



## REQUEST FOR QUOTATION (RfQ15/01009)

### Procurement of Servers

#### Clarification Questions and Answers (as of 29 May 2015)

- Q.1. Item #1, Item #2 – Servers. *Requested Power Supply – 500W*: 500W – is it a minimum or maximum value for server's PSUs? Considering the use of high-performance CPUs, it is recommendable to use power supplies with value of 750W or 900W, in order to cover the power consumption of both CPUs.
- A.1. As a minimum requirement each server should be equipped with 2 hot plug power supply units of 500W each. The power supply must comply with power efficiency requirements.
- Q.2. Item #1, Item #2 – Servers. *Form-factor – 1U*: 1U rack height – is it a rigid requirement? Is it allowed to propose servers with 2U rack height, without compromising the proposal evaluation?
- A.2. All major server vendors supply 1U servers; thus, 1U is a mandatory requirement for efficient rack real estate.
- Q.3. Item #2 – server. *Disk drive – 400GB 6Gb SSD*: Could you please clarify – what kind of SSD is required? Enterprise SSD or Enterprise Value SSD?
- A.3. Both options are acceptable. The responsibility of the supplier is to supply SSDs of requested capacity, performance and warranty.
- Q.4. Item #3 – UPS. *Requested form factor – 1U*: Such form-factor (1U) is not typical for rack-mountable UPSes, especially for those ones that are supposed to be used with high-performance servers. Typical rack height for rack-mountable UPSes is 2U or 3U. Could you please revise this requirement?
- A.4. 2U or 3U UPS-es are acceptable, however the more compact version might be preferable for a more efficient use of rack space. The solicitation documents (RfQ) will be amended to reflect the increased number of units required for a fully redundant UPS subsystem.
- Q.5. Item #3 – UPS. *Requested autonomy run-time for both servers – 45 min*: Such a big runtime can be accomplished only with external battery, working in conjunction with main UPS on 40%-50% load. A runtime of a typical 2U/3U UPS itself is approx. 10-14 min. on 40-50% load. Could you please revise this requirement as well, specifying the max runtime on specific load percentage?
- A.5. The revised requirements for UPS are as follows: 3KVA, 20 min at 50% load shall be acceptable. The solicitation documents (RfQ) will be amended to reflect these requirements.
- Q.6. Item 3. UPS - You requested - Form factor 1U, including rail kit. It is quite impossible to provide about 1kW power (2x servers with 500W load) during 45 minutes from a 1U UPS. Usually 1U UPS can only provide around 5 minutes of autonomous running time for 1kW load. Therefore, in order to fulfill mentioned requirement (45 minutes autonomous running) you will need more powerful UPS with extended runtime battery module, which will consume min. 4 rack units. Could you please revise this requirement from 1U to 4U?

- A.6. The revised requirements for UPS are as follows: 3KVA, 20 min at 50% load shall be acceptable. 2U or 3U UPS-es are acceptable, however the more compact version might be preferable for a more efficient use of rack space. The solicitation documents (RfQ) will be amended to reflect these requirements.
- Q.7. Item 3. Requirements to UPS: it is requested "Shall provide minimum 45 minutes autonomy for both servers Rack – 1U". Is it acceptable if we offer an UPS solution in Rack 4U (2U Main UPS unit +2U Extended Runtime Module), otherwise it is impossible to assure 45 minutes of autonomous operating?
- A.7. The revised requirements for UPS are as follows: 3KVA, 20 min at 50% load shall be acceptable. 2U or 3U UPS-es are acceptable, however the more compact version might be preferable for a more efficient use of rack space. The solicitation documents (RfQ) will be amended to reflect these requirements.
- Q.8. Va rugam sa explicati necesitatea respectarii 100% cerintelor fata de UPS: (a) 1U, (b) 45min autonomie pentru ambele servere. Rugam schimbarea cerintei sau „Form factor: 2-3U” sau „autonomie 5-15min” (timp suficient pentru shutdown normal pentru sistem de operare). Server brand in medie aprox. are 300W. 2 servere, respectiv 700W. Pentru a asigura cerinta trebuie sa fie un UPS cel putin de 1kVA cu EBM (cu baterii aditionale pentru asigura 45min), sau un UPS de 3-5kVA (atunci 2-5U)
- A.8. The revised requirements for UPS are as follows: 3KVA, 20 min at 50% load shall be acceptable. 2U or 3U UPS-es are acceptable, however the more compact version might be preferable for a more efficient use of rack space. The solicitation documents (RfQ) will be amended to reflect these requirements.