



ANNEX I TERMS OF REFERENCE

Provision of Internet Services to ILO Office in Manila, Philippines

Objectives

The present Terms of Reference aim to provide a framework for full TCP/IP Internet Service Provision for the ILO Office in Makati City. The service is expected to be **highly stable and reliable**, with overall uptime of **not less than 99% per month**.

Background

The ILO Office is located in 19th Floor Yuchengco Tower 1 RCBC Plaza Ayala Avenue, Makati City, currently has around 39 end users; connected through an inter-office LAN. Additionally, the office is connected to the corporate WAN over VPN. The Internet connection might also be used for VoIP communication and videoconferences.

Technical Requirements

1. Internet service shall **not** have additional payment or limitation by (1) traffic amount or (2) time.
2. To connect our office to the provider central, the following options are acceptable (indicated in order of preference): (i) Fibre optic underground; (ii) Fiber optic aerial (iii) Copper (DSL or cable).
3. For the connection of the provider central to upstream, the following options are acceptable (indicated in order of preference): (i) Fibre optic underground; (ii) Fiber optic aerial (iii) Copper (DSL or cable).
4. The provided bandwidth must be **dedicated** (CIR=1:1), can be symmetric or asymmetric, but the minimal guaranteed bandwidth should be **30 Mbps** for downstream and **30 Mbps** for upstream.
5. Provide at least 16 static (255.255.255.240 netmask) public IPv4 addresses for internet connectivity, where 13 are available to the ILO.
6. During the contract duration, the Provider must be able to¹:
 - o Upgrade the line in 1Mbps/1Mbps increments;
OR, if this is not possible:
 - o Provide a secondary IP address set or secondary line with 1Mbps/1Mbps of bandwidth.
7. Tier 2 peering with Tier 1 ISPs are required for this bid².
8. Provider must **not** use Intermediate Proxies and Transparent proxies as they will interfere with ILO ERP services.

¹ These two extra options (fees and implications) should be added in the bidding process.

² The most common definition of a Tier 1 network are usually National providers that don't rent Internet to third parties inside the country. Tier 2: Are Internet Providers that rent part or fully their network with another local provider. This are usually resellers or regional providers Tier 3: A provider that rents all the network to another provider..

9. No limitations on traffic/ports; bandwidth capacity should be ensured through direct IP connection; no mandatory proxy servers.
10. Provider must **not** use Throttling.
11. Optional QoS support on ingress: Provider can either implement QoS or not. However, in case it does, then the provider should note that the following types of ingress traffic is important for the ILO and must be classified and treated as high priority on the Provider's network:
 - All Videoconference traffic (H323) which uses following TCP/UDP ports:
 - UDP/1719
 - UDP/2326:2485
 - TCP/1720
 - TCP/5555:5574
 - Video streaming
 - UDP/554
 - ERP application
 - TCP/4444
 - TCP/4445

The following options are acceptable (indicated in order of preference): (i) Provider implements QoS and the traffic listed above **WILL have the high** priority; (ii) Provider **does NOT implement** QoS; (iii) Provider implements QoS but the traffic listed above **will NOT have high** priority.
12. The Internet Service Provider should note that the route to ILO Headquarters and has to have a maximum number of **18 Hops** (*router1.ilo.org, router2.ilo.org, outlook.office365.com*). Please provide the detailed traceroute to both hosts as annex to your bid.
13. The Provider must guarantee that the maximum packet loss within their infrastructure does not exceed **1% per month**. Please provide the latest packet loss information taken during peak and off-peak hours as annex to your bid.
14. In case of incident, the Provider must guarantee initial diagnostics within the first **4 hours**.
15. In case of incident, the Provider must guarantee full resolution within the first **24 hours**.
16. Data confidentiality guarantee: the Provider **shall not** scan traffic (unless this is done for finding problems in the network for which a prior ILO agreement must be obtained).
17. Service reliability must be ensured. Overall uptime shall **not be less than 99% per month**. If this means installation of a failover line (e.g. radio or DSL), this has to be made part of the bid.
18. Providers following ITIL best practices will be preferred.
 - o Please indicate the percentage of your staff dedicated to operate the infrastructure that passed the following certification and submit copy of the certificate:
 - ITIL foundation certification
 - ITIL service design certification
 - o Please provide the ITIL certification as annex to your bid
19. ISO certified Providers will be preferred.
 - o The following ISO certifications are acceptable (indicated in order of preference): (i) Company's ISO certification, (ii) Individual's certification who are dedicated to operate the service.

- Please provide ISO certification as annex to your bid.
20. The Provider **must** be present in the country for at least 5 years.
 21. The Provider **must** indicate at least three references (please provide names, phone number and e-mails of references) for the provision of similar services in the country.
 22. The Provider **must** provide a list of its own edge equipment that will be delivered and installed in the ILO Office (e.g. router, modem, switch), along with space, environment and power requirements.
 23. The provider **must** provide a peering diagram listing its current and planned connectivity **capacity** to local IX(es), as well as international peers (if such direct international peering is available).
 24. The provider is to comply with the ILO Terms and Conditions of Contract. If the provider has comments, it is to be included in the questionnaire and offer.

Additional Notes

- The provider must have 24 hours a day, 7 days a week and 365 days coverage for technical assistance and/or helpdesk facilities. Under the normal circumstances all problems should be resolved within maximum 24 hours after the notification from ILO received. The provider is also responsible for contacting designated ILO network specialist(s) for both scheduled and un-scheduled downtime.
- Bidders are required to describe what alternate routing or fallback arrangements for continuity of service they have in place (if any), should their primary link(s) to the Internet backbone become non-operational. Alternate routing or fallback arrangements must meet the standards and requirements set out herein.
- The selected provider must provide a web interface facility for ILO to retrieve real time and historical information on network performance, utilization and usage analysis.
- The demarcation point of the Internet connection is in the ILO Office, at the RJ-45 Ethernet port on the ILO firewall with IP Layer 3 termination.
- ILO may wish to visit the vendor's Network Operations Centre.
- The secondary IP address set or secondary line and additional bandwidth options are to be used in case that the office requires more bandwidth within the duration of the contract. Our intention is **not** to implement redundancy for load balance or failover, eg. if the ILO office takes the option of a secondary line, only one router for both lines would be perfectly acceptable. The objective is, if required, to allow the ILO office to grow the bandwidth during the contract period.

We are aware that if the ILO office takes one of these options the recurrent fee would rise and an additional investment might be required, however the installation/upgrade shall not take more than 5 working days.

Implementation Timeline

All installation works should be accomplished and connection launched on the date(s) specified in the Contract.

Contract Duration

The contract duration will be 36 months (from 1 January 2021 to 31 December 2023). The Contractor's rates will remain firm for the entire contract duration.

The ILO reserves the right to renegotiate the bandwidth requirements indicated in the TOR during the course of contract implementation.

Without prejudice to Section 10 of the Terms and Conditions applicable to ILO Contracts for Services in Annex IV, each Party may terminate the Contract by sending an advance written notice of three months to the other Party.

ILO Data Protection

All data proprietary to the ILO collected and/or processed by the Contractor ("ILO Data") is considered confidential, and may only be stored or processed in a country that is a party to the 1947 Convention on the Privileges and Immunities of the Specialized Agencies or where other arrangements are in place to ensure adequate legal protection of the ILO.

Storage of ILO Data by the Contractor or sale or release of ILO Data by the Contractor to marketing firms, research organizations, or any outside party where this is not required for the performance of the Services under this Contract and not authorized by ILO is strictly prohibited and can lead to termination of this Contract with cause by ILO, except where required to be disclosed by law or regulatory body, in which case the Contractor will give ILO sufficient prior notice of the disclosure request in order to allow the ILO to have a reasonable opportunity from the receipt of the request to disclose, to take protective measures or such other action as may be appropriate. Use of ILO Data by the Contractor for internal research or for marketing or promotional purposes is also strictly prohibited.

These obligations survive the termination or expiration of the Contract.