



**TENDER SPECIFICATIONS FOR  
PALO ALTO NETWORKS PERIMETER  
FIREWALL REPLACEMENT AND  
MAINTENANCE AT THE UNIVERSITY OF  
PRETORIA  
TENDER IT-UPFW-2017-020**

Information in this document is subject to change. No part of this document may be reproduced, or transmitted, in any form, or by any means, electronic or mechanical, for any purpose, without the express written permission of the University of Pretoria.

## Table of contents

Table of contents .....	1
1 Scope of document.....	1
2 Background.....	2
3 Evaluation Process, Requirements and Stages .....	2
<b>3.1 Pre-Qualification</b> .....	2
3.2 Vendor Requirements .....	3
3.3 Scoring and Evaluation Stages .....	3
3.4 Background on the University of Pretoria.....	3
4 Problem and Scope .....	3
4.1 The Problem .....	3
4.2 The Solution .....	4
The client wishes to (but not limited to):.....	4
5 Vendor Questions .....	5
Question .....	5
1.) Has your company been in operation for longer than 5 (five) consecutive years? .....	5
2.) Is your company's head office or major support site in the Gauteng area? State your address. ....	5
3.) Is your company currently a Palo Alto Networks certified partner in good standing? State partner level. ....	5
4.) Does your company have experience in network related installations at Higher Education institutions? Please state institutions and contact references.....	5
5.) Does your company have experience in large scale firewall deployments (enterprise to carrier grade)? Please state size of networks and client references. ....	5
6.) Does your company have experience working with large scale data and voice networks using Avaya and Aruba equipment? Please state size of networks and client references. ....	5
7.) Does your company have multiple personnel who are Palo Alto Networks certified? (ACE, PCNSE, ASE). Please list personnel and their certification(s). ....	5
6 Pricing Schedule (Please specify Rate of exchange).....	5
Document elements .....	6
Synopsis of roles and responsibilities.....	6
Approval list .....	7
Record of changes.....	7
List of abbreviations and acronyms .....	7

### CAUTION

As this document is published electronically, it is impossible to exercise control over who reads or prints it. It is, therefore, the responsibility of readers to ensure that they are reading the latest version of this document

## 1 Scope of document

The Department of Information Technology Services at the University of Pretoria ("the client") is evaluating vendors to meet their Firewall upgrade or replacement requirements. Maintenance services for said replacement firewall are also under consideration. Your organisation ("the vendor") is hereby invited to deliver a Tender in response to this Tender Request, by supplying the necessary information as outlined in this document. Any claims should be substantiated were possible.

All costs incurred in replying to this Tender shall be for the account of the vendor. If the vendor cannot meet the requirements, it will be excluded from any further consideration. It is recorded that the University of Pretoria is under no obligation to accept any of the Tenders submitted during this process. The client reserves the right to accept any proposal in full or in part at the discretion of the project team. In addition, the client also reserves the right subsequent to the submission of the Tender response by you to request for any clarification on any representation made by yourselves within your response.

## 2 Background

The University of Pretoria undertook a proof of concept process to evaluate various manufacturers of next generation firewalls. During the POC phase the various manufacturers were invited to install a firewall device that met the technical requirements of the client. A portion of the client's production network traffic was routed through the POC firewall and various features and functions of the firewall were tested. At the conclusion of this phase of testing the client has decided that two **Palo Alto Networks 5260** firewalls in a high availability, active/passive cluster best met all the requirements as defined by the client. For background information purposes the process will be described, the vendor requirements will be listed and some background on the University will be provided.

## 3 Evaluation Process, Requirements and Stages

All enquiries can be submitted to Mr Vian Kruger via email : [vian.kruger@up.ac.za](mailto:vian.kruger@up.ac.za).

Should you wish to tender, please return at least one (1) hard copy and one (1) soft copy of your proposal not later than **29<sup>th</sup> September 2017 at 12:00 noon** to Mr Vian Kruger, Administration Building, Room 5-29, Hatfield Campus, Lynnwood Road, Pretoria.

An information session will be held on the **22nd of September 2017** from 11:00 to 13:00 at Natural Sciences 2 Building (NW2), Room 5-13. Please indicate your attendance to this session by the **15<sup>th</sup> of September 2017**.

Service Providers should note that the University operates a preferential procurement system:

- The University follows the prescribed scorecard applicable to Universities as set out in Act 53/2003.
- The PPPFA Act 5/2000 is applicable when tenders are adjudicated.

After the closure of the tender, the client will run an evaluation process. Each vendor will be evaluated against a wide range of competencies. Your responses to the different questions will enable the client to objectively assess the vendor's ability to meet these criteria. The client may arrange meetings, presentations, and/or site visits, if deemed necessary. The client reserves the right to make the selection solely on the information received, or to negotiate further with none, one or more vendors. The vendor will be selected on the basis of greatest perceived benefit to the client, and not necessarily on the response to any particular factor. The precise basis for evaluation can be made available to vendors on request.

The successful vendor will be notified that the client wishes to negotiate further with them by the **13<sup>th</sup> of October 2017**.

### 3.1 Pre-Qualification

The following documents are mandatory for pre-qualification as per the client's procurement policy. Failure to provide any of the following documents will mean immediate exclusion from the tender process:

- Completed Tender form, signed by authorised signatories
- Brief Company Profile (basic details relevant to this tender)
- Proposal with specific requirements indicated herein (See section 4 & 5)
- Registration document of the enterprise (CK1/CK2 or CM29/CM22)
- Valid tax clearance certificate
- VAT registration certificate
- Valid B-BBEE certificate from SANAS/IRBA accredited verification agency
- Proxy: Attach a director's resolution or proxy, authorising the signatory on the tender documents on behalf of the Service Provider if applicable
- Proof of bank account
- Completed questionnaire (see section 5)

## 3.2 Vendor Requirements

The vendor must comply with the following requirements:

- The vendor must have been in existence for a minimum of five (5) years
- The vendor's South African head office or major support site must be in the Gauteng area
- The vendor must be a current Palo Alto Networks certified partner with good standing
- The vendor should have experience in network related installations at Higher Education institutions
- The vendor must have demonstrable experience in large scale firewall deployments (enterprise to carrier grade)
- The vendor should have demonstrable experience working with large scale data and voice networks using both IPv4 and IPv6.
- The vendor must have multiple personnel who are Palo Alto Networks certified, e.g. ACE, PCNSE, ASE.
- The vendor must supply indicative pricing based on the Palo Alto Networks 5260 firewall as mentioned in section 2 (background) and in section 6 (pricing schedule).

## 3.3 Scoring and Evaluation Stages

Pre-qualification – Vendor assessment and pre-qualification

All submissions are reviewed to ensure that all mandatory documentation and requirements (see 3.1 and 3.2) have been submitted in order to be considered for stage two of the evaluation process. Any submissions not meeting these requirements will be excluded from the tender process.

Stage 1 – Vendor Technical/Functional assessment and questionnaire

The qualifying vendor submissions from stage one, will be assessed against their proposed implementation and their responses to the questionnaire. The vendors' proposal must indicate the following:

- Proposed design of new firewall infrastructure
- Proposed project plan including migration methodology
- Proposed operational guidelines and best practices
- Information detailing call logging and escalation procedures
- List of engineers working on project, their roles and their responsibilities (and CVs)
- Bill of materials

Stage 2 - Pricing

The remaining submissions will be evaluated on pricing and submitted technical design documents. The successful vendor will be further negotiated with.

## 3.4 Background on the University of Pretoria

The University of Pretoria was founded in 1903. The University has 44 934 contact, as well as 17 544 distance students, numbering 62 487 students in total. The University offers more than 1600 academic programmes and comprises of 140 academic departments, 85 academic centres/institutes/bureaus and 28 support units/departments. The vision at the University of Pretoria is to be the premier university of choice in South Africa, internationally recognized for academic excellence and locally relevant through innovation. Information Technology plays a big role as an enabler to fulfil the tasks of the University of Pretoria, i.e. education, research and community service.

The University of Pretoria currently maintains a Checkpoint HA (active/passive) firewall architecture with two 4800 devices and a software management device running as a virtual machine. The network is made up entirely of Avaya routers and switches for the wired network and Aruba wireless controllers and access points for the wireless network.

# 4 Problem and Scope

## 4.1 The Problem

The purpose of this firewall tender is to replace our current, out-dated firewall with next generation firewall technology that will meet our current requirements and ensure business continuity as well as future expansion.

Currently the client uses two Checkpoint 4800 gateway devices in a high availability pair (active/passive) and a software management appliance that runs on a virtual machine. The current solution is not scaling to the client's present demands and is creating a performance bottleneck when accessing both external and internal ITS resources. The existing firewall is also lacking the latest, next generation features and technology and is not able to give us the insight we require for day to day network operations.

The following must also be taken into consideration when designing a solution for the client:

- The client is planning for a second internet breakout to an ISP
- High Performance Computing requirements such as a science DMZ
- Second Data Centre

## 4.2 The Solution

The client wishes to (but is not limited to):

- Receive in good order, a working set of Palo Alto Networks 5260 firewalls in an active/passive configuration.
- Receive a guaranteed level of service delivery (SLA), pre-and post deployment from qualified vendor staff
- Receive maintenance and support as well as consultancy services and engineering services for the new hardware for five years
- General maintenance e.g. software upgrades during scheduled downtimes
- Have knowledge transfer to the firewall administrative team
- Receive advanced trouble shooting and support with escalation to Palo Alto Networks if required
- Receive consultancy services on an ad hoc basis when advanced configuration is needed
- Have access to a 24-hour call centre for logging calls and escalating problems
- Receive advise on best practise in terms of firewall and security implementations
- Receive assistance in migrating and streamlining the current firewall's rules
- Receive relevant engineering services during installation and for at least 10 working days post installation
- Have access to a second vendor engineer should the primary engineer be unavailable
- Have an account manager to co-ordinate and escalate activities and to provide monthly reports on activities if applicable
- Have the service provided in accordance with the University of Pretoria Safety, Health & Environmental Quality (SHEQ) policy

## 5 Vendor Questions

Kindly indicate in respect of each item, whether your company complies or not. Each appropriate space must be clearly marked "YES" or "NO", with further elaboration or explanations where applicable or deemed necessary. In cases where you really need to refer to a separate document / attachment, clearly state the reference in the applicable column.

Question	Yes / No	Elaborate
1.) Has your company been in operation for longer than 5 (five) consecutive years?		
2.) Is your company's head office or major support site in the Gauteng area? State your address.		
3.) Is your company currently a Palo Alto Networks certified partner in good standing? State partner level.		
4.) Does your company have experience in network related installations at Higher Education institutions? Please state institutions and contact references.		
5.) Does your company have experience in large scale firewall deployments (enterprise to carrier grade)? Please state size of networks and client references.		
6.) Does your company have experience working with large scale data and voice networks using Avaya and Aruba equipment? Please state size of networks and client references.		
7.) Does your company have multiple personnel who are Palo Alto Networks certified? (ACE, PCNSE, ASE). Please list personnel and their certification(s).		
8.) Does your company have experience in working with networks using IPv6? If Yes, please elaborate (size and scope of IPv6 work conducted).		

## 6 Pricing Schedule (Please specify Rate of exchange)

Item No	Description	UoM	Quantity	Unit Price	Total Price
1	Palo Alto Networks PA-5260 with redundant AC power supplies	Each	2		
2	Threat prevention subscription for device in an HA pair year 1, PA-5260	Each	2		
3	PANDB URL filtering subscription for device in an HA pair year 1, PA-5260	Each	2		
4	WildFire subscription for device in an HA pair year 1, PA-5260	Each	2		

5	Global Protect subscription for device in an HA pair year 1, PA-5260	Each	2		
6	Support and Maintenance	Yrs.	5		
7	Implementation Fee	Each	1		
8	Project Management Fee	Each	1		
<b>Sub Total</b>					
<b>VAT @ 14%</b>					
<b>Grand Total</b>					

## Document elements

<b>Title</b>	Tender specifications for perimeter firewall replacement at the University of Pretoria.
<b>Synopsis</b>	The purpose of this Tender is to enable the university to decide upon which vendor to partner with to provide a set of Palo Alto Networks firewalls as well as a general maintenance and support contract.
<b>Audience</b>	All qualifying Palo Alto Networks vendors
<b>Compliance</b>	Compulsory tender specifications for qualifying Palo Alto vendors
<b>Keywords</b>	Palo Alto Networks, Firewall, ITS, Security, IPS, IDS, Anti-Bot, Avaya, Aruba
<b>Owner</b>	S Pey
<b>Author(s)</b>	MA Vladar, J Masemola
<b>Contributor(s)</b>	R Botha, S Pey,
<b>Editor(s)</b>	MA Vladar
<b>Enquiries</b>	MA Vladar

## Synopsis of roles and responsibilities

Name	Post held	E-mail address	Role / Responsibility
Vladar, Marcel	Performance Monitoring Manager ITS	<a href="mailto:Marcel.vladar@up.ac.za">Marcel.vladar@up.ac.za</a>	Project co-ordinator, technical resource
Pey, Sven	Manager: IT Infrastructure ITS	<a href="mailto:Sven.pey@up.ac.za">Sven.pey@up.ac.za</a>	Evaluate and appoint vendor
Botha, Rupert	Networks Manager ITS	<a href="mailto:Rupert.botha@up.ac.za">Rupert.botha@up.ac.za</a>	Evaluate and appoint vendor
Van Schalkwyk, Christo	Senior Network Engineer ITS	<a href="mailto:Christo.vanschalkwyk@up.ac.za">Christo.vanschalkwyk@up.ac.za</a>	Lead technical resource
Ceronio, Charles	Server Administrator ITS	<a href="mailto:Charles.ceronio@up.ac.za">Charles.ceronio@up.ac.za</a>	Technical resource
Floorie Botes	Project Manager ITS	<a href="mailto:Floorie.botes@up.ac.za">Floorie.botes@up.ac.za</a>	Project Manager

## Approval list

Name	Post held
Management	ITS Management Committee.

## Record of changes

Date	Edited by	Description
2017/08/31	MA Vlarar	Ver 2.1
<b>All documents should be reviewed within six months of ratification, or earlier where necessary.</b>		

## List of abbreviations and acronyms

ACE	Palo Alto Accredited Configuration Engineer
ASE	Palo Alto Accredited Sales Executive
B-BBEE	Broad-Based Black Economic Empowerment
DLP	Data Loss Prevention
DMZ	Demilitarised Zone
HA	High Availability
ICT	Information and Communication Technology
IDS	Intrusion Detection System
IP	Internet Protocol
IPS	Intrusion Prevention System
IPv4	Internet Protocol version 4
IPv6	Internet Protocol version 6
IRBA	Independent Regulatory Board for Auditors
ISP	Internet Service Provider
PCNS	Palo Alto Certified Network Security Engineer
POC	Proof of Concept
PPPFA	Preferential Procurement Policy Framework Act
SANAS	South African Nation Accreditation System
SLA	Service Level Agreement
VAT	Value-added Tax
VPN	Virtual Private Network