

Request for Proposals

Design of Framework and Visualization of a
Common Technology Component Architecture for the SDGs
11-Apr-17



Initiative Background Summary

- Despite the rapid expansion of telecommunications and mobile technologies, the digital revolution has not yet reached all populations, limiting the impact of many of existing beneficial digital services. Among the barriers to expanding the benefits of technology is that many tools and platforms are developed for high-resource environments and are not fully designed to function with the constraints of low-resource environments. Technologies can prove to be expensive or less suited where unreliable electricity, intermittent connectivity and limited expertise are present as everyday challenges.
- In this context, International Telecommunication Union (ITU) and Digital Impact Alliance (DIAL) in collaboration with ITU-WHO joint mHealth initiative “Be Healthy, Be Mobile” are working to advance the adoption of already existing, and the creation of new, appropriate digital solutions to achieve the Sustainable Development Goals (SDGs).
- To achieve this, a first step is to gather tech requirements that are common across a number of sectors e.g., health, education, agriculture, humanitarian, etc., identify gaps and work on stimulating new innovations that are to fill those. Identifying commonalities and reusability opportunities is an efficient and effective way to accelerate scaling up processes, avoid duplication of efforts and creating economies of scale needed to reinforce the business case of developing ICT services and solutions for the BOP.

Scope of Work

Summary of work:

1. **Common Capability Analysis:** Based on existing per-sector analyses for 2-3 sectors (e.g. Health, Agriculture, Humanitarian Response), identify layers of common capabilities and foundational services to meet the needs of use cases across humanitarian and international development sectors.
2. **Gap Analysis:** Perform a rough landscape analysis of existing technical solutions to meet the identified common capabilities identifying areas where solutions are needed.
3. **“Common SDG Component Architecture”—Framework and Visualization:** Design a framework and visualization to communicate the layers of identified common capabilities, supporting foundational services, and gaps.
4. **Iteration:** Conduct 1 or more cycles of peer-review and revision to the outputs listed above.
5. **Presentation & Feedback:** Facilitate a presentation and feedback session of the Capabilities Architecture and Gap Analysis in a consultation workshop to be held in July/August 2017

Details of steps 1-3

Common Capability Analysis:

The first part of the process is about the identification of common Functional capabilities that are required across different use cases and/or sectors. Functional capabilities are defined as:

- A standalone capability that is delivering well scoped service(s), e.g., data collection, messaging services, identification service, etc.

- A *common* capability meets the needs of a number of use cases, often across sector (e.g., agriculture extension services, health education)
- A common capability can be shared and re-used across different use cases within the same sector and/or across different sectors.

Common capabilities can be identified through an analysis of existing sector-specific capabilities architectures. Where these pre-established architectures do not exist, they can be derived from case studies, use cases, and existing solutions. Each “Capability” needs to be described in terms of the needs it meets and the manner in which it meets the needs in the context of actual Use Cases.

An initial set of curated documentation (architectures, use cases etc...) will be provided as a baseline. Additional documentation gathering might need to be done to complement the initial baseline.

The consultant should note where the provided documentation is insufficient and additional Use Cases/Case Studies will be required to fill the gaps in the analysis and to complement the overall picture.

A template for Use Case documentation should be suggested to capture the right information to inform future analysis work.

Gap Analysis:

Already existing solutions/products/platforms will be mapped to this framework, “key gaps” to be extracted

- Key gaps are defined as areas where there is still a lack mainstreamed solutions or where existing solutions have failed to successfully reach scale.
- Gaps can include ICT solutions, products, connectivity, devices, servers, devices, platforms, etc. Each gap should describe the required functionalities and why those are important to enable which use cases for which SDGs.

“Common SDG Component Architecture”—Framework and Visualization

Once identified, these capabilities need to be placed into a framework and visualized to communicate:

- Appropriate categorization and grouping of capabilities (e.g. ‘reusable functions, foundational services, enabling infrastructure’)
- Applicability of capabilities—what use cases / sectors do they support?
- Mapping of existing solutions to capabilities
- Highlighting of gaps where high-potential capabilities are not implemented with appropriate technology solutions.

Ultimately, the SDG Platform Architecture and identified gaps will be used to engage with, inform and guide:

- Government: to build common infrastructure that is re-usable across sectors and across use cases to maximize the return on investments, accelerate scaling up processes and innovation deployments;
- Private sector: to unveil technology and business opportunities for SDGs by directing investment capital and resources;
- Development agencies: areas to focus on for activities e.g. co-creation efforts, innovation challenges, etc.

Example of (sector specific) frameworks will be provide which may serve as models for a resulting cross-sector framework and visualization.

One example, of a component framework for Agriculture is provided as Appendix 1.

Deliverables

The following table reflects the anticipated deliverables and schedule required for this project. Respondents may suggest amendments as part of their proposals, for approval prior to contracting. All deliverables must also be submitted in widescreen format.

#	Deliverable	Description	Estimated completion date
1	Common SDG Component Architecture v0.1	A first revision (v0.1) of the framework and visualization of the common component architecture.	June 2
2	Use Case Template	Template to be used to gather additional use cases as needed.	June 2
3	Common SDG Component Architecture v0.2	A second revision (v0.2) of the framework and visualization of the common component architecture incorporating public feedback.	June 16
4	Presentation of Framework	Presentation of framework and facilitation of feedback and workshop session.	TDB
5	Common SDG Component Architecture v0.3	A second revision (v0.3) of the framework and visualization of the common component architecture incorporating feedback from workshop session.	July 7 (estimate dependent on workshop scheduling)

Project Period of Performance

We expect work to begin by May 15th and complete by July 7th, or ~8 weeks from start to finish. Submitters are encouraged to offer a work schedule based on their understanding of the needs and required effort.

Proposal submission requirements

Proposal submissions, which may be created in Word, PowerPoint, or a combination of the two, must include the following components. Respondents may include additional elements as needed.

- Proposed approach
 - Demonstrate understanding of the project objectives
 - Describe approach and methodologies, as applicable
 - Describe project management approach, including timeline and any recommended updates to timeline provided above, including timing and level of effort on the part of the DIAL team, e.g. to participate in scoping and requirements workshops, iteration junctures, etc.
- Staff and team structure
 - Identify the team structure, including roles, responsibilities, and level of effort of staff and any sub-contracted resources
 - Provide rationale and background on any sub-contracted firms or individuals
- Relevant experience
 - Demonstrate firm and key participants' experience relative to the scope of work
 - Provide at least 3 examples of similar work
- Budget
 - Provide a detailed budget, including assumptions and costs and level of effort for staff and any sub-contractors
 - Provide professional fees budget, including cost and level of effort per staff member
 - Provide separate line item for any sub-contractors
 - Provide expenses budget by type of expenses, e.g. travel, research, etc. Travel estimates should indicate the anticipated destination and duration of each trip
- References
 - Provide names and email addresses of at least two prior client willing to discuss their experiences working with you.

Submission format and timeline

- All submissions are due on 25-Apr by 1700 ET. We expect the submissions to be in the 5 page range (not including references and sample projects) but will not penalize submissions that are above or below this range.
- Questions and clarifications will be communicated to Respondents by Apr-28 with a kind request for prompt turnaround on part of the Respondents.
- The selected Respondents will be notified on 5-May by 1800 ET
- Please send all EOIs and email submissions to RFP@digitalimpactalliance.org
- In case Respondents encounter a problem submitting, please contact Stephanie Meagher, stephanie.meagher@itu.int .

Questions and answers

Please forward any questions to RFP@digitalimpactalliance.org by 17-April. DIAL will make every effort to respond to questions within 24 hours, and may choose to share the questions and answers from these bilateral discussions with other Respondents.

Evaluation Process

DIAL will review all written proposals, and may request a phone or in-person interview and/or updated submission to address questions or provide clarification. The evaluation committee will use the following criteria to evaluate candidates' response.

The selection decision will be based on the following criteria:

Criteria	Score (1-5)
1. Approach	
The analytical framework and methodology is capable of answering the project's key questions and deliverables	
2. Subject Matter Expertise	
Solid understanding of the key dynamics and trends in the relevant substantive areas	
Appropriate level of understanding of the key stakeholders and dynamics within the ecosystem	
Key participants can speak with authority and credibility on the key project issues	
Experience working with emerging markets and the field of global development	
3. Project Management	
Demonstrated understanding of their proposed scope of work, including overall project structure and how their scope of work relates to other consultants	
Achievable action plan that will deliver the project on time and on budget	
Effective staffing and/or team structure	
Thoughtful risk identification and mitigation strategies	
4. Capabilities and Experience	
Demonstrated firm experience with similar projects	
Team members with demonstrated skills and experience with similar projects and activities	
High-quality sub-contractors and external advisors, if relevant	
Appropriate access to resources and knowledge centers	
5. Value	
The proposed pricing is within budget	
The proposed pricing demonstrates a competitive price and good value for the money	
Development and Emerging Market Experience	
Experience working with emerging markets and the field of global development	

Intent and disclaimer

This RFP is made with the intent to identify a consultant to deliver results as described in this RFP. DIAL will rely on Consultant's representations to be truthful and as described. DIAL assumes it can be confident in Consultant's ability to deliver the product(s) and/or service(s) proposed in response to this RFP.

If DIAL amends the RFP, copies of any such amendments will be sent to all Respondents.

Contract terms

DIAL will negotiate contract terms upon selection. A copy of the contract terms and conditions will be provided upon selection. All contracts are subject to review by UN Foundation's Business Services Budget Reporting (BSBR) team. Once a draft contract is reviewed by BSBR, DIAL's Grants Manager will contact the Consultant. The project will start upon the execution of the contract. The contract will outline terms and conditions, scope, budget, and applicable flow-down terms.

Release

Consultant understands that DIAL has chosen to solicit an RFP for consulting services, and that Consultant's response does not guarantee that DIAL will enter into a new contract with Consultant or continue any current contract(s) with Consultant.

Consultant agrees that DIAL may, in its sole discretion:

- Amend or cancel the RFP, in whole or in part, at any time
- Extend the deadline for submitting responses
- Determine whether a response does or does not substantially comply with the requirements of the RFP
- Waive any minor irregularity, informality or nonconformance with the provisions or procedures of the RFP
- Negotiate with all consultants UNF deems acceptable
- Issue multiple awards
- Copy the responses

This RFP is not an offer to contract. DIAL assumes no responsibility for Consultant's cost to respond to this RFP. All responses become the property of DIAL.

The Consultant, by submitting a response to this RFP, waives all right to protest or seek any legal remedies whatsoever regarding any aspect of this RFP.

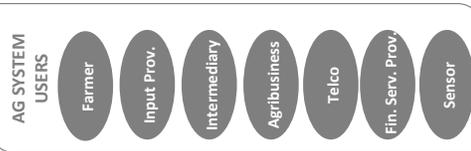
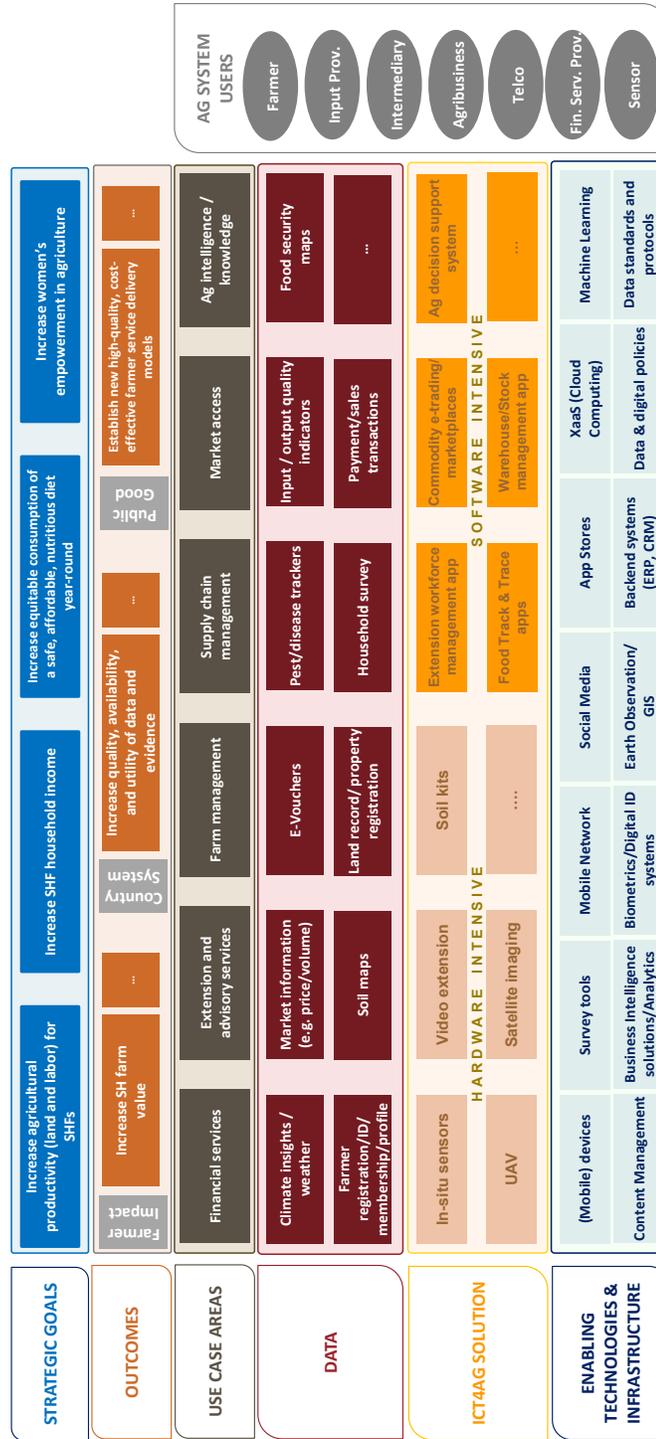
Consultant represents that it has responded to the RFP with complete honesty and accuracy. If facts provided in Consultant's response change, Consultant agrees to supplement its response in writing with any deletions, additions, or changes within ten (10) days of the changes. Consultant will do this, as necessary, throughout the selection process. Consultant understands that any material misrepresentation, including omissions, may disqualify it from consideration for a contract award.

Consultant understands it may receive proprietary and confidential information from DIAL during the RFP process (“Confidential Information”). Consultant agrees to not use Confidential Information for any purpose other than its participation in the RFP process and to not reveal Confidential Information directly or indirectly to any other person, entity, or organization without the prior written consent of DIAL. Consultant further agrees to exercise all reasonable precautions to maintain the proprietary and confidential nature of Confidential Information where it can best demonstrate its value and capacity to delivery ecosystem-wide, meaningful value.

Appendix 1: Example Component Architecture

(courtesy of the Bill and Melinda Gates Foundation)

ICT4AG USE CASE FRAMEWORK





Appendix 2: Program Concept Note

Digital Innovations for SDGs

Human centred approach to catalyse digital solutions for SDGs

Despite the rapid expansion of telecommunication and mobile technologies and their gradual “democratization,” many people around the world still remain out of reach of this digital revolution. According to ITU’s latest data, 53% or some 3.9 billion of the world’s people at the Bottom of the Pyramid (BOP) still do not enjoy regular access to the Internet. Additionally, current mainstreamed ICT products/services are not yet fully designed with the 4 Billion Bottom of the Pyramid users’ needs in mind in terms of cost, connectivity, power and usages. Adding to that the fact that ICT applications are often developed and deployed in a ‘siloed’ manner leading to significant duplication of efforts and investments. This makes the existing digital applications and services for development accessible to only a fragment of those who need them most due to cost, appropriateness, scalability and sustainability barriers.

If we are to concurrently achieve high ICT adoption rates with commensurate benefits on sustainable development at the BOP and in LMICs contexts, the development of ICT products/services needs to be geared towards addressing new emerging markets and to be specifically designed for them. As the SDGs are inter-linked, synergistic, mutually supportive and of equal priority, digital innovations need to adopt human-centred approaches and consider holistically end-users as humans who would benefit from access to ICTs to improve all aspects of their life including work and family livelihoods, health, education, etc.

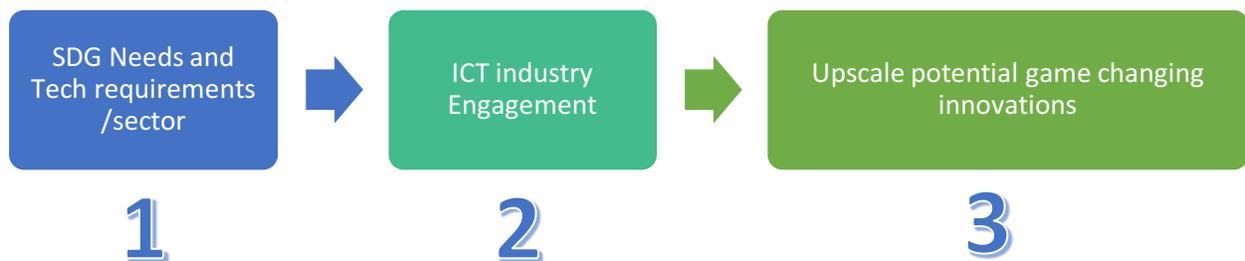
Despite the huge market potential at the BOP, digital innovations that can catalyse SDGs particularly for low resource settings are still not perceived by large number of ICT industry players (both large and small companies) as holding viable business opportunities giving low purchasing power of people in the base and middle of the pyramid. This is exacerbated by the lack of comprehensive understanding of specific SDG needs for those groups and the contexts in which digital innovations would be adopted in. This creates a significant gap between, from one side, the “development community” who has a comprehensive understanding of SDG needs and, from the other side, the “ICT industry” who has the skills and competencies to develop digital innovations. This gap is leading to a lack of “mainstreamed” digital innovations that can be widely adopted at affordable prices and that they are appropriately designed to address specific SDG needs in LMICs.



To bridge this gap, ITU, Digital Impact Alliance (DIAL) and ITU-WHO mHealth initiative “Be Healthy, Be Mobile” along with several other stakeholders, are kicking-off an open and cross-sectoral collaboration based on “Human Centred Design” to steer, stimulate and accelerate ICT innovations mainstreaming for SDG by engaging all stakeholders including governments, private sector and development organizations across different sectors (e.g., Education, Agriculture, Health, Humanitarian, etc.) with the ICT industry to catalyse the development of digital innovations that are appropriate, affordable, scalable and specifically designed for SDGs.

Appropriate SDG solutions/tools/products can include low-cost and low-power end-user devices and connectivity solutions for underserved areas, wearables, mobility services, sensors-based solutions, Learning and multi-media low-cost solutions, identification and authentication solutions, etc. that are all relevant to health, education, agriculture, environment, etc. The use, adaptation and further development of these tools can also foster entrepreneurship, micro-business opportunities at the BOP and for larger business worldwide.

This will be achieved through the following process and the series of activities that are described below:



1. Identify collaboratively “SDG Needs and Innovation Opportunities”

SDG needs which can be addressed by technology and digital innovation opportunities across different sectors e.g., Education, Health and Agriculture will be identified based on a sound analysis of a well-defined series of use cases/scenarios/case studies developed by each sector for their respective SDG. A number of UN agencies will be involved in addition to a number of potential contributors from development agencies, academia, and private sector companies. Additionally, ICT Applications/services/solutions that are potential game changers, open, affordable and appropriate will be identified and collated in an SDG “Landscape”.



Based on collected Use Cases/Scenarios/case studies, a SDG common platform architecture will be designed that include most common components and capabilities within the same sector or across different ones that can be reused without having to reinvent the wheel to develop, deploy and upscale, at minimal cost, core common services that can serve several projects.

2. ICT industry engagement to catalyze digital innovations for SDG

2.1 Launch SDG challenges:

“SDG Challenges” will be formulated in close consultation with participating stakeholders to stimulate new ICT products, applications and services that are specifically designed for SDG and tapping market opportunities related to the accomplishment of SDG. Winners will be granted not only a financial “prize” but will be provided a package of support activities and resources to assist the upscaling of those digital applications and to be ready for market adoption.

2.2. Conduct series of collaborative SDG co-design events:

A series of ICT industry interactions and co-design events (global/regional/local workshops and field visits) will be organized with selected champion companies or academic institutions to convey the landscape of innovation opportunities for SDGs and to collaboratively design high-level prototypes for what can be future game changing technologies and products/services. Those interactions will seek to include as much as possible representatives of the BOP such as consumers in the new markets and also business partners.

2.3. High-level cross-sectoral and industry dialogues:

Based on identified Common Technology Needs and ICT Applications Innovations opportunities, high-level messages can be communicated at a series of high-level cross-sectoral events e.g., ICT-Health; ICT-Education; ICT-Agriculture, etc. and Industry-SDGs dialogues. A joint public statement can also be formulated and announced in global events.

3. New potential game changing ICT Applications for SDG ready for upscale

Selected potential game changer ICT Applications will be scaled up through the provision of seed funding, mentoring, capacity development and facilitated piloting to reach a certain level of maturity and be ready for market adoption.