



## CONSULTANCY - TERMS OF REFERENCE

### Giga Commodity Expertise Specialist (Internet Connectivity)

UNICEF Office of Innovation - Giga, Geneva, Switzerland

Duration: 12 months (Deliverable-Based)

Duty Station: Geneva

#### Advertising summary

Giga seeks a Commodity Expertise Specialist to join one of the most innovative and impactful initiatives at the United Nations, whose aim it is to connect every school in the world to the Internet and every young person to information, opportunity and choice. The Commodity Expertise Specialist will be a core member of the Market Influence and Procurement team at Giga, bringing in-depth knowledge about internet connectivity, spectrum management, and the movement and accounting of gigabytes—from the global transit of Internet traffic via undersea, terrestrial fiber-optic cables or satellites (including LEO, MEO and GEO), to the national backbone, distribution networks, and into the last-mile service delivery to schools. This role is critical for understanding the technical nuances and market dynamics of internet connectivity to inform Giga's procurement and market influence strategies. The Commodity Expertise Specialist will report directly to the Program Manager, Market Influence & Procurement and will collaborate closely with other technical and market experts within the team to achieve Giga's objectives.

---

#### 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

### **How can you make a difference?**

As a Commodity Expertise Specialist for Giga, your assignment will be to provide a clear understanding of the technical nuances and dynamics of the global, regional and national internet bandwidth markets, international gateways, the satellite internet market (including LEO, MEO, and GEO systems), distribution and last-mile networks. Your objective is to help Giga and the Market Influence and Procurement team to commoditize internet connectivity services for schools by 1) establishing common service requirements for school connectivity that are comparable across different regions and countries, 2) leveraging bulk purchasing in the wholesale market for internet bandwidth, 3) encouraging competition among internet service providers, among others. The Commodity Expertise Specialist will report directly to the Program Manager, Market Influence and Procurement and will collaborate closely with other technical and market experts within the team to achieve Giga's objectives.

## **1. Key outputs**

**United Nations Children's Fund**

- Technical Expertise
- Market Analysis
- Technical Advisory
- Stakeholder Engagement
- Reporting and Documentation
- Cross-functional Collaboration

### Your main responsibilities will be:

- 1. Technical Expertise:**
  - Provide deep technical expertise on the various facets of internet connectivity including the movement, sale, and accounting of gigabytes across terrestrial and satellite platforms.
  - Understand and advise on spectrum management, internet traffic, and its quantification, ensuring Giga's strategies are technically sound.
- 2. Market Analysis:**
  - Analyze supply and demand dynamics of connectivity commodities, especially in emerging markets.
  - Evaluate market players, pricing dynamics, and regulatory frameworks affecting the movement and pricing of gigabytes.
- 3. Technical Advisory:**
  - Serve as a technical advisor to the Market Shaping and Procurement teams, ensuring that the technical aspects of internet connectivity are accurately represented in procurement strategies and negotiations.
  - Provide technical inputs during negotiations with connectivity providers and other stakeholders.
- 4. Stakeholder Engagement:**
  - Engage with external technical experts, industry stakeholders, and regulatory bodies to gather insights and stay updated with the latest advancements in internet connectivity technologies and market dynamics.
  - Facilitate technical discussions with stakeholders to address challenges and explore opportunities for improving connectivity in target regions.
- 5. Reporting and Documentation:**
  - Develop technical documents, reports, and presentations to communicate technical and market insights to internal teams and external stakeholders.
  - Contribute to the creation of procurement documents and negotiation strategies with technical inputs.
- 6. Cross-functional Collaboration:**
  - Collaborate closely with the Market Analysis, Data Science, and Procurement teams to ensure a coherent understanding and approach towards improving market access and shaping favorable market conditions for Giga's objectives.

## Description of assignment

	Tasks	Deliverables/Outputs	Delivery deadline	% of payment/ Estimated combined working days
1	<b>Technical Expertise</b>	<p>1.1 Provide deep technical expertise on the various facets of internet connectivity including the movement, sale, and accounting of gigabytes across terrestrial and satellite platforms.</p> <p>1.2 Understand and advise on spectrum management, internet traffic, and its quantification, ensuring Giga's strategies are technically sound.</p> <p>1.3 Deliver a technically sound proposal, that considers industry input, to commoditize internet connectivity services for schools</p>	<p>Month 3</p> <p>Month 4</p> <p>Month 8</p>	<p>8%</p> <p>8%</p> <p>10%</p>
2	<b>Market Analysis</b>	<p>2.1 Analyze supply and demand dynamics of connectivity commodities, especially in emerging markets.</p> <p>2.2 Evaluate market players, pricing dynamics, and regulatory frameworks affecting the movement and pricing of gigabytes.</p>	<p>Month 1</p> <p>Month 6</p>	<p>8%</p> <p>8%</p>
3	<b>Technical Advisory</b>	<p>3.1 Serve as a technical advisor to the Market Shaping and Procurement teams, ensuring that the technical aspects of internet connectivity are accurately represented in procurement strategies and negotiations.</p> <p>3.2 Provide technical inputs during negotiations with connectivity providers and other stakeholders.</p>	<p>Month 5</p> <p>Month 12</p>	<p>8%</p> <p>8%</p>

4	<b>Stakeholder Engagement</b>	4.1 Engage with external technical experts, industry stakeholders, and regulatory bodies to gather insights and stay updated with the latest advancements in internet connectivity technologies and market dynamics.	Month 2	8%
		4.2 Facilitate technical discussions with stakeholders to address challenges and explore opportunities for improving connectivity in target regions.	Month 7	9%
5	<b>Reporting and Documentation</b>	5.1 Develop technical documents, reports, and presentations to communicate technical and market insights to internal teams and external stakeholders.	Month 9	9%
		5.2 Contribute to the creation of procurement documents and negotiation strategies with technical inputs.	Month 11	8%
6	<b>Cross-functional Collaboration</b>	6.1 Collaborate closely with the Market Influence and Procurement, and Data Science teams to ensure a coherent understanding and approach towards improving market access and shaping favorable market conditions for Giga's objectives.	Month 10	8%

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

**Qualifications:**

- Master's degree in Telecommunications, Computer Science, Engineering or a related technical 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 substantial experience in the field of internet connectivity, spectrum management, and related technical areas.
- Experience in procurement or market shaping within the telecommunications or internet connectivity sectors is beneficial. The ability to adapt to rapidly evolving technological and market conditions is crucial for success in this role.
- Experience in engaging with international organizations, government entities, and private sector stakeholders is an asset

- Deep understanding of the technical, regulatory, and market dynamics affecting the movement and pricing of gigabytes.
- Demonstrated ability to work both independently and in collaborative team environments.
- Excellent communication skills with the ability to translate complex technical concepts into understandable terms for non-technical stakeholders.
- Fluency in English is required. Knowledge of another official UN language (Arabic, Chinese, French, Russian or Spanish) is an asset.

#### Travel:

- The consultant is expected to travel to Giga's Barcelona Tech Centre on six trips, for a stay of 5 nights each.
- 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.
- Consultant is responsible for his/her own health and travel insurance
- Consultant is responsible to arrange his/her own travel, including visa

#### 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.