



CONSULTANCY - TERMS OF REFERENCE

Giga Connectivity Solutions Market Specialist

UNICEF Office of Innovation - Giga

Duration: 12 months (Deliverable-Based)

Duty Station: Remote (Panama-based)

Advertising summary

UNICEF is seeking for a Connectivity Solutions Market Specialist to join Giga, an initiative aimed at connecting every school globally to the Internet. The successful candidate will be instrumental in driving strategies to enhance school connectivity in Panama and the Latin American and the Caribbean region.

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](#)

UNICEF works in some of the world's toughest places, to reach the world's most disadvantaged children. To save their lives. To defend their rights. To help them fulfill their potential.

Across 190 countries and territories, we work for every child, everywhere, every day, to build a better world for everyone.

And we never give up.

For every child...innovate

UNICEF has a 70-year history of innovating for children. We believe that new approaches, partnerships and technologies that support realizing children's rights are critical to improving their lives.

The **Office of Innovation** is a creative, interactive, and agile team in UNICEF. We sit at a unique intersection, where an organization that works on huge global issues meets the start-up thinking, the technology, and the partners that turn this energy into scalable solutions.

About Giga

Launched in 2019 as a joint initiative between UNICEF and ITU, **Giga** has set the ambitious goal to connect every school in the world to the internet. Half of the world's population has no regular access to the Internet. Millions of children leave school without any digital skills, making it much more difficult for them to thrive and contribute to local and global economies. This has created a digital divide between those who are connected and those who are not, a divide that has become even wider during the Covid-19 pandemic. UNICEF and ITU have therefore joined forces to create **Giga**, an initiative to connect every school in the world to the Internet and address this new form of inequality.

Giga focuses on connecting schools so that children and young people have access to information, opportunity, and choice. It also uses schools as anchor points for their surrounding communities: if you connect the school, you can also connect local businesses and services. This creates opportunities for service providers to generate revenue from paying users, making connectivity more sustainable. A 2021 report by the Economist Intelligence Unit found that a 10% increase in school connectivity can increase effective years of schooling by 0.6% and increase GDP per capita by 1.1%.

You can read more about Giga's work at <https://giga.global/> and by following us on twitter @Gigaglobal

Panama Context

While Panama is a High-Income Country, inequalities remain among the highest in the world with a Gini Index at 50.9, affecting primarily indigenous and Afro-Panamanian populations. Children are impacted disproportionately: three out of 10 children live in multi-dimensional poverty (nine out of ten children in indigenous areas called Comarcas). The results of the 2022 PISA assessment painted a concerning picture for Panama with the country showing one of the lowest educational outcomes in the region. A vast majority of 15-year-old students continue to struggle with foundational learning skills, such as mathematics and reading, with results that are significantly below the OECD average (for instance 84% of 15-year-old students did not reach the minimum proficiency in mathematics). One of the reasons of the poor educational outcomes can be found in the outdated pedagogy and teaching methodologies and the lack of access to Internet and digital learning tools for many children in the country.

Despite a significant financial investment by the Government, a 40 per cent of public schools do not have access to internet. Within the framework of the global GIGA initiative, UNICEF conducted in 2023 the first-ever study on Internet quality in schools in Panama that showed the low quality and high cost of the internet in Panama and the lack of the appropriate infrastructure (computers and wireless equipment) in many schools. This study initiated a dialogue among the Ministry of Education, the National Innovation Authority and the Public Services Authority aimed at increasing the access of all schools to quality internet at a reasonable cost. With support from GIGA, UNICEF



will continue to provide technical assistance to the Government of Panama on Internet procurement processes and School Internet Quality monitoring in 2024.

Latin America and the Caribbean Regional Office (LACRO) Context

The UNICEF Latin America and the Caribbean Regional Office is located in Panama City, Republic of Panama. The Regional Office coordinates and supervises the work of UNICEF in 36 countries and territories through 24 national programmes to promote the rights and well-being of all children and adolescents in the region.

Giga aims to increase its footprint in the LACRO region. As of March 2023, Giga is active in Barbados, Belize, Brazil, Dominican Republic, El Salvador, Honduras, OECS and Panama. Giga has also provided mapping support to Costa Rica and Colombia and is currently in discussions with an additional 3 countries that have expressed interest in the initiative.

How can you make a difference?

Under the leadership of the Global Giga Procurement and Market Shaping Lead, matrixed to the Chief of Education in Panama and the Regional Advisor on Education in LACRO, the Giga Connectivity Solutions Market Specialist will support UNICEF LACRO and UNICEF Panama to engage with the telecommunications industry and other key stakeholders (ITU, regulators, national innovation and service delivery agencies, among others) in the region to develop and implement strategies aimed at improving countries' market access to affordable, high-quality, meaningful and sustainable school connectivity.

Key responsibilities include:

In UNICEF Panama Country Office (80% of time)

- Conduct thorough market research to understand current pricing structures in the Red Nacional de Multiservicios, as well as in the open market, and identify opportunities for cost reduction in school connectivity.
- Provide expert advice on technical specifications and service requirements unique to school connectivity to better define this service essential for children's educational development within the Red Nacional de Multiservicios.
- Develop and maintain strong relationships with key stakeholders, including government agencies (e.g., Ministry of Education, Ministry of the Presidency, Ministry of Foreign Affairs of Communications, AIG, ASEP, among others), service providers, and other relevant parties for connecting schools.
- Conduct an investigation or analysis on the process and laws to update the new contract of the National Multiservice Network, to propose improvements in the laws, or a new process if necessary.
- Develop and coordinate the implementation of a comprehensive strategy for contracting school connectivity, focusing on expanding the industry suppliers available to deliver

connectivity for schools, cost reduction and service optimization, including school-specific KPIs and SLAs to be considered within the Red Nacional de Multiservicios.

- Develop connectivity financing models in coordination with the Giga global teams.
- Support the deployment of Giga’s monitoring tools and connectivity performance data-sharing requirements with the industry to assess the quality of internet services, and ensure the service is delivered accordingly to the SLAs defined in the contracts.
- Support the Panama office in other defined GIGA or innovation initiatives.

In LACRO (20% of time)

- Lead the technical explorations around connectivity monitoring data, accountability and equity enabling mechanisms and connectivity solutions for schools.
- Provide support to UNICEF country offices in the region to engage with the telecommunications industry and internet service providers for the implementation of Giga.
- Support Giga Panama/LACRO focal point on technical and infrastructure discussions.
- Based on Giga’s school and infrastructure mapping data, as well as the country’s regulatory and policy context, develop materials (overview decks, analysis of different technologies and operating models) to advise Country Offices in the region on innovative solutions and operating arrangements for school connectivity that could be tested in the country.

Description of assignment

#	Tasks	Deliverables/Outputs	Delivery deadline
1	Analyze policies, regulations, processes, and stakeholders to procure school connectivity in Panama’s Red Nacional de Multiservicios. Support Giga deployment in UNICEF – LACRO countries and represent Giga in digital education meetings	<ul style="list-style-type: none"> • Document with an assessment of the school connectivity procurement processes in Panama: 1) map of key stakeholders in the public and private sector, 2) policy and regulatory framework, 3) process and timelines, 4) lessons learned from past processes. • Notes and project management (Trello) entries on the support provided in the region & the digital education meeting(s) 	Month 1
2	Conduct thorough market research to understand connectivity solutions available in Panama (urban, semi urban, rural, remote), costs and pricing models from industry suppliers.	<ul style="list-style-type: none"> • Market assessment document with connectivity solutions available in the country, specifications, expected quality of service, costs (CapEx & OpEx), availability in urban, rural and remote locations, pricing models. • Notes and project management (Trello) entries on the support provided in the region & the digital education meeting(s) 	Month 2



3	<p>Lead a co-creation workshop with key stakeholders to develop a strategy to reduce the pricing of school connectivity in the Red Nacional de Multiservicios catalogue.</p> <p>Provide technical/connectivity inputs into Giga's LACRO regional overview decks and tracking documents</p>	<ul style="list-style-type: none"> • Conduct a workshop session to develop a strategy for contracting school connectivity at prices that better reflect the costs of connectivity in the open market. • Document with the report of the workshop detailing the strategy, actions to implement, and responsibilities for each stakeholder. • Updated connectivity inputs in Giga LACRO overview deck and regional tracking document 	Month 3
4	<p>Using Giga's Target Service Profile (TSP) for school connectivity and, in collaboration with key stakeholders from the government, define the country's standards & requirements for meaningful school connectivity.</p>	<ul style="list-style-type: none"> • Position paper & TSP with the requirements for meaningful school connectivity in Panama. The document should specify the service level requirements that could be integrated in terms of reference for these services and in contracts. • Notes and project management (Trello) entries on the support provided in the region & the digital education meeting(s) 	Month 4
5	<p>Using the position paper for meaningful school connectivity and the TSP, launch an Expression of Interest or Request for Information, in collaboration with the government.</p> <p>Based on meetings with the Giga procurement and market shaping team, develop a Giga overview analysis of different technologies and operating models</p>	<ul style="list-style-type: none"> • Publication of the TSP / Expression of Interest / Request for Information in the appropriate UN or government channels. The EoI or RFI should ask industry suppliers to provide what could be a target price for them to be able to deliver services to schools. • Short document with an overview analysis of different technologies and operating models 	Month 5
6	<p>Create a database of industry suppliers willing to deliver school connectivity services up to the standards defined in the TSP.</p> <p>Provide technical explorations to UNICEF LACRO around connectivity monitoring data, accountability and equity enabling mechanisms and connectivity solutions for schools</p>	<ul style="list-style-type: none"> • Database of industry suppliers in the country willing to participate in the delivery of school connectivity through a competitive bidding process (The database should include suppliers, areas of coverage, services they can provide, and target pricing) • Provide a 2-page document with 1 or 2 suggestions to improve connectivity monitoring data in the LACRO region 	Month 6

7	<p>Conduct an industry consultation with the participation of suppliers and government stakeholders.</p> <p>Provide support to 2 UNICEF country offices in the region to engage with the telecommunications industry and internet service providers for the implementation of Giga</p>	<ul style="list-style-type: none"> Conduct an industry consultation to learn from industry challenges to deliver connectivity up to the quality defined in the standards, inform the objective of establishing a target price for education, real-time monitoring, define a plan & next step. Document with the report of the industry consultation & agreements. Notes and Trello entries documenting the support. 	Month 7
8	<p>Using the Giga procurement toolkit support the government in developing the procurement documents, SLAs, contracts, among others, required to update the definition of school connectivity services in the Red Nacional de Multiservicios.</p>	<ul style="list-style-type: none"> Procurement documents to support the government and update the Red Nacional de Multiservicios. 	Month 8
9	<p>Support the negotiation process of new contracts with industry suppliers.</p>	<ul style="list-style-type: none"> Organize 1 or 2 sessions with industry suppliers. 	Month 9
10	<p>Support Giga Panama/LACRO focal point on technical and infrastructure discussions in 2 countries.</p>	<ul style="list-style-type: none"> Notes and Trello entries documenting the support to the Giga Panama/LACRO focal point. 	Month 10
11	<p>Document the lessons learned throughout this process and develop a case study for how UNICEF and Giga helped the country's government to reduce the prices of school connectivity.</p>	<ul style="list-style-type: none"> Case study with lessons learned ready to be published 	Month 11
12	<p>Document and summarise the support to LACRO and Giga over the past year with suggestions for further improved content or processes.</p>	<ul style="list-style-type: none"> Final handover report 	Month 12

To qualify as an advocate for every child you will have...

- A master's degree in business, Economics, Computer Science, Network Engineering, Telecommunications, or a related field. Alternatively, a first level university degree in combination with two years additional qualifying experience may be accepted in lieu of the advanced university degree.



- A minimum of 5 years of relevant professional experience in the telecommunications sector, preferably with a focus on connectivity solutions.
- Experience in facilitating engagements with an array of partners at the national/regional level, i.e., government entities, telecommunication regulators, international development organizations, or civil society, etc.
- Experience in contract negotiations between the public and private sectors and stakeholder management within the connectivity sector is highly desirable.
- Experience in the field of development or policy, ideally within the United Nations system, or at an International Non-Governmental Organization, foundations, governments, private sector or academic institutions is an asset.
- Experience providing hands-on program management support is an asset.
- Knowledge of Latin American telecommunications market is an asset.
- Previous experience in the telecommunications industry or public offices in charge of innovation and public procurement is highly desirable.
- Organizational, coordination, and multi-tasking experience. Capacity to work independently with minimal supervision.
- Analytical and problem-solving experience.
- Experience establishing work relationships across multi-disciplinary teams with different technical skills and multiple partners in different time zones is highly desirable.
- Proven experience in translating complex ideas from various fields into unified, clear guidance.
- Fluency in English and Spanish is required. Knowledge of another official UN language (Arabic, Chinese, French, Russian) is an asset.

Travel:

- The consultant is expected to travel to Geneva one time (1 trip), for a stay of 4-5 nights.
- The consultant is expected to travel to a GIGA country on time (1 trip) for a stay of 4-5 nights.
- The consultant is expected to travel to a Latin American country on time (1 trip) for a stay of 4-5 nights.
- The consultant is responsible for arranging his/her own travel, including visa and travel insurance.

Payment details and further considerations

- Payment of professional fees will be based on the submission of agreed deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant.
- The consultant is responsible for his/her own health and travel insurance.
- The consultant is responsible for arranging his/her own travel, including visa. For non-Panamanian nationals applying, UNICEF will facilitate the process for obtaining local permits (for the consultant only).
- The consultant is expected to be physically present at the Panama Regional office at least twice a week for meetings and collaborative activities.

How to apply:

- Interested applicants are required to submit a financial proposal with an all-inclusive fee. Please see the financial proposal template.
- Financial proposal must include travel costs (economy class) and daily subsistence allowance, if travel is required as per TOR and any other estimated costs: visa, travel/health insurance.
- **Applications without a financial proposal will not be considered.**

For every Child, you demonstrate...

UNICEF's values of Care, Respect, Integrity, Trust, Accountability, and Sustainability ([CRITAS](#)).

To view our competency framework, please visit [here](#).

UNICEF is here to serve the world's most disadvantaged children and our global workforce must reflect the diversity of those children. The UNICEF family is committed to include everyone, irrespective of their race/ethnicity, age, disability, gender identity, sexual orientation, religion, nationality, socio-economic background, or any other personal characteristic.

UNICEF offers reasonable accommodation for consultants/individual contractors with disabilities. This may include, for example, accessible software, travel assistance for missions or personal attendants. We encourage you to disclose your disability during your application in case you need reasonable accommodation during the selection process and afterwards in your assignment.

UNICEF has a zero-tolerance policy on conduct that is incompatible with the aims and objectives of the United Nations and UNICEF, including sexual exploitation and abuse, sexual harassment, abuse of authority and discrimination. UNICEF also adheres to strict child safeguarding principles. All selected candidates will be expected to adhere to these standards and principles and will therefore undergo rigorous reference and background checks. Background checks will include the verification of academic credential(s) and employment history. Selected candidates may be required to provide additional information to conduct a background check.

Remarks:

Only shortlisted candidates will be contacted and advance to the next stage of the selection process.

Individuals engaged under a consultancy or individual contract will not be considered "staff members" under the Staff Regulations and Rules of the United Nations and UNICEF's policies and procedures, and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.

The selected candidate is solely responsible to ensure that the visa (applicable) and health insurance required to perform the duties of the contract are valid for the entire period of the contract. Selected candidates are subject to confirmation of fully-vaccinated status against SARS-CoV-2 (Covid-19) with a World Health Organization (WHO)-endorsed vaccine, which must be met prior to taking up the assignment. It does not apply to consultants who will work remotely and are not expected to work on or visit UNICEF premises, programme delivery locations or directly interact with communities UNICEF works with, nor to travel to perform functions for UNICEF for the duration of their consultancy contracts.