

**NATIONAL AGENCY FOR FISCAL ADMINISTRATION
REVENUE ADMINISTRATION MODERNIZATION PROJECT**

**Procurement of Hardware, Software and Training for Primary, Secondary and Data
Warehouse Centers (RAMP/1-SR)**

CLARIFICATIONS No. 1 of November 21st, 2014

Dear Sirs,

With regard to the above-referenced procurement procedure, we have received comments and requests for clarifications from some prospective bidders. According to Clause 10.1 of Section 1. *Instructions to Bidders* of the bidding documents issued on October 28th, 2014, please find below the requested clarifications:

Q1: *Please consider modifying requirements (3.8.4) as to allow instead a global distributed pool of spare drives.*

A1: The Technical Requirement 3.8.4 specifies that the Service Controller Module (#DSC_SCM) “*Continuously maintain at least 1 (one) hot-spare drive*”. As stated, TR 3.8.4 is clear, technically appropriate, and non-restrictive (i.e., may be satisfied by a “global distributed pool of spare drives”, but also other configurations). ***No amendments to TR 3.8.4 will be made.***

Q2: *Please consider modifying requirements (3.8.15) as to allow a maximum LUN size of 16TB.*

A2: The Technical Requirement 3.8.15 specifies that the Service Controller Module (#DSC_SCM) “*Provide a maximum LUN size of at least 64TB*”. As stated, TR 3.8.15 is clear and technically appropriate for a datacenter supporting large database and unstructured data-stores (i.e., it provides the *option* to configure LUN sizes of up to 64TB; actual provisioning will be dictated by need). TR 3.8.15 is also non-restrictive, as it is commonly offered by mainstream storage vendors. ***No amendments to TR 3.8.15 will be made.***

Q3: Please consider modifying requirements (3.11.1 and 3.11.2) as follows:

3.11.1: Provide at least 8 (eight) 1Gbps Ethernet ports, per service controller module, in a scale-out model;

3.11.2: Provide at least 8 (eight) 10Gbps FCoE ports, per service controller module, in a scale-out model.

A3: There is no need to add “in a scale-out model” to TR 3.11.1 or TR 3.11.2, since TR 3.8.1 specifies [#DSC must be supplied and configured to] “Provide at least 2 (two) service controller modules (#DSC_SCM), per site, operating as an active-active HA configuration with both data access and control loop multi-pathing.” Moreover, TR 3.7.3 specifies [Data Storage System Core (#DSC) must be supplied and configured to:] “Allocate the shared hardware storage across block- and file-based data-access services.” In other words, the TR specify a “scale-out” architecture at the level of the #DSC. **Hence, no amendments to TR 3.11.1 or TR 3.11.2 will be made.**

Q4: Please consider modifying requirement (3.12.2) as follows:

3.12.2: Provide at least 640 Gbps using a combination of the following: 2-24 of 8 Gb/s Host Ports; 0-8 of 16 Gb/s Host Ports; 0-8 10 Gb/s iSCSI Host Ports.

A4: There is no need to incorporate the throughput requirement already covered in TR 3.12.1 “[I/O Interconnect Fabric Module (#IFM) must be supplied and configured to:] Provide at least 640Gbps of line-rate performance and a cut-through internal architecture for low-latency, packet-size independent, service”. Moreover the proposed formulation of the requirements for the #IFM ports would not meet TR 3.12.3 and 3.12.4 (correlated with TR 3.2.5.4 and 3.12.6) and would also be unduly restrictive vis-à-vis TR 3.12.2, which specifies “Provide at least 64 physical 1Gbps/10Gbps service ports and end-to-end control of the communication between the compute modules and the storage, across the interconnect fabric.” **Hence, no amendments to TR 3.12.2 will be made.**

Q5: Please clarify if the scope of this procurement is purely supply, or other related services such as data warehouse - data migration, report generation, data cleansing etc. – are required. Please indicate where other functional requirements of the future system are detailed.

A5: The scope of this procurement is defined in Section VI. *Technical Requirements*; Chapter 0.2 *Business Objectives of the Purchaser*: “The System under this Contract provides the server test base at three sites”, corroborated with Chapter 5 “*Services Specifications*”. Data warehouse, data migration, report generation, data cleansing are not specified and not required.

Q6: *Could you please confirm if all references (previous contracts) should be in copy according to the original or must be legalized copy.*

A6: The bids may contain copies of the original documents. At post-qualification of the proposed winning bidder, ANAF may request legal copies of the contracts to confirm the experience requirement.

Q7: *In the case of a Joint Venture (between company A and Company B), please confirm that we may consider some specialist from company A and some from company B and the total will be the minimum requested.*

A7: The staff of the Implementation Team (and Maintenance and Technical Support Team) may be drawn from both JV Partners. Please note that the Technical Requirements specify a minimum composition and number.

Q8: *Regarding the profiles of the key experts required in tender documentation at page 179 and 180 please confirm us that the following understandings are correct:*

a) *At page 180 – Key expert profile “Virtualization Software Specialist(s)”, requirement “Professional certification as a specialist for not at least 2 (two) of the major products/components of the #HPS and the #AVS”. Please confirm us that you will accept a proposed expert for this profile that will have at least two certifications that fulfill the requirements:*

– one certification for products/components of the #HPS and one certification for products/components of the #AVS,

b) *At page 180 – Key expert profile “Management Platform Specialist(s)”, requirement “Professional certification as a specialist at least 2 (two) of the major products/components of the #PCS and the #SMS”. Please confirm us that you will accept a proposed expert for this profile that will have at least 2 certifications that fulfill the requirements:*

– One certification for products/components of the #PCS and one certification for products/components of the #SMS.

A8: Yes, your understanding is correct for both questions.

Q9: *Regarding Technical Requirement No. 3.8.14. - please confirm that it is acceptable to configure up to at least 2000 LUNs, per multi-node HA configuration, per site.*

A9: No, the requirement remains unchanged: *“Provide the possibility to configure up to at least 4000 LUNs, per multi-node HA configuration, per site”.*

Q10: *Chapter “4.5. Operating Platform Subsystem (#OS)”, requirement 4.5.7, please confirm whether all the mentioned database types will be used at the same time or just a subset of this list, based on the specific requirements.*

A10: TR 4.5.7 requires that all the mentioned database types be supported by the Operating Platform (#OS) and, therefore, that any one (or more) of them could be installed and run on top of the #OS as needed.

Q11: *Chapter “4.6. Platform Control Subsystem (#PCS)”, requirement 4.6.11, please mention if it's mandatory for the requested tools to be natively included in the #PCS system or separate applications/modules can be used to fulfill the functional requirements.*

A11: As defined in the Technical Requirements, all the functionalities requested by the TR 4.6.11. must be provided by the Platform Control Subsystem (#PCS).

Q12: *Chapter “4.6. Platform Control Subsystem (#PCS)”, requirement 4.6.13, please mention the LDAP protocol version supported by the existing legacy systems (LDAPv2, LDAPv3, LDAPv2 multimaster etc.)*

A12: The existing legacy identity and access management do support LDAP v3.

Q13: Chapter “4.7. Security Management Subsystem (#SMS)”, requirement 4.7.19, please confirm that the list of protocols (HTTP, HTTPS/SSL and SSH) is complete and the filtering requirements apply exclusively to these protocols.

A13: The requirements of TR 4.7.19 apply to HTTP/HTTPS, as regards to URL filtering; and to SSL and SSH respectively, as regards to applying security policies to protected data communication over encrypted channels.

Q14: Regarding your technical requirement:

“3.2.2 Achieve a synthetic CINT2006 SPECint_rate CPU performance benchmark of at least 750 (seven hundred fifty), as measured at factory clock rate for maximum supported CPU configuration of the compute module”

Can you please confirm that the performance benchmark must be at least 750 for the maximum configuration of the compute module (#CSC_CM) regarding the CPUs?

A14: TR 3.2.2 indeed requires that each compute module “achieve a synthetic CINT2006 SPECint_rate CPU performance benchmark of at least 750 (seven hundred fifty), as measured at factory clock rate for maximum supported CPU configuration”.

Q15: Regarding your technical requirement:

“3.2.4 Provide no more than 50% of the maximum number of supported CPUs and with no more than 50% of the maximum amount of supported RAM”

Corroborated with the following requirement:

“3.2.5.2 At least 16 (sixteen) active CPU cores (single- or multi thread) in at least 2 (two) installed multi-core CPU chips”

It is in our understanding that you wish to purchase Compute modules (#CSC_CM) which are individually capable of supporting a number of minimum 4 CPUs and which are delivered with a minimum of 2 CPUs installed.

Can you please confirm if our understanding is correct?

A15: TR 3.2.4 corroborated with TR 3.2.5.2 indeed requires that the compute modules (#CSC_CM) be individually capable of supporting a number of at least 4 physical multi-core CPUs and be delivered with at least 2 physical multi-core CPUs installed. All other applicable requirements in the bidding documents must be met.

Q16: *Regarding your technical requirement:*

“3.1.6 Include, for each site, at least 8 (eight) identical #CSC_CM, housed and integrated in at least 1 (one) system chassis #CSC_SC”

Corroborated with the following requirement:

“3.3.3 Provide not more than 50% of the total number of supported compute modules (#CSC_CM):”

Given the current technological solution on the market your requirements can be met only by offering compute modules (#CSC_CM) which are equipped with a maximum of 2 CPUs per compute modules as all the solutions delivered with compute modules (#CSC_CM) with a maximum 4 CPUs per compute module fully occupy the system chassis (#CSC_SC).

Can you please clarify if our understanding is correct and if you require compute modules with support for a maximum of 2 CPUs per compute module (#CSC_CM)?

A16: TR 3.1.6 requires that the #CSC “include, for each site, at least 8 (eight) identical #CSC_CM, housed and integrated in at least 1 (one) system chassis #CSC_SC”.

One or more system chassis may be supplied as needed, per site, and the requirement is therefore not restrictive. The requirements remain unchanged.

Q17: *Regarding Technical Requirement 3.9.3, can you please accept also SATA drives 7.2K or 10K rpm of at least 2TB. There are no differences in performance between the two technologies.*

A17: SATA drives do not satisfy the performance needs of the project and unified (SAS-based) common I/O and control architecture is required.

SAS-NL is a non-proprietary industry standard specification, a common offering among mainstream storage vendors, and the TR 3.9.3 requirement (“Accept higher-capacity 7.2K or 10K rpm SAS-NL drives of at least 2TB”) is therefore not restrictive. The requirements remain unchanged.

Q18: *For 3.10.3 please confirm that our understanding is correct: we have to provide at least 2 disk enclosures populated with only half of the number of disks it accommodates.*

A18: TR 3.10.3 indeed requires that the Data Storage System Core (#DSC) must be supplied and configured to include at least 2 (two) expansion units (#DSC_XM) per site, each with not more than 50% of the total number of storage units (#DSC_UM) supported installed.