



भारतीय राष्ट्रीय भुगतान निगम  
NATIONAL PAYMENTS CORPORATION OF INDIA

Registered Office - 1001A, B Wing, 10th Floor, 'The Capital', Bandra Kurla Complex, Bandra (E),  
Mumbai - 400 051

Date: 29.11.2017

**Corrigendum-1**

This is with reference to NPCI's RFP # NPCI/RFP/2017-18/IT/06 dated 17.11.2017 for RFP for supply, installation & maintenance of Network components. The prospective bidders may please note the following:

S.No	Document Reference	Description	Existing RFP Clause	Amended clause
1	Section 1 Bid schedule & address Sr. No 6	Last Date & Time for bid submission	30.11.2017 05.00 p.m.	04.12.2017 5.00 pm
2	Section 1 Bid schedule & address Sr. No 8	Date and Time of Eligibility bid (Envelope A) and Technical bid (Envelope B) opening	30.11.2017 05.30 pm	04.12.2017 5.30 pm

**Annexure A**  
**Amendments in Technical Specifications in Section 9**

S.No	Page No	Sub Clause No	Clause No	Existing clause	Amended Clause
1	34	1	Spine Switch Specification Sr.No.1	The spine layer switches should have hardware level redundancy (1+1) in terms of data plane and control plane. Issues with any of the plane should not impact the functioning of the switch	This clause stands deleted
2	34	2	Spine Switch Specification Sr.No.2	The switch should have redundant CPUs working in active-active or active-standby mode. CPU fail over/change over should not disrupt/impact/degrade the functioning the switch	This clause stands deleted
3	34	12	Spine Switch Specification Sr.No.12	Switch should have minimum 35 nos. of line rate and Non - Blocking 40/100G ports	Switch should have a minimum of 51 ports of 40Gbps as well as 100 Gbps interchangeably on the same switch by changing the optics only. All proposed optics and proposed Switch must be from same OEM
4	34 & 60	Additional Clause	Additional clause	Additional clause	The switches should have minimum of 40 MB buffer space
5	36	48	Spine Switch Specification Layer3 Features Sr.No. 48	Switch should be capable to work as DHCP server and relay	This clause stands deleted

	40	44	Leaf switch (Fiber) Specification Layer3 Features Sr.No.44	Switch should be capable to work as DHCP server and relay	This clause stands deleted
	44	44	Type 2 Leaf switch (UTP) Specification Layer2 Features Sr.No.44	Switch should be capable to work as DHCP server and relay	This clause stands deleted
6	35	36	Spine Switch Specification Layer 2 Features Sr.No.36	Switch should support minimum 160,000 no. of MAC addresses	Switch should support minimum of 90000 no.of MAC addresses
7	37	75	Spine Switch Specification Manageability Sr.No.75	Switch should support central time server synchronization using Network Time Protocol NTP V.4/PTP	Switch should support NTP
8	38	8	Leaf switches (Fiber) Specification Hardware and Interface Requirement Sr.No. 8	Switch should have the following interfaces A. 48 x 10G/25G Multi Mode Fiber Interface B. 2 x 40/100GbE QSFP ports	Switch should have minimum of following interfaces A. 48 x 10G/25G Multi Mode Fiber Interface B. 5 x 40/100 GbE QSFP ports (2 for uplinks, 2 for peer to peer & 1 port for future use)
9	39	23	Leaf switch (Fiber) Specification Performance Requirement Sr.No.23	Switch should support minimum 3.2 Tbps including the following services A. Switching B. IP Routing (Static/Dynamic) C. IP Forwarding D. Policy Based Routing E. QoS F. ACL and Other IP Services G. IPv6 host and IPv6 routing	Switch should support minimum 3.4 Tbps throughput including the following services A. Switching B. IP Routing (Static/Dynamic) C. IP Forwarding D. Policy Based Routing E. QoS F. ACL and Other IP Services G. IPv6 host and IPv6 routing
10	43	23	Type 2 Leaf switch (UTP) Specification Performance Requirement Sr.No.23	Switch should support minimum 3.2 Tbps including the following services A. Switching B. IP Routing (Static/Dynamic) C. IP Forwarding D. Policy Based Routing E. QoS F. ACL and Other IP Services G. IPv6 host and IPv6 routing	Switch should support minimum 1.76 Tbps throughput including the following services A. Switching B. IP Routing (Static/Dynamic) C. IP Forwarding D. Policy Based Routing E. QoS F. ACL and Other IP Services G. IPv6 host and IPv6 routing
11	34	8	Spine Switch Specification Sr.No.8	Switch should support in service software upgrade of the switch without disturbing the traffic flow. There should not be any impact on the performance in the event of the software upgrade/downgrade. It should support in service patching of selected process/processes only without impacting other running processes	Switch should support upgradation of the operating systems of the switch without disturbing the traffic flow. There should not be any impact on the performance in the event of the software upgrade/downgrade. It should also support patching of selected process/processes only without impacting other running processes
12	35	28	Section 9 - Technical Specifications Spine Switch Specification Virtualization Features Sr.No.28	Switch should support Network Virtualization using Virtual Over Lay Network using VXLAN (RFC 7348)/NVGRE as per RFC 2890	Switch should support Network Virtualization using Virtual Over Lay Network using VXLAN (RFC 7348) or NVGRE as per RFC 2890
13	22	Clause 8.6	8.6. Key Deliverables	Chennai : 40G QSFP : 48 units Hyderabad:40G QSFP : 32 units	Chennai : 40G QSFP : 100 units Hyderabad: 40G QSFP : 76 units
14	35	24	Spine Switch Specification Performance Sr.No.24	Switch should support minimum 1000 VRF instances	Switch should support minimum 500 VRF instances
	39	20	Leaf switch (Fiber) Specification Sr.No.20	Switch should support minimum 1000 VRF instances	Switch should support minimum 500 VRF instances

	43	20	Type 2 Leaf switch (UTP) Specification Sr.No.20	Switch should support minimum 1000 VRF instances	Switch should support minimum 500 VRF instances
15	35	37	Layer2 Features Sr.No.37	Switch should support 16 Nos. of link or more per Port channel (using LACP) and support 200 port channels or more per switch	Switch should support 12 Nos. of link or more per Port channel (using LACP) and support 200 port channels or more per switch

**Annexure B**  
**Amendments in Annexure K- Technical Compliance**

S.No	Page No	Sub Clause No	Clause No	Existing clause	Amended Clause
1	60	1	Sr.No.1	The spine layer switches should have hardware level redundancy (1+1) in terms of data plane and control plane. Issues with any of the plane should not impact the functioning of the switch	This clause stands deleted
2	60	3	Sr.No.2	The switch should have redundant CPUs working in active-active or active-standby mode. CPU fail over/change over should not disrupt/impact/degrade the functioning the switch	This clause stands deleted
3	60	12	Sr.No.12	Switch should have minimum 35 nos. of line rate and Non - Blocking 40/100G ports	Switch should have a minimum of 51 ports of 40Gbps as well as 100 Gbps interchangeably on the same switch by changing the optics only. All proposed optics and proposed Switch must be from same OEM
4	34 & 60	Additional Clause	Additional clause	NA - Additional clause	The switches should have minimum of 40 MB buffer space
5	62	48	Spine Switch Specification Layer3 Features Sr.No. 48	Switch should be capable to work as DHCP server and relay	This clause stands deleted
	66	44	Leaf switch (Fiber) Specification Layer3 Features Sr.No.44	Switch should be capable to work as DHCP server and relay	This clause stands deleted
	70	44	Type 2 Leaf switch (UTP) Specification Layer2 Features Sr.No.44	Switch should be capable to work as DHCP server and relay	This clause stands deleted
6	61	36	Layer2 Features Sr.No. 36	Switch should support minimum 160,000 no. of MAC addresses	Switch should support minimum of 90000 no.of MAC addresses
7	63	75	Spine Switch Specification Manageability Sr.No.75	Switch should support central time server synchronization using Network Time Protocol NTP V.4/PTP	Switch should support NTP

8	64	8	Leaf switch (Fiber) Specification Hardware and Interface Requirement Sr.No. 8	Switch should have the following interfaces A. 48 x 10G/25G Multi Mode Fiber Interface B. 2 x 40/100GbE QSFP ports	Switch should have minimum of following interfaces A. 48 x 10G/25G Multi Mode Fiber Interface B. 5 x 40/100 GbE QSFP ports (2 for uplinks, 2 for peer to peer & 1 port for future use)
9	65	23	Leaf switch (Fiber) Specification Performance Requirement Sr.No.23	Switch should support minimum 3.2 Tbps including the following services A. Switching B. IP Routing (Static/Dynamic) C. IP Forwarding D. Policy Based Routing E. QoS F. ACL and Other IP Services G. IPv6 host and IPv6 routing	Switch should support minimum 3.4 Tbps throughput including the following services A. Switching B. IP Routing (Static/Dynamic) C. IP Forwarding D. Policy Based Routing E. QoS F. ACL and Other IP Services G. IPv6 host and IPv6 routing
10	69	23	Type 2 Leaf switch (UTP) Specification Performance Requirement Sr.No.23	Switch should support minimum 3.2 Tbps including the following services A. Switching B. IP Routing (Static/Dynamic) C. IP Forwarding D. Policy Based Routing E. QoS F. ACL and Other IP Services G. IPv6 host and IPv6 routing	Switch should support minimum 1.76 Tbps throughput including the following services A. Switching B. IP Routing (Static/Dynamic) C. IP Forwarding D. Policy Based Routing E. QoS F. ACL and Other IP Services G. IPv6 host and IPv6 routing
11	60	8	Spine Switch Specification Sr.No.8	Switch should support in service software upgrade of the switch without disturbing the traffic flow. There should not be any impact on the performance in the event of the software upgrade/downgrade. It should support in service patching of selected process/processes only without impacting other running processes	Switch should support upgradation of the operating systems of the switch without disturbing the traffic flow. There should not be any impact on the performance in the event of the software upgrade/downgrade. It should also support patching of selected process/processes only without impacting other running processes
12	61	28	Spine Switch Specification Virtualization Features Sr.No.28	Switch should support Network Virtualization using Virtual Over Lay Network using VXLAN (RFC 7348)/NVGRE as per RFC 2890	Switch should support Network Virtualization using Virtual Over Lay Network using VXLAN (RFC 7348) or NVGRE as per RFC 2890
13	22	Clause 8.6	8.6. Key Deliverables	Chennai : 40G QSFP : 48 units Hyderabad : 40G QSFP : 32 units	Chennai : 40G QSFP : 100 units Hyderabad:40G QSFP : 76 units
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	65	20	Leaf switch (Fiber) Specification Sr.No.20	Switch should support minimum 1000 VRF instances	Switch should support minimum 500 VRF instances
	69	20	Type 2 Leaf switch (UTP) Specification Sr.No.20	Switch should support minimum 1000 VRF instances	Switch should support minimum 500 VRF instances
15	61	37	Spine Switch Specification Layer2 Features Sr.No.37	Switch should support 16 Nos. of link or more per Port channel (using LACP) and support 200 port channels or more per switch	Switch should support 12 Nos. of link or more per Port channel (using LACP) and support 200 port channels or more per switch

**Revised Annexure N - Commercial Bid (Indicative)**  
**NPCI/RFP/2017-18/IT/06 dated 17.11.2017**  
RFP for supply, installation & maintenance of Network components  
(Bidder's Letter Head)

**Table A:**  
**Hardware to be delivered**

Sr.No	Description	Qty	Unit Price (Rs)	Total (Rs)
1	Spine Switch with 3 year warranty cost	4		
2	Leaf switch Type-1 Leaf switch (Fiber) Specification with 3 year warranty	20		
3	Leaf switch Type-2 Leaf switch (UTP) Specification with 3 year warranty	4		
4	40G QSFP with 3 year warranty cost	176		
5	10G SFP with 3 year warranty cost	960		
<b>Total A</b>				

**Table B:**  
**AMC Rates:**

Sr. No.	Description	Unit	Unit Price (Rs)	Total Price (Rs)
<b>A</b>	<b>AMC for 4th year</b>			
1	Spine Switch	4		
2	Leaf switch Type-1 Leaf switch (Fiber) Specification	20		
3	Leaf switch Type-2 Leaf switch (UTP) Specification	4		
4	40G QSFP	176		
5	10G SFP	960		
<b>B</b>	<b>Hardware AMC for 5th year</b>			
6	Spine Switch	4		
7	Leaf switch Type 1 Leaf switch (Fiber) Specification	20		
8	Leaf switch Type-2 Leaf switch (UTP) Specification	4		
9	40G QSFP	176		
10	10G SFP	960		
<b>Total B</b>				

- Delivery Location: Chennai and Hyderabad (as per clause 8.8 of the RFP)
- AMC cost should not be less than 10% of the cost of hardware / software
- The bidder shall meet the requirements of Goods & Services Tax (GST)

**TCO = A + B**

**(Amount in Rs) All prices are exclusive of taxes.**

Dated this..... Day of..... 2017

(Signature)

(Name)

(In the capacity of)

Duly authorized to sign Bid for and on behalf of

All other terms and conditions of aforesaid RFP remain unchanged.

**CHIEF EXECUTIVE OFFICER**  
**NATIONAL PAYMENTS CORPORATION OF INDIA**  
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Bandra (East), Mumbai - 400 051