TO:	All Bidders	FROM:	Courtney Linley
	FAO Sales Managers		Chief, Procurement Section
DATE:	27 April 2021	REF.:	ITB No. 2021-0029/JIBRIL
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SUBJECT: **Clarifications No.1 – ITB No. 2021-0029/JIBRIL**

Dear Sales Manager,

Please find attached the response to queries raised by an interested bidder in respect of ITB No. 2021-0029/JIBRIL "Supply, Delivery and Installation Services for the Improvement, and Support of Storage System for Veritas NetBackup".

Please take this response into account in the preparation and submission of your bid.

We are looking forward to receiving your bid prior to the submission deadline on 20 May 2021, 17:00 hours, Vienna (Austria) local time.

Kind regards

O.I.C.

Courtney Linley
Chief, Procurement Section

Clarifications No. 1- ITB No. 2021-0029/JIBRIL:
Supply, Delivery and Installation Services for the
Improvement, and Support of Storage System for Veritas NetBackup

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Item#	Question	Answer
1	Is the Commission interested to have an alternative Backup Software solution instead of Veritas NetBackup? If yes, may I ask you to send us a detailed asset list of the equipment which needs to be backed up?	No, the Commission is not interested in changing the backup solution. We are interested in replacing the hardware and upgrading the current solution, while keeping the existing licenses.
2	Ref. ToR 4.2.1: What is the actual Veritas Licensing Model?	The current licensing model used is Terabyte Licensing.
3	Ref. ToR 5.1 and 5.2: Can you provide us with a detailed Installation Documentation to determine the effort?	Master Server, RHEL 6, Virtual System, 24GB Mem, 8 VCPU Media Servers: B2D Media Server, RHEL6, Virtual System, 8GB Mem, 6 VCPU 2x Tape Media Servers, RHEL6, 32GB Mem, 24 CPU, 4x FC Ports 166 active Clients (RHEL 6/7/8, Solaris 9/10/11) 4 NetAPP NDMP Hosts
4	Ref. ToR 5.3: Can you please provide us with the exact Version of OS and Database / Message brokers for the Systems in Scope?	Oracle Enterprise Linux 7.8/8+ Oracle database 11.2, 12.2 and 18c 27 Oracle databases at the time right now MariaDB 10.3.10 PostgreSQL 11.2, 12.6 and 13.2 Number of instances: MariaDB: 1 PostgreSQL: 10 Messagebrokers: N/A
5	Ref. ToR 5.4: Can you provide us with the count of databases / Message brokers and Servers to integrate?	See previous answer above.
6	Please confirm that there is no need for tape-out any more in the new NetBackup platform except for migration purpose.	Currently Tape based access is still mandatory and a hard requirement for the CTBTO.
7	If there is no tape needed any more, should there be redundant backup copies?	We want redundant copies, but we will initially still use tapes.
8	If redundant backup copies are required, should they reside on separate storage systems?	Yes, they should.
9	Are the 180TB calculated with only one copy or two copies of the backup?	Our current consumption for one copy is 240TB.

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10	Do you mean 180TB (BASE10) usable or 180TiB usable? (180TB usable would only be 163TiB usable).	Please consider 240 TiB. The calculation and capacity should take into consideration all proposed levels of disk redundancy implementations (exception Raid-10)
11	Is Raid-6 a must or also any other form of dual parity?	Raid-6 was selected due to long RAID rebuild time duration on large disk. Any similar dual parity concepts providing redundancy during disk replacements are considered sufficient.
12	Please note that NBU 8.0 is End of Standard Support. There is the possibility to purchase extended support which started on 26.03.2020 – 26.03.2022. For the migration option we highly recommend a supported environment with the extended support. Should we include the extended support in the offer?	Noted, please include extended support accordingly.
13	Please define: "support for configuration of monitoring".	The awarded contractor is expected to assist and support the Commission's specialists with integrating the offered solution into the Commission's Nagios monitoring system.
14	Will the RedHat licenses be provided by CTBTO?	Yes, they will.
15	Is it planned to have Deduplication pools in the final configuration?	Yes, best practices from Veritas on deduplication pools shall be in the configuration.
16	Should there be two physical media servers for redundancy reasons?	Yes, redundancy shall cover any hardware maintenance.
17	Should the storage be a dual controller storage system?	Yes, redundancy shall cover any hardware maintenance.
18	Please provide a client list with versions of OS, NBU Agent, DBs & message brokers, these are needed to scope the services part	166 active Clients (RHEL 6/7/8, Solaris 10/11)
19	Should the client upgrade be included for all clients or for sample clients per policy type?	Client upgrade was considered not to be included in the concept and will be handled by CTBTO. The awarded contractor is expected to assist and support the Commission's specialists.
20	Is it necessary to be onsite for migration or client update tasks?	All tasks that do not require physical work can be arranged remotely (Cisco Webex).
21	How should the storage be linked to the server? FC, iSCSI. SAS?	FC.
22	Ref. to above question: May it also be an enclosure that connects via SAS to a raid controller in the server?	No, it may not; it should use an FC interface.
23	Ref. ToR 3.1.1: How many physical servers (which are defined in Appendix A) are required? One or two servers?	2 servers are required.

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24	3.1.1: The server described in Appendix A is a 4U 8 socket machine. But only 1 CPU is built-in. Should the future system be equipped with only 1 CPU and 28 cores, 2.7Ghz?	Any system proposed should be fully compatible with the servers listed in appendix A. The servers must provide the required number of cores.
25	3.1.1: Are alternative hardware manufacturers like HPE or Dell permitted?	No, they are not, due to standardization requirements.
26	3.1.1: How should the servers be connected to the storage system? Via FC or SAS?	FC
27	3.1.1: Are servers and storage systems should be installed in the same rack? If not, how far apart are both HW components from each other?	At the most, they will be on adjacent racks.
28	3.1.1: How many virtual machines will be running on the server defined in Appendix A?	The number of VMs will be defined during the planning workshop.
29	3.1.1: Which applications run on the virtual machines and what is their dependency?	No other applications will run on these VMs, only Netbackup related systems.
30	3.1.1: Are virtualization licenses necessary? If not, which hypervisor is provided? Redhat?	No license is necessary. Hypervisor is KVM.
31	3.1.1: What is the HA scenario in this case?	The HA scenario will be defined in the planning workshop.
32	3.1.1 What data growth is foreseen over the next few years?	Any data growth is out of the scope of this ToR and will be handled with the optional expansions.
33	Ref. ToR 4.2.1: Can you provide us with the information what licensing model you have actual in place?	See question 2 above.
34	Ref. ToR 5.1: Can you provide us with a detailed Installation Information? Master server: Type (Phys, Virt.), OS Version, NBU Version Media server: count Type (Phys, Virt.), OS Version, NBU Version Clients: Count, OS Type and Version, NBU Version	See question 3 above.
35	Ref. ToR 5.1: Start from scratch (..and keeping the existing setup running in parallel for a while). What exactly is meant by for a while?	It means "As long as the existing retention period (6 months)".
36	Ref. ToR 5.1: Netbackup Catalog Migration needed?	Depends on the chosen scenario.