

Cererea Ofertei de Preturi
privind achiziția Data Center Switch

Cumpărător:

S.A. “Moldtelecom”, Bd. Stefan cel Mare și Sfânt 10, mun Chișinău.

Obiectul Achiziției:

“Data Center Switch” (conform specificației tehnice din anexa nr.1).

1. Ofertele trebuie să conțină și să confirme următoarea informație:

- Costul per unitate în EURO;
- Achitarea se va face în 120 de zile de la livrarea marfii;
- Termen de garanție pentru bunurile livrate minimum 24 de luni
- Termenul de livrare nu va depăși 60 de zile de la data semnării comenzii;
- Condiția de livrare DAP Chișinău pentru vânzătorii străini sau DDP Chișinău pentru vânzătorii locali, conform INCOTERMS 2020
- Vânzătorul local va asigura transportul mărfii la depozitul S.A. „Moldtelecom”, mun. Chișinău, str. M. Dragan 23

2. Condițiile de prezentare a ofertei:

- Ofertele vor fi prezentate în plic sigilat la adresa: RM, MD-2001 or. Chișinău, bd. Ștefan cel Mare și Sfânt, 10 (sediul central, recepție) pe care se scrie denumirea și adresa ofertantului, denumirea și obiectul concursului
- Prezentarea ofertei comerciale până la data de 27.10.2023, ora 12.00
- După expirarea termenului limită de prezentare a ofertelor, acestea nu vor fi acceptate.
- Deschiderea ofertelor va avea loc în incinta S.A. „Moldtelecom” (or. Chișinău, bd. Ștefan cel Mare și Sfânt, 10) la data de 27.10.2023 ora 15.00.

3. Pentru confirmarea capacității și calificării Ofertantului de a executa contractul de achiziții, este necesară prezentarea obligatorie a următorului set de documente:

- a) Copia certificatului de înregistrare a întreprinderii. Persoana juridică nerezident va prezenta documente din țara de origine care dovedesc forma de înregistrare
- b) Copia Certificatului de înregistrare a subiectului impunerii cu TVA (pentru persoane juridice rezidente);
- c) Raportul financiar-copie pentru ultima perioadă, confirmată prin semnătura și ștampila ofertantului;

- d) Informația despre ofertant care va conține minim date generale, informație privind obiectul de activitate pe domenii (în conformitate cu prevederile din Statutul propriu), principala piață de afaceri, cifra de afaceri pe ultimii 3 ani.
- e) Declarație pe propria răspundere (conform anexei nr.2);
- f) Certificat privitor lipsa datoriilor față de Bugetul Public Național (pentru persoane juridice rezidente);
- h) Certificat de dealer/distribuitor autorizat de către producător privind deținerea dreptului de livrare, prestare a serviciilor de suport tehnic, integrare și implementare a produselor propuse pe teritoriul Republicii Moldova.

Persoană de contact pentru a oferi răspunsuri și clarificări ofertanților:

V.Mazare– mob: +37367199565; mail: victor.mazare@moldtelecom.md

Persoana responsabilă de recepționarea ofertelor:

E. Mihalachi– mob: +37367399166; +37322570497.

Table of Content

1. Solution Overview
 2. Main functionality requirements for Switch
 3. Switch port specification
 4. Price offer
 5. Support services requirements and warrantee
 6. Other requirements
- Table of conformity

Compliance

The following categories have been defined:

“[M]” denotes a mandatory requirement, which the bidder shall meet fully and it shall be available on the first day of the indicated timeframe.

“[P]” denotes expected requirements. Proposal submitted by a bidder is expected to be in full compliance with such preferred requirements. Proposals failing to comply with these requirements shall be negatively considered during the evaluation of the Proposal. However, failure to comply with any preferred requirement shall not lead to the invalidation of the Proposal.

“[O]” denotes “good to have” requirements, which the bidder shall mention in the response.

1. Solution overview

- 1.1 The scope of this Tender is to acquisition a L3 Switches for Data Center with 10/25G and 100G ports.
- 1.2 If the offered solution involves the use of modules with the MTP interface, additionally must be offered the prices for all the components necessary to build the end-to-end connectivity:
 - *Compatible 4 x 10GBASE-LR QSFP+ 1310nm 10km DOM MTP/MPO-12 SMF Optical Transceiver Module;*
 - *Compatible MTP® to 4 LC UPC Duplex 8 Fibers OS2 9/125 Single Mode Breakout Cable;*
 - *19’’ Fiber Adapter Panel, OS2 Single Mode, 24 or 48 x LC UPC Duplex;*
- 1.3 Solution must support pluggable redundant AC power.
- 1.4 Price should be offered separately for each components to be able to build a custom configurations for orders.

2. Main functionality requirements for Switch

2.1 Chassis requirements

- 2.1.1 (M) Chassis must be fully compatible with standard 19-inch rack and equipped with necessary accessory kit for mount.
- 2.1.2 (M) Chassis height must not exceed 3 rack units.
- 2.1.3 (M) Hot swap feature must be supported for field replaceable units in the proposed solution.
- 2.1.4 (M) Removal or insertion of any field replaceable unit of the proposed solution must not cause any soft, hard reset or packet loss.

2.2 Power requirements

- 2.2.1 (M) Proposed solution must have at least 2 power units and must support input from two different power sources.

- 2.2.2 (M) Proposed solution must support AC power in the 180V-240V range. Switch must continue full operation in case of a one of the power feed failures.
- 2.2.3 (M) Proposed solution must have the capability to run in full operation mode on half of total power supply if others fail.
- 2.2.4 (M) Power supply units of the proposed solution must be hot swappable.
- 2.2.5 (M) Typical power consumption should not exceed 400W.

2.3 Features requirements

- 2.3.1 (M) Bidder must state all the features and highlights for the offered solution (forwarding performance [Mpps], switching performance [Tbps], packet buffer, dimension, weight, power consumption, services and protocols supported etc.).

- 2.3.2 Switch solution must support not less than the following functionalities and characteristics:

- 2.3.2.1 (M) *Switching capacity* 2,4 Tbps
- 2.3.2.2 (M) *Forwarding rate* 1800 Mpps
- 2.3.2.3 (M) *Packet buffer* not less than 32M
- 2.3.2.4 (M) *Stacking* stacking through standard Ethernet ports
- 2.3.2.5 (M) *Link aggregation* static, LACP (10GE/25G/100GE port)
- 2.3.2.6 (M) *Networking* VLAN mapping, QinQ, port based VLAN, VLAN assignment based on IP, MAC, protocol, policy
- 2.3.2.7 (M) *VXLAN support* VXLAN Layer 2 switching, VXLAN L3 gateways, VXLAN default encapsulation
- 2.3.2.8 (M) *EVPN support* BGP EVPN
- 2.3.2.9 (M) *Protection* RSTP/MSTP, BPDU protection, root protection, and loop protection
- 2.3.2.10 (M) *Routing* OSPF, OSPFv3, IS-IS, IS-ISv6, BGP, BGP4+, Policy based routing.
- 2.3.2.11 (M) *L2 Settings* Support ARP snooping, DHCP snooping, BUM storm suppression, L2PT (Layer2 Protocol Tunneling)
- 2.3.2.12 (M) *Ipv6 features* Ipv6 Ping, Ipv6 Tracert, Ipv6 Telnet, ACLs based on source/destination Ipv6 addresses. Ipv6 addresses configured for sub-interfaces.
- 2.3.2.13 (M) *Multicast* IGMP Snooping v1/v2/v3, MLD v1/v2, IGMP fast leave, multicast VLAN/VPN, PIM-SM, PIM-DM, and PIM-SSM
- 2.3.2.14 (M) *QoS/ACL* Rate limiting in/out on port, 8 queue per port, 802.1p priority and DSCP priority, packet filtering at Layer 2 to Layer 4, traffics

- classification based on MAC, IP, port, VLAN, CAR, WRED.
- 2.3.2.15 (M) *Security* AAA, HWTACACS/TACACS/TACACS+, RADIUS, SSH2.0 authentication
- 2.3.2.16 (M) *MGMT* SNMP v1/v2c/v3, logs and alarms of different severities, Flow export (netflow/sflow/others).
- 2.3.2.17 (O) *Mirroring* Remote port mirroring (ERSPAN).

3 Switch port specification

- 3.1 Offer should correspond to following minimal specification for one switch:
- 3.1.1 (M) 100G QSFP28 minimal 8 up to 16 ports
- 3.1.2 (M) 10G/25G SFP+/SFP28 minimal 24 up to 48 ports
- 3.1.3 (M) Console port 1x RJ45 port
- 3.1.4 (M) Management port 1x 100/1000 Mbps port
- 3.1.5 (M) Power Supply slots 2x AC or DC

4 Price offer

- 4.1 Offer should include price for:
- 4.1.1. (M) **2-switches** that should work in cluster/stack mode (operate together as a single unit). The characteristics, capacities and options/features must correspond to Articles 2 and 3 of this RfP.
- 4.1.2. (O) **4-switches** that should work in cluster/stack mode (operate together as a single unit). The characteristics, capacities and options/features must correspond to Articles 2 and 3 of this RfP.
- 4.1.3. (M) Offer will include all necessary cabling, license and accessory kit for mount.
- 4.1.4. (M) If the offered solution involves optical links terminates with MTP/MPO interface for used in a 4x10G, additionally must be offered separate prices (per unit) for all the components necessary to build the end-to-end connectivity (MTP transceivers, Breakout Cables, Adapter panels, as requested in ARTICLE 1.2.)

5 Support services requirements and warrantee

- 5.1 (P) Bidder shall provide in warrantee support services and post-warrantee support services in compliance with following SLA table:

Service	Support
Availability period for support service	8 hours x 5 day a week

Trouble ticket classification	Critical	Major	Minor
Answer time	30 minutes	Less than 1 hour	Less than 2 hours
Intervention time (period between Time Stamp “create Ticket” until “Work in Progress”)	max. of 8 hours	In case when a temporary solution is necessary: max. 2 days	In case when a temporary solution is necessary: max. 10 working days
Full recovery time	max. 45 days	max. 2 month	max. 15 weeks or next version release for software

- 5.2 (O) Bidder should provide alternative SLA terms and condition in case of own best practices scenarios for offered solution
- 5.3 (M) Bidder must guarantee during the warranty period to repair or replace, free of charge any of offered Hardware, Software and Repaired parts found to have quality problem by reasons of defects in material, faulty design or workmanship.
- 5.4 (M) Bidder must guarantee during the warranty period to provide technical support, including free software updates.

6 Other requirements and conditions

- 6.1 (M) Bidder must complete the Table of conformity under its own responsibility.

Table of Conformity

Article of technical part	Type of requirement Mandatory (M); Optional (O); Preferable (P)	Conformity (Compliance / Partially / Not compliance)	The proof
2.1.1	M		
2.1.2	M		
2.1.3	M		
2.1.4	M		
2.2.1	M		
2.2.2	M		
2.2.3	M		
2.2.4	M		
2.2.5	M		
2.3.1	M		
2.3.2.1	M		
2.3.2.2	M		
2.3.2.3	M		
2.3.2.4	M		
2.3.2.5	M		
2.3.2.6	M		
2.3.2.7	M		
2.3.2.8	M		
2.3.2.9	M		

2.3.2.10	M		
2.3.2.11	M		
2.3.2.12	M		
2.3.2.13	M		
2.3.2.14	M		
2.3.2.15	M		
2.3.2.16	M		
2.3.2.17	O		
3.1.1	M		
3.1.2	M		
3.1.3	M		
3.1.4	M		
3.1.5	M		
4.1.1	M		
4.2.2	O		
4.3.3	M		
4.4.4	M		
5.1	P		
5.2	O		
5.3	M		
5.4	M		
6.1	M		