

**Request for Price Offer
for acquisition „Data Center Switch”**

Buyer:

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

Object of the Purchase:

“Data Center Switch” (according to the technical specification in Annex no. 1).

1. Offers must contain and confirm the following information:

- Cost per unit in EURO;
- The payment shall be made in 120 days after delivery of goods;
- The warranty period of the delivered goods must be of at least 24 months from the delivery date;
- The delivery term will not exceed 60 days from the date of signing the order;
- The delivery condition of goods should be DAP Chisinau for foreign sellers or DDP Chisinau for local sellers, according to INCOTERMS 2020;
- The local seller will ensure the transportation of the goods to the S.A. "Moldtelecom" warehouse, mun. Chisinau, M. Dragan str., 23..

2. Conditions for presentation of the offer:

- Offers will be submitted in a sealed envelope to the address: RM, MD-2001 mun. Chisinau, bld. Ștefan cel Mare și Sfânt, 10 (headquarters, reception), the name and address of the bidder and the object of the competition will be written.
- Presentation of the commercial offer by the date of 27.10.2023, 12.00
- After the expiration of the deadline for submitting offers, they will not be accepted.
- The opening of the offers will take place in the premises of S.A. "Moldtelecom" (mun. Chișinău, bld. Ștefan cel Mare și Sfânt,10) on 27.10.2023, 15.00.

3. For confirming Bidder’s capacity and qualification to perform the procurement contract, it is a mandatory requirement to submit the following set of documents:

- a) The certified copy of company’s registration certificate. Non-resident legal person shall submit documents proving the home registration form;
- b) The certified copy of the Certificate on entity registration as a VAT payer (resident legal entities);
- c) Copy of the financial report confirmed by the signature and stamp of the bidder;

- d) Information about the bidder that will contain the minimum basic data, information on objects of the fields (in accordance with the provisions of the statute), the main business market, turnover for the last 3 years.
- e) Declaration on own responsibility according to Annex no.2 must be provided;
- f) Certificate confirming the absence or existence of debts towards the National Public Budget (resident legal entities);
- h) The authorization certificates from equipment manufacturers on holding the right for delivery of hardware, software products and services, rendering technical support services, integration and implementation of the proposed products on the territory of the Republic of Moldova.

Contact person for giving answers and clarifications to bidders:

V. Mazăre – phone: 067199565; mail: victor.mazare@moldtelecom.md

The person responsible for receiving offers:

E. Mihalachi– phone: +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		

Declaration on own responsibility

I hereby confirm that the company "_____"

- **It is not bankrupt, it is not in the process of liquidation or insolvency, the assets are not seized, the business activity is not suspended.**

Notes:

Signature

- **It has no overdue debts to financial institutions.**

Notes:

signature

- **"_____", the company executives, during the last 3 years, were not involved in fraudulent and corrupt practices.**

Notes:

signature

- **There have been no administrative or criminal sanctions, during the last 3 years, against "_____", the company executives in connection with their professional activity or with the presentation of erroneous data for the purpose of concluding the public procurement contract.**

Notes:

signature

The effective final beneficiary of the company is _____.

Administrator _____

Date _____