United Nations Children's Fund

TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANTS AND CONTRACTORS

Title	Funding Code	Type of engagement	Duty Station:
Digital Public Goods (DPG) Technical Consultant.	3900/A0/08/880/005	☐ Consultant ☐ Individual Contractor Part-Time ☒ Individual Contractor Full-Time	Freetown, Sierra Leone (including travel to districts).

Purpose of Activity/Assignment:

Background.

The fundamental mission of UNICEF is to promote the rights of every child, everywhere, in everything the organization does — in programs, in advocacy and in operations. The equity strategy, emphasizing the most disadvantaged and excluded children and families, translates this commitment to children's rights into action. For UNICEF, equity means that all children have an opportunity to survive, develop and reach their full potential, without discrimination, bias or favoritism. To the degree that any child has an unequal chance in life — in its social, political, economic, civic and cultural dimensions — her or his rights are violated. There is growing evidence that investing in the health, education and protection of a society's most disadvantaged citizens — addressing inequity — not only will give all children the opportunity to fulfill their potential but also will lead to sustained growth and stability of countries. This is why the focus on equity is so vital. It accelerates progress towards realizing the human rights of all children, which is the universal mandate of UNICEF, as outlined by the Convention on the Rights of the Child, while also supporting the equitable development of nations.

"To realize the SDGs' vision of a world in which no one is left behind, we need to go beyond business as usual – investing in innovation and building broader, bolder partnerships that help us reach every child." UNICEF Executive Director Henrietta H. Fore

Since 2014, UNICEF Sierra Leone has been championing the use of innovation to help identify and address the issues that affect the children and women of Sierra Leone. Work done over the past 6 years has established UNICEF Sierra Leone as the leading agency for innovative programming to help deliver results for children in Sierra Leone.

In 2018, the Government of Sierra Leone established a new Directorate of Science, Technology and Innovation (DSTI). DSTI's mandate is to use Science, Technology and Innovation to support the Government of Sierra Leone to deliver on its national development plan effectively and efficiently; and to help transform Sierra Leone into an innovation and entrepreneurship hub. UNICEF Sierra Leone has already established a workplan with DSTI to promote and enable the use of Innovation in Sierra Leone for improved results for children.

The Digital Public Goods Alliance (DPGA) aims to facilitate the discovery, development, use of, and investments in DPGs of high relevance for attainment of the Sustainable Development Goals (SDGs).

Digital Public Goods are defined as open-source software, open data, open AI models, open standards and open content that adhere to privacy and other applicable best practices, do no harm and are of high relevance for attainment of the Sustainable Development Goals (SDGs).

Purpose and objective of the assignment:

As part of Sierra Leone's role as a co-champion of the DPGA, and to strengthen the existing collaboration between UNICEF and DSTI on DPGs, this assignment aims to:

A) Provide product development support to selected DPGs created and/or curated by DSTI (60%).

B) Provide open-source-community management support to the same projects to strengthen local capacity & talent (40%).

The Digital Public Goods (DPG) Technical Consultant reports to the Innovation Specialist for general guidance and direction.

Scope of Work:

Under the general guidance and supervision of the Innovation Specialist, the post has the following key responsibilities including, but are not limited to:

- Provide product development/programming support to digital public goods such as, OpenG2P, GoSL USSD Services Platform
- Coordinate the engagement and technical cooperation with the UNICEF Office of Innovation.
- Support any solution development to be prepared to meet the DPG Standard and to be included in the DPG Registry.
- Provide technical assistance to each solution as outlined in the description of the assignment below.
- Provide opensource community management support to digital public goods projects to strengthen local capacity & talent.
- Identify key open-source community organizations, academia and/or private sector to be engaged in each of the projects
- Advocate for the adoption of open-source best practices in the development and maintenance of these projects' software repositories
- Develop and deploy clear and structured documentation for all project repositories
- Develop, deploy and manage issue and pull request templates for each of the projects and position these projects overall to welcome external contributions
- Regularly review and incorporate community contributions functions/accountabilities:
- Underpin UNICEF's role as a convener to enable the scale-up of the DPGA at country level.
- Maintain collaboration with government of Sierra Leone and identify new opportunities for engaging other stakeholders to contribute to the DPGA for Sierra Leone.
- Perform other related duties as assigned by the supervisor to ensure the success of the team, as needed.

Child Safeguarding

Is this project/assignment considered as "Elevated Risk Role" from a child safeguarding perspective?

☐ YES   ☒ NO   If YES, check all that apply:

Direct contact role   ☐ YES   ☒ NO

If yes, please indicate the number of hours/months of direct interpersonal contact with children, or work in their immediately physical proximity, with limited supervision by a more senior member of personnel:

Child data role   ☐ YES   ☒ NO

If yes, please indicate the number of hours/months of manipulating or transmitting personal-identifiable information of children (name, national ID, location data, photos):

More information is available in the Child Safeguarding SharePoint and Child Safeguarding FAQs and Updates

Budget Year: *2021/22*	Requesting Section/Issuing Office: *Innovation/DepRep*	Reasons why consultancy cannot be done by staff: *Digital Public Goods are a part of the Innovation portofolio, and can be considered Frontier technology work. Given the technical nature of the work being outlined in the ToR, where there is a focus on Open Source Software Development, and a clear need for experience in the area of managaing Open Source Software Development projects and communities a consultancy is required. This skill set is not readily available in UNICEF in general, as yet. Worth noting that this a skill set (software development & computer programming) which is not necessarily academic in nature and best served with experience.*

Included in Annual/Rolling Workplan: ⊠ Yes ☐ No, please justify:

Consultant sourcing: ☐ National ☐ International ⊠ Both Consultant selection method: ☐ Competitive Selection (Roster) ⊠ Competitive Selection (Advertisement/Desk Review/Interview)	Request for: ⊠ New SSA – Individual Contract ☐ Extension/ Amendment

If Extension, Justification for extension:	
Work Assignment Overview	

Supervisor: *Innovation Specialist*	Start Date: *December 2021*	End Date: *November 2022*	Number of Days (working) *230 (11.5 mths).*

Tasks/Milestone:	Deliverables/Outputs:	Timeline	Estimate Budget
Provide product development/programming support to OpenG2P, the USSD Services Platform, IGIS, and other possible digital public goods as needed	Support the planned integration of Mobile Payments to OpenG2P.	Q1 2022.	n/a
	Support the integration with RapidPro and MNOs for the USSD Services Platform.	Q1 2022.	n/a
	Support obtaining an appropriate open source License for the USSD Services Platfom.	Q1 2022.	n/a
	Participate in technical collaboration with UNICEF's Office of Innovation.	Ongoing.	n/a
	Support solution(s) development to be prepared to meet the DPG Standard and to be included in the DPG Registry.	Ongoing.	n/a

Provide Open-Source-Community management support to the same projects to strengthen local capacity & talent	Identify key open-source community organizations, academia and/or private sector to be engaged in each of the projects and document.	Ongoing.	n/a

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	Support solution(s) development to be prepared to meet the DPG Standard and to be included in the DPG Registry.	Ongoing.	n/a
Provide Open-Source-Community management support to the same projects to strengthen local capacity & talent	Identify key open-source community organizations, academia and/or private sector to be engaged in each of the projects and document.	Ongoing.	n/a

Provide Open-Source-Community management	Identify key open-source	Q3	n/a
	Advocate for the adoption of open source best practices in the development and maintenance of these projects' software repositories.	Ongoing.	n/a
	Support the clear and structured documentation for projects.	Ongoing	n/a
	Create issue and pull request templates for each of the projects and position these projects overall to welcome external contributions.	Ongoing.	n/a
	Regularly review and incorporate community contributions to projects.	Ongoing.	n/a

Minimum Qualifications required:	Knowledge/Expertise/Skills required:
☒ Bachelors ☐ Masters ☐ PhD ☐ Other Enter Disciplines: A advanced university degree (Master's or higher) in Technology, Computer Science, Information Technology, Engineering or related field. *A first University Degree in a relevant field combined with 2 additional years of professional experience may be accepted in lieu of an Advanced University Degree.*	• A minimum of 5 years of experience developing and managing open source technology projects . • Solid experience in programming languages including Java, Python, and Golang. • Previous experience developing projects in the open and the ability to demonstrate an active Github or Gitlab profile. • Familiarity with different frameworks such as Java/ Spring & Python/ Django. • Experience in system design and architecture. • Familiarity with Sierra Leone's developer community organizations/landscape. • Ability to work with a diverse team in a rapidly-changing work environment and adapt to unforeseen changes. • Experience working in the social impact space. • Fluency in English is required, strong written and verbal competency is necessary. • Experience working in a developing country required, working in the West African region is considered as an asset
Administrative details: Visa assistance required: ☐ Transportation arranged by the office: ☐	☐ Home Based ☐ Office Based: If office based, seating arrangement identified: ☐ IT and Communication equipment required: ☐ Internet access required: ☐