# **Response To Vendor Questions Regarding**

## RFP IT2020001: Next Generation Network Solution Implementation

1. What is maximum ISP connections needed per load balancer?

**Answer:** The Bank envisages no more than three (3) ISP connections per load balancers. There are currently two (2) ISP connections to each of the Bank's data centers.

2. Will firewalls be in active/active or active/standby?

**Answer:** The firewalls will be in Active/Standby mode.

3. Will all networks terminate on firewall?

Answer: Yes.

4. How are the primary and secondary sites connected?

Answer: Yes, via a Layer 2 WAN circuit.

5. The L3 core switch will be positioned at which location?

**Answer:** The core switch or switches will be required at the primary site.

6. The L3 Core require Fibre or Copper ports and how many?

**Answer:** Both fibre and copper – 16 fibre, 96 copper.

7. Do you have VM Space for management applications?

Answer: Yes.

8. Do you have existing radius servers

**Answer:** The proposed solution should include provisioning of radius servers.

9. Do you have existing 802.1x

Answer: Yes.

10. Does the L2 switches require Fibre or Copper uplinks

Answer: Fibre.

11. Is redundancy needed for Wireless?

Answer: Yes.

12. Do you have a high-level network diagram? Please provide a most recent copy of the Bank's network diagram

**Answer:** Due to the sensitive nature of the Bank's business and for cybersecurity purposes, we are unable to provide this information. We believe the details of the RFP provides sufficient information for a vendor to provide a comprehensive response to the Bank's solicitation. Further, the selected vendor will be provided this information following execution of a non-disclosure agreement and any supporting contracts.

13. The RFP does not have a reference to any routers, can you please provide a list of routers used in the Bank's network?

**Answer:** All Layer 3 traffic is managed either via the firewall or external load balancer.

14. Where do the ISP links terminate or plan to be terminated? Does the Bank have redundant ISP links? Please provide details (i.e. bandwidth, utilization report)

Answer: ISP links terminate to external load balancer and are subscribed at 200Mb.

15. On page 16, under Section 4.2.1 "Management Features", it states "The solution must support inband and out-of- band management. The former must support both telnet and SSHv3 and the latter

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should be provided via serial or other console interface." Please confirm if the SSHv3 referenced is meant to be SSHv2. Leading vendors such as Cisco and Juniper supports SSHv1 and SSHv2.

**Answer:** The correct protocol is SSHv2.

- 16. On page 16, under Section 4.2.1 "Management Features", it states, "The solution must support syslog and be capable of integrating with third party network management and security monitoring applications/solutions." Please provide a list of network management and security monitoring applications/solutions that needs to be taken into consideration.
  - **Answer:** Due to the sensitive nature of the Bank's business and for cybersecurity purposes, we are unable to provide this information. We believe the details of the RFP provides sufficient information for a vendor to provide a comprehensive response to the Bank's solicitation. Further, the selected vendor will be provided this information following execution of a non-disclosure agreement and any supporting contracts. Vendors should articulate the protocols (e.g. SNMP) or network monitoring solutions the proposed product supports.
- 17. On page 17, under Section 4.2.2 "Security features", it states, "The solution must support integration with third party multifactor authentication solutions." What is the current MFA solution being used? **Answer:** Due to the sensitive nature of the Bank's business and for cybersecurity purposes, we are unable to provide this information. We believe the details of the RFP provides sufficient information for a vendor to provide a comprehensive response to the Bank's solicitation. Further, the selected vendor will be provided this information following execution of a non-disclosure agreement and any supporting contracts. Vendors may wish to describe the third party multifactor solutions the proposed solution supports.
- 18. On page 17, under Section 4.2.2 "Security features", it states, "The solution must support encryption of traffic traversing LAN segments, particularly across data centres. What is the throughput of the traffic that should be encrypted over the Data Center Interconnect link? This information is required in order to recommend a device/solution that can meet/exceed the stated requirement.

Answer: 500Mb

19. On page 18, under Section 4.2.5 "Redundancy", it states "The solution's design must support survivability with no single point of failure for uplink connectivity. Consideration should be given for both power and data transport." Please provide the number of uplinks (see question 1)

**Answer:** There are currently seven (7) IDF's and one (1) offsite facility that will interface directly with the network core. This is in addition to four (4) auxiliary locations that will uplink to one of the existing IDF's.

20. Is there a preference for a type of load balancer - i.e., physical or virtual?

Answer: No

21. Is there a preference for a type of Wireless Controller? - i.e., physical or virtual?

**Answer:** No

22. Is there a requirement for POE+ ports on the switches?

**Answer:** Yes, all access ports.

23. For the post implementation support requirement, is the expectation for the winning bidder to provide ongoing support/services? If yes, please state the expectations and desired SLA's.

**Answer:** No; however, vendors can optionally provide costing.

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24. Is this the first network upgrade the Bank has done?

Answer: No

25. Is there any specific automation software that the Bank wants to use?

Answer: No

26. Does the Bank currently have an out-of-band management system?

Answer: No

27. Does The Bank currently have a WAN optimizer or are they looking to implement one? (Example: Riverbed, Barracuda, etc.)

**Answer:** No, vendors may present a solution to the Bank as a part of their proposal response.

28. What is the model of the existing Load Balancers?

**Answer:** Due to the sensitive nature of the Bank's business and for cybersecurity purposes, we are unable to provide this information. We believe the details of the RFP provides sufficient information for a vendor to provide a comprehensive response to the Bank's solicitation. Further, the selected vendor will be provided this information following execution of a non-disclosure agreement and any supporting contracts.

29. What are the models of the existing Firewalls?

**Answer:** Due to the sensitive nature of the Bank's business and for cybersecurity purposes, we are unable to provide this information. We believe the details of the RFP provides sufficient information for a vendor to provide a comprehensive response to the Bank's solicitation. Further, the selected vendor will be provided this information following execution of a non-disclosure agreement and any supporting contracts.

30. What are the models of the Wireless Lan controller?

**Answer:** Due to the sensitive nature of the Bank's business and for cybersecurity purposes, we are unable to provide this information. We believe the details of the RFP provides sufficient information for a vendor to provide a comprehensive response to the Bank's solicitation. Further, the selected vendor will be provided this information following execution of a non-disclosure agreement and any supporting contracts.

31. What are the models of the Wireless access points?

**Answer:** Due to the sensitive nature of the Bank's business and for cybersecurity purposes, we are unable to provide this information. We believe the details of the RFP provides sufficient information for a vendor to provide a comprehensive response to the Bank's solicitation. Further, the selected vendor will be provided this information following execution of a non-disclosure agreement and any supporting contracts.

32. What are the models of the 24 POE switches?

**Answer:** Due to the sensitive nature of the Bank's business and for cybersecurity purposes, we are unable to provide this information. We believe the details of the RFP provides sufficient information for a vendor to provide a comprehensive response to the Bank's solicitation. Further, the selected vendor will be provided this information following execution of a non-disclosure agreement and any supporting contracts.

33. Does the Bank have a preferred vendor or platform in mind?

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Answer: No.

- 34. Can the Bank provide details on the network monitoring solution for compatibility reasons? **Answer:** Due to the sensitive nature of the Bank's business and for cybersecurity purposes, we are unable to provide this information. We believe the details of the RFP provides sufficient information for a vendor to provide a comprehensive response to the Bank's solicitation. Further, the selected vendor will be provided this information following execution of a non-disclosure agreement and any supporting contracts. Vendors should articulate the protocols (e.g. SNMP) or network monitoring solutions the proposed product supports.
- 35. In reviewing the uplinks and ports, will the Bank consider 25GbE instead of 10GbE?

  \*\*Answer: Vendors must include support for a minimum of 10GbE in their proposals and indicate support for 25GbE.\*\*
- 36. Is the Bank seeking a single core switch? For proper redundancy, both core switches and wireless controllers should be redundant.
  - **Answer:** The Bank seeks a redundant solution inclusive of its core switches, wireless controllers, and access switches.
- 37. Please confirm if this project focuses on the physical network and the wireless network or is there consideration for a software defined networking (SDN) solution for the Bank.
  - **Answer:** The Bank seeks a comprehensive next generation networking solution inclusive of software-defined networking (SDN). It is envisaged that the delivered solution will result in greater flexibility and security while allowing the Bank more control and ease for managing resources virtually