EUROPEAN UNION
DELEGATION TO THE REPUBLIC OF SERBIA

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CONTRACTING AUTHORITY'S CLARIFICATIONS

**"Administrative capacity building of the Customs Administration of Serbia for
the full implementation of the common transit procedure / NCTS"
Publication reference: EuropeAid/130450/C/SER/RS
Tender no.: 07SER01 24 21**

No	Question	Answer
1.	There is R1 requirement: "The storage solution should fulfill the following requirements: - Support for FC and FC SATA HDDs in the same physical enclosure or expansion; and R2 requirement: The storage solution should provide additional capacity to existing CAS storage as following: - 25 TB space on SATA disks for open systems. Could we offer SAS-2 10krpm discs instead of FC SATA?	R1 requirement: "The storage solution should fulfill the following requirements: - Support for FC and FC SATA HDDs in the same physical enclosure or expansion; and R2 requirement: The storage solution should provide additional capacity to existing CAS storage as following: - 25 TB space on SATA disks for open systems. ***No substitute or variation allowed***
2.	There is R4 requirement: The storage solution should have the following minimum characteristics - Minimum 24GB cache; and there is R8 requirement: The storage system should provide a following virtualization characteristics: - 24 GB cache memory per controller. How much cache memory should be provided? 24 GB total or 48 GB total?	R4 requirement: The storage solution should have the following minimum characteristics - Minimum 24GB cache; ***And*** R8 requirement: The storage system should provide a following virtualization characteristics: - 24 GB cache memory per controller.
3.	There is a R8 requirement: The storage system should provide a following virtualization characteristics: What is exact meaning of "virtualization" expression in R8 requirement? What kind of virtualization should be provided?	***Virtualization, in computing, is the creation of a virtual (rather than actual) version of something, such as a hardware platform, operating system, a storage device or network resources.***

Vladimira Popovica Street 40/V, 11070 Belgrade
Tel: +(381 11) 3083-200 / Fax: +(381 11) 3083-201 / E-mail: delegation-serbia@ec.europa.eu

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4.	There is R4 requirement: The storage solution should have the following minimum characteristics - Support for following protocols: 4 Gbps Fiber Channel, 8 Gbps Fiber Channel and 1Gbps iSCSI (over Ethernet); Could we offer storage system attached to separate device called "iSCSI gateway" in order to provide support for iSCSI protocol? An iSCSI gateway bridges IP server to Fiber Channel SANs.	R4 requirement: The storage solution should have the following minimum characteristics : - Support for following protocols: 4 Gbps Fiber Channel, 8 Gbps Fiber Channel and 1Gbps iSCSI (over Ethernet); ***No substitute or variation allowed***
5.	There is R3 requirement: The storage system should be extendable up to 80 TB with 8 storage controllers and there is R4 requirement: The storage solution should have the following minimum characteristics - Minimum 2 controllers; What is exact meaning of "controllers" expressions in R3 and R4 requirements? I am sending you definition of "processor complex" by IBM: *Processor complex* *A processor complex controls and manages the storage unit to perform the function of the storage server. The two processor complexes form a redundant pair such that if either processor complex fails, the remaining processor complex performs all storage server functions.* *(IBM System Storage DS8800, Introduction and Planning Guide, Version 6 Release 0)* Could we say that "controller" is by definition equal to IBM's "processor complex"?	R3 requirement: The storage system should be extendable up to 80 TB with 8 storage controllers R4 requirement: The storage solution should have the following minimum characteristics - Minimum 2 controllers; ***The term "controller" shall be interpreted disk array-controller.*** ***In this context the "IBM's processor complex" is one of the possibilities to perform the controller function, as long as it controls a series of disk-array.***

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No	Question	Answer
6.	According to supplied figure 5 it is described that storage has connectivity to Mainframe and AS/400 servers. In storage specification it is stated that storage has to support 8 FC i Eth iSCSI ports. Are these ports also used for mainframe connectivity or we have to offer specialized ports for this purpose (usually FICON) and what is number of these ports if needed?	R8 requirement: The storage system should provide a following virtualization characteristics: - 24 GB cache memory per controller - Minimum of 8 Fiber Channel Host ports - Minimum of 4 Gigabit Ethernet iSCSI ports. ***These ports are also used for mainframe connectivity***
7.	Could you please clarify the below issues: Time limit for the response time following the Project Manager's statement about break down of servers and storage systems within warranty period. Limit of the duration for the complete solution of any problem of servers and storage systems within warranty period?	As stated in the Tender Dossier: <u>5. Ancillary Services</u> – point 6. **1 year warranty for all proposed hardware and software** ***There are no service level agreement terms in the tender dossier as those should be specified during the maintenance terms.***