CLARIFICATION no. 2
Procurement procedure CEPOL/PR/OP/2017/001 – Hosting, maintenance and support services for CEPOL's electronic network (e-Net)

Answers to questions sent by interested economic operators.

No.	Question	
1	Is the use of provider-owned shared physical infrastructure (networking, storage, compute) a legitimate way to satisfy "the requirements"? The requirements do not clearly state whether dedicated physical infrastructure is needed or whether a properly virtualized environment running on shared infrastructure is a possible way to satisfy the requirements, too.	Yes, use of properly virtualised environment is a legitimate way to satisfy requirements. As stated in point 3.2.1 of tender specifications, contractor shall maintain and update: • any virtualisation technology (if applicable); • the operating system (security patches, bug fixes, updates); • the component applications of e-Net (security patches, bug fixes, updates).
2	Servers: Are there any disaster recovery scenarios? Do you have prepared any? And if yes, are these scenarios already tested?	CEPOL did not prepare any disaster recovery scenarios as they are highly dependent on setup of environment which is responsibility of contractor. Contractor shall satisfy requirements from point 3.2.5.2 of Tender specifications in order to accomplish requirement of resolution time as stated in point 3.1.6 of tender specifications.
3	Servers: Is defined any DR window? That means, after DR, how old the data could be? (For example, with backing up of once per day there would be 24 hours data window)… Is it ok with you?	Disaster recovery windows is not defined. However, contractor needs to ensure maximum resolution time per high/critical incident of not more than 4 hours as stated in point 3.3.1 of Tender specifications.

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4	Servers: How monitoring is managed in current systems? Is some alerting there? What´s the CEPOL requirements for the new system? How the process monitoring systems are set up? Who is responsible for bug fixes?	It is up to contractor to choose monitoring system in best effort to satisfy Tender specifications requirement as stated in points 2.3.2, 2.3.3, 3.2.5.1, 3.2.5.4 and 3.2.6.2. Setup of monitoring system is highly dependent on choice of setup of servers and environment, but it has to fulfil requirements from points 2.3.2 and 3.1.6 of tender documentation. Contractor is responsible to provide security patches, bug fixes and upgrades as described in point 3.2.1 of tender specifications.
5	Servers: How the server are set up? Automatically or manually ?	It is up to contractor to select best method for server set up.
6	Servers: How do you manage security monitoring and updates now? What are the requirements for new system? Are you considering automatic new tools version launch/use? Is there any timetable for new version release?	Security monitoring currently will be performed by contractor and it has to ensure security of all e-Net layers and availability of CEPOL e-Net. Automatic new tools version launch/use is not recommended because it can lead to enplaned downtime. Timeframe for maintenance/upgrade should not exceed 4 occasions per year with no more than 6 hours of downtime per year. Timetable for implementation of new releases have to be liaised with CEPOL.
7	Connection: Are the servers running on VLAN(s) or we can access them freely on web without any limits? If there are on VLAN can with get the VPN access in case of migration?	Servers are running on VLAN(s) and only end-user access is possible from internet. Migration process will be agreed in close cooperation with CEPOL and current contractor. VPN access to servers can be established on user level.

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8	Servers: Will we get root access on servers during migration?	No, as this could have impact on current operation at that time, root access to servers is not possible. However, the new contractor will have necessary rights to directories and packages on servers in order to perform data migration.
9	System/Security: How will be solved the access to all system? Will we get the administrator access rights?	The new contractor will have the necessary rights to directories and packages on servers in order to perform data migration.
10	Servers/Improvement solution: How many servers (environment) are you planning to operate? We supposed 3 of them: DEV / UAT-Test / Live, is this a correct assumption? UAT and DAT on the same server with any necessary maintenance and security measures?	The contractor should provide three environments in order to fulfil requirement 3.2.4. of the tender specifications. Test and development environments should be configured on individual virtual or hardware servers so there is no possible impact during development and test phase.
11	How many man-days should we allocate for the continuous development of servers and/or tools solution?	CEPOL expect from contractor to fulfil requirements from point 3.2.1 of tender specifications. Planning of allocation of resources is contractor's responsibility and it highly dependent on development needs which can't be defined at this stage.
12	Improvements: Are you planning to upgrade all of tools to newest versions after server migration and setting support will be done?	Yes, as per point 3.2.5.1 of tender specifications, it is contractor's responsibility to apply upgrades through contract duration.

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13	In section E-NET ARCHITECTURE, the minimum ("at least") resources for e-Net in the dedicated server is described (CPU=25 reserved and dedicated cores,41Gb RAM and 1Tb storage). In addition, in annex X there is a description of the servers-virtual machines hosted in the host. By the analysis of this information we see that number of minimum reserved and dedicated CPUs for the server is equal to the sum of cores per server hosted. In our understanding, this is a 1:1 relationship between physical and virtual cores. On the other hand, virtualisation technology is able to optimise the use of physical resources, enabling a more efficient use of CPUs without impacting performance. In order to provide a more efficient use of resources always in compliance with CEPOL's requirements, we understand that we may propose a hosting infrastructure with physical servers with a number of cores inferior to the sum of virtual cores of the virtual servers hosted in it, as long as we follow best practices in virtualisation configuration and ensure performance of the e-Net platform. Could you please confirm?	Current environment uses 25 dedicated cores in 1:1 relationship. CEPOL recommends continuance of this practice. However, if contractor can satisfy "Performance-Response time" as stated in point 3.3.1 of tender specifications during the whole contractual period, it is up to contractor to choose best method for virtualization.

No.	Question	
14	Could you provide information on the monthly average dedication for support and maintenance services for e-Net (e.g. man/days per profile or number of tickets and average time for resolution)?	Currently, average number of monthly tickets with noted priorities is as follows: Low – 3/month Medium – 1/month High/Critical – 2/month Resolution times of opened tickets is fulfilling requirements according to point 3.1.6 of tender specifications.