

Terms of Reference: Extension of Starlink Internet Connectivity to WHO Yambio Office Block 2

1. Project Title: Extension of Reliable Internet Connectivity to WHO Yambio Office Block 2

2. Background and Justification:

The World Health Organization (WHO) Yambio office currently utilizes a Starlink internet connection located in Office Block 1. This connection provides reliable internet access within Office Block 1. However, Office Block 2, located approximately 70 meters away, experiences unreliable and inconsistent internet connectivity. This lack of consistent internet access in Office Block 2 hinders the efficient execution of WHO's mandate, impacting communication, data sharing, access to online resources, and overall operational effectiveness for staff working in that building.

To ensure seamless operations and equitable access to essential online resources for all staff within the WHO Yambio office, it is crucial to extend the existing reliable Starlink internet connection from Office Block 1 to Office Block 2. This project aims to establish a stable and dependable internet connection in Office Block 2, thereby improving overall productivity and collaboration.

3. Objectives:

The primary objective of this project is to extend the existing Starlink internet connection from WHO Yambio Office Block 1 to Office Block 2, ensuring consistent and reliable internet access for all staff in both buildings.

Specific objectives include:

- **Assessment:** Conduct a thorough site assessment of both Office Block 1 and Office Block 2 to determine the most suitable and cost-effective method for extending the internet connection.
- **Solution Design:** Develop a detailed technical proposal outlining the chosen solution, including required hardware, software, cabling, installation procedures, and network configuration.
- **Procurement:** Identify and procure all necessary equipment and materials required for the implementation of the chosen solution.
- **Installation and Configuration:** Install and configure the necessary hardware and software to establish a stable and reliable internet connection in Office Block 2, extending from the existing Starlink setup in Office Block 1.

- **Testing and Validation:** Conduct thorough testing of the extended internet connection in Office Block 2 to ensure it meets the required standards for speed, stability, and reliability.
- **Documentation:** Provide comprehensive documentation of the implemented solution, including network diagrams, configuration details, troubleshooting guides, and user instructions.
- **Knowledge Transfer:** Provide basic training to designated WHO Yambio office staff on the operation and basic troubleshooting of the extended internet infrastructure.

4. Scope of Work:

The selected service provider/individual will be responsible for the following tasks:

Detailed Site Assessment:

- Physically inspect both Office Block 1 and Office Block 2, including the surrounding environment.
- Analyze potential obstacles (e.g., walls, trees) that may affect signal transmission.
- Assess existing infrastructure (e.g., conduits, power outlets) that can be utilized.
- Identify potential locations for equipment placement in both buildings.

Technical Proposal Development:

- Propose a viable and cost-effective solution for extending the internet connection (e.g., point-to-point wireless bridge, underground/overhead Ethernet cabling with necessary switching).
- Specify all required hardware (including specifications, quantities, and potential vendors), software, cabling (type and length), connectors, and any other necessary components.
- Detail the proposed installation methodology, including cable routing, equipment mounting, and safety precautions.
- Outline the network configuration plan, ensuring seamless integration with the existing Starlink network.
- Provide a clear Bill of Materials (BOM) with estimated costs for all hardware, software, and services.
- Include a project timeline with key milestones.

Installation and Configuration:

- Supply all approved hardware, software, and materials.
- Install and securely mount all necessary equipment in designated locations in both buildings.
- Install and terminate all required cabling (Ethernet, power, etc.) according to industry best practices and safety standards.
- Configure all networking devices (e.g., wireless bridge, switches, access points) to establish a stable and secure connection between the two buildings.
- Ensure seamless integration of Office Block 2 network with the existing Starlink network in Office Block 1.

Testing and Validation:

- Conduct thorough testing of the internet connection in Office Block 2, including speed tests, latency checks, and stability assessments.
- Verify connectivity to various online resources and applications.
- Address any identified issues and ensure the connection meets acceptable performance standards.

Documentation:

- Develop a comprehensive network diagram illustrating the extended network infrastructure.
- Document all configuration settings for networking devices.
- Provide a step-by-step troubleshooting guide for common connectivity issues.
- Create basic user instructions for accessing and utilizing the internet connection in Office Block 2.

Knowledge Transfer:

- Conduct a brief training session for designated WHO Yambio office staff on the basic operation of the extended internet infrastructure, including how to connect to the network and perform basic troubleshooting steps.

5. Deliverables:

The following deliverables are expected upon completion of the project:

- **Detailed Site Assessment Report:** Including findings, analysis, and recommendations.

- **Technical Proposal Document:** Outlining the proposed solution, hardware specifications, installation methodology, network configuration, BOM, and project timeline.
- **Procured Hardware and Software:** All necessary equipment and licenses as per the approved proposal.
- **Fully Installed and Configured Internet Connection:** Reliable internet access extended to WHO Yambio Office Block 2.
- **Testing and Validation Report:** Documenting the testing procedures and results, confirming the stability and reliability of the connection.

6. Timeline:

The proposed timeline for this project should be clearly outlined in the technical proposal, including estimated durations for each phase (assessment, proposal development, procurement, installation, and testing). WHO anticipates the project to be completed within [approximately 1-2 weeks] from the date of contract signing.

7. Reporting Requirements:

The selected service provider/individual will report to the State Coordinator of the WHO Yambio office. Regular updates on project progress will be required, and a final completion report summarizing the activities undertaken, challenges encountered, and outcomes achieved will be submitted upon project completion.

8. Qualifications and Experience of the Service Provider/Individual:

The ideal service provider/individual should possess the following qualifications and experience:

- Proven experience in designing and implementing network infrastructure solutions, including wireless and wired network extensions.
- Strong technical knowledge of networking principles, protocols, and hardware (e.g., routers, switches, access points, wireless bridges).
- Experience with cable installation and termination (Ethernet).
- Familiarity with different methods of extending internet connectivity over short distances.
- Ability to conduct thorough site assessments and develop effective technical solutions.
- Excellent problem-solving and troubleshooting skills.

- Strong communication and reporting skills.
- Experience working in similar environments (e.g., remote locations, limited infrastructure) is desirable.
- Relevant certifications in networking (e.g., CompTIA Network+, Cisco CCNA) are an advantage.

9. Evaluation Criteria:

Proposals will be evaluated based on the following criteria:

- **Technical Approach and Methodology:** Clarity, feasibility, and technical soundness of the proposed solution, including the understanding of the requirements and the appropriateness of the chosen technology.
- **Experience and Qualifications:** Demonstrated experience in similar projects, relevant technical skills, and qualifications of the proposed team/individual.
- **Cost-Effectiveness:** Reasonableness and competitiveness of the proposed budget, including a detailed breakdown of costs.
- **Timeline:** Realism and feasibility of the proposed project timeline.

10. WHO Contact Information:

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This Terms of Reference provides a framework for the project. Specific details and requirements may be further clarified during the proposal evaluation and negotiation process.