



INTERNATIONAL TELECOMMUNICATION UNION



REQUEST FOR PROPOSAL

Ref. n. PROC-AB-1498-14-IS

For the

REPLACEMENT OF MICROSOFT THREAT MANAGEMENT GATEWAY

Prospective vendors should be aware that ITU has and enforces a zero-tolerance policy concerning proscribed practices, including corruption, fraud, coercion, collusion, unethical behavior and obstruction. ITU adheres to the UN Supplier Code of Conduct which may be consulted at http://www.un.org/Depts/ptd/pdf/conduct_english.pdf. Prospective vendors hereby understand and accept that any submission sent to ITU constitutes agreement to abide by, observe and fully cooperate with the application of said Code of Conduct.

This Request for Proposal is published on United Nations Global Marketplace (www.ungm.org), the global portal to United Nations procurement. All further communication to prospective vendors (including the Contract award), except for Confidential Information as defined in Attachment 2, will be published on this portal. Unsuccessful vendors will not be informed individually that their offer was not retained.

Geneva, June 2014



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Part I. Notice of Invitation

The International Telecommunication Union (ITU) issues the present tender for the Replacement of Microsoft Threat Management Gateway..

The purpose of this tender is to select, in accordance with ITU rules and procedures, a vendor to provide ITU with the deliverables and the professional services as described in details in the Technical Specifications available in Part III.

1. Intention to Tender and Confidential and Non-Disclosure Agreement

Prospective vendors are requested to complete, sign and return by email to Ms. Valentina Pistritto (valentina.pistritto@itu.int) and copy Proc@itu.int by the deadline of **Thursday 19 June 2014 (12h00 Geneva Time)**, the following **mandatory** documents:

1. Acknowledgement Form (**Attachment 1**); and
2. Confidentiality and Non-Disclosure Declaration (**Attachment 2**).

The submission of the above documents, within the aforementioned deadline, is a *sine qua non* condition for the offer being qualified for evaluation and for receiving supplemental informations to the tender document (such as ITU's response to vendors queries and any other data not publically available in UNGM).

2. Queries and Clarification Questions

This tender will be administered by ITU Procurement Division. Therefore, vendors requiring any clarification on the tender documents, or the procurement process itself, shall submit their queries, **in writing** to the email addresses referred in **Section 1** above.

Two queries sessions are foreseen for this tender:

- (a) The deadline for the submission of *first round* of questions is Monday 23 June 2014.
- (b) The deadline for the submission of the *second round* of questions is Monday 14 July 2014.

ITU will answer to the queries and share the responses (without identifying the source of enquiry) only to the vendors who have previously submitted the Acknowledgement Form and the Non-Disclosure Declaration.

3. Deadline for offer Submission

The deadline for the submission of the offer is **Monday 4 August 2014 at 12h00 (Geneva time)**.



4. Amendments of ITU tender document

At any time prior to the deadline for offer submission, ITU may at its discretion modify the tender document by amendments. All prospective vendors shall periodically check if amendments or any other communications, except for Confidential Informations as defined in Attachment 2, have been posted in UNGM.

Yours faithfully,

A handwritten signature in blue ink, which appears to read 'Dietmar Plesse', is positioned below the 'Yours faithfully,' text.

Dietmar Plesse
Head, Procurement Division
International Telecommunication Union

Geneva, 6 June 2014



ATTACHMENT 1 to part I: Acknowledgement Form

Please check the appropriate box below and email this Acknowledgement Form together with the Confidentiality and Non-Disclosure Declaration (Attachment 2 to Part I hereto) by **Thursday 19 June 2014 at 12h00 Geneva Time** to the address below:

Email: Ms. Valentina Pistritto Valentina.Pistritto@itu.int

Copy: PROC@itu.int

Email subject: Tender PROC-AB-1498-14-IS- Intention to Tender.

☐ **Intention to Tender**

We hereby acknowledge receipt of the tender. We have perused the document and advise that we intend to submit a offer, according to the terms and conditions set forth in the tender document, on or before **Monday 4 August 2014 at 12h00 Geneva Time**.

☐ **Non-Intention to Tender**

We hereby acknowledge receipt of the tender . We have perused the document and advise that we *do not intend* to submit an offer for the following reason:

Vendor's Contact Information is as follow:

Vendor name: -----

Contact Person: -----

Email Address: -----

Telephone number: -----

Where did you learn about this tender?

☐ UNGM website ☐ direct solicitation from ITU ☐ other, please describe

Name and Tile of
Authorizing Officer: -----

Signature:

Date:



ATTACHMENT 2 to part I: Confidentiality and Non-Disclosure Declaration¹

Related to the **Request for Proposal ref. n. PROC-AB-1498-14-IS** for the Replacement of Microsoft Threat Management Gateway

[*Insert name of the company*] hereinafter referred to as the “**Recipient**”, having its seat located at [*insert official address in full*], hereby agrees to the undertakings of this Confidentiality and Non- Disclosure Declaration (hereinafter “**Declaration**”), as follows:

1. In connection the Recipient’s interest to submit an offer to the Request for Proposal ref. n. PROC-AB-1498-14-IS (hereinafter “**Tender**”), the International Telecommunication Union (hereinafter “**ITU**”) will provide to the Recipient certain information and/or materials of a non-public, confidential and proprietary nature, pertaining to, without limitation, technical data, software and hardware configurations and specifications, processes, architectures, concepts, designs, drawings, and other information or materials in written, graphic or electronic form, which relate to but is not contained in the Tender. Such information and/or materials, in whole or in part, together with analyses, compilations or other documents prepared by the Recipient, its employees or agents, which contain or otherwise reflect or are generated from such information and/or materials, is hereinafter referred to as “**Confidential Information**”. Such Confidential Information shall not include information that is or becomes generally available to the public other than as a result of a disclosure by the Recipient, its employees or agents, as well as any information that is independently developed by the Recipient without reference to or use of any of the Confidential Information.
2. In consideration of ITU furnishing the Confidential Information to the Recipient, the Recipient shall:
 - (a) use the Confidential Information exclusively for the purpose of evaluating the Tender and preparing a proposal to ITU in response to the Tender;
 - (b) use best efforts to keep the Confidential Information in strict confidence, exercising a high level of diligence and degree of care, taking into account the nature of the Confidential Information and its critical importance for the information security infrastructure of ITU;
 - (c) Disclose the Confidential Information only to those Recipient’s employees or agents who need to know the Confidential Information exclusively for the purpose of evaluating the Tender and preparing the Recipient’s proposal to ITU in response to the Tender. In doing so, the Recipient shall duly inform such employees or agents of the strictly confidential nature of the Confidential Information and shall have such employees or agents agree in advance, to ITU’s benefit, to be bound by the terms and conditions of this Declaration. In all cases, the Recipient shall be jointly responsible for any breach of this Declaration by its employees or agents.
 - (d) at the request of ITU, promptly return or destroy all Confidential Information, without the Recipient or its employees or agents retaining any copies, summaries, analyses or extracts thereof (whether in hard copy or intangible media).
 - (e) Immediately notify in writing ITU in the event of any unauthorized use or disclosure of the information in confidence.
3. The Recipient acknowledges that, although ITU has included in the Confidential Information certain data that it considers relevant for the purpose of evaluating the Tender, ITU is not making any

¹ In the case of joint-offer or consortium, this Declaration must be signed in by each consortium member.



representation or warranty as the accuracy or completeness of the Confidential Information.

4. The Recipient acknowledges that Confidential Information provided by ITU is and shall remain the property of ITU and no license or other rights in said Confidential Information are granted hereby
5. The Recipient acknowledges that unauthorized disclosure or use of Confidential Information could cause irreparable harm and significant injury to ITU, which may be difficult to ascertain. Accordingly, the Recipient agrees that monetary damages would not be a sufficient remedy for any breach of this Declaration and that specific performance and injunctive or other equitable relief shall be available to ITU as a non-exclusive remedy for any such breach.
6. This Declaration shall be binding on the Recipient's successors and assigns.
7. The commitments of this Declaration shall continue in full force and effect notwithstanding the outcome of the Tender process, the award of the Contract to the Recipient or a third party and/or the completion of the work described in the Tender. The commitments of this Declaration shall continue in full force and effect unless such time as all Confidential Information becomes freely available to the public in circumstances not involving a breach of the commitments under this Declaration.
8. The Recipient acknowledges that this Declaration does not create a joint venture or partnership between ITU and the Recipient, and that ITU is not obligated to enter into any further contract or business relationship with the Recipient. The award of the contract for the Tender shall be made in accordance with ITU Rules, Regulations and Procedures.
9. Any dispute between the ITU and the Recipient arising from, or in connection with, this Declaration shall be settled by them directly and amicably through negotiations. In the case of failure of such negotiations, the dispute shall be settled by a sole arbitrator to be nominated at the request of either of the Recipient or ITU by the Court of Arbitration of the International Chamber of Commerce (ICC). The place of arbitration shall be Geneva. The language of arbitration shall be English. The arbitration shall be carried out in accordance with the Rules of Arbitration of the International Chamber of Commerce, as at present in force. The applicable law shall be Swiss law. The arbitrator's ruling shall be binding and final upon ITU and the Recipient and any recourse against this ruling to any court or tribunal shall be excluded
10. Nothing in this Declaration (or its acceptance by ITU) shall constitute a waiver of the privileges, immunities and facilities the ITU enjoys by virtue of the international and national laws applicable to it.

Place and Date: _____

Name and Title: _____

Recipient's Seal: _____

Part II. Instructions to Vendors

1 Definitions

In this tender document the following definition shall apply:

- a) **"ITU"** refers to International Telecommunication Union.
- b) **"Tender"** refers to this Request for Proposals consisting of instructions and references prepared by ITU for purpose of selecting the best service provider to perform the services described in the Technical Specification (Part III).
- c) **"Tender document"** refers to the complete set of documents that provides vendors with all informations needed and procedures to be followed in the course of preparing their offers, as well as the description of the requirements, deliverables and activities requested by ITU though this tender.
- d) **"Offer"** refers to the vendor's response to the tender, including technical and financial offer and all other documentation attached thereto as required by the tender document.
- e) **"Vendor"** refers to any legal entity that may submit, or has submitted, an offer for the provision of services requested by ITU through this tender.
- f) **"NOI"** refers to the Notice of Invitation (Part I).
- g) **"Successful Vendor"** refers to vendor selected by ITU as a result of the tender process, for the provision of the materials, works and services requested and described in the Technical Specification (Part III).
- h) **"Supplemental Information to the Tender Document"** refers to a written communication issued by ITU to prospective Vendors containing clarifications, responses to queries received from prospective Vendors, or changes to the made tender document, at any time after release of the tender document but before the deadline for submission of the offers.
- i) **"Confidential information"** refers to information and/or materials of a non-public, confidential and proprietary nature, pertaining to, without limitation, technical data, software and hardware configurations and specifications, processes, architectures, concepts, designs, drawings, and other information or materials in written, graphic or electronic form, which relate to but is not contained in the Tender document.

2 Background Information

2.1 The International Telecommunication Union (ITU)

ITU is the leading United Nations agency for information and communication technology (ICT) issues, and the global focal point for governments and the private sector in developing networks and services. For nearly 149 years, ITU has coordinated the shared global use of the radio spectrum, promoted international cooperation in assigning satellite orbits, worked to improve telecommunication infrastructure in the developing world, established the worldwide standards that foster seamless interconnection of a vast range of communications systems and addressed the global challenges of our times, such as mitigating climate change and strengthening cybersecurity.

ITU also organizes global networking and knowledge-sharing events such as ITU TELECOM WORLD, bringing together the most influential representatives of government and the telecommunications and ICT industry to exchange ideas, knowledge and technology for the benefit of the global community, and in particular the developing world.



From broadband Internet to latest-generation wireless technologies, from aeronautical and maritime navigation to radio astronomy and satellite-based meteorology, from convergence in fixed-mobile phone, Internet access, data, voice and TV broadcasting to next-generation networks, ITU is committed to connecting the world.

ITU is based in Geneva, Switzerland, and its membership includes 193 Member States and more than 700 private sector member companies.

ITU Membership represents a cross-section of the telecommunications and information technology industry, from the world's largest manufacturers and carriers to small, innovative new players working in new fields like IP networking.

Founded on the principle of international cooperation between governments and the private sector, the ITU represents a global forum through which governments and industry can work towards consensus on a wide range of issues affecting the future direction of this increasingly vital industry.

2.2 Tender Purpose

The purpose of this tender is to solicit potential vendors to propose a complete solution for the replacement of Microsoft Threat Management Gateway in ITU.

The tender will result in the selection of the best technical and commercial offer from a one vendor (hereinafter the “**Successful Vendor**”) for the provision of the required software, deliverables and professional services as described in the Technical Specification in Part III hereto.

3 Vendor Profile and Selection Process Criteria

- 3.1** The vendor shall ensure that it has the technical ability, experience, managerial capacity, resources and sufficient human resources and equipment for executing the tasks described in this tender document. Vendors who may not have the equipment, expertise, personnel or other necessary criteria to provide the services described herein are permitted to submit a **joint offer** with another vendor(s). It must be noted that if the Successful vendors submitted a joint offer with another vendor(s), in the contract with ITU, ITU will treat the Successful Vendor (contractor) jointly and severally with the other vendor(s) as applicable. In such cases special attention should be paid to the documents requested in the NOI as well as in **Section 4.3.4** below, which must also be provided for *all* subcontractor vendors referenced in the offer.
- 3.2** ITU’s evaluation of the offers will be based on the documentary evidence that it is substantially compliant with the technical requirements and technical specifications and is the best value for money. The following evaluation criteria will be taken into consideration during the evaluation of the offers:

MAX Points	70	Technical evaluation criteria
50 points		Overall Quality: How the technical offer matches all technical requirements, specifications and deliverables detailed in Part III of the tender document.
10 points		Vendors and its proposed Consultant’s Experience:
10 points		Support and Maintenance: Quality and efficiency of maintenance and support and trouble shooting
MAX	30	Commercial and Administrative evaluation criteria



Points	
20 points	Price proposed for: <ul style="list-style-type: none">- total fix overall price for Basic Costs (Table 5 in Annex 7);- Total fix overall price for Recurrent Costs (Costs for three years).
10 points	Acceptance of ITU General Conditions for Contracts

- 3.3** All offers received on or before the deadline specified in **Section 4.4** below and in the form described in the present tender document will be evaluated in an exhaustive and impartial manner by ITU.
- 3.4** ITU may seek clarifications from vendors during the evaluation stage. Any change to the offer however will not be permitted.
- 3.5** ITU reserves the right to reject all or part of the offer received in due form, without being bound in any way to communicate the reasons for such decision to the vendors, which shall have no right of appeal or recourse against the final decision taken by ITU.

4 Conditions

Offers shall meet the following requirements:

- 4.1** Vendors shall submit one (1) printed signed original, one printed copy and one electronic version (USB or CD ROM) of **both** technical **and** commercial offer. The language of the offer shall be English.
- 4.2** To be qualified for evaluation, the vendors shall submit the **Acknowledgment Form (Attachment 1** to Part I) and the **Confidentiality and Non-Disclosure Declaration (Attachment 2** to Part I) by the deadline specified in the NOI.
- 4.3** In addition, to be qualified for evaluation, the offer must also include the following compulsory information and documents:

TECHNICAL OFFER

4.3.1 The technical offer shall contain *at a minimum*:

- (a) A summary of the vendor, and any of its subcontractors' (if applicable), overall professional profile;
- (b) At least two references, as well as detailed examples (including dates) of the vendor(s) similar projects and experience acquired in the past in project of a similar nature than the one described in this tender document , by completing the table contained in **(Annex 4)**;
- (c) A Curriculum Vita of the Project Lead and *all* the engineers and resources allocated for this project. The Curricula shall also contain references on resource's relevant experience and certifications.
- (d) The tables contained in **Annex 7** to Part III (Project management and Implementation Timeline Form).

4.3.2 In addition to the above, separately for each *variant* (see Part III), the technical offer shall contain special sections detailing *at a minimum* all items requested in Table 2 "*Items to include in the Technical Offer*" under Section 4 to Part III.

4.3.3 The duly completed Vendor Information Form **(Annex 4)**.



- 4.3.4** If applicable, a detailed list of the work which the vendor intends to subcontract, together with precise identification of the subcontractor(s). ITU requests that the vendor does supply a duly completed Vendor Information Form (**Annex 3**) for **each** subcontractor which it intends to work with in connection with this tender, if and as applicable. If the vendor is submitting a joint offer, the vendor should make a clear reference to this in the covering letter, and shall indicate all details in relation thereto.
- 4.3.5** A Formal Declaration (**Annex 5**), signed by the vendors' legal representative and bearing the official vendor's stamp, certifying that all the terms and conditions of the offer, including all commercial aspects and prices, will remain valid until a definitive agreement is entered into with ITU. This agreement will include, or refer to, the ITU General Conditions of Contract (**Annex 6**).
- 4.3.6** Acceptance or non-acceptance in relation to each and every Article and Sub-Article of the ITU General Conditions for Contracts by completing the Checklist on ITU General Conditions for Contract available in **Annex 6**. The reasons for any non-acceptance shall be clearly stated and the vendor shall propose an alternative clause being understood that such proposed deviations will remain subject to contractual negotiation between ITU and the Successful Vendor. If a vendor does not include the aforementioned **Annex 6** it will be understood that it is implicitly accepting all terms and conditions thereof in their entirety; therefore ITU shall have the right to demand the vendor to fulfill its relevant duties and obligations accordingly, if the contract is awarded to the latter.

ITU reserves the right to verify the contents of the information thus received, by contacting, if necessary, those organizations. By submitting an offer, the vendor hereby consents to such contacts.

No price and/or commercial information shall be contained in the technical offer.

COMMERCIAL OFFER

- 4.3.7** The vendor shall include in its commercial offer a financial section with:
- (a) The fixed and firm price in respect of the items and deliverables by completing the compulsory pricing tables available in **Annex 8 to Part III** (Price Schedule Form); Specifically, vendors shall complete **Table 5 (basic costs)**, **Table 6 (Recurrent costs)** and **Table 7 (optional features costs, if any)** **for each Variant and each System** proposed by specifying the name of the offer variant and the name of the system.
 - (b) All prices must be quoted in **United States Dollar (USD)** or **Swiss Francs (CHF)** **only** and must be exclusive of VAT, from which ITU is exempt².

² **Section 9 of the 1947 Convention on the Privileges and Immunities of the Specialized Agencies of the United Nations** exempts ITU from all taxes, except charges for public utility services, as well as customs duties and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the ITU exemption from such taxes, duties and charge, the Successful Vendor shall immediately consult with ITU to determine a mutually acceptable procedure. Accordingly, the Successful Vendor authorizes ITU to deduct from the Successful Vendor's invoice any amount representing such taxes, duties or charges, unless the supplier has consulted with ITU before the payment thereof and ITU has, in each instance, specifically authorized the Successful Vendor to pay such taxes, duties or charges under protest. In that event, the Successful Vendor shall provide ITU with written evidence that payment of such taxes, duties or charges has been made and authorized.



(c) Suggestion relating to the timeframes, conditions and practical arrangement for *payments* being understood that such suggestions are purely indicative and will remain subject to contractual negotiation between ITU and the Successful Vendor.

- 4.4 No price variation will be allowed. All prices quoted must be fully inclusive of all administrative charges and overheads, including but not limited to, fees, transport costs, levies, etc., if and as applicable.
- 4.5 Failure to include any one of the requested items of information and/or document(s) listed in **Section 4.2** and **4.3** above, or failure to complete all of the above-mentioned forms and papers fully and correctly may, at the sole discretion of ITU, entail the automatic rejection of the offer as a whole.
- 4.6 In addition to the compulsory elements of the tender listed in **Section 4.2 and 4.3** above, the prospective vendor may also append any document or data which it considers necessary. *Such additional documents or data must be clearly itemized in the covering letter.*
- 4.7 The Successful Vendor shall be solely responsible, financially and otherwise, for all costs and losses in relation to the hiring of subcontractors for the performance of the terms and conditions contained in this tender document.
- 4.8 All **Attachments** and **Annexes** herein shall form an integral part of this tender document.
- 4.9 ITU will treat as confidential all information, document and data provided by the vendors.

5 Procedures

- 5.1 Any requests for further technical, commercial and administrative clarifications or queries in relation to this tender shall be submitted **by email**, to the email addresses detailed in the NOI under Section 2, **on or before Monday 23 June 2014 at 12h00 (Geneva Time)** and shall refer to the **“RFP No. PROC-AB-1498-14-IS – “Clarifications- Round 1.”** Vendors have the possibility to submit another set of questions on or before **Monday 14 July 2014 at 12h00 (Geneva Time)**. Such requests for further clarifications shall refer to **“RFP No. PROC-AB-1498-14-IS – “Clarifications- Round 2”**.
- 5.2 ITU will answers to all clarifications and queries and distribute such answers (without identifying the source of enquiry) only to the vendors who have previously submitted the Acknowledgement Form (**Attachment 1** to Part 1) and the Confidentiality and Non-Disclosure Declaration (**Attachment 2** to Part I) by the deadline and conditions detailed in the NOI (Part I).
- 5.3 The offers shall be sent directly to the **ITU Headquarter in Geneva** by hand during office hours or sent by registered mail to the following address, indicating the reference **“Request for Proposals PROC-AB-1498-14-IS”**:

International Telecommunication Union
Communications Service
Place des Nations
CH-1211 Geneva 20
Switzerland



The offers shall be sent in a sealed outer envelope bearing the words “**Request for Proposals No. PROC-AB-1498-14-IS – “Replacement of Microsoft Threat Management Gateway”**”, which must itself contain two separated sealed envelopes, one containing and labeled the **technical** offer and another one containing and labeled the **commercial** offer. The relevant labels available in **Annex 3** must be affixed on each of the two inner envelopes accordingly. This requirement is mandatory due to the fact that the offers will be evaluated in two sequential phases: the technical evaluation first, and at a later stage, the commercial evaluation.

- 5.4 Each page of the original offer (cf. **Section 4.1** above) shall be signed/visa’d (witnessed) by an official who is legally authorized to enter into a contract on behalf of the vendor.
- 5.5 The offers must be received by the ITU Communication Service at **12h00 (Geneva Time) on or before Monday 4 August 2014**. ITU Communication Service will certify receipt of the offer by recording the date and time of receipt on the outside envelope or package. The official date and time of receipt will be those recorded by ITU Communication Service upon receipt of each offer and may under no circumstances be queried. It is understood that the vendor is responsible for ensuring that its offer reaches the ITU Communication Service *before* the above mentioned expiry date. Any offer received after the above mentioned expiry date will be return unopened.
- 5.6 All vendors should carefully note that in case of conflict, discrepancy and/or ambiguity between the hard copy of its offer submitted to ITU and any electronic copy, the original hard copy shall in all circumstances be treated by ITU as the definitive offer.
- 5.7 No information concerning the examination, clarification or evaluation of the offer and/or recommendations relating to the award will be communicated to any vendors or to any other person whomsoever.
- 5.8 ITU will make no payment whatsoever to any vendor for the preparation and submission of its offer or for any costs incurred in that respect; in particular, ITU will not refund the costs incurred by unsuccessful vendors.
- 5.9 The Successful Vendor is required to obtain any required export licenses (and to bear the cost thereof). In the event that the Government issuing such export license delays the processing of such request for a license or otherwise denies such a license, then the Successful Vendor may seek assistance from ITU, and ITU would liaise through the appropriate Mission to the UN in order to seek to resolve the matter.
- 5.10 By submitting an offer, the vendor thereby agrees to abide by all the terms and conditions set forth in these conditions and procedures. No provision of this tender document shall in any way be regarded as a waiver, express or implied, of the privileges and immunities enjoyed by ITU under the international agreements or any national law applicable to it.

ANNEX 3 to Part II

REFERENCE LABELS

(To be printed and affixed by the vendor respectively to the technical offer envelope and the commercial offer envelope as per Part II **Section 5.3** of the tender)



**Union internationale
des télécommunications**
Place des Nations
CH1211 Genève 20
Switzerland

SOUMISSION – TENDER – OFERTA No
TECHNICAL OFFER PROC-AB-1498-14-IS



**Union internationale
des télécommunications**
Place des Nations
CH1211 Genève 20
Switzerland

SOUMISSION – TENDER – OFERTA No
COMMERCIAL OFFER PROC-AB-1498-14-IS



ANNEX 4 to Part II: VENDOR INFORMATION FORM

The following information shall be supplied accurately by each vendor:

Company:

Name of Vendor: _____
Head Office: _____
Names of Officers/Directors: _____
Legal Status: _____
Date of founding: _____
Registered Capital
(if applicable) : _____

Nos. Staff Employed:		Turnover ³ /budget in US Dollars (round figures):	
Management:	_____	2010:	_____
Other Staff: full time	_____	2011:	_____
part time	_____	2012:	_____
	_____	2013:	_____

List of Major Clients to which your Company/ Institution has satisfactorily delivered services of similar nature to those defined in the Technical Specifications (Part III) (address, telephone number, contact person) and details of the work carried out (dates, type of work, value and duration of contract etc.) - attach additional page(s) if required⁴

SERVICE DESCRIPTION	CLIENT	CONTACT PERSON	FROM	TO	CONTRACT VALUE

Certified as accurate:

Stamp:

Date

³ Total income or expenses.

⁴ The ITU reserves the right to check the information given under this heading by contacting the companies or individuals listed, or by requiring the relevant certification of services rendered, whenever considered appropriate.



ANNEX 5 to Part II: FORMAL DECLARATION

I, the undersigned,

(Legally incorporated name of vendor)

certify that the whole offer, including but not limited to all commercial and financial aspects, corresponding to the Request for Proposals

No. PROC-AB-1498-14-IS for Replacement of Microsoft Threat Management Gateway

will remain valid in all its terms and conditions until an Agreement is signed with the ITU.

Signature of the vendor's authorized representative

Name and Title of the vendor's authorized representative

Date: _____

Place: _____

Vendor's seal:



page intentionally blank



ANNEX 6 to Part II: CHECKLIST ON ITU GENERAL CONDITIONS FOR CONTRACTS

Vendors are requested to complete and include in the technical offer, this checklist as per **Section 4.3.6** of the tender document.

The original Article and Sub-Article as per Annex 4 (ITU General Conditions for Contracts)	Acceptance (tick box)	Proposed deviation (alternative clause), if any, by the vendor	Reason for proposing alternative clause
<p>1 Legal Status</p> <p>1.1 The Contractor shall be considered as having the legal status of an independent contractor vis-à-vis ITU. The Contractor's personnel and sub-contractors shall not be considered in any respect as being the employees or agents of ITU.</p> <p>1.2 Under no circumstances may the Contractor, its personnel and/or sub-contractors claim any of the privileges, immunities and facilities enjoyed by ITU, in order to obtain any exemption from, or reimbursement for, costs related to any taxes, duties, fees or levies whatsoever, which may be imposed upon them in connection with the Contract or otherwise, or to be immune from any claim or judicial process arising out of the performance of the Contract, for which the Contractor shall assume full responsibility, or brought against them on any other grounds.</p>			
<p>2 Source of Instructions</p> <p>Unless agreed upon in writing and in advance with ITU, the Contractor shall neither seek nor accept instructions from any authority external to ITU in connection with the performance of the Contract. The Contractor shall refrain</p>			



from any action which may adversely affect ITU and shall fulfill its commitments with the fullest regard to the interests of ITU.			
<p>3 Contractor's Responsibility for its Employees</p> <p>The Contractor shall be responsible for the professional and technical competence of its employees and will select, for work under the Contract, reliable individuals who will perform effectively in the implementation of the Contract, respect the applicable laws, regulations, rules and ordinances promulgated by the competent authorities, as well as the local customs, and conform to a high standard of moral and ethical conduct.</p>			
<p>4 Removal of Employees</p> <p>Upon written request of ITU stating the reasons therefore, the Contractor shall remove any member of its personnel and/or that of its sub-contractor(s) and shall replace, if necessary, such member by another one acceptable to ITU. The Contractor shall submit to ITU sufficiently in advance the curriculum vitae of the person it envisages to newly designate, who shall meet the standard requirements stated in Article 3 above, for ITU's consideration and approval, which shall not be unreasonably withheld or delayed by the latter. Costs and additional expenses resulting from such removal of any member of the Contractor's personnel and/or that of its sub-contractor(s) and his replacement shall be at the Contractor's own expense. Such removal shall not be considered as termination in part or in whole of the Contract between ITU and the Contractor.</p>			
<p>5 Assignment</p>			



The Contractor shall not assign, transfer, pledge or make other disposition of the Contract or any part thereof, or any of the Contractor's rights, claims or obligations under the Contract except with the prior written consent of ITU.			
6 Sub-contracting In the event the Contractor requires the services of sub-contractors, the Contractor shall obtain the prior written approval and clearance of ITU for all sub-contractors. The approval by ITU of a sub-contractor shall not relieve the Contractor of any of its obligations under the Contract. The terms of any sub-contract shall be subject to and in conformity with the provisions of the Contract between ITU and the Contractor.			
7 ITU Officials not to Benefit The Contractor warrants that no official of ITU has received or will be offered by the Contractor any direct or indirect benefit arising from the Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of the Contract.			
8 Non-employment of Respective Personnel Neither ITU nor the Contractor shall, during the period of one year following the end of the provision of services or goods under the Contract by the Contractor, either employ or consider employment of any member of the personnel of the other Party without the prior written approval of the latter.			
9 Indemnification			



<p>The Contractor shall indemnify, hold and save harmless, and defend, at its own expense, ITU, its officials, agents, servants and employees from and against all suits, claims, demands, and liability of any nature or kind, including their costs and expenses, arising out of acts or omissions of the Contractor, or the Contractors' employees, officers, agents or subcontractors, in the performance of the Contract. This provision shall extend, <i>inter alia</i>, to claims and liability in the nature of workmen's compensation, products liability and liability arising out of the use of patented inventions or devices, copyrighted material or other intellectual property by the Contractor, its employees, officers, agents, servants or sub-contractors. The obligations under this Article do not lapse upon termination of the Contract.</p>			
<p>10 Bankruptcy</p> <p>The Contract shall automatically terminate if the Contractor files a petition in bankruptcy or is adjudicated bankrupt or insolvent, or makes an assignment for the benefit of creditors, or an arrangement pursuant to any bankruptcy law, or in the event of any realization or execution on the Contractor's assets.</p>			
<p>11 Severability</p> <p>Each provision of the Contract constitutes a separate right or obligation. If any provision of the Contract is deleted, varied or declared unenforceable, that provision will be severed and the remainder of the Contract will continue in force regardless. The failure of a Party to enforce an obligation does not constitute a waiver of that provision.</p>			



12 Insurance and Liabilities to Third Parties

12.1 The Contractor shall provide and thereafter maintain insurance against all risks in respect of its property and any equipment used for the execution of the Contract or any good to be delivered to ITU.

12.2 The Contractor shall provide and thereafter maintain all appropriate workmen's compensation insurance, or its equivalent, with respect to its employees to cover claims injury or death in connection with the Contract.

12.3 The Contractor shall also provide and thereafter maintain liability insurance in an adequate amount to cover third party claims for death or bodily injury, or loss of or damage to property, arising from or in connection with the provision of services under the Contract or the operation of any vehicles, boats, airplanes or other equipment owned or leased by the Contractor or its agents, servants, employees or sub-contractors performing work or services in connection with the Contract.

12.4 Except for the workmen's compensation insurance, the insurance policies under this Article shall:

- i) name ITU as additional insured;
- ii) include a waiver of subrogation of the Contractor's rights to insurance carrier against ITU; and
- iii) provide that ITU shall receive thirty (30) days' written notice from the insurers prior to any cancellation or change of coverage.

12.5 The Contractor shall, upon request, provide ITU with



satisfactory evidence of the insurance required under this Article.			
<p>13 Encumbrances/Liens</p> <p>The Contractor shall not cause or permit any lien, attachment or other encumbrances by any person to be placed on file or to remain on file in any public office or on file with ITU against any monies due or to become due for any work done or materials furnished under the Contract, or by reason of any other claim or demand against the Contractor.</p>			
<p>14 Title to Equipment</p> <p>Title to any equipment and supplies that may be furnished by ITU shall rest with ITU and any such equipment shall be returned to ITU at the conclusion of the Contract or when no longer needed by the Contractor. Such equipment, when returned to ITU, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear. The Contractor shall be liable to compensate ITU for equipment determined to be damaged or degraded beyond normal wear and tear.</p>			
<p>15 Copyright, Patents and Other Proprietary Rights</p> <p>15.1 Except as otherwise expressly provided in writing in the Contract, ITU shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Contractor has developed for ITU under Contract and which bear a direct</p>			



relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the Contract, and the Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for ITU.

15.2 To the extent that any such intellectual property or other proprietary rights consist of any intellectual property or other proprietary rights of the Contractor: (i) that pre-existed the performance by the Contractor of its obligations under the Contract, or (ii) that the Contractor may develop or acquire, or may have developed or acquired, independently of the performance or its obligations under the Contract, ITU does not and shall not claim any ownership interest thereto, and the Contractor grants to ITU a perpetual license to use such intellectual property or proprietary rights.

15.3 At the request of ITU, the Contractor shall take all necessary steps, execute all necessary documents and generally assist in securing such rights and transferring or licensing them to ITU in compliance with the requirements of the applicable law of the Contract.

15.4 Subject to the foregoing provisions, all maps, drawings, photographs, mosaics, plans, reports, estimates, recommendations, documents, and all other data compiled by or received by the Contractor under the Contract shall be the property of ITU, shall be made available for use or inspection by ITU at reasonable time and in reasonable places, shall be treated as confidential, and shall be delivered only to ITU authorized officials on completion of the work under the Contract.



<p>16 Use of Name, Emblem, Acronym or Official Seal of ITU</p> <p>The Contractor shall not advertise or otherwise make public the fact that it is a Contractor with ITU, nor shall the Contractor, in any manner whatsoever use the name, emblem, acronym or official seal of the ITU, or any acronym of the name of ITU in connection with its business or otherwise.</p>			
<p>17 Confidential Nature of Documents, Information and Other Data</p> <p>17.1 Documents, information and other data that is considered proprietary by either Party and that is delivered or disclosed by one Party ("Discloser") to the other Party ('Recipient') during the course of performance of the Contract, and that is designated as confidential ("Information"), shall be held in confidence by that Party and shall be handled as follows:</p> <p>17.2 The Recipient of such information shall:</p> <p>17.2.1. use the same care and discretion to avoid disclosure, publication or dissemination of the Discloser's Information as it uses with its own similar information that it does not wish to disclose, publish or disseminate; and,</p> <p>17.2.2. use the Discloser's Information solely for the purposes for which it was disclosed.</p>			



17.3 Provided that the Recipient has a written agreement with the following persons or entities requiring them to treat the information confidential in accordance with the Contract and this Article 17, the Recipient may disclose Information to:

17.3.1. any other party with the Discloser's prior consent; and,

17.3.2. the Recipient's employees, officials, representatives and agents who have a need to know such information for purposes of performing obligations under the Contract, and employees, officials, representatives and agents of any legal entity that it controls, controls it, or with which it is under common control, who have a need to know such information for purposes of performing obligations under the Contract, provided that, for these purposes a controlled legal entity means:

- (i) a corporate entity which the Recipient owns or otherwise controls, whether directly or indirectly, over fifty percent (50%) of voting shares thereof; or,
- (ii) any entity over which the Recipient exercises effective



<p>managerial control; or,</p> <p>(iii) for ITU, a governing organ, or subsidiary organ of ITU established in accordance with the Constitution and Convention of ITU.</p> <p>17.4 The Contractor may disclose Information to the extent required by law, provided that, subject to and without any waiver of the of the privileges and immunities of ITU, the Contractor will give ITU sufficient prior notice of a request for disclosure of Information in order to allow ITU to have a reasonable opportunity to take protective measures or such other actions as may be appropriate before such disclosure is made.</p> <p>17.5 ITU may disclose Information to the extent as required pursuant to the Constitution and Convention of ITU, the rules, decisions, resolutions, and recommendations of its governing organs, or rules promulgated by the Secretary-General.</p> <p>17.6 These obligations and restrictions of confidentiality shall be effective during the term of the Contract, including any extension thereof, and, unless otherwise provided in the Contract, shall remain effective following any termination of the Contract.</p>			
<p>18 Privileges, Immunities and Facilities</p> <p>Nothing in or related to the Contract shall constitute a waiver, express or implied, of any of the privileges, immunities and facilities, which ITU enjoys by virtue of the international agreements and national laws applicable to it.</p>			



<p>Section 9 of the 1947 Convention on the Privileges and Immunities of the Specialized Agencies of the United Nations exempts ITU from all direct taxes, except charges for public utility services, as well as customs duties and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the ITU exemption from such taxes, duties or charges, the Supplier shall immediately consult with ITU to determine a mutually acceptable procedure. Accordingly, the Supplier authorizes ITU to deduct from the Supplier's invoice any amount representing such taxes, duties or charges, unless the Supplier has consulted with ITU before the payment thereof and ITU has, in each instance, specifically authorized the Supplier to pay such taxes, duties or charges under protest. In that event, the Supplier shall provide ITU with written evidence that payment of such taxes, duties or charges has been made and authorized.</p>			
<p>19 Force Majeure and Other Changes in Conditions</p> <p>19.1 In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to ITU, of such occurrence or change if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. The Contractor shall also notify ITU of any other changes in conditions or the occurrence of any event that interferes or threatens to interfere with its performance of this Contract. On receipt of the notice required under this Article, or upon being directly affected in its fulfillment of its obligation</p>			



<p>under the Contract by an event constituting Force majeure, ITU shall take such action as, in its sole discretion it considers to be appropriate or necessary in the circumstances, including the granting to the Contractor of a reasonable extension of time in which to perform its obligations under the Contract.</p> <p>19.2 If the Contractor is rendered permanently unable, wholly, or in part, by reason of force majeure to perform its obligations and meet its responsibilities under this Contract, ITU shall have the right to suspend or terminate this Contract on the same terms and conditions as are provided for in Article 20 below, except that the period of notice shall be seven (7) days instead of thirty (30) days.</p> <p>19.3 Force majeure as used in this Article means acts of God, war (whether declared or not), invasion, revolution, insurrection, or other acts of a similar nature or force, which are beyond the control of either Party, and which neither Party, exercising due care, is able to overcome.</p> <p>19.4 The Contractor acknowledges and agrees that, with respect to any obligations under the Contract that the Contractor must perform in or for any areas in which ITU is engaged in, preparing to engage in, or disengaging from humanitarian or similar operations, any delays or failure to perform such obligations arising from or relating to harsh conditions within such areas or to any incidents of civil unrest occurring in such areas shall not, in and of itself, constitute force majeure under the Contract.</p>			
<p>20 Termination</p> <p>20.1 Either party may terminate this Contract for cause, in whole or in part, upon thirty (30) days notice, in writing,</p>			



<p>to the other party. The initiation of arbitral proceedings in accordance with Article 21 below shall not be deemed a termination of this Contract.</p> <p>20.2 ITU may terminate forthwith this Contract at any time should the mandate or the funding of the Mission/Bureau or Program be curtailed or terminated, in which case the Contractor shall be reimbursed by ITU for all reasonable costs incurred by the Contractor prior to receipt of the notice of termination.</p> <p>20.3 In the event of any termination by ITU under this Article, no payment shall be due from ITU to the Contractor except for work and services satisfactorily performed in conformity with the express terms of this Contract.</p> <p>20.4 Should the Contractor be adjudged bankrupt, or be liquidated or become insolvent, or should the Contractor make an assignment for the benefit of its creditors, or should a Receiver be appointed on account of the insolvency of the Contractor, ITU may, without prejudice to any other right or remedy it may have under the terms of these conditions, terminate this Contract forthwith. The Contractor shall immediately inform ITU of the occurrence of any of the above events.</p>			
<p>21 Settlement of Disputes and Governing Law</p> <p>Any dispute between the Parties arising from or in connection with this Contract shall be settled directly and amicably by them through mutual negotiations. In case of failure of such negotiations, the dispute shall be settled by a sole arbitrator to be nominated at the request of either of the Parties by the Court of Arbitration of the International Chamber of Commerce of Paris. The place of arbitration</p>			



shall be Geneva. The language of arbitration shall be English. The arbitration shall be carried out in accordance with the Rules of Arbitration of the International Chamber of Commerce, as at present in force. Besides, and only supplementary to, the provisions of this Contract, the applicable law shall be the Swiss substantive law, with the exception of Article 190 of the Swiss Federal Law on private international law of 8 December 1987. The arbitrator's ruling shall be binding and final upon the Parties hereto and any recourse to any court or tribunal against the arbitrator's ruling shall be excluded.			
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Part III. Technical Specification

1. Introduction

ITU wishes to replace its existing Microsoft Threat Management Gateway (TMG) with new solution with equivalent or better functionality and better performance. The vendor is expected to be a systems integrator who can engineer the offered systems to work optimally as a coherent whole. This part of the document describes the existing environment and the technical requirements for the new solution.

The deliverables of the project are shown in *Table 1: List of Deliverables* below:

Table 1: List of Deliverables

	DELIVERABLES	DETAILS
1	New solution (hardware, software, subscription and licensing) that includes all functionalities of the current Microsoft Threat Management Gateway system. Additional features to mitigate changing threat landscape.	<i>Desired Environment and Technical Requirements</i> sections, plus <i>Table 3: Technical Requirements</i>
2	Full installation of new system with its configuration based on the configuration of the current Microsoft Threat Management Gateway system	<i>Table 3: Technical Requirements, R1-17</i>
3	Migration from Microsoft Threat Management Gateway to new system including all functionalities to production stage leading to a smooth transition with ideally no downtime for users	<i>Table 3: Technical Requirements, R1-18</i>
4	Enterprise grade premium support for 3 years	<i>Table 3: Technical Requirements, R1-20</i>
5	In-depth training at ITU premises (Geneva, Switzerland) is needed for administrators and operators for each system offered. Maximum of 6 participants.	<i>Table 3: Technical Requirements, R1-21</i>
6	Documentation of the new system	<i>Table 3: Technical Requirements, R1-22</i>

The current desired project timeframe foresees to receive all equipments by mid-December 2014.

The current and desired functionalities of the system will be described next and the full details of the requirements can be found in the Technical Requirements section.

2. Existing Environment

ITU currently has Microsoft Threat Management Gateway employed for various functionalities. Existing functionalities of the Microsoft Threat Management Gateway are as follows:

- Application Firewall and Threat Management
- VPN



- Forward Proxy
- Reverse Proxy
- SSO
- Load Balancer

All the functionalities mentioned above are deployed in high availability mode.

For sizing calculations the vendor shall keep the following in mind:

- There are approximately 1000 client machines in Security Zone1.
- There can be approximately 3000 client machines in Security Zone2 including WiFi clients.
- There are few hundred servers in Security Zone3.
- There are few hundred servers in Security Zone4.
- There are approximately 250 rules in Microsoft Threat Management Gateway frontend today. Half of these are web rules.
- There are approximately 300 rules in Microsoft Threat Management Gateway backend today. Half of these are web rules.

Please note that there are also perimeter firewalls, IPS and the WAN acceleration equipment in place.

3. Desired Environment

The new solution shall replace the Microsoft Threat Management Gateway. The functionalities that are needed from the replacement solution are as follows:

- New Generation Firewall (NGFW)
- VPN
- Reverse Proxy
- SSO
- Load Balancer
- Forward Proxy

All the functionalities mentioned above need to be capable of being deployed in high availability mode.

3.1 Definitions of Solution, System, Base and Modules

The solution offered needs not to be an “all-in-one-box” solution as it is now; the vendor may offer a solution with these components spread over different “systems” or “boxes”. For the purposes of this tender, a system comprises of a base plus multiple modules: the base is usually a hardware appliance and each module serves one of the functionalities. A module may be a combination of hardware and software. This concept is illustrated in Figure 1 below.

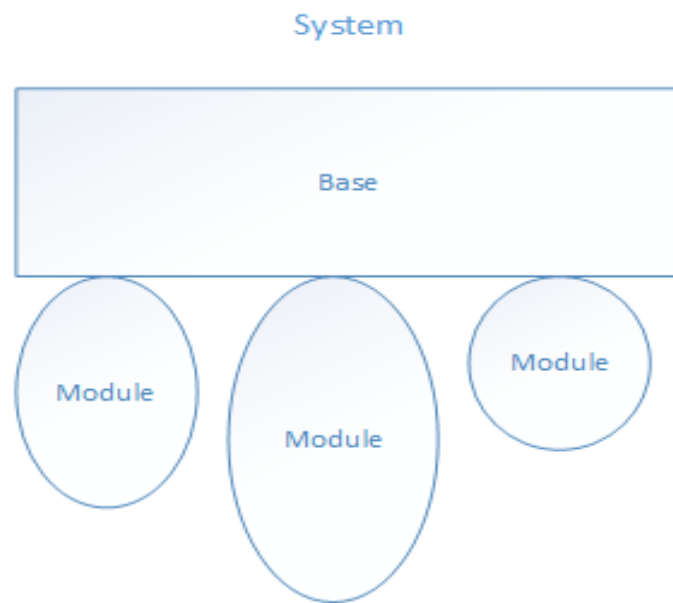


Figure 1: A system comprises of the base and various modules

The system base is usually a hardware appliance with CPU, memory, network interfaces, storage, etc. Further, the total solution that the vendor may offer is a collection of systems that are optimized to work seamlessly together as shown in Figure 2 below.

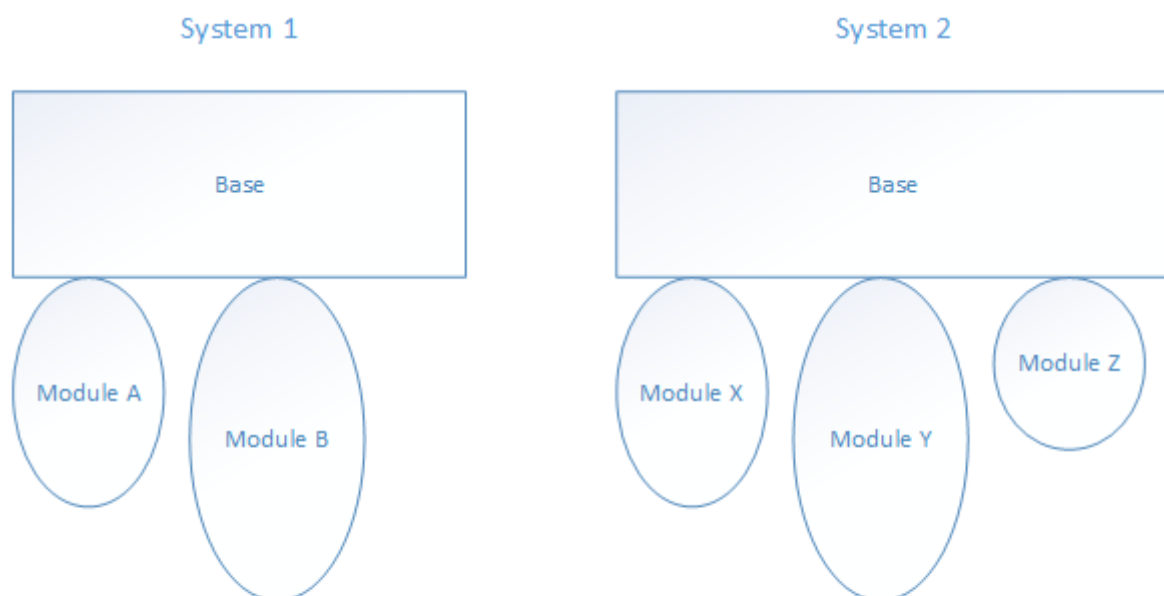


Figure 2: The solution may consist of multiple systems

Thus to summarize: the solution the vendor may propose may consist of one or multiple systems and each system is composed of a base and possibly multiple modules.

As examples, New Generation Firewall, VPN and Forward Proxy modules may belong to System1 from Manufacturer1 while Reverse Proxy, SSO and Load Balancer modules may belong to System2 from Manufacturer2, etc – and the solution would then comprise of System1 and System2.

3.2 Offers and Variants

It should be noted that, along with the necessary systems, all the desired functionalities mentioned above, represented by modules, **are mandatory for the vendor to offer, however, ITU may decide, at its own discretion, to purchase only certain systems or modules.** Further, it is the vendor's responsibility, as the integrator of the solution, to make the overall solution, comprising of the chosen modules, work seamlessly with performance and acceptable total cost of ownership (TCO).

The vendor may propose more than one solution and label them Variant 1, Variant 2, etc. Each variant must be independent as a total solution offering as well as in price (see Annex 7 to Part III). If a variant is seen to be incomplete or has dependencies on other variants offered, it will be rejected. Each variant will be evaluated independently.

3.3 Connectivity and Further Details

Also, in the new environment, it shall be noted that, the connectivity requirements are as follows:

- High-speed (10 Gbps) connectivity needed between at least four security zones.
- 2 x 1 Gbps of bandwidth is required for the Internet connectivity.

The full details of all technical requirements are given in the *Technical Requirements* section and *Table 3: Technical Requirements* therein.

4. A Checklist for Preparing the Technical Offer

When offering the solution, in its Technical offer, separately for each variant of the offer, the vendor shall include at a minimum the following items in the offer as shown in *Table 2: Items to include in the Technical Offer* below.

Table 2: Items to Include in the Technical Offer

	ITEMS	DETAILS
1	<i>Table 3: Technical Requirements</i> completely filled in by the vendor. The vendor is required to fill in the Vendor's Response column. The vendor shall begin the response with the wording COMPLIED, NOT COMPLIED, or PARTIALLY COMPLIED and then give a fair amount of sufficient and detailed information regarding how the requirement will be met.	<i>Technical Requirements</i> section and <i>Table 3: Technical Requirements</i> . Serious vendors are expected to fill in the response with enough relevant technical details.
2	A detailed technical description of the overall solution and its parts and how the solution works together to answer the needs of this tender. It should include a logical diagram that shows the major components of the solution and also the security zones being protected.	<i>Technical Requirements</i> section and <i>Table 3: Technical Requirements</i>



3	Hardware spec sheets of the major components in the solution and industry certifications if any, such as ICSA Labs certification for firewalls.	<i>Table 3: Technical Requirements, R1-2</i>
4	Performance figures of the major systems within the solution. Performance figures, if any, measured by third party testers such as ICSA Labs shall be provided.	<i>Table 3: Technical Requirements, R1-4</i>
5	Detailed description of the offered enterprise grade premium support for all the systems, including reaction times.	<i>Table 3: Technical Requirements, R1-20</i>
6	Pre-requisites and ITU's Responsibilities	<i>Table 3: Technical Requirements, R1-29</i>

5. Technical Requirements

The Vendor is required to fill in *Table 3: Technical Requirements* with Vendor's comments.

For each requirement outlined below, the vendor is required to fill in the vendor's Response column. The vendor shall begin the response with the wording COMPLIED , NOT COMPLIED , or PARTIALLY COMPLIED and then give a fair amount of sufficient and detailed information regarding how the requirement will be met.

Important Note:

If the vendor merely mentions COMPLIED, NOT COMPLIED or PARTIALLY COMPLIED without giving sufficient amount of detailed information, the offer may be disqualified as there will be no ground on which to judge it fairly. Serious vendors are expected to fill in the response with enough relevant technical details.

If extra space is needed for the vendor's response, the vendor can use a separate section or page of technical offer to further comment on it; the section or page of the bid response shall be clearly labeled and referenced, e.g., "Details can be found on page X of the technical offer."

Table 3: Technical Requirements

Serial	Requirement	Vendor's Response
R1	OVERALL SOLUTION	
R1-1	<p>GENERAL</p> <p>As has been described in <i>Introduction</i> and <i>Desired Environment</i> sections, the project aims to replace the Microsoft TMG Firewall with a new solution with the following functionalities:</p> <ul style="list-style-type: none">• New Generation Firewall (NGFW)• VPN• Forward Proxy• Reverse Proxy• SSO• Load Balancer <p>The solution offered need not be an "all-in-one-box" solution as it is now; the vendor may offer a solution with these components spread over different "systems" or "boxes". The solution the vendor may propose may consist</p>	



	<p>of one or multiple systems where each system is composed of a base and possibly multiple modules as described in <i>Section 3.1</i>. For definitions of solution, system, base and modules, the vendor shall refer to <i>Section 3.1</i>.</p> <p>Also, as explained in <i>Section 3.2</i>, it should be noted that, along with the necessary systems, all the desired functionalities mentioned above, represented by modules, are <i>mandatory</i> for the vendor to offer, however, ITU may decide, <i>at its own discretion</i>, to purchase only certain systems or modules. Further, it is the vendor's responsibility, as the integrator of the solution, to make the overall solution, comprising of the chosen modules, work seamlessly with performance and acceptable total cost of ownership (TCO).</p> <p>The vendor is expected to be a systems integrator who can engineer the offered systems to work optimally as a coherent whole.</p>	
R1-2	<p>HARDWARE</p> <p>For all hardware part of the solution, the vendor shall provide full details including manufacturer, model number and part numbers along with a specification sheet.</p> <p>Industry certifications if any, such as ICSA Labs certification for firewalls, shall be provided.</p>	
R1-3	<p>SOFTWARE, FIRMWARE, SUBSCRIPTION, LICENSING</p> <p>All software, firmware, subscription and licensing necessary for the solution to work shall be included in the commercial offer. The subscription shall be valid for at least 3 years.</p> <p>Timely security patches and firmware upgrades shall be available at no further cost.</p>	
R1-4	<p>PERFORMANCE FIGURES</p> <p>The vendor shall provide relevant performance figures for the systems offered.</p> <p>Examples: For the firewall functionality, the aggregate throughput of the firewall before and after threat mitigation measures. Performance figures, if any, measured by third party testers such as ICSA Labs shall be provided.</p>	
R1-5	<p>HIGH AVAILABILITY (HA)</p> <p>All components, or modules, shall have high availability feature spread across two data centers in two buildings.</p> <p>The solution shall offer high availability in active/active or active/passive mode while being housed in two different buildings which are approximately 250 meters away from</p>	



	<p>each other in distance; i.e., COMPONENT1 in Building 1 and COMPONENT2 in Building 2. Should one of them fail, the other shall take over all functionalities without any disruption of traffic.</p> <p>The vendor shall provide details of the HA feature's working mechanism.</p>	
R1-6	<p>REDUNDANCY AND RESILIENCY</p> <p>The systems shall have redundancy and resiliency features built-in including redundant power supplies and fans with hot-swap functionality.</p>	
R1-7	<p>CONNECTIVITY</p> <p>The vendor shall indicate how many gigabit and 10 gigabit interfaces the system has available and any restrictions they may have.</p>	
R1-8	<p>CONFIGURATION BACKUP AND REBUILD</p> <p>The systems offered shall have the possibility to backup the rules, configurations in text-based formats so that in catastrophic cases the systems can be rebuilt from scratch.</p>	
R1-9	<p>MANAGEMENT/DELAGATION FEATURES</p> <p>Centralized management features are expected. Management plane shall be separate from data processing planes.</p> <p>One of the operational pain points has been that the user groups have to interact with the firewall/proxy team to request new rules or modify the rules, and sometimes in a hurry. The goal should be to reduce delays so that the responsible group itself can make some changes (e.g., in firewall rules or reverse proxy redirections) without having to contact the main administrators of the system. Delegating certain responsibilities to other groups to certain parts of the configuration, role-based access and read-only views for user groups are highly desirable</p> <p>In the same vein, if certain configurations can be managed/scripted using APIs, that will be a major plus.</p>	
R1-10	<p>MONITORING AND ALERTING</p> <p>The systems offered (including firewalls and IPS) shall have the possibility of monitoring rules, events and resources and alerting staff on certain events or thresholds.</p>	
R1-11	<p>IPv4, IPv6 COMPATIBILITY</p> <p>The systems offered shall be compatible with IPv4 and IPv6 protocols.</p>	
R1-12	<p>AUDITING FEATURES</p> <p>The vendor shall indicate which features will help in auditing the operational aspects of the systems. Identifying users and applications so that corrective actions can be taken is highly desirable.</p>	

	Role-based access control is desired for administration and dashboards.	
R1-13	LOGGING The systems shall have logging facilities to log activities and packets in a secure manner in standard logging formats.	
R1-14	QUERYING The system shall be able to be queried for operational, diagnostic and trouble-shooting purposes.	
R1-15	REPORTING Reporting on various relevant parameters of the operation shall be available. Role-based access to reporting features is highly desirable.	
R1-16	SDN COMPATIBILITY The system that is able to participate in Software Defined Networks (SDN) and be configured via the same will be an added advantage.	
R1-17	INSTALLATION The vendor shall perform full physical, logical, software installation for the solution to work. The configuration shall be based on the configuration of the current Microsoft Threat Management Gateway system.	
R1-18	MIGRATION The vendor shall migrate all functionalities (New Generation Firewall (NGFW), VPN, Forward Proxy, Reverse Proxy, Web Publishing, SSO, Load Balancer) to the new solution to production stage leading to a smooth transition with ideally no downtime for users. The vendor shall give a brief outline of the planned migration process. The plan shall also include physical and logical diagrams at various levels.	
R1-19	ACCEPTANCE TEST The project shall be declared closed only after an acceptance test and resolution of all major and minor problems associated with the project. The acceptance test shall mainly focus on the design, functionality and performance of the system and the closure of all open issues.	
R1-20	PREMIUM SUPPORT For each system within the solution, enterprise grade premium support for 3 years is required. The vendor shall include details of the support including reaction times and RMA times. For critical issues, on-site presence of qualified, certified engineers is needed within 4 hours of opening the call. Problem escalation procedures and access to system level engineering shall be clearly indicated.	

	<p>Vendors operating out of Switzerland shall:</p> <ul style="list-style-type: none"> • Attach a letter from the Manufacturer's representative in Switzerland that all support obligations will be handled through their Swiss operations • Specifically mention how the on-site engineer requirements will be handled logistically 	
R1-21	<p>TRAINING In-depth training at ITU premises (Geneva, Switzerland) is needed for administrators and operators for each system offered. Maximum of 6 participants.</p> <p>For each major system offered, the vendors shall state how many days of training have been proposed.</p>	
R1-22	<p>DOCUMENTATION The vendor shall provide documentation related to the new solution including all logical and physical diagrams.</p>	
R1-23	<p>PROJECT MANAGEMENT The vendor shall be responsible for the management of the project for the overall installation, migration phasing into production of the new system. The project plan shall include resource and scheduling plans, quality plan, risk plan and communication plan.</p>	
R1-24	<p>RESOURCE PLANS, EXPERIENCE AND STAFFING The vendor shall include qualified, certified engineers with experience in migrating Microsoft Threat Management Gateway (TMG) in its migration team. The size and complexity of the undertaken projects shall be at least equal to the project at hand.</p> <p>Expertise and experience with networking, firewalling, VPN, proxying, load balancing, web publishing, multiplatform authentication, authorization, single-sign on (SSO) are expected of the technical team.</p>	
R1-25	<p>GROWTH AND SCALING The vendor shall indicate how the system can grow in future. Scale-out architecture is desirable.</p>	
R1-26	<p>MAJOR RISKS The vendor shall outline the major risks, if any, with the project and how it is intended to mitigate these risks.</p>	
R1-27	<p>MAJOR APPLICATIONS The following major applications need to be supported in an optimal way by the new solution:</p> <ul style="list-style-type: none"> • SAP/SAP NetWeaver Gateway/CRM/ERP 	



	<ul style="list-style-type: none"> • SharePoint • Documentum • Apache/IIS web servers • DNS, SMTP, POP, IMAP • Real-time audio, video broadcasting and conferencing, IP telephony 	
R1-28	<p>ACCESSIBILITY FEATURES</p> <p>The vendor shall state if any software/hardware or application being offered in the bid has accessibility features.</p> <p>The system or modules should, as far as is possible, be accessible to all potential users, including older people and people with disabilities.</p> <p>As far as possible, the products should:</p> <ul style="list-style-type: none"> • be technically accessible, in that it is possible for all users to access all information and functionality; • be equally usable, in that it is not prohibitively difficult or time consuming for users with disabilities to carry out normal tasks; • be capable of being adapted or configured by individual users to meet their specific needs and preferences; • be capable of interfacing with appropriate, widely available assistive technologies employed by users. 	
R1-29	<p>PRE-REQUISITES AND ITU'S RESPONSIBILITIES</p> <p>Vendors shall list the technical pre-requisites that it expects ITU to provide at installation site and ITU staffs' responsibilities and time necessary for the project.</p>	
R2	NEXT GENERATION FIREWALL (NGFW) REQUIREMENTS	
R2-1	<p>GENERAL</p> <p>The Web Application Firewall component shall be replaced by an appliance-based next generation firewall (NGFW), a wire-speed integrated network platform that performs deep inspection of traffic and blocks network and application attacks and includes malware protection, flood mitigation, protection against denial of service.</p>	
R2-2	<p>INTEGRATED IPS; PROTECTION AGAINST MALWARE AND ATTACKS</p> <p>The next generation firewall shall include integrated signature-based IPS engine. The signatures shall be updated frequently and an upgrade path to include future</p>	

	<p>information feeds and security threats shall be included.</p> <p>The vendor shall explain how the NGFW protects the enterprise against malware, unknown and zero-day attacks, internet-based attacks such as Distributed Denial of Service (DDoS), Advanced Persistent Threats (APTs). A single-pass inspection feature is highly desired.</p>	
R2-3	<p>APPLICATION AWARENESS</p> <p>The next generation firewall shall have application awareness, full stack visibility and granular control. The firewall shall learn new legitimate applications by watching how applications behave, while blocking malicious and anomalous applications.</p> <p>A single-pass inspection feature is highly desired.</p>	
R2-4	<p>RULES AND POLICIES</p> <p>Vendors shall indicate how the firewall addresses rules and policies and, if any, policies from external sources such as the Microsoft Active Directory.</p>	
R2-5	<p>INFORMATION INTEGRATION</p> <p>The next generation firewall shall have the ability to incorporate information from outside the firewall, such as directory-based policy, blacklists and white lists.</p>	
R2-6	<p>STANDARD FIREWALL CAPABILITIES</p> <p>The next generation firewall shall include standard first-generation firewall capabilities, such as network-address translation (NAT) and stateful protocol inspection (SPI).</p>	
R2-7	<p>NETWORK INTERFACES AND THROUGHPUT</p> <p>All network interfaces shall be fully compatible with handling public and private addressing and NAT translations where necessary.</p> <p>Multiple security zones are needed and subzones within each security zone are needed.</p> <p>Also, for network connectivity,</p> <ul style="list-style-type: none"> • At least 6 physical interfaces, each able to carry trunked VLANs. • High-speed (10 Gbps) connectivity needed between at least four major security zones. • 2 x 1 Gbps of bandwidth is required for the Internet connectivity. • Aggregate throughput of 10 Gbps after applying threat prevention measures. • 120,000 new sessions per second. • Separate management interface(s). 	
R2-8	SSL DECRYPTION	



	The option to decrypt SSL when shall be provided.	
R2-9	<p>BANDWIDTH CONTROL</p> <p>The firewall shall be able to throttle bandwidth or activate flood mitigation based on applications, ports, IP addresses or user IDs.</p> <p>The vendor shall indicate how various classes of IP traffic will be handled including real-time webcasts.</p>	
R2-10	<p>IPv6 FEATURES</p> <p>For IPv6,</p> <ul style="list-style-type: none"> - The firewall shall be able to detect/filter IPv6 packets based on packet header information. - The firewall shall be able to drop packets based on IPv6 option types. - The firewall shall be able to filter ICMPv6 traffic at a message type/code granularity. - The firewall shall be able to block IPv6 packets that employ a Routing Header both at the granularity of Extension Header Type and Routing Header Type. - The firewall shall be able to detect IPv6 tunnels such as SIIT, 6to4, 6in4, ISATAP and Teredo and to selectively block or allow them for specific sources, destinations, routes or interfaces. - The firewall shall be able to statefully match ICMPv6 errors to TCP, UDP, and ICMPv6 communication instances. - The firewall shall be able to find the upper-layer protocol in an IPv6 header chain. - NAT64 functionality is needed. - Intelligent fragmentation handling, Path MTU Discovery (PMTUD), and granular filtering of ICMPv6 messages and multicast traffic are needed. - Firewall policies that can handle both IPv4 and IPv6 objects in a single policy are an added benefit. 	
R2-11	<p>FTP SUPPORT</p> <p>FTP and SFTP support in active and passive modes.</p>	
R3	VPN	
R3-1	<p>CLIENT VPN</p> <p>Encrypted VPN for roaming clients is required for approximately 100 concurrent users and maximum 500 users. All the licensing needed, if any, shall be included.</p> <p>Split VPN shall be supported in this mode.</p> <p>The vendor shall indicate which type of protocols is used for this functionality.</p>	
R4	REVERSE PROXY	



R4-1	GENERAL The web publishing capability shall allow for publishing web contents on the back-end web servers.	
R4-2	HEARTBEAT CHECKING The web publishing capability shall allow for setting up of heartbeat checking of the back-end web servers. It should do so by checking HTTP RESPONSE CODE at the configured URL and notify in case of a failure.	
R4-3	ACCESS LOG IN A STANDARD FORMAT The web publishing capability shall provide access log for the published webs in a well-known format such as that of W3C.	
R4-4	PUBLISHING RULE Each “publishing rule” describes a part or the whole content (specified in URL) of a back-end web or a web farm to be published towards users such as visitors from the Internet. For example, users may access at http://www.itu.int/news to the contents residing actually at http://news.itu.int/ . It is advantageous that those URLs are expressed in the regular expression, e.g., http://www.itu.int/(.+\.php) for http://php.itu.int/\$1 .	
R4-5	MULTI-FOREST ACTIVE DIRECTORY ITU uses a multi-forest Active Directory for users and groups for authorization. Use of LDAP, ADFS and external identity stores may also be planned in the future.	
R5	SSO	
R5-1	GENERAL The web publishing capability shall allow for setting up a single sign-on (SSO) functionality across back-end web servers. <ul style="list-style-type: none"> • Ability to authenticate against multiple identity sources (internal and public). • Ability to test against multiple fields in parallel in Active Directory (UPN, Account Name, extended attributes, e-mail address, etc.). • Ability to specify which field(s) should be sent to the application. 	
R5-2	REDIRECTION TO HTTPS A web site which hosts both public contents, i.e., accessible anonymously and restricted access contents, i.e., access is restricted to a group of known users (users authentication/authorization is involved), should be published so that HTTP requests to the restricted URL are redirected to HTTPS and that username and password for the authentication are sent over secured connection.	
R5-3	CLAIMS-BASED AUTHENTICATION Support for claims-based authentication using SAML 2.0 is required.	



R5-4	HYBRID MODEL SUPPORT The solution shall work with a hybrid model comprising of local and cloud-based authentications and resources.	
R5-5	MULTIFACTOR AUTHENTICATION Support for multifactor authentication systems is a plus.	
R5-6	THIRD-PARTY AUTHENTICATION Support for third party-based authentication is a plus.	
R6	LOAD BALANCER	
R6-1	GENERAL The web publishing capability should allow for setting up of web server farm, distributing web requests among servers in the farm.	
R6-2	LOAD BALANCING It should do the distribution of requests in such a way that the load of each back-end web server is balanced.	
R6-3	SETTING ASIDE FAILING SERVERS When a failure is detected at a server in a web farm, it shall stop forwarding requests to the failing web server, until it responds OK response again.	
R6-4	SUBGROUPING It is advantageous if the web farm/load balancing capability supports “subgrouping” of back-end web servers. That is, it allows for forming subgroups A, B and C, each containing one or more web servers, for instance. And it allows us to configure the web publishing so all requests are served by the subgroup A as long as one or more web servers in the subgroup are functioning OK, starts routing requests to B if all in servers in A have stopped responding to the heartbeat checking, and to C if neither A nor B functions.	
R6-5	PROTECTION AGAINST MALWARE AND ATTACKS Protection against malware, unknown and zero-day attacks, internet-based attacks such as Distributed Denial of Service (DDoS), Advanced Persistent Threats (APTs).	
R6-6	FTP SUPPORT FTP and SFTP support in active and passive modes.	
R7	FORWARD PROXY	
R7-1	HIDE COMPLEXITY Ability to hide ITU’s internal complexity and IP addressing schemes.	
R7-2	CACHING Ability to cache web data.	
R7-3	SSL DECRYPTION Possibility for SSL decryption and application level control.	



R7-4	CONTENT FILTERING Possibility for content filtering based on white lists and black lists, MIME types, keywords, IP source and destination.	
R7-5	FTP SUPPORT FTP and SFTP support in active and passive modes.	

6. Further Information

Some sizing information can be found in the *Existing Environment* section of this tender document.



ANNEX 7 to Part III: Project Management and Implementation Timeline Form

(To be filled by the vendors as per Section 4.3.1 (d) of the tender document)

PROJECT MANAGEMENT

RESOURCE NAMES	FUNCTIONS	Certifications (please specify)

PROJECT PLAN⁵

PROJECT MILESTONES	Remote/Onsite (please specify)	Expected n. of weeks
TOTAL n. of weeks		

⁵ The project plan shall also include quality plan, risk plan and communication plan.



Annex 8 to Part III: Price Schedule Form

(Table 5 (**basic costs**) and Table 6 (**recurrent costs**) and Table 7 (if Applicable) needs to be filled in by the vendors for **EACH** variant and for **EACH** system proposed as per Section 4.3.7 of the tender document

Name of the Offer Variant	(please specify here)
Name of the System	(Please specify here)

Table 5: Basic Costs

<u>BASIC COSTS (ONE TIME COSTS)</u>		
	ITEMS/DELIVERABLES	PRICE (USD or CHF)
BASE	HARDWARE	
	SOFTWARE LICENSES	
	SOFTWARE INSTALLATION, CONFIGURATION AND DATA MIGRATION	
	TESTING	
	ONE WEEK TRAINING for Operators/administrators	
	SYSTEM'S DOCUMENTATION	
MODULES OR BUNDLES	Basic costs related to Module X	
	Basic costs related to Module Y	
	Basic costs related to Module ...	
	Basic costs related to Bundle containing Modules X, Y	
OTHERS	EXTRA-COSTS⁶ (if any and please specify item(s))	
	DISCOUNTS (if any)	
TOTAL Basic Costs		

⁶ All items related to Extra-costs, if any, shall be clearly listed in this table.

Table 6: Recurrent Costs

	<u>RECURRENT COSTS FOR THREE YEARS⁷</u>	
	ITEMS/DELIVERABLES	COST FOR 3 YEARS PRICE (USD or CHF)
BASE	ENTERPRISE GRADE PREMIUM SUPPORT for THREE YEARS	
	EXTRA-COSTS⁸ (if any and please specify item(s))	
	DISCOUNTS (if any)	
MODULE X	ENTERPRISE GRADE PREMIUM SUPPORT for THREE YEARS (if any)	
	EXTRA-COSTS (if any and please specify item(s))	
	DISCOUNTS (if any)	
MODULE Y	ENTERPRISE GRADE PREMIUM SUPPORT for THREE YEARS (if any)	
	EXTRA-COSTS (if any and please specify item(s))	
	DISCOUNTS (if any)	
MODULE ...	ENTERPRISE GRADE PREMIUM SUPPORT for THREE YEARS (if any)	
	EXTRA-COSTS (if any and please specify item(s))	
	DISCOUNTS (if any)	
BUNDLE CONTAINING MODULES X, Y	ENTERPRISE GRADE PREMIUM SUPPORT for THREE YEARS (if any)	
	EXTRA-COSTS (if any and please specify item(s))	
	DISCOUNTS (if any)	
TOTAL Costs for 3 Years		

NOTE:

In Table 5 and Table 6, the vendor may offer bundle prices by clearly indicating which modules are included in each bundle.

⁷ **ALL PRICES FOR EACH ITEMS REPORTED IN TABLE 6 (RECURRENT COSTS) SHALL BE FOR THREE (3) YEARS.**

⁸ All items related to Extra-costs, if any, shall be clearly listed in this table.



Table 7: Proposed Optional features

<u>Optional Features (if any)</u>	
ITEMS	PRICE (USD or CHF)
Per diem rate for technical experts if further consultation or work is required at ITU Headquarters at Geneva, Switzerland.	
Per diem rate for technical experts if further work is needed that can be done remotely at vendor's premises	