Utilizing innovative open source technology and thinking, the Innovations Lab currently provides a platform for creation, mobilization and innovation for Kosovo youth, through its existing two pillars – By Youth for Youth and the Design Centre. By Youth for Youth projects provide youth with the opportunity to impact their own lives (and those of their peers and communities) by nurturing and supporting the development of innovative, youth-led projects, while the Design Centre focuses on designing and implementing technological innovations for Kosovo institutions already working on behalf of youth and children.

In line with UNICEF principles and key programmatic goals, as well as broader UNKT CDP and KYSAP structures, the UNICEF Office in Kosovo has identified the need for a more inclusive and innovative model for youth mobilization and engagement with key social policy issues.

It is within this existing framework that the Youth Advocacy Platform will be introduced, as a hub for innovative, youth-led social advocacy efforts at both the central and grassroots levels. The Youth Advocacy Platform will accordingly provide the organisational infrastructure, technical expertise, and physical space for collectively identifying key issues, collaborating and sharing ideas, influencing central-level policy development, participating in various formal and informal capacity-building trainings, creating innovative and high-impact public advocacy campaigns and materials around multiple issues of youth concern, and developing a Kosovo-wide youth advocacy and mobilization strategy (with a specific focus on the municipalities and marginalised communities).

Under the supervision of the Innovations Specialist, and in close collaboration with the Youth and Adolescent Specialist, this consultancy will drive the creation of a sustainable, Kosovo-wide network of youth-led political engagement and influence, and encourage a culture of public, evidence-based social advocacy.

#### PURPOSE OF ASSIGNMENT:

To oversee, in close collaboration with all relevant UNICEF sections, the planning, coordinating and implementing of the Innovations Lab Youth Advocacy Platform.

2. Duration: 364 days

3. Duty station: Pristina, Kosovo

### 4. Supervisor (must be a staff member):

**Innovations Specialist** 

### **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

The UNICEF Innovations Lab Kosovo is seeking to expand the scope of its current activities to reach and engage a wider section of Kosovo youth, with a particular focus on the municipalities and marginalised groups. The Youth Advocacy Officer will be accordingly responsible for developing, coordinating and implementing the Youth Advocacy Platform, as the Third Pillar of the Innovations Lab.

In addition to designing innovative ways to link and directly engage Kosovo youth in social policy issues, through formal and informal advocacy channels, the Youth Advocacy Officer will assist in establishing a sustainable network of key local youth leaders, advocates, mentors and stakeholders to collaborate on various advocacy issues, projects and strategies.

Tasks

- Undertake desk review, preliminary needs assessment and consultations with key local youth leaders and stakeholders working on youth issues in Kosovo to determine the final advocacy model and mechanisms for the Youth Advocacy Platform
- Facilitate direct, central-level channels for youth to engage with decision-makers on policy issues that affect them
- Coordinate the establishment of the Youth Advocate Network, organise and oversee their monthly meetings, and facilitate quarterly meetings with mentors and key stakeholders
- Support local youth and project leaders to develop innovative, high impact advocacy projects and campaigns, utilizing social media and open-source technologies
- Initiate and develop the Advocate Mentorship Programme, recruiting and matching local and outsourced experts in policy, advocacy and campaign design and new media technologies with local youth advocates
- Design and support the implementation of a highly-visible, mixed- media communication strategy to engage Kosovo youth around key policy issues through the Innovations Lab
- Assist in the creation of quality data visualization and advocacy materials, in collaboration with the UNICEF Knowledge Hub, Communications and other relevant departments.

### 6. Tangible & measurable outputs of the work assignment (End Products):

- A social advocacy education and training platform recognised throughout Kosovo as the primary access point for youth engagement and mobilization around issues central to policy-development for youth
- Multiple access channels (both formal and informal) for youth to voice concerns, introduce public debate and assist in information collection and advocacy on key policy issues affecting Kosovo youth
- A sustainable network of youth leaders and organizations, advocacy and policy experts, designers, artists, technologists and institutions focused on implementing a youth-led mechanism for effectively including the voices of Kosovo's youth in policy development on issues that concern them
- A body of innovative youth-sourced and youth-initiated advocacy campaigns and materials that effectively generate public debate on key issues, in line with UNICEF programmatic goals, and serve as concrete examples of successful youth-led advocacy initiative and influence
- An effective social advocacy and communication strategy for Kosovo youth, including varied strategic approaches and recommendations for mobilizing youth in rural municipalities and engaging partners, advocacy experts and infrastructure for campaign development

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required:

#### **Education**

University degree in social policy, communications, youth issues, international development, social sciences or other related field, with emphasis on social mobilisation, advocacy and/or participatory communication

### **Work Experience**

Significant practical professional experience in advocacy and communications Practical experience in community mobilization and working with youth Previous work experience with UN and/or international organisations is an asset

### **Language Proficiency**

Excellent command of written and spoken English and knowledge of another UN language Knowledge of the local working languages is an asset.

### Other Skills and Attributes

Excellent communication and networking skills Proven leadership skills and the ability to effectively engage and mobilise others Proven ability to handle sensitive issues with tact and diplomacy Proven ability to design and implement action plans and trainings Demonstrable ability to think both creatively and strategically

Knowledge of current new media advocacy tools, platforms and technologies Proven capacity to liaise with a wide variety of stakeholders Ability to work in a team under pressure Demonstrable cultural sensitivity

9. Payment Plan:

10. Special Notes:

11. Prepared by:

12. Approved by:

### UNICEF – KOSOVO: TERMS OF REFERENCE (TOR)

## YOUTH INNOVATION CAMP PARTICIPATORY CONSULTANT

### 1. Objective and targets (Attach background documents, if necessary):

Utilizing innovative open-source technology and thinking, the UNICEF Innovations Lab Kosovo currently provides a platform for creation, mobilization and innovation for Kosovo youth, through its existing two pillars – By Youth for Youth and the Design Centre. By Youth for Youth projects provide youth with the opportunity to impact their own lives (and those of their peers and communities) by nurturing and supporting the development of innovative, youth-led projects, while the Design Centre focuses on designing and implementing technological innovations for Kosovo institutions already working on behalf of youth and children.

In line with UNICEF principles and key programmatic goals, as well as broader UNKT CDP and KYAP structures, the UNICEF Office in Kosovo has identified the need to introduce a 'third pillar' within the Innovations Lab to support direct youth engagement with key decision-makers and social policy issues. It is within this existing framework that the Youth Advocacy Platform (YAP) will be introduced, as a hub for innovative, youth-led social advocacy efforts at both the central and grassroots levels.

A key YAP objective is to provide multiple opportunities to link young social entrepreneurs with the expertise they need to identify and articulate social issues, and develop feasible solutions to those problems from the bottom-up by leveraging the organic, peer-to-peer pinciples and tools of open source and Web 2.0 technology. YAP aims to do this by identifying those who have a keen understanding of Kosovo's key socialissues —from highly-skilled professionals, tothose with the deepest personal experience of those problems—and linking them withthose who intimately understand the potential of new technology to address these issues, namely software developers, designers and service designers, as well as advocacy, social policy and private-sector experts.

It is envisioned that this will be accomplished, in part, through the organization of a Kosovo Youth Innovation Camp, to be held in Pristina, Kosovo in February 2012. In order to achieve this, UNICEF Kosovo will engage a consultant to provide the advocacy, technical, and logistic expertise and network of relevant experts that will enable the successful implementation and replication of this event.

Under the supervision of the Innovations Specialist, and in close collaboration with the Innovations Lab Youth Advocacy Consultant, this position will drive the creation of an model that will support the development of a sustainable, Kosovo-wide network of advocacy, entrepreneurship and policy influence – encouraging a youth-led culture of innovative, evidence-based social and civic advocacy.

### **Purpose of Assignment**

To design, organise and oversee (in close collaboration with the UNICEF Innovations Lab Kosovo) the Kosovo Youth Innovation Camp, as a replicable model for increased youth social engagement, advocacy and civic participation.

#### 2. Duration:

3 months

### 3. Duty station:

Pristina, Kosovo

### 4. Supervisor (must be a staff member):

**Innovations Specialist** 

### 5. Description of assignment: (provide detail and in quantitative terms, add pages if required)

The UNICEF Innovations Lab Kosovo is seeking expand opportunities for youth to directly access and influence decision-makers around the key social issues affecting their peers and communities.

The overall purpose of the consultancy is to develop a replicable model (Youth Innovation Camp) in a participatory manner that will help foster a sustainable Kosovo-wide network of empowered young civic and social advocates with the capacity to influence the policy issues that affect them both at the community and central level. By supporting the ideas of Kosovo's most innovative young social entrepreneurs, it is envisioned that the Youth Innovation Camp will further help bridge the gap between Kosovo's education and employment sector– functioning, in part, as a 'precommercial' incubator for some of Kosovo's brightest young minds.

The Youth Innovation Camp will drive the agenda of YAP's technological engagement and overall visibility, and must be conceived of as far more than a self-contained weekend event. In order to achieve the project's key objectives, months of preparation will be required to identify and link the best developers, designers, and policy and advocacy experts – both within Kosovo and abroad - to help youth understand and articulate their problems in a meaningful way. While one of the aims of this event will be the production of viable market products, the overall aim remains to increase the capacity and engagement of Kosovo's youth to find their own solutions to existing challenges in their society. Accordingly, the Youth Innovation Camp model mustaccurately be tailored to reflect the capacity and limitations of this particular demographic.

The Youth Innovation Camp is envisioned as a six (6) month process of building networks and generating creative ideas, culminating in a two-day workshop that will ultimately bring together issues, people and technology in a single physical space. This weekend event will ideally facilitate the creation of youth-led sustainable social ventures and applications - all within 48 hours. In order to encourage quality results, the event model should also incorporate a competitive element, with prizes awarded for the most innovative projects produced during the weekend event.

### **Tasks**

- Conduct a field situation- and needs-assessment and produce a summary report and mapping of key stakeholders. These documents should include an assessment of domestic new media landscape and technological infrastructure, availability of existing networks of specialists relevant to the process and identification of all external resources (human, technical) required.
- In a participatory manner, develop a comprehensive, replicable model for the Kosovo Youth Innovation Camp, capable of engaging Kosovo's youth and key stakeholders to produce innovative, viable market products addressing key social issues identified by the youth participants themselves.
- Create a website serving as an interactive platform housing all related Kosovo Youth Innovation Camp information and future YAP! activities
- Engage required network of relevant experts and specialists to support the process, activities and participants of the Kosovo Youth Innovation Camp
- Oversee selection of key issues, team organisation, establishment of judging criteria and panel, logistic requirement and other relevant processes required prior to successfully implementing the 48-hour event
- Assist in generating international publicity for Youth Innovation Camp
- Organise and successfully implement a 48-hour Youth Innovation Camp in Pristina, Kosovo in February 2012.
- Establish framework for a follow-up support system and 'next steps' for successful youth projects following the completion of the Youth Innovation Camp.
- Assist in finalizing templates to ensure model is replicable and regionally scaleable, including drafting of necessary documents and templates and other follow-up activities as necessary

### 6. Tangible and measurable outputs of the work assignment (e.g. end products):

- An innovative, replicable model for engaging youth in addressing key social and civic issues within their societies from the bottom-up. education and training platform recognised throughout Kosovo as the primary access point
- A sustainable, Kosovo-wide network of young social entrepreneurs and civic activists, advocacy and social policy experts, designers, artists, technologists and institutions engaged in iterative co-creation to address Kosovo's key social issues.
- A body of viable market applications and products that address key local issues and serve as concrete examples of successful youth-led advocacy, initiative, influence and positive social change. This includes innovative tools for real-time data collection capable of facilitating and strengthening evidence-based advocacy efforts at both the grassroots and the central level.
- An interactive online platform (website) that serves to house all information elated to the Youth Innovation Camp as well as future YAP activities

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required:

Education

Advanced degree in policy, social sciences or other relevant field.

Work Experience

- Experience developing and implementing similar events linking both advocacy and technology to produce viable market products
- Significant advocacy experience, preferably with a leading international watchdog organization
- Expertise in participatory digital innovation to empower marginalised communities
- Extensive, proven experience in community mobilization and working with youth Language Proficiency
- Excellent written and spoken English and knowledge of another UN language
- $\bullet$  Knowledge of the local working languages is an asset.

Other Skills and Attributes

- Expert knowledge of new and emerging Web 2.0 technologies
- Ability to effectively engage and mobilise others
- Knowledge of Kosovo context is an asset

9. Pa	aymen	t Plan:
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10. Special Notes:

11. Prepared by:

12. Approved by:

### UNICEF - KOSOVO: TERMS OF REFERENCE (TOR)

## COMMUNITY OUTREACH CONSULTANT (SSA, GS-6)

### 1. Objective and targets (Attach background documents, if necessary):

Kosovo is home to Europe's "youngest population", with more than half of its estimated population of 2.2 million under 25 years of age. Yet youth inclusion and participation in the key processes that affect the lives of their peers and communities remains extremely limited.

Harnessing innovative open-source technology and thinking in combination with a variety of on-site and mobile trainings, the UNICEF Innovations Lab Kosovo currently provides a platform for youth-led innovation, mobilisation and advocacy through its existing three pillars: By Youth for Youth (BYFY), the Design Centre (DC) and the newly launched Youth Advocacy Platform (YAP). BYFY projects provide youth with the opportunity to impact their own lives and those of their peers by nurturing and supporting the development of innovative, youth-led projects, while the DC focuses on designing and implementing technological innovations for Kosovo institutions already working on behalf of youth and children. YAP aims to facilitate multiple access channels for youth to identify and voice concerns and propose key solutions to the issues directly impacting their lives, with a focus on participatory capacity-building projects in select communities throughout Kosovo.

The scope and impact of YAP, as well as the ongoing activitivites of the Innovations Lab in general, will be highly dependent upon effective outreach, mobilisation and inclusion young people living within Kosovo's most vulnerable and marginalised communities. Discrimination is a further challenge facing young people throughout Kosovo, eroding quality of life along ethnic, age and gender divides. While a small fraction of minority communities enjoy decent work and access to social services, many lack legal status of any kind, with the Roma, Ashkali and Egyptian (RAE) communities as the most disadvantaged. An estimated 50 percent of RAE people are classed as poor, more than one-third may be unregistered and up to 70 percent do not attend school beyond the age of 12. Social inclusion and concrete skills-transfer for Kosovo's most marginalised young people is thus a key driver of UNICEF's activities in Kosovo and, in particular, the Innovations Lab Kosovo.

Accordingly, YAP will be launching a 12-month outreach project in six (6) select communities throughout Kosovo (in Fushe Kosove, South Mitrovica, Peja, Gjakova and Ferizaj), with the aim of building a sustainable network of empowered young people who are linked to existing youth networks and services throughout Kosovo and can, in turn, serve as role models, leaders and advocates for and within their own communities,

In close collaboration with the Innovations Lab staff, the project's primary implementing partner, and young people within these six (6) target communities, this consultancy will strengthen the overall aim of YAP to build the capacity of Kosovo's marginalised youth to be effective advocates on the key issues that directly impact their lives.

### **Purpose of Assignment**

To support the development and implementation a 12-month community outreach project in six (6) select communities throughout Kosovo (in Fushe Kosove, Peja, Gjakova, Ferizaj and South Mitrovica)

2. Duration: 11 months

3. Duty station: Pristina, Kosovo

### 4. Supervisor (must be a staff member):

Youth Advocacy Consultant

### **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

The UNICEF Innovations Lab Kosovo is seeking to expand the scope of its current activities to reach, engage and mobilise a wider section of Kosovo youth, with a particular focus on building the capacity of young people from marginalised communities to be empowered advocates for positive change within their own environments.

The overall aim of the consultancy is to increase the agency of vulnerable youth from select communities to identify and address existing needs and challenges within their communities and advocate for the local-/municipal –level changes that they wish to see. This assignment will be comprised of ongoing field visits to these communities over a 12-month period to support and mentor youth-led development and implementation of a series of specific micro-projects, trainings and activities, deisgned in close collaboration with the Community Outreach Consultant and project implementing partner staff. It is envisioned that these activities will deliver the 'core elements' of the Innovations Lab (process + technology-driven results + advocacy) to vulnerable youth in an accessible way in their own physical spaces – allowing them to build and develop the skills necessary to voice and realise their ideas, concerns and solutions to local leaders and decision-makers.

The consultant will additionally be responsible, in close collaboration with the Youth Advocacy Consultant, for overseeing project development to ensure the strengthening of youth capacity for evidence-based advocacy, by introducing specific psychosocial activities and mobile formal and 'alternative' advocacy workshops and trainings). A key aim of this consultancy will be to encourage greater inter-ethnic interaction and social inclusion through the introduction of multiple opportunities for engagement, collaboration and skills-sharing between young people from these select communities and other youth networks and organisations already interacting with the Innovations Lab, as well as their local and municipal representatives.

#### **Tasks**

• Conduct bi-monthly field visits with youth in target communities; oversee development and implementation (including logistics) of all scheduled activities and projects, in collaboration with project implementing partner and Youth Advocacy Consultant

- Encourage integration of young people from target communities in ongoing Innovations Lab events, activities and networks
- Draft and maintain written documentation of all field visits; propose project recommendations and adapt and initiate activities as necessary
- Maintain ongoing project correspondence and documentation (including coordination of activity logistics) with project implementing partner
- Support youth from target communities in drafting and maintaining documentation (written/visual) of each youth-led field activity/project during 12-month pilot phase
- Support designated 'Community Advocates' to link with existing relevant youth services and advocates (including physical advocacy, assistance in ustilisation of YAP! Map and other ad-hoc requests and activities as necessary)
- Support development of Advocacy Resource Library (with a focus on psychosocial activities and informal education methodologies)
- Liaise with relevant UNICEF sections (Education, Social Policy, Child Protection etc) to support project development and implementation, as necessary; oversee initiation of external project evaluation, in collaboration with UNICEF M&E section
- Support the drafting of a final report upon completion of 12-month pilot phase, in collaboration with the Youth Advocacy Consultant and implementing partner

### 6. Tangible and measurable outputs of the work assignment (e.g. end products):

- Support the development and implementation of all scheduled field activities and projects (field outreach and assessment visits, micro-project, mobile trainings, 'Community Advocate' certification, YAP-in-a-Box and additional ad-hoc activities) in six (6) target communities throughout Kosovo, in coordination with primary implementing partner and the UNICEF Youth Advocacy Consultant
- Support the development, implementation and documentation of 20 additional 'microprojects' in marginalised communities throughout Kosovo, in collaboration with the project implementing partner and Youth Advocacy Consultant
- Oversee the development of sustainable, adapted advocacy resources for youth in target communities (PCM manual, basic needs assessment matrix, YAP resource guide etc)
- Assist in the development of a 'project portfolio' and visibility materials for each target community upon completion of project pilot phase
- Assist in the drafting of a final report at the end of the project pilot phase; support drafting of necessary 'follow-up' documentation, in collaboration with implementing partner, Youth Advocacy Consultantand and relevant UNICEF sections

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required:

#### Education

Univesity degree in relevant social sciences

### **Work Experience**

Practical experience in the field of community outreach and/or youth advocacy Experience in youth capacity-building (project development, peer education etc) Previous experience working with youth communities throughout Kosovo is an asset

### **Language Proficiency**

Fluency in English and another UN language.

Fuency in local working languages (Albanian and Serbian) is required

#### Other Skills and Attributes

Excellent communication skills, capacity to positively interact with young people

Demonstrable cultural and inter-ethnic sensitivity; experience working within a multi-cultural team

Demonstrable knowledge of existing local youth services and networks

9. Payment Plan:

10. Special Notes:

11. Prepared by:

12. Approved by:

Software & Hardware

Development

### UNICEF - UGANDA: TERMS OF REFERENCE (TOR)

### PRODUCTION COORDINATOR, T4D UNIT

### 1. Objective and targets (Attach background documents, if necessary)

### **Background**

Overview: UNICEF Uganda in Kampala needs the services of a highly skilled and experienced production manager to assist the T4D Unit with the ongoing and expanding work needed to roll-out the rugged solar-powered computer kiosk systems – in particular to oversee and coordinate the workshop team, manage the complete prototyping, testing, procurement, production and installation processes and ensure quality of the hardware, software and manufacturing processes.

The candidate should have proven experience in managing production and procurement processes and also understand the specific circumstances of industrial design and production in the Ugandan context.

The consultant will primarily be based at the Mbuya workshop in Kampala, Uganda, with some coordination and procurement work to be completed at the Nakasero head-quarters office.

### **Purpose of Assignment**

### **Assist UNICEF's T4D Unit in:**

- Coordinate and lead all projects at the UNICEF Innovations Center / Mbuya workshop, with T4D program management support
- Oversee and monitor the complete prototyping, testing, production, assembly and installation process of the ruggedized computer kiosk program and related sub-projects
- Supervise all software and hardware developers and assistants based at the UNICEF workshop in Mbuya
- Coordinate further research and (cost-effective) development of ruggedized computer systems, including research on new technologies
- Work with engineers and assistants to provide relevant documentation on costing of the different versions of the computer kiosk systems and suggestions for further improvements
- $\bullet$  Manage the setup of quality standards and procedures for the UNICEF workshop and all ongoing R&D and production processes
- Coordinate, monitor and further plan all installations of the computer kiosk systems at various (urban and remote/rural) sites allover Uganda
- Coordinate all related procurement processes and manage communications with UNICEF Supply, Logistics as well as other external suppliers for the computer kiosk systems
- $\bullet$  Oversee the implementation of a monitoring system and troubleshooting procedures for installed systems

- Monitor and manage related budgets
- Coordinate the documentation of production processes, quality assurance reports, research and installation plans

#### 2. Duration:

11 months

### 3. Duty station:

Kampala – UNICEF office and Mbuya workshop

### 4. Supervisor (must be a staff member):

Cheif of Communication

### **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

#### Task 1

Review and update installation schedule; review production process and installation commitments; review current process and workshop capacity, and organize a system and schedule for prototyping, testing, production and installation

#### END PRODUCT/DELIVERABLES

Clear production, software development and installation schedule, including work plans for all workshop staff, presented to T4D, Comms/Youth team

**TIME FRAME:** End of month 1

#### Task 2

Complete supply plan and ordering documents for 2012

#### END PRODUCT/DELIVERABLES

Updated supply plan submitted to Supply; details for all orders submitted to T4D PA

TIME FRAME: End of month 2

#### Task 3

Identification of local fabricators (phase 2) and local assembly teams (phase1)

### END PRODUCT/DELIVERABLES

List of all recommended companies, with assessment criteria outlined and assessment scores recorded, submitted to T4D and Supply, and contracts raised

TIME FRAME: End of month 3

### Task 4

Production, software development and installation system progress review

### END PRODUCT/DELIVERABLES

Updated production guidelines and schedule, based on lessons learned in first 4 months

TIME FRAME: End of month 4

### Task 5

Review of installations and content delivery systems

### END PRODUCT/DELIVERABLES

Report to T4D and Comms/Youth managers on all sites where kiosks are installed, usage, recommendations for other installation companies or partners

**TIME FRAME:** End of month 5

### Task 6

Review of software development for remote monitoring and usage logging

### END PRODUCT/DELIVERABLES

Report to T4D managers on implementation and follow-up on kiosk monitoring system  $\,$ 

**TIME FRAME:** End of month 6

#### Task 7

Complete maintenance & troubleshooting plan for installed systems

### END PRODUCT/DELIVERABLES

Report to T4D managers on implementation of maintenance and troubleshooting procedures

**TIME FRAME:** End of month 7

#### Task 8

Identify and prototype design at least 1 new T4D innovation or cost-effective adaption of existing systems

### END PRODUCT/DELIVERABLES

Provide design, costing and production documents of new innovation

TIME FRAME: End of month 8

### Task 9

Supply plan and ordering documents for 2013

### END PRODUCT/DELIVERABLES

Supply plan agreed on with T4D management and submitted to Supply

**TIME FRAME:** End of month 9

### Task 10

Identification of local assembly teams (phase 2) and any additional fabricators (phase 3)

### END PRODUCT/DELIVERABLES

List of all recommended companies, with assessment criteria outlined and assessment scores recorded, submitted to T4D and Supply, and contracts raised

TIME FRAME: End of month 10

### Task 11

Review and implement procedures to ensure production quality standards

### END PRODUCT/DELIVERABLES

Report to T4D management on implemented quality standards and coordination measures

TIME FRAME: End of month 11

### 6. Tangible and measurable outputs of the work assignment (e.g. end products):

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialized knowledge/experience required for the assignment

### **Education and Training**

 Advanced degree or equivalent applied experience in engineering, computer science or a related field

### **Skills to include:**

- 10 years experience managing production and R&D processes in the industrial sector, preferably in IT related businesses
- 5 years experience implementing large-scale technical projects including the supervision of hardware and software engineers
- Experience in budgeting, procurement and contracts

- A good understanding of development issues and the specific circumstances of an R&D and production process in a development context
- Ability to manage relationships with UNICEF partners, including private sector, NGOs, universities among others
- Strong organizational, planning and budgeting abilities
- Proven analytical and problem solving skills
- Ability to set priorities and coordinate work in a team to meet deadlines
- Ability to make decisions on a variety of complex matters
- Proven skills in negotiation, networking, strategic thinking and advocacy
- Ability to travel and work in remote and sometimes insecure locations
- Fluency in written and verbal English
- Residence and work experience in a development context, current or past
- Residence in Kampala, Uganda, for duration of contract

9. Payment Plan:		
10. Special Notes:		
11. Prepared by :		
12. Approved by:		

UNICEF – ZIMBABWE: TERMS OF REFERENCE (TOR)

### SOFTWARE CONSULTANT

### 1. Objective and targets (Attach background documents, if necessary)

### Background

Within the framework of the 2012-2015 Government of Zimbabwe-UNICEF Country Programme of Cooperation the use of Technology for Development (T4D) has been identified as a critical strategy to help accelerate positive results for children and women, in the areas of knowledge management, health, education, protection and participation. In this regard, T4D technical assistance is required to add technology, development and innovation capacity to the existing Communications Cluster and the Collaborative Centre for Research and Evaluation (CCORE).

The technical assistance will provide the capacity in the Country Office to create and support at least three IT platforms for prototype projects with projected quick wins. This engagement will prove the value of this additional capacity in a Country Office, in collaboration with ongoing work being done in Tech4Dev and real-time monitoring at HQ. It will support the set up and roll out of Technology for Development initiatives aimed at real time data collection.

The ZCO has identified a specific need to add a technology, development and innovation capacity to the existing work of CCORE. This additional capacity will be modeled on other successful Tech4Dev engagements – where small teams have been created in Country Offices to support specific programme needs. The objectives will be lined up directly with the organisational priority of real-time monitoring and management of Programmes within the ZCO.

Objective(s)

To support the set up and roll out of Technology for Development initiatives aimed at real time data collection.

### 2. Duration:

11 months

### 3. Duty station:

UNICEF office in Zimbabwe

### 4. Supervisor (must be a staff member):

### **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

Working under the direct guidance and supervision of the Chief of Social Policy and in collaboration with the IT Manager and the Communications Section within UNICEF, the T4D Specialist will add a technology, development and innovation capacity to the ZCO to develop and support IT platform for three prototype projects.

### 6. Tangible and measurable outputs of the work assignment (e.g. end products):

- Development of Real-time Systems for Programme monitoring and children's participation.
- Development of appropriate technology to address identified needs for children with disabilities such as "hard of hearing"
- Analyze software requirements and develop paper prototypes
- Develop software using agile methodology
- Analyze software partners' code, on both a technical and a strategic level
- Develop and implement software and technology innovations on a national scale (understanding constraints of working with various partners, but also the strengths of representing an international organization)
- Set-up and administer servers, networks and mobile gateways

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

- A recognised T4D/IT professional with proven experience in designing and implementing Technology for Development initiatives, including social media programming and use of digital media. Prior experience in similar assignments with the UN system including UNICEF is an advantage.
- Minimum 5 years hands-on software development experience with a mix of the following frameworks, tools and languages:
- Python or Ruby
- Django (or experience with a framework such as Cheetah, Camping, Rails)
- Source code management / Version control systems (Git)
- AJAX and JavaScript including libraries (such as jQuery and Mootools)
- mySQL (postgres)
- XHTML and CSS
- XML
- Mapping (Google Maps API/ Openlayers)
- Lightweight libraries for interacting with graphing, photos.
- Linux

- Apache
- Windows
- Strong, proven developing country experience in T4D including negotiating agreements with ICT private sector.
- Existing personal and professional network of technology partners
- Self-motivated, responsive and innovative
- Proficiency in object oriented back-end programming languages; specifically Python
- 9. Payment Plan:
- 10. Special Notes:
- 11. Prepared by:
- 12. Approved by: UNICEF- Uganda: TERMS OF REFERENCE (TOR)

### **ENGINEERING LEAD**

### 1. Objective and targets (Attach background documents, if necessary)

### **Background**

In November 2009, UNICEF Uganda set up a cross-sectoral Technology for Development Coordination Unit, tasked to support the integration of innovative practices into traditional UNICEF programming. The T4D Unit focused on identifying regional and global trends in innovative technologies, reviewing initiatives with programmatic counterparts and assessing opportunities for the use of innovations, advising government counterparts, strengthening partnerships and supporting capacity building with local and regional stakeholders, managing the design and development of software applications and hardware components, coordinating testing and deployment, and monitoring and evaluating outcomes.

This resulted in a number of significant, ongoing T4D initiatives, including Community Vulnerability Surveillance (CVS) and a social entitlement monitoring platform (uReport) using mobile phones, a first-phase dynamic web based mapping application (DevTrac) which integrates key facility based information with crowd-sourced reporting, a USSD and web based application for Birth and Death Registration (MobileVRS), UNICEF's new emergency alert system (Status160), and Information and Communication Technology (ICT) prototype kiosks (Digital Drums) to be deployed at UNICEF supported Youth Centres and Teacher Colleges. UNICEF Uganda desires to consolidate gains, further developing, field testing and deploying such T4D initiatives, and moving toward their integration into regular UNICEF and Government of Uganda programming.

In order to achieve this, UNICEF Uganda seeks to employ a Senior Engineer who can design, build and train others to build ICT solutions to achieve the goals of the Uganda Country Office: to keep children alive, safe and learning. The engineer will be required to develop designs and lead a small team to build rugged computer systems and related energy and connectivity systems. The Engineer will need to design strategic plans for hardware deployment and content delivery, oversee and advise a team of trainees and other engineers, and work with external companies, and training and maintenance sites across Uganda, to carry out these projects.

UNICEF developed and supported T4D applications strive to be enterprise level, opensource, low cost and locally modifiable. The consultant will therefore work with local innovators, technical colleges and universities, vocational schools, youth organizations, cultural and religious organizations, NGOs, and the private sector, to nurture and test new and innovative ideas and designs, and to build local capacity.

Expertise in co-creative and participatory approaches to hardware development is critical. Familiarity with the UN system, experience working with multicultural teams in challenging conditions, and experience with programmatic areas including basic education, health and nutrition, child protection and water, sanitation and hygiene (WASH) are required.

The need for this company at this time arises from the limited in-office experience with hardware development, as well as from the very specialised set of skills needed.

### **Purpose of Assignment**

To provide a consultant to work as senior engineer and technical advisor to a team of consultants, volunteers and trainees in a small unit responsible for building and integrating ICTs into regular UNICEF programming where appropriate, and to build capacity within UNICEF, private sector companies, vocational training sites and universities, the GoU and local NGOs, CBOs and FBOs to increasingly take the lead on ICT4D hardware-related projects

- The consultant provided by the company will serve as the T4D lead to develop UNICEF Uganda's rugged computing system.
- The consultant provided by the company will serve as UNICEF Uganda lead for rural computing, network, power and information systems. The consultant will provide overall guidance to UNICEF Uganda, Ministries and other partners accordingly.
- The consultant provided by the company will assist the Supply Division with identification of local suppliers
- Working with technical consultants, the consultant provided by the company will guide the development of the rugged computing operating system environment, content delivery and portal system.
- The consultant provided by the company will oversee further development of rugged computing hardware with internal technical consultants, external experts and local manufacturing resources.
- The consultant provided by the company will advise partners, technical schools and local suppliers on the manufacture and development of various rugged computing systems being developed by T4D and external experts.
- The consultant provided by the company will give technical guidance to section chiefs and section colleagues on all T4D related rural computing initiatives.
- The consultant provided by the company will advise program sections in development of training materials for above-mentioned T4D activities.
- The consultant provided by the company will, when requested, represent UNICEF Uganda's T4D Unit during high level donor visits, government and development partner meetings (Working Groups, Task Forces, etc), and international conferences and events.
- The consultant provide by the company will, when requested, advise and provide technical support to UNICEF's East and Southern African Regional Office (ESARO), as well as UNICEF HQ.

### 2. Duration:

11 months (1 January 2011 - 30 November 2011)

### 3. Duty station:

Kampala - UNICEF office

### 4. Supervisor (must be a staff member):

### **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

### Task 1

Design a series of basic outlines for a teacher's curriculum on the building of rugged computer systems that will be ultimately used in vocational schools, academia, private sector and CBO/youth organizations. The outline will include basic metal fabrication techniques, fitment of electronic components, installation of operating system and software required. Once outline has been developed work closely with Makere University and other technology institutes that can develop the outline into a full teaching module.

### END PRODUCT/DELIVERABLES

• A series of basic outlines to be developed into teaching modules

• Construction guidebooks and toolkits

• Identify vocational sites that would be able to implement the curriculum

TIME FRAME: 10 June 2011

### Task 2

Working closely with Supply Division in the identification and building of database of local suppliers and resources for power generation technologies. This will entail:

- Identification of potential suppliers
- Assessing and establishing that suppliers have the appropriate quality product that is necessary and the capacity to deliver product in quantities required. This will entail visiting suppliers, assessing quality of product and capacity.
- Pricing out specific products so there is a reference guide that supply can refer to.
- Develop modular packages for the use of Supply Division for biddings.
- Providing technical input into any LTAs to support rugged computing and solar power systems.

### END PRODUCT/DELIVERABLES

- A comprehensive database of suppliers and manufacturers.
- Pricing guide for reference.
- List to be available online and updated on quarterly basis.
- Create the specifications and basic design for a generic solar system

TIME FRAME: 28th February 2011

### Task 3

Act as overall hardware technical advisor for T4D team on continued development of current and future T4D projects across all programmatic areas, as well as solutions for Operations as requested. This may include:

• Designing solar power systems for maternity centres

- Investigating and designing solar power and lighting for schools.
- Researching and advising on appropriate printers for local distribution of birth certificates.
- Installation, maintenance and systems programming of equipment for office connectivity in emergencies.
- On-going server maintenance for all online projects being incubated in T4D, as well as support to the transfer to government and other partners.
- Modification of donated supplies for use by Alive, Learning and Safe initiatives (solar lamps, solar mobile phone chargers, mobile phones) Modification of donated supplies for use by Alive, Learning and Safe initiatives (solar lamps, solar mobile phone chargers, mobile phones)

### END PRODUCT/DELIVERABLES

- Provide monthly technical documentation on hardware recommendations, status updates and research findings, for relevant programme and operational sections submitted to supervisor and relevant Section Chiefs.
- Regular meetings with T4D and relevant Section Chiefs to respond to program needs and advise on technical aspects of program implantation when needed.
- Monthly updates of new technologies being developed and implemented in developing countries to keep T4D and relevant sections briefed and providing information on successes and failures to track for knowledge management.

TIME FRAME: 1st January to end of contract

### Task 4

Initial orientation of visiting Design Volunteer which will entail oversight and direct supervision for his first 2 months of work. Designer to begin in March. This will require:

- Orientation of T4D program in Uganda
- Work Shop training.
- Introductions to relevant suppliers and manufacturers, academic and training partners, and any other actors in the rugged computer design plan.

### END PRODUCT/DELIVERABLES

Evaluation report of Design Volunteer submitted to supervisor, with consolidated recommendations for next steps.

TIME FRAME: 1st March to 30th April, 2011

#### Task 5

Organise one workshop for instructors who will be utilizing the teacher's module (refer to Point 1.) for the design of the 'rugged computer system. This will serve to train the teachers in the actual implementation of the teacher's module.

#### END PRODUCT/DELIVERABLES

• Design of workshop

Produce training guides and construction manuals for use during workshop

• Manage all logistical aspects of the organization of the workshop

• Assist in the production of the video of the workshop providing technical expertise to the communication section. Video to be used as training tool as well.

TIME FRAME: 1st January to 31st May, 2011

### Task 6

Continue piloting of the prototype kiosk (Digital Drum; other models as developed/procured) in rural areas of Uganda. This is intended to be on-going work throughout the year, and ranges from training, production oversight, hands-on production, ongoing procurement and refining of the workshop, to any work that will be done on emerging models of the kiosk (e.g. modifications or local production of the Rural Internet Kiosk, from Kenya; support to newly emerging local models developed in partnership with local vocational schools, academia or private sector)

#### END PRODUCT/DELIVERABLES

First locally produced set of rugged computing systems installed and operational in specific rural areas

TIME FRAME: 30th June, 2011

#### Task 7

Oversee the development of rugged computing operating system environment, content delivery and "Uganda portal" system. (Software developers to be identified by Supply.) This includes:

- Define the needs of the operating system environment
- Work with programmers to develop the environment, both user interface and server applications.
- Guide development of content management system
- Test developed systems and modify according to results

### END PRODUCT/DELIVERABLES

- Operational rugged computing system environment.
- Provide each quarter a review of development
- Timeline: Ongoing with deliverable due

**TIME FRAME:** Ongoing with deliverable due date on: 30th March, 30th June, 30th September and end of contract

#### Task 8

Provide technical inputs and guidance in the development of training guides and tool kits for T4D hardware-related projects that have been successfully implemented and are operational.

### END PRODUCT/DELIVERABLES

Printable PDF toolkit on T4D hardware projects that are operational

TIME FRAME: 31st October, 2011

### Task 9

Continued development of rugged computing hardware. This will include:

- Continuation of the rebuilding of 5 rugged computing hardware systems based on findings and proof of concept design from 2010.
- Once rebuilt, piloting of 5 redesigned rugged computing hardware system in Kampala area.
- Collection of data on the 5 operational rugged computing hardware system that will include: power usage, performance, assessing impact of environmental conditions (heat, dust etc.)
- Analysis of data and modification of design based on findings.
- Building of 50 to a 100 rugged computing hardware systems to be installed throughout Uganda, specifically rural areas.
- Overseeing the installment of the initial hardware systems in specific areas
- Identification of potential partners in order to provide training and build capacity for installers and maintenance teams of the rugged computing hardware system.

#### END PRODUCT/DELIVERABLES

Operational rugged computing hardware

TIME FRAME: 1st January to end of contract

### 6. Tangible and measurable outputs of the work assignment (e.g. end products):

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

- A strong understanding of UNICEF programs and policy, including knowledge of communication, technology, youth participation and partnership goals, as well as sound interpretation and judgment to present these programs and policies in a way that enhances UNICEF's image.
- Knowledge of current trends and developments in computing, power generation and networking systems
- 3-5 years experience in developing computer and networking systems for rural environments

- Proven knowledge of open source operating systems
- Proven knowledge of wireless network technologies
- Experience with hardware design and fabrication
- Experience in developing networking, computing and power systems in remote areas
- Proven ability to manage relationships with UNICEF partners, including youth coalitions, universities, intellectual leaders, UN organizations, NGOs and the private sector
- Proven ability to conceptualise, plan and execute ideas as well as to transfer knowledge and skills.
- At least 3-5 years experience designing and managing development and implementation of projects with strong technology components, including supervising software developers, within the international development context.
- Experience developing mobile phone and web based technologies in Africa.
- Experience in supporting and coordinating project activities across a large organization and with other international partner organizations.
- Knowledge of current trends in youth participation and new media, as well as a good understanding of development issues, world affairs and current events.
- Ability to travel and work in remote and sometimes insecure locations
- Fluency in written and verbal English is a must

12. Approved by:

9. Payment Plan:		
10. Special Notes:		
11. Prepared by :		

UNICEF - UGANDA: TERMS OF REFERENCE (TOR)

### HARDWARE PRODUCTION ASSISTANT 1, T4D UNIT

### 1. Objective and targets (Attach background documents, if necessary)

### **Background**

UNICEF Uganda in Kampala desires to recruit an assistant for the Senior Hardware Engineers in all duties related to the production and deployment of the rugged solar-powered computer kiosks and to support new installations as well as the Digital Doorway and Digital Drum installations.

The consultant will work mainly in the Mbuya workshop, with occasional responsibilities at the UNICEF Kampala main office. Responsibilities will focus on maintenance and oversight of the workshop, material and tool acquisition and care, production of rugged computer kiosks, installation of rugged computer kiosks (hardware and software), monitoring, maintenance and upgrade of our installed base of units. Other occasional duties as requested by the T4D unit.

### **Purpose of Assignment**

Assist the Senior Engineers in:

- Ongoing care, maintenance and upgrading (as necessary) of Mbuya workshop
- Maintaining and training safe working conditions in workshop
- Maintenance and upkeep of all tools and equipment in Mbuya workshop including computer equipment: proxy/web server, wireless network and internet access.
- Installation of Digital Doorways, Digital Drums, Uniport and Kiosk at identified sites; basic training of on-site maintenance teams
- Other duties as assigned by Senior Engineers or T4D Unit Coordinator
- Occasional travel may be required for site surveys, installation and maintenance

#### 2. Duration:

6 months beginning 14 May, with possible extension for up to 11 months

### 3. Duty station:

Kampala - Mbuya workshop and UNICEF office

### 4. Supervisor (must be a staff member):

### 5. Description of assignment:

### Task 1

Support installation of 3 new sites (Digital Doorway or Kiosk), maintenance of 3 existing sites (Digital Drum, Digital Doorway) as needed

### END PRODUCT/DELIVERABLES

Trip reports and/or DevTrac reports of all installation and maintenance trips, including photos

TIME FRAME: Month 1

### Task 2

Document OS/software installation of Kiosk servers, help with field upgrade process

### END PRODUCT/DELIVERABLES

Online deployments system up to date

**TIME FRAME:** Month 2

### Task 3

Inventory/monitoring system: train team on how to enter data and query the database

### END PRODUCT/DELIVERABLES

Online inventory system up to date

**TIME FRAME:** Month 3

### Task 4

Assist with revision of Kiosk design based on deployed units

### END PRODUCT/DELIVERABLES

Brief (1-3 page) report on contribution to the kiosk design

TIME FRAME: Month 4

### Task 5

Ongoing installations, maintenance and work with partner installation teams (training/supervision)

### END PRODUCT/DELIVERABLES

Trip reports and/or DevTrac reports of all installation and maintenance trips, including photos

TIME FRAME: Month 5

### Task 6

Ongoing documentation of OS/software installation of Kiosk servers, help with field upgrade process

### END PRODUCT/DELIVERABLES

Online deployments system up to date

**TIME FRAME:** Month 6

- 6. Tangible and measurable outputs of the work assignment (e.g. end products):
- 7. Performance indicators for evaluation of results:
- 8. Qualifications or specialised knowledge/experience required for the assignment
- Experience with manual repair and installation of structures (wood, metal etc); set up of basic electronics
- Experience working with tools and in workshop environment
- Linux system administration experience
- $\bullet$  Experience overseeing small teams of people, taking direction, and delivering results
- Willing to travel within Uganda (sometimes on short notice)
- Residence in Kampala, Uganda, for duration of contract
- 9. Payment Plan:

Monthly payment based on outputs to deliverables, certified upon monthly review with supervisor.

- 10. Special Notes:
- 11. Prepared by:
- 12. Approved by:

### UNICEF – UGANDA: TERMS OF REFERENCE (TOR)

# SOFTWARE DEVELOPMENT, HARDWARE DESIGN, AND TRAINING VOLUNTEER

### 1. Objective and targets (Attach background documents, if necessary)

### **Background** (attach documents if necessary)

Overview: UNICEF Uganda in Kampala needs the services of a highly skilled and experienced volunteer to assist the T4D Unit with the substantial and expanding work needed on the rugged computers systems (design, prototyping, production, deployment, and related training) and related software, connectivity and power issues.

The candidate should have proven experience in the application and development of technology to support the work of an international organization, or a similar challenge. Experience working with multicultural teams in challenging conditions is desired. Travel to field locations in Uganda, as well as international travel, may be required.

The consultant will support the T4D Unit, in particular the Senior Hardware Engineer, on technical issues that take top priority for the country programme to deliver the rugged computer systems and related content package to youth centres, PTCs, schools and coordinating centres, health centres, NGO, CBO and FBO partners, and other locations deemed fitting by the Country Office.

### **Purpose of Assignment**

Assist with work on Digital Drum prototype:

- Create CAD models of drum components for fitment; update Sketchup models of drum
- Develop programmatic interface to charge controllers for direct communication with drum server
- Installations, maintenance and testing of all models
- Training of on-site T4D workers as well as partner staff, as required
- Other work as requested

### The Digital Doorways

- Assist in hardening operating system for currently deployed models
- Installation and maintenance as needed

#### New models

• Other hardware prototyping and design work as requested

All models: support to process of building operating system and content delivery system for all models (working with the software company hired by BE) – as needed

#### 2. Duration:

22 November 2010 - 20 April 2011, excluding holidays

### 3. Duty station:

Kampala - UNICEF office

### 4. Supervisor (must be a staff member):

### 5. Description of assignment: (provide detail and in quantitative terms, add pages if required)

#### Task 1

Support Senior Engineer in Digital Drum prototype building, programming and charge control issues

### END PRODUCT/DELIVERABLES

At least 3 new prototype models completed, tested, delivered installed, follow-up recommendations made to Senior Engineer

TIME FRAME: End of contract

#### Task 2

Assist in hardening the Digital Doorway operating system, and any installation, maintenance and repairs

#### END PRODUCT/DELIVERABLES

Functioning deployed Doorways; new OS installed

TIME FRAME: End of contract

### Task 3

Other design and prototyping work

#### END PRODUCT/DELIVERABLES

Proposed designs presented to Sr. Engineer

TIME FRAME: End of contract

#### Task 4

Support to Uganda Content Portal development

### END PRODUCT/DELIVERABLES

Documentation of any recommendations

TIME FRAME: End of contract

- 6. Tangible and measurable outputs of the work assignment (e.g. end products):
- 7. Performance indicators for evaluation of results:
- 8. Qualifications or specialised knowledge/experience required for the assignment
- Experience in installation and testing of computer and internet-connectivity systems in challenging locations
- Experience in at least one modern object-oriented programming language
- Experience in hardware development and fabrication
- Experience in software assessment
- Knowledge of the RapidSMS framework a plus
- Knowledge of development framework in which UNICEF operates, and understanding of the constraints of working in a developing-world environment. This should include experience developing low-bandwidth applications in difficult work environments.
- Ability to align technical goals with UNICEF strategic goals.
- Willing to travel and work in the field with partners of various technical skill levels
- Willing to relocate to Kampala, Uganda, with possible domestic and tional travel

9. Payment Plan:		
10. Special Notes:		
11. Prepared by :		
12. Approved by:		

# Designer

### UNICEF - KOSOVO: TERMS OF REFERENCE (TOR)

### **FULL TIME DESIGNER**

1. Objective and targets (Attach background documents, if necessary)

The main focus of the Designer is to design the Innovations Lab's promotional and visibility materials.

- 2. Duration:
- 3. Duty station:
- 4. Supervisor (must be a staff member):

**Project Coordinator** 

Supervisor and frequency of performance reviews:

- 5. Description of assignment: (provide detail and in quantitative terms, add pages if required)
- Responsible to design the Innovations Lab's promotional materials, such as: leaflets, brochures, posters, portfolio, webpage and other promotional and visibility materials of the lab
- Advising and helping By Youth for Youth project leaders to design the promotional materials for their projects
- Designing materials for the overall Innovations Lab's functionality
- Working on and editing videos, such as interviews, short documentaries etc.
- Working closely with the Innovations Lab and UNICEF Communication Officer to implement the lab's communication strategy.
- The designer will work on different aspects of the Innovations Lab and will be brought to design material for various projects led by the Innovations Lab or young people.
- 6. Tangible and measurable outputs of the work assignment (e.g. end products):
- 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

- At least 3 years working on Graphic Design
- Skills in video editing strongly desirable
- The ability to work as part of a small and a big team including responding to ad hock request outside the job description
- High level of motivation, ability to show initiative, creativity and work independently
- Excellent interpersonal and representational skills
- Fluency in written and spoken Albanian and English Serbian (desirable)
- Academic degree in Graphic Design or other relevant field
- 9. Payment Plan:
- 10. Special Notes:
- 11. Prepared by:
- 12. Approved by:

### UNICEF - UGANDA: TERMS OF REFERENCE (TOR)

# DESIGN WITHOUT BORDERS FELLOW (NO-FEE CONSULTANT), SPECIALIZING IN INDUSTRIAL DESIGN, USER-FOCUSED DESIGN AND BUSINESS PROCESS

### 1. Objective and targets (Attach background documents, if necessary)

#### Overview

UNICEF Uganda in Kampala needs the services of a highly skilled and experienced volunteer to assist the T4D Unit with the substantial and expanding work needed on the rugged computers systems – in particular to focus on user-centered design research and business models for manufacture.

The candidate should have proven experience in industrial design and the application and development of technology to support the work of an international organization, or a similar challenge. Experience working with multicultural teams in challenging conditions is desired. Travel to field locations in Uganda will be required.

The consultant will support the T4D Unit, in particular the Senior Hardware Engineer and his team, on hardware design issues that take top priority for the country programme to deliver the rugged computer systems and related content package to youth centres, PTCs, schools and coordinating centres, health centres, NGO, CBO and FBO partners, and other locations deemed fitting by the Country Office.

The designer will work closely on a daily basis with UNICEF and also regularly with its ICT site partners, and will be responsible for the following:

- Understand culture / vision / goals of UNICEF, the UNICEF Uganda CO and Learning Team, MoES, other government partners, and the youth centres and other partners which will be hosting the ICT sites
- Conduct market research to get a better understanding of the target market's (Ugandan youth, mothers and children, VHTs, etc) needs, interests and lifestyles
- Understand existing products that provide similar needs on the international market
- Identify design needs of the target groups and match them up with UNICEF and partners' visions and goals.
- Synthesise the information gathered to develop design specifications
- Design, develop and assist in implementing the information kiosks
- Help the association create short / medium / long term design goals and plans

#### 2. Duration:

8 March 2011 - 1 June 2012

### 3. Duty station:

Kampala - UNICEF office

### 4. Supervisor (must be a staff member):

### **5.** Description of assignment: (provide detail and in quantitative terms, add pages if required)

### Phase 1 – baseline study

#### END PRODUCT/DELIVERABLES

Baseline study report: Goal-defined plan for the design project based on the baseline study, containing defined output and outcomes as well as indicators; Concept design specification; Report on project status – user feedback on current design

TIME FRAME: 10 June 2011

### Phase 2 - concept development

### END PRODUCT/DELIVERABLES

Prototype DWB; Concept development report (Prototype testing, User feedback on concepts designs, Pricing and manufacturability, Design specification)

TIME FRAME: 30 September 2011

### Phase 3 – engineering

### END PRODUCT/DELIVERABLES

Functional prototype DWB; Production documentation (Test reports, Technical drawings / components list, Assembly Instructions, Service procedures and manual)

TIME FRAME: 31 December 2011

### Phase 4 - industrialization

### END PRODUCT/DELIVERABLES

O series DWB model (fully functional series production of DWB)

TIME FRAME: 31 March 2012

#### Phase 5 - installation

#### END PRODUCT/DELIVERABLES

Final report; 0 series DWB models installed in youth centres in Uganda

TIME FRAME: 1 June 2011

6.	Tangible and measurable outputs of the work assignment (e.g. end
	products):

### 7. Performance indicators for evaluation of results:

### 8. Qualifications or specialised knowledge/experience required for the assignment

### **Experience in:**

- Mechanical design
- Industrial design
- Project management
- Broad knowledge of manufacturing technologies and materials
- Experienced in product development processes (Cooper stage gate).

### **Skills to include:**

- Creative management of product development projects
- Mechanical design
- 3D modeling and concept visualization
- Hand sketching
- Product testing and verification

### 9. Payment Plan:

### 10. Special Notes:

If volunteer is required to travel in country for work purposes, UNICEF will pay DSA and travel costs as standard to SSA Individual contracts

### 11. Prepared by:

### 12. Approved by:

# Volunteers (Technology)

## VISUALIZATIONS WITH JAVASCRIPT LIBRARIES

Brief Description: Complement the work of Innovations Lab by using JavaScript Libraries for visualization of data in interactive charts and graphs.

- Familiarise self with Protovis/InfoVis Libraries and examples of data visualization
- Check Protovis and InfoVis Libraries and corresponding Examples, use one of these libraries and take existing Innovations Lab work (map of Kosovo municipalities) to display given data
- Add interactive features to the map (dropdown lists, radio buttons etc.)
- Prepare external presentation about project; finish any activities that were delayed.

Requirements: JavaScript, JSON Objects, ability to work in a team, communications and documentation skills, eager to learn.

Desired Skills: Version Control with Git (or SVN).

Acquired Skills: Visualizations, Javascript, Web 2.0 technologies.

Benefits: Gain valuable work experience in a young and fun environment, increased employability in innovative web-design firms that work with web 2.0 technologies; ability to develop own visualization projects.

Schedule: Part-time (20 hrs per week) or Full-time (40 hrs per week).

### DJANGO DEVELOPER

Brief Description: Work with the staff of the Innovations Lab to program applications on top of RapidSMS framework with Django.

- Familiarise self with MVC framework and Python programming language
- Pick a project out of a list of easy-to-build Django applications from UNICEF's RapidSMS usage context
- Development of Django site in close collaboration with Project Manager and Software Development Mentor
- Document the development of the application
- Prepare external presentation about project; complete any activities that were delayed.

Requirements: Python, MySQL, ability to work in a team, communication and documentation skills, eager to learn.

Desired Skills: Version Control with Git.

Acquired Skills: Model View Controller Framework, developing Web 2.0 technology backend with Python.

Benefits: Gain valuable work experience in a young and fun environment, increased ability to create web applications (using Django) with less work, will be positioned for increasingly demanded but not supplied Python-based jobs in Kosovo.

Schedule: Part-time (20 hrs per week) or Full-time (40 hrs per week).

### DRUPAL DEVELOPER

Brief Description: Work with the staff of the Innovations Lab to program web database driven applications.

- Familiarise self with Model-View-Controller framework, MySQL and PHP programming language
- Pick a project out of a list of easy-to-build Drupal applications from UNICEF's context
- Development of Drupal site in close collaboration with Project Manager, Software Development Mentor
- Document Project, prepare external presentation about project; finish any activities that were delayed.

Requirements: PHP, MySQL, ability to work in a team, communication and documentation skills, eager to learn.

Desired Skills: Version Control with Git.

Acquired Skills: Model View Controller Framework, Databases, developing web 2.0 technology backend with PHP.

Benefits: Gain valuable work experience in a young and fun environment, increased ability to create web applications with the extensive available features of Drupal framework, will be positioned for utilizing this for web developer jobs.

Schedule: Part-time (20 hrs per week) or Full-time (40 hrs per week).

### **USHAHIDI DEPLOYMENT FOR MAPPING**

Brief Description: Complement the work of the Innovations Lab by using the Ushahidi platform to customise it for mapping purposes.

- Familiarise self with the Ushahidi Platform and Install it on a local server
- Understand and analyze the requirements of mapping farms/farmers in Kosovo
- Begin customization of Ushahidi source code
- Finish customization. Prepare registration web forms and various other administrative tasks for the web site.
- Produce documentation for future implementation
- Prepare external presentation about project; finish any activities that were delayed.

Requirements: PHP, MySQL, ability to work in a team, communication and documentation skills, eager to learn.

Desired Skills: Version Control with Git.

Acquired Skills: DBMS, open source platforms, crowd-sourced mapping.

Benefits: Gain valuable work experience in a young and fun environment, mastery and knowledge of database and open source systems, knowledge about crowd-sourced mapping in the world, etc.

Schedule: Part-time (20 hrs per week) or Full-time (40 hrs per week).

### MOBILE APPLICATION DEVELOPER

Brief Description: Work with the staff of the Innovations Lab to program a data collection mobile application.

- Get familiar with mobile applications (with JavaRosa platform)
- Pick a task out of UNICEF's context in collecting data with mobile phones
- Work on implementation an testing of a JavaRosa data collection application
- Prepare external presentation about project; finish any activities that were delayed.

Requirements: Java, ability to work in a team, communication and documentation skills, eager to learn.

Desired Skills: Version Control with Git, JavaRosa.

Acquired Skills: Mobile application development.

Benefits: Gain valuable work experience in a young and fun environment, knowledge of developing mobile application etc.

Schedule: Part-time (20 hrs per week) or Full-time (40 hrs per week).

### PROGRAMMING WITH OPENLAYERS

Brief Description: Complement the work of the Innovations Lab by using the OpenLayers Library to program applications with maps.

- Familiarise self with OpenStreetMap and OpenLayers
- Research existing projects (e.g. transportation openbusmap.org) and how map layers are retrieved from OSM with the OpenLayers library
- Retrieval of particular information (to be decided later, e.g. bus lines in Prishtina) from OSM and displaying on a web site
- Make website functional and public, ironing out bugs, etc.
- Prepare external presentation about project; complete any activities that were delayed.

Requirements: JavaScript, ability to work in a team, communication and documentation skills, eager to learn.

Desired Skills: Knowledge of OpenStreetMap API, Version Control with Git (or SVN).

Acquired Skills: Working with OpenStreetMap API, OpenLayers (JavaScript) and web 2.0.

Benefits: Gain valuable work experience in a young and fun environment, increased employability for firms that work with information on maps, ability to use maps and display information on top of them.

Schedule: Part-time (20 hrs per week) or Full-time (40 hrs per week).

### WEB DESIGNER

Brief Description: Design user-friendly and slick web interfaces for the Innovations Lab web applications

- Pick a task out of UNICEF's web applications (with Django, Drupal etc.)
- Work on implementation of the interface based on user requirements
- Prepare external presentation about project; finish any activities that were delayed. Requirements: HTML/XHTML, CSS, XML, JavaScript, ability to work in a team, communication and documentation skills, eager to learn.

Desired Skills: HTML5, knowledge of Dreamweaver, Photoshop, Adobe Illustrator, ability to utilise a database, Python.

Acquired Skills: HTML, CSS, JavaScript.

Benefits: Gain valuable work experience in a young and fun environment, increased employability for graphic and web design firms.

Schedule: Part-time (20 hrs per week) or Full-time (40 hrs per week).

# Lab Process Documents

### UNICEF – ZIMBABWE: TERMS OF REFERENCE (TOR)

# TOR FOR SCOPING MISSION FOR ZIMBABWE COUNTRY OFFICE: INNOVATION TECHNOLOGY FOR DEVELOPMENT

#### 1. Tasks

#### Three main focus areas

Present ongoing tech4dev innovation in other CO's and at HQ to the ZCO – a larger presentation and then individual work-slots with programme areas who are interested in various aspects. This is presenting everything from rapidSMS to trends in education technology to birth registration (RapidFTR)

- This presentation usually happens first or second day with individual meetings with programme staff scheduled as convenient
- This is an overarching objective which continues through the whole mission and will end with a report about what various possibilities are for innovative tech4dev work in the Country Office, which the CO could then decide how to move forward on (with support from NY)

#### **Work with CORE**

- Specific work to present ongoing initiatives in Kosovo, Uganda, etc. to CORE staff, hear about their work, look at partnerships with other Innovation labs and global private sector.
- Explore possibility of using modern technology to conduct the Vital Medicines Availability and Health Services Survey (VMAHSS) The VMAHSS was commissioned in 2009 in response to a need articulated by the donor community in conjunction with the Ministry of Health and Child Welfare, to routinely obtain data concerning expected and actual deliveries of vital medicines to over 1,300 health facilities across the country. While the VMAHSS has so far facilitated timely identification of medical supply gaps and other challenges at the health facilities in the last eight rounds, it is critical to transition over time to collection of data through an efficient, appropriate real time monitoring system possibly rapid SMS or PDAs'. The mission includes field visit and discussion with partners such as mobile service providers, academia, etc. to evaluate the possibility of applying such technology in Zimbabwe and a detailed costed implementation plan.

#### **Work on Real time Monitoring**

 Work with PME / M+E / and Information Management in ZCO and see places for support of ongoing or upcoming CO initiatives that can benefit from work with real time information.

#### 2. Pre-mission

- Provide background, examples and analysis on how UNICEF has used mobiles for project monitoring and programme implementation over the past three years. [ who should be the focal point for this it will essentially be me dumping a large amount of information that CO can hand out to relevant programme staff before arrival]
- Provide background on key operating principles of using innovation / tech4dev. Provide background and examples on necessary partnerships needed for using mobiles in project monitoring and programme implementation.
- Country specific understanding of CPAP / country plan and CORE needs prior to arrival

### **Some Basic Principles**

Context	Culturally appropriate, socially acceptable, exploits available technologies, builds on existing practices
Motivation	Provides a shortcut (saves time and/or effort), builds personal or professional reputation, encourages peer pressure
Behavior	Similar to existing workflow/practices, easy to understand, or desirable enough to incentivise change, adequate training
Critical Mass	Sufficient participation in order to get value from the system. Early adopters/influencers to promote peer learning
Sustainability	Mechanisms to measure/evaluate usage and desired behaviors. Adequate training and motivation to reinforce participation
Awareness	Promotion by formal and informal chan- nels, local training capacity and local project staff
Expense	Ongoing costs are acceptable to implementers, and partners, and system administrator to maintain system
Usability	Acceptable training requirements, actions are as natural as possible, training materials are appropriate for low literacy
Quality	Functions reliably, gives constructive feed- back to errors, local software developer(s) for bug fixes and new features
Support	Help and supplementary training is readily available from formal (implement- ers) and informal (peer) channels

### 3. During mission

- Meet with Operations Manager and Country Representative to discuss Country Office priorities within project monitoring and reporting, and initial rapid assessment for emergencies.
- Presentation to Country Office based off of pre-mission tasks
- Individual meetings with Country Office M&E, IT, Emergency, Health, WASH, Education, and Protection etc. teams to discuss table listed below. This discussion will lead into discussion and agreement on how to prioritise various tech4dev projects as requested by the CO.

### 4. Post-mission

- Based on tasks completed during mission and in collaboration with key interested parties in CO prepare final report (Background, Proposal, HR requirements and associated TORs, necessary partnerships, Budgets etc.) for various projects. Depending on the amount of support time from CO these can be quite detailed.
- Connections to appropriate stakeholders for various projects at a global level (i.e. if there is interest in connecting with other innovation labs, ensuring that those conversations are started and guided).
- Continued support from NYHQ on staffing, hiring for TORs, etc.

### UNICEF – ZIMBABWE

### **CONCEPT NOTE/PLAN OF ACTION 2011**

#### 1. Introduction

In response to the growing recognition of the need for robust information to inform policies, programming and practices, the Collaborating Centre for Operational Research and Evaluation (CCORE) was established in 2010 to support and promote operational research and to strengthen the use of quality data in guiding policies and programming in Zimbabwe. With strong, accurate, and program-focused information, programs can adopt better targeted and more appropriate strategies, outcomes and impact can be more effectively measured, existing funding can be better focused, and new funding can be better leveraged.

The CCORE, located on the UNICEF campus in the Belgravia neighborhood of Harare, began operations in March 2010, and currently works to build the field of operations /intervention research and evaluation in the Zimbabwean health and social sciences communities through technical assistance, capacity building, and information dissemination.

Prior to formation of the CCORE, an exhaustive situational assessment process was undertaken with over 40 identified stakeholder organizations from the government, para-statal, donor, NGO, United Nations, and academic sectors. Participants were briefed on the overall mission of the project and proposed objectives of proposed collaborative operational research centre, and asked for feedback on what their current needs in the OR field were, and how the proposed CCORE could best assist them in meeting their needs. The findings from the institutional review clearly revealed capacity and skills gaps in the broad domain of operational research and evaluation and a "green-light " was received to develop a multi-disciplinary collaborating Centre for Operational Research and Evaluation. Feedback from the review process was incorporated into the overall framework of the new "CCORE"

### 2. The CCORE Mandate

The CCORE offers support for the advancement of operational/intervention and evaluation in five strategic areas. Expected outcomes, activities, expected outputs and estimates costs for each of these five strategic areas are fully described in the AWP attached .

### Strategic Area 1. Collaboration and Partnerships with existing research institutions and the public sector

In this domain CCORE will operationalise the CCORE conceptual framework, strengthen internal coordination and expand local and regional partnerships

### Strategic Area 2. Capacity Building to enhance and improve evidence based approaches to programming by enhancing data management and data use

Activities in the capacity building domain will include an internal (UN) assessment of data management needs, the development, delivery and evaluation of short courses to address needs both internally and externally – e.g. at partner level

### Strategic Area 3. Collaboration and technical support for evaluation research in key areas of thematic focus

In this domain CCORE will activate the evaluation agenda and provide support for evaluation research in each thematic area (MNCH and Nutrition; Education; HIV and Youth; WASH; Social Protection Social Policy and Health Information )

### Strategic Area 4. Technical and financial support for Operational Research in key areas of thematic focus:

The Operational/Intervention Research agenda will be clearly defined against standard guidelines and CCORE funds and technical support will be provided to activate at least four OR studies in 2011, according to identified thematic areas

### Strategic Area 5. Knowledge management and Dissemination – by providing a platform for routine dissemination of current operational/intervention research and evaluation

In this domain CCORE will develop a publications policy and activate and maintain, dissemination forums and information sharing through electronic and other mechanisms

### 3. CCORE Thematic Focus

The CCORE has its focus on 5 key thematic areas, including (but not limited to) the areas of maternal newborn child health and nutrition, health systems strengthening, social protection including livelihoods, water and sanitation and basic education with HIV as cross cutting

### 4. CCORE Structure and Governance

Oversight to the CCORE and its operation is currently provided by UNICEF in collaboration with the Centres for Disease Control (CDC) Zimbabwe, under the direct leadership of the UNICEF Country Representative.

The CCORE is managed by a Senior Technical Advisor working with a small team of staff employed on a contract basis. All staff is recruited according to UNICEF regulations and subject therefore to conditions of service stipulated by the United Nations. Currently these comprise an Epidemiologist, Data Analyst and a Capacity Building Specialist. The Program Assistant provides administrative support to the Centre and technical support is provided by the CDC Epidemiologist

With reference to the Draft Organogram in Figure 3, it is noted that although planned, the appointment of a Knowledge Manager and a Personal Assistant is pending while

the Special Studies Unit falls within the rubric of a planned partnership, possibly with CDC Zimbabwe.

### 5. Funding

CCORE is a non-profit organization and currently operates with generous funding from a private benefactor. Funds are managed by UNICEF and therefore subject to a system that ensures strict accounting and audit controls.

### 6. Collaborating partners

CCORE has established a strong network of local research partnerships, including the University of Zimbabwe College of Health Sciences; the Bio-medical Research Training Institute (BRTI); ZIMSTATS (Zimbabwe Statistical Authority; MRCZ (Medical Research Council of Zimbabwe); the NAC (National AIDS Council); the Public sector (Ministry of Health and Child Welfare; Ministry Labour and Social Services; Ministry of Education), Non Governmental and Social Sector networks such as the WASH , Protection, Education and Nutrition Clusters. Internationally, the CCORE is building strong alliances with RTI International , the London School of Hygiene and Tropical Medicine (LSHTM); University College of London (UCL), Pangaea and Battelle. CCORE also acknowledges the need to network regionally.

### 7. Planned activites of 2011

In the Appendices that follow, details of the 2011 Annual Work plan are presented. Though not exhaustive, the plan adheres to the operational framework of collaboration, capacity building, support for evaluation and operational research (through special studies) and knowledge management and dissemination. The Annual Work plan (AWP) provides details of activities and outputs by specific time frame, [in this case quarterly], with an estimated budget for expected outcomes for each domain listed below:

### 8. Review Process

A Quarterly review process will be employed to monitor progress against intended targets and results. CCORE is also subject to and compliant with, internal (UNICEF) review processes.

Prepared by Susan M. L. Laver (PhD)

**Senior Technical Advisor: CCORE** 

January 2011

## External Partner Contracts

### UNICEF - KOSOVO: TERMS OF REFERENCE (TOR)

### MOU WITH MOBILE PROVIDER

### POST AND TELECOMMUNICATIONS OF KOSOVO (PTK)

### and

### **UNICEF KOSOVO**

### Mobile Communications Innovations for Kosovo Children and Youth

**THIS AGREEMENT** (together with all schedules hereto, this "Agreement") is made as of the XXX day of July, 2010.

### **BETWEEN:**

THE UNITED NATIONS CHILDREN'S FUND ("UNICEF"), an international intergovernmental organization established by the General Assembly of the United Nations by resolution No. 57(I) of 11 December 1946 as a subsidiary organ of the United Nations, having its Headquarters at UNICEF House, 3 United Nations Plaza, New York, New York 10017, U.S.A and having an office at Ali Pasha Tepelena No.1, Pristina 10000, Kosovo.

### AND:

POST AND TELECOMMUNICATIONS OF KOSOVO ("PTK"), organised and existing under the laws of the Republic of Kosovo, having its representative office in Pristina [address] (hereinafter "The Company"), represented by CEO Dr Shyqiri Haxha;

### UNICEF and the Company are hereinafter referred to as ("the Parties").

### WHEREAS

- A. UNICEF works with governments, civil society organizations and other partners world-wide to advance children's rights to survival, protection, development and participation, and is guided by the Convention on the Rights of the Child.
- B. UNICEF's work in Kosovo is implemented in accordance with UN SCR 1244 and the UNICEF Kosovo Action Plan 2005-2010, whereby UNICEF and Kosovo institutions are jointly working on the realization of the rights of all children, supported in this instance through innovative use of modern mobile communications solutions that would increase data collection, linkages between institutions and their clients, and enable greater participation of Kosovo's children and young people in advocacy and decision-making processes.
- C. In this context UNICEF and PTK, with the support of key Kosovo institutions, are interested in implementing a project as more fully described in Annex A of this agreement entitled "Mobile Communications Innovations for Kosovo Children and Youth" (hereinafter referred to as the "Project").
- D. UNICEF and its partners have conducted an initial analysis and found that the lack of data and cost-effective means of communication readily available for use by Kosovo institutions, and the weak ability for active participation in civic life by young people, significantly limit the potential for development, particularly in a context in which over 50 percent of the population are under 25 years old.
- E. The Company has offered to support the implementation of the Project by providing in-kind support through providing access to its SMS and mobile innovations platform (and the required technical support) at no cost to UNICEF, its partners and/or beneficiaries (hereinafter referred to as "the Initiative"). The Initiative is described in Annex 2, which is an integral part of this Agreement. The Parties would ensure that any and all software development done on this project would be licensed in the public domain and the software code accessible by the open source community.

NOW, THEREFORE, on the basis of mutual trust and in the spirit of friendly cooperation, UNICEF and PTK (hereinafter referred to as "the Parties") have agreed as follows:

### 1. PURPOSE OF AGREEMENT AND PROJECT

- 1.1. The Purpose of this Agreement is to establish the general terms and conditions under which the Parties will collaborate in the implementation of the Project.
- 1.2. UNICEF and Kosovo institutions are working on the realization of rights for all Kosovo children. Lack of readily available data and weak participation of children and youth in decision-making processes is a critical barrier to these efforts. SMS technology can play a major role to fill that gap.

### 2. GENERAL RESPONSIBILITIES OF THE PARTIES

- 2.1. The Parties agree to carry out their respective responsibilities in accordance with the provisions of this Agreement. The Parties agree to join efforts and to maintain close working relationships in order to achieve the objective of the Project.
- 2.2. The Parties agree to keep each other informed of all relevant activities pertaining to the Project, and its implementation, and will hold regular consultations and also to consult at anytime as any Party considers it appropriate, on the status of this collaboration, particularly during the piloting stage, including any circumstances that may affect the achievement of the objectives.

### 3. RESPONSIBILITIES OF UNICEF.

- 3.1. Under this Agreement UNICEF will:
- 3.1.1. Support implementation of initiatives agreed in consultation with Kosovo institutions in respect of the Project;
- 3.1.2. Co-develop Communication Plan for the Project with the Company;
- 3.1.3. Co-organise any required training within its field of expertise related to the Project with the Parties;
- 3.1.4. Provide insight and data to guide in the analysis, development and imple mentation phase;
- 3.1.5. Ensure that the in-kind contribution received from PTK is used only for the purpose of implementing those activities necessary for the execution of the Project

### 4. RESPONSIBILITIES OF THE COMPANY

- 4.1. Under this Agreement, the Company will support the Project by the use of SMS-based mobile communications solutions, providing services within the context of the Project, in the form of in-kind and technical support. Some examples of technology collaboration that will be needed include but are not limited to:
- 4.1.1. Toll-free incoming / outgoing SMS shortcodes as well as the necessary links to PTK's mobile gateways (UNICEF servers would / could live outside of PTK but would need to send and receive information to PTK's gateways);
- 4.1.2. Location data for incoming messages (down to municipality level) this would not need to be individual location, but to give a sense of roughly where mes sages (data) are coming from;
- 4.1.3. Ability to do coordinated SMS "blasts" to PTK subscribers both general blasts and blasts to certain demographics (in the cases where there is subscriber demographic data);
- 4.1.4. A technical and non-technical resource from PTK available as needed, for both the prototyping / development phase (including developing server-based applications for mobile phones, using open source tools) and the implementation phase. [DEFINE # hrs / week]
- 4.1.5. Support for lab facility (financial / in kind) including: physical hosting / "open" office-space, connectivity, media and communications around lab projects, outreach to youth,

### **Strategic collaborations:**

- Work with UNICEF to help build the FOSSK (open source community of Kosovo);
- Commit to engaging with academia to collaborate around open source development and mobile innovation courses with the University of Prishtina;
- Work to create necessary and appropriate partnership frameworks with external thought-leaders (for example: Twitter). This would involve leveraging PTK's extensive knowledge of needs and possibilities and having them work with UNICEF to craft additional partnership documents and engagements;
- Participate in trend-spotting in the region what is coming in the next year or two, how can UNICEF be strategic rather than reactive to the technology and advise UNICEF on trends.
- 4.2 The Company will commit staff time and resources to develop the following SMS-related products / services (or similar). This list is neither exhaustive nor final, and is likely to change over time, and as such should be considered as indicative of potential opportunities.

### Health

- Register births and deaths (between 7 and 10 percent of births in Kosovo are not registered, and the cause of up to 40 percent of deaths are unrecorded).
- Promote healthy pregnancy register and track pregnant mothers at key milestones, providing reminders for follow-up, utilization of pregnancy booklet, iron and folic acid tablets, deliver health promotion messages, for key antenatal interventions such as HIV testing and results, safe delivery, care after delivery, nutrition, breastfeeding, etc.
- Promote healthy children register and track children at key milestones to ensure that they are up-to-date on key immunizations, breastfeed, deliver messages for adequate child care and development and are screened for key risk factors such as malnutrition, parasites, etc.
- Conduct disease surveillance that is instantly aggregated at a central level.
- Track case referrals linking and following patient 'movements' to other sites, strengthening referral systems by building check-ins. (i.e. checks that children referred for health services actually receive those services).
- Monitor and support the work of clinics and health workers through real-time information, and enable them to see their data on a rich map interface.
- Query health workers for information from a specific location.
- $\bullet$  Enable sanitary inspectors at border points to report to central level instantly.
- Create epidemic / health SMS hotline to pass 2-way information on incidence of communicable diseases (e.g. H1N1, hemorrhagic fever) and non-communicable diseases.
- Identify and advocate families who have not vaccinated their children.
- Support community reporting for smoking violations.
- Enable rapid communications on water quality testing.
- Inform communities on the availability / location of mobile clinics and blood donor drives.

### Youth participation

- Provide a platform for student counsels to communicate concerns and initiatives for social mobilization (e.g. youth opinion polls).
- Link to Facebook and /or Twitter (partnership discussions with Twitter are ongoing).
- Link to UNICEF Innovations Lab in which young people will be working on innovative solutions to problems

### **Child protection**

- Provide platform for reporting on violence against children and young people (in schools, in the workplace, at home, etc).
- Provide platform for self-reporting of delinquencies
- Communicate health/life-skills messaging via SMS (e.g. substance abuse, venues serving underage children, bars/restaurants allowing child vendors of tobacco products, etc).

### **Education**

- Identifying and including children with special needs into the regular school system.
- Use SMS as a means to capture essential data generated at school/municipality level, and feedback guidance from central level, i.e. connect schools to each other and to the Ministry.
- Identify and support families with out-of-school children to re-engage in formal education.
- Produce mapping of SMS-generated data to highlight geographical gaps/issues in present in the education sector.

### **Expected results and outcomes**

- Reduction of burden of data reporting at district health level as real-time data will be available.
- Contribution to reduced maternal, infant and child morbidity and mortality through performance tracking of staff and utilization of users.
- Increased access to and utilization of education services by children, especially those currently suffering exclusion.
- Greater knowledge of service gaps by duty bearers at central level, leading to more informed decisions re efficient allocation of resources.
- Increased reporting, transparency and accountability in terms of reach and quality of services provided by the public service system.
- Bird's-eye view of the scope and quality of social services provided to women and children in resource poor areas.
- 4.3. The above-mentioned products / services shall be jointly developed by the Parties and delivered within a mutually agreed work-plan / time-frame. All outputs of this work would be licensed under BSD licensing and would be open source and in the public domain.

### 5. COMMUNICATION AND PROJECT PROMOTION

- 5.1. The development of all communications and materials related to the Project will be mutually coordinated by the Parties, and in all communications materials the Project will be referred to as agreed by all Parties.
- 5.2. UNICEF and the Company will develop written material, including promotional material (hereinafter referred to as "the Project Materials"), for use by the Parties in connection with the Project. Such materials will describe the Project, the use of the support provided by the Company to the Project, and such other matters as the Parties may agree. The Materials shall be reviewed and approved by the Parties prior to production, in accordance with the relevant regulations, rules and procedures of the Parties.
- 5.3. The Parties hereby authorise each other to publicise its participation in the Project, along with a description of the Project. Where promotional or advertising materials (hereinafter referred to as "the Publicity Materials") are produced for external publication, the Parties shall review and approve the Promotional Materials prior to their use, in accordance with the rules and regulations of the Parties. Such approval shall not be unreasonably withheld, and review shall take place in a timely manner. Notwithstanding the foregoing, the Parties shall be entitled to reference and communicate the Project and mutual co-operation in their internal communication. The right shall include referencing of the Project and its progress on the Parties intranets or other relevant internal communication channels. This right shall also apply with regards to the Parties' ongoing internal and external awareness activities including lectures, presentations, etc. UNICEF and the Company will jointly develop a Communication Plan for the Project.

### 6. USE OF THE UNICEF NAME AND LOGO

- 6.1. UNICEF hereby grants to the Company the non-exclusive, non-assignable right to use the UNICEF name and logo for the term of this Agreement and in accordance with the UNICEF Brand Tool Kit (a copy of which has been provided to the Company), in the form set out in Annex B, solely for the purpose of the Project and to the extent necessary to give effect to this Agreement, and subject to the terms of this Agreement. The grant of this right does not constitute an endorsement of the Company's business or services by UNICEF or the United Nations.
- 6.2. The Company hereby grants UNICEF the non-exclusive, non-assignable right to use the PTK name and logo for the term of this Agreement and in accordance with the PTK Brand Guidelines (a copy of which will be provided upon request), solely for the purpose of the Project and to the extent necessary to give effect to this Agreement.
- 6.3. The Company will not abuse, infringe, or otherwise violate UNICEF's rights in the UNICEF signature. The provision shall survive the expiration or early termination of this Agreement.
- 6.4. The Company represents and warrants to UNICEF that neither the Company nor any person or entity controlling the Company, controlled by the Company or under common control with the Company (a) is engaged in the sale or manufacture of anti-personnel mines or of components utilised in the manufacture of anti-personnel mines, or (b) employs child labour in the conduct of its business. The Company acknowledges and agrees that a breach of this provision is a breach of an essential

term of this Agreement, entitling UNICEF to terminate the Agreement as it relates to the Company immediately by written notice to the Company.

### 7. PROJECT COORDINATOR AND CONSULTATION

- 7.1. The Parties agree that performance follow-up must be jointly conducted at least once a month during the piloting stage.
- 7.2. Each of the Parties agree to appoint and to maintain for the duration of this Agreement, a Project Coordinator, who will have primary responsibility for its involvement in the Project and liaison with the other Parties, and the Project Coordinators shall work in a coordinated manner for the success of the Project.
- 7.3. Each Party agrees to designate the following coordinators:
  - i. UNICEF designates: Deputy Head of Office or delegate
  - ii. The Company designates: to be advised
- 7.4. The Parties will consult each other throughout the term of this Agreement through a mutually agreed modality in order to ensure its smooth and effective implementation and to share comments, observations and lessons learned about the Project.

### 8. TERM AND TERMINATION

- 8.1. This Agreement shall enter into effect upon its signature by all Parties and shall remain valid for a period of twenty four (24) months as the required completion date unless terminated by any of the Parties in accordance with paragraph 10.2 below.
- 8.2. Any Party may terminate this Agreement for any reason upon sixty (60) days' written notice to the other Party. In the event of a breach by one of the Parties of the terms of this Agreement, the non-breaching Party may request the breaching Party in writing to remedy such breach within thirty (30) days and if the breaching Party shall fail to remedy said breach within the specified time, or if the breach cannot be remedied, the non-breaching Party may terminate this Agreement forthwith in writing, without prejudice to any right which may have accrued to the breaching Party.
- 8.3.Upon termination of this Agreement (other than by early termination in accordance with 8.2, the Parties will consult with a view to explore the possibility of concluding a further agreement; provided however that should the Parties not conclude a further agreement within sixty (60) days thereafter, the company will within thirty (30) days after that sixty (60) days period, deliver to UNICEF all promotional material in connection with the Project then held by the Company or on its behalf carrying only the UNICEF signature.
- 8.4. If any of the Parties terminate this Agreement before the expiry date the other Party will undertake to withdraw any publicity materials carrying the Party's name and logo and discontinue all promotional and publicity activities in connection with the Project.
- 8.5. The obligations assumed by the Parties under this agreement shall survive the term of the Agreement to the extent necessary to permit the orderly conclusion of the activities and the settlement of any contractual liabilities that are required by each Party under the Agreement and any Amendment thereto.

### 9. SETTLEMENT OF DISPUTES

### 9.1. Between UNICEF and the Company

The Company and UNICEF shall use their best efforts to settle amicably any dispute, controversy, or claim arising out of or relating to this Agreement. Where the Company and UNICEF wish to seek an amicable settlement through conciliation, the conciliation shall take place in accordance with the UNCITRAL Conciliation rules then obtaining, or according to such other procedures as may be agreed upon. Any such dispute, controversy, or claim which is not settled amicably within sixty (60) days after receipt by each of the parties of the other's request for such amicable settlement, shall be referred by any of them to arbitration in accordance with the UNCITRAL Arbitration rules then obtaining. They shall be bound by an arbitration award rendered as a result of such arbitration as the final adjudication of such dispute. The costs of the procedure shall be equally shared by each of them. In no event shall UNICEF be liable for incidental, indirect, or consequential damages or for lost revenues or profits. The arbitral tribunal shall have no authority to award punitive damages. The arbitral tribunal shall have no authority to award interest in excess of four percent (4%) per annum, simple interest not compounded. As used herein, "UNICEF" means UNICEF, and "UNCITRAL" means the United Nations Commission on International Trade Law. Nothing in this paragraph will prevent UNICEF from enforcing its rights in its name, logo, and signature by means other than arbitration.

### 10. PRIVILEGES AND IMMUNITIES

Nothing in or relating to this Agreement will be deemed a waiver, express or implied, of any of the privileges and immunities of the United Nations and its subsidiary organs, including UNICEF, whether under the Convention on the Privileges and Immunities of the United Nations or otherwise, and no provision of this Agreement shall be interpreted or applied in a manner, or to an extent, inconsistent with such privileges and immunities.

### 11. MISCELLANEOUS

- a. The Company shall indemnify, hold and save harmless and defend, at its own expense, UNICEF and their respective officials, agents, servants and employees, from and against all third party suits, claims, demands and liability of any nature or kind, including their costs and expenses, arising out of the acts or omissions of the Company or its employees or sub-contractors in the implementation of the Agreement. This provision shall extend to claims arising out of the use of Equipment.
- b. UNICEF shall indemnify, hold and save harmless and defend, at its own expense, the Company and their respective officials, agents, servants and employees, from and against all such third party suits, claims, demands and liability of any nature or kind, including their costs and expenses, arising out of the acts or omissions of the UNICEF or its employees or sub-contractors in the implementation of the Agreement. as UNICEF shall determine. This provision shall exclude claims arising out of the use of the Equipment and materials provided by the Company for the Project).
- c. This Agreement shall not be construed as transferring any rights or licenses to the Project that are not explicitly granted herein or otherwise necessary for the implementation of the Project. For the avoidance of doubt, information with regards to how

the Company applies the Project which is not publicly communicated by the Company itself or otherwise in lawful possession of the public domain, shall not be communicated to third parties.

- d. This Agreement contains all the covenants, stipulations and provisions agreed by the Parties with respect to the subject matter hereof. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.
- e. This Agreement may only be modified by written agreement of the Parties. The Parties will not assign, transfer, pledge or make other disposition of this Agreement or any part thereof, or any of its rights, claims or obligations under this Agreement except with the prior written consent of other Parties.
- f. The Parties warrant that no official of each of the parties has received or will be offered by any of other party any direct or indirect benefit arising from this Agreement or the award thereof. The parties agree that breach of this provision is a breach of an essential term of this Agreement.
- g. The Parties will comply with all laws, ordinances, rules and regulations bearing upon the performance of their obligations under the terms of this Agreement.
- h. Notices will be deemed to be effective as follows: in the case of personal delivery, on delivery; in the case of registered mail, seven (07) days; in the case of facsimiles, twenty four (24) hours following confirmed transmission.
- i. Any notice, request or consent required or permitted to be given or made pursuant to this Agreement shall be in writing, and addressed and sent by registered mail or facsimile to such Party as follows:
- i.i. If to UNICEF: Luciano Calestini, Deputy Head of Office, UNICEF Kosovo i.ii. If to PTK: to be advised
- j. This Agreement is concluded in 4 (four) identical copies in English and each Party is entitled to two (2) copies.
- IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be signed by their duly authorised representatives in their respective names as of the day and year first above written.

Ву	
Name: Johannes Wedenig	Title: Head of Office, UNICEF Kosovo
POST AND TELECOMMUN	TICATIONS OF KOSOVO, PTK

### UNICEF - KOSOVO: TERMS OF REFERENCE (TOR)

### MOU WITH UNIVERSITY OF PRISHTINA

### UNITED NATIONS CHILDREN'S FUND IN KOSOVO (UNICEF)

### **AND**

### UNIVERSITY OF PRISHTINA

THIS MEMORANDUM OF UNDERSTANDING ("MoU") is entered into between UNICEF Office in Kosovo, (No. 1, Rd. Ali Pashe Tepelena, 10000 Prishtinë, Kosovo), a subsidiary organ United Nations established by the General Assembly of the United Nations pursuant to resolution 57 (I) of 11 December 1946, having its headquarters at UNICEF, 3 United Nation Plaza, New York 10017 NY, USA and UNIVERSITY OF PRISHTINA (Str. "Gazmend Zajmi", nio 75, 10000 Prishtinë, Kosovo).

WHEREAS, UNICEF in Kosovo and UNIVERSITY OF PRISHTINA will work together on supporting youth in Kosovo, in particular students at UNIVERSITY OF PRISHTINA, to apply their creative energy in innovative solutions for the problems youth and children in Kosovo face. The two parties shall work on the following deliverables, as well as long term partnership goals:

### 1. PARTNERSHIP DELIVERABLES

- Thesis project collaborations. University students graduating from masters programme or three years bachelor program at University of Prishtina are required to complete thesis project. The project framework at the Innovations Lab is ideally suited for admitting thesis projects from the university students. The Innovation Lab maintains an "ideabank", a set of project concepts that will be passed into relevant faculty members. A faculty member who's file matches concept will supervise selected students in their thesis project, focusing on a given child or youth issue. The student will then work in close co-operation with Innovations Lab staff as well responsible parties who had a role in the formulation of the problem, under the supervision of the faculty member. Students may use either University of Prishtina space or Innovations Lab space and equipment as necessary for such projects.
- **Hosting of "optional courses."** If University of Prishtina students may take optional subjects as part of their degree courses, there is an opportunity to introduce new courses with regards, there is an opportunity to introduce new courses with regards

to open courses, mobile, social technologies, and integrate courses, with practical projects arising from those at the Innovations Lab and University of Prishtina.

These courses will be conducted at the Innovations lab under the supervision of University of Prishtina faculty members, and taught by experts jointly identified by University of Prishtina and the Innovations lab.

- **Integration with existing courses**. Students of University of Prishtina take several courses that that have practical components that could be served by partnership with the Innovations Lab. Such courses could be the Innovations lab projects into extra curriculum.
- Innovations presentations. Lab staff will facilitate various presentations regarding "Innovations" that will be open to university students and Innovations Lab members. Practitioners and researchers involved in pursuing innovative technologies for human development worldwide will be invited to present to audiences of youth, who will have a chance to submit questions through internet technologies regarding their own context.

### 2. LONG-TERM PARTNERSHIP GOALS

- Lectures by visiting professors. Trough distance learning technologies as well as short-term visits of visiting lectures from University of Prishtina partner institutions, lecturing on relevant topics will be hosted. Should the opportunities arise the Innovations Lab agrees to facilitate linkages with partner institutions or expertise abroad that can lecture University of Prishtina students.
- Placements of UNIVERSITY OF PRISHTINA graduate students in offshore internships. It would also be of great value to University of Prishtina graduates to be able to spend time working abroad before graduation. The Innovations Lab will seek to find positions suitable for University of Prishtina graduates incorporate internships abroad. Students with existing projects or links with the Innovations Lab will be given priority during these efforts.

### 3. MODALITIES

The University of Prishtina will assign one faculty member to be the focal point with the Innovations officer at UNICEF Kosovo. UNICEF Kosovo will similarly assign one focal point to manage the Innovations Lab and University of Prishtina partnership.

Upon signing of this agreement, and led by the respective focal points, University of Prishtina and UNICEF will jointly develop an annual work plan that details the activities, targets and indicators for each component of the initiative.

### 4. DURATION

The MoU will be in force from February 2012 to February 2013 with the possibility of mutually agreed extension through an exchange of letters between University of Prishtina and UNICEF. Should either party wish to with draw from the collaboration, this may be done in writing with a minimum six month notice.

### 5. COMMUNICATIONS

The development of all communications and materials related to the projects will be mutually coordinated by the parties, and in all communications materials the Projects will be referred to as agreed by all parties. The parties hereby authorise each other to publicise its participations in Project, and where visibility materials are produced for external publication, the parties shall review and approve prior to their use. Prishtina and UNICEF. Should either party wish to with draw from the collaboration, this may be done in writing with a minimum six month notice.

Approved and signed by:		
Date:		
24. 02. 2012		



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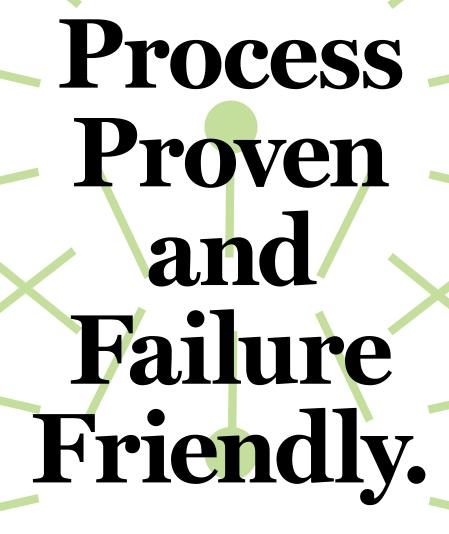
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