PRE-BID CONFERENCE MINUTES

UNDP House, 30 September 2009

Mr. Olivier made a brief presentation on the architecture of the system.

LOT 1

Question: Will there be one server or two servers?

Answer: One server, with back-ups, redundancy...

Question: Internet equipment – is it server or something else, connection to Internet?

Answer: That's the CEC building – it's private VPN, it's going wherever...

Question: And if you want one side, and you are specifying the configuration, first of all, the database server has to support the Microsoft cluster. Do you want to have one external storage or internal storage for each server? If you want a cluster with two database servers, and if you want external storage, in this case there are many options and you need to specify.

What kind of cluster do you mean?

Answer: Windows Enterprise Server and Windows Database Server, but the moment you put it in external storage, that external storage must be able to support more than one LUN. If you do not have more than one LUN, the two servers will not see that storage. Windows Unix and Apple have internal, and HP - they will support that. The two servers will talk to the same external storage. Windows 2008 and Windows is different, you need the second LUN. So this storage, if you want to have it outside, you need to know that Windows server needs to look at that drive at the same time. If you just use a normal SAS cable going in and a SAS cable going out, the discs inside will be other way round for one server and for that server this way... so you must be sure that if you do it this way, that cluster must be able to support Windows to talk to the same server... The specifications at this stage calls that every single server should have 1 TB.

Question: Do you want to say, if my option is external storage, then I need 2 TB, 1 TB for each server?

Answer: Yes, there are two database servers, and each should have 1 TB.

Question: So, in the end, you want to use two database servers and two databases?

Answer: Yes, but they must be able to support cluster.

Question: CPU type – do you want Intel or AMD?

Answer: I do not specify anything.

Question: Internal disc adapter type – do you want 15K SAS? Only RAID 10 support? Or maybe RAID 5?

Answer: Raid 10.

Question: And what ports? Also RAID?

Answer: At this moment the specification is RAID 10.

Question: If you create RAID 10 in the database server and you have external storage, you need 3 discs, if you want to use RAID 1, you need 2 discs for the operating system. For the operating system, is RAID 1 enough?

Answer: Yes.

Question: And [internal] RAID Controller must support RAID 1, not 10?

Answer: In the internal one, if you do it like this, the internal one needs to have redundancy [RAID1].

Question: The specification RAID 10 is for data, not for Operating System.

Answer: Yes, but this is in case the storage is external, but if you have the 1 TB storage inside, then you do not need that.

Question: For optical drive, do you want DVD - read only or DVD – read and write?

Answer: DVD read and write.

Question: How the specified storage, external storage, in offers? You have only one storage for both servers. You should specify separately.

Answer: At this moment it is two and you just put a price for the two. You can add that in the specification separately. And it will be part of the total price for item 1.

Question: What do you mean by reserve for the server? If you have warranty period, I do not think you need reserve. There is the warranty team which can be available within 5 minutes after the failure.

Answer: We want everything that is in the specification, we do not want to disqualify a team if they cannot provide their warranty team within 5 minutes.

Question: Are the spare parts specified for each server?

Answer: Yes.

Question: The warranty period – how long do you require it to be?

Answer: 3 years.

Question: What type of processor do you want? Quad core processor is more performing than dual core processor. What kind of quad core processor shall we offer?

Answer: It's up to you, as long as it is the specified frequency, it's fine.

Question: If one company offers dual core and another company offers quad core, will they have the same chances?

Answer: The one that offers a better price will have better chances. There will be no advantage to the items with higher specifications than the minimum required.

Question: Backup tape drive – do you want to use simple, or library such as Autoloader?

Answer: It's not called for Autoloader. Do you want us to specify, it's not Autoloader

Question: You mentioned that you would use two databases separately, so, will there be only one backup?

Answer: It's for backup, it's not automated, so it's fine. You can just put a SAS cable and it will work.

Question: Do you need to install backup software to each server

Answer: That's correct.

Question: Is it two-license? Or if you want 4 servers because there are servers for web applications, you need to support backup, it's a four-license?

Answer: Database Server must support it. And there should be backup software on both servers.

Question: The server that will be backup will it be using LAN?

Answer: Yes. But the Backup Software on the Database Server must be able to see the web server. If you do not have the right agent, you cannot see other PCs. If backup exists, you need to be able to see other computers on the network.

Question: Do you want data server or web server license?

Answer: I just specified windows server 2008...

Question: How many people will be authorized on the web server? Will the users log on to the website?

Answer: This is only for internet website. We could use intranet as well, but it will be still the same IIS for run on intranet and it will be just a website. But the users will log on to the website, but not to the server. They will not log on to the operating system.

Question: Question about Internet Information Server - Internet Information Server, when you use it as a public internet web server, you can use without licensing, but this when the user does not identify themselves.

Answer: Ok, in this case they won't logon to Operating System. In this case it's form authentication, not windows authentication.

Question: How many users will be able to log on?

Answer: Potentially 9000 users.

Question: Can we give the price for the web license and as an option, data center with 9000 of licensed users?

Answer: Give two offers. If you are in doubt about some articles, give two separate offers.

Question: Will there be a connection between the switches or there will be an external connection?

Answer: For now there will be a connection between the switches. It must be able to support connection to core switches as well.

Question: If you want to make an external connection, do you make 10 GB or 1 GB?

Answer: 10.

Question: Do you want to have 10 Giga uplinks, not stackable?

Answer: It should be stackable.

Question: Stackable using 10GB or stackable with special ports?

Answer: You can stack them using 10GB ports.

Question: Will you use an optical or copper links?

Answer: It's not specified. It doesn't matter.

Question: A question about switches – specified options do you need all the options?

Answer: Yes.

Question: Network Intrusion Prevention System – you specify "High availability – yes". That yes – is it 2 pieces or 1 piece that supports high availability?

Answer: At this moment it specifies for one.

Question: Some network Intrusion Systems are based on number of internal users for licenses. Is it also 9000 users?

Answer: That is the Internet.

Question: How many internal users?

Answer: Potentially now it's only the CEC, but later it will expand to the district electoral councils and to the precinct electoral bureaus. So, at this stage there are about 50 users, but later on there will be around 9000.

Question: Ok, shall the license be for only 50 internal users?

Answer: This has mainly been used for outside attacks, not internal. On Election Day we had 50,000 hits per second and we want to be able to handle this.

Question: With regard to Management Software for KVM – if your need server will have remote control for KVM, do you need remote control for KVM?

Answer: We can do remote desktop as well, so I don't think we will use it for KVM.

Question: If I have remote KVM card on the server, do I need command switch?

Answer: Not remote, remote you will use for local KVM only.

Question: A question about mouse – PS/2 or USB – is that important?

Answer: Yes, PS/2 you need to restart the machine and USB one does not need restart.

Question: About monitor, should be external monitor?

Answer: It's like this – you pull it out and monitor is build in. A 1U KVM – Keyboard, Video and Mouse.

Question: If the capacity of one UPS is enough, can we provide only one UPS?

Answer: No, there should be two.

Question: Three-phase or two-phase?

Answer: I think at this moment we only have one phase. It might have more than one phase, but at this moment it is one phase.

Question: How long must the UPSs maintain the system?

Answer: 20 minutes per UPS.

Question: Who will install all the hardware and software?

Answer: We will install it.

Question: Why do you need cooling system for the case-rack if the front door will be perforated?

Answer: We will have raised floors so there might be that at one stage we will close those things and the suction will go in a vertical direction.

Question: The problem is that not all the producers can provide racks fitted with fans

Answer: You should look for producers who have this. Everybody is in the same situation.

Question: Should the rack be provided with something to keep it stable, fixed, to prevent it from falling?

Answer: No, just the stabilizers next to wheels.

Question: Another question about the rack – you specified coded lock – should it be with a simple key or coded lock?

Answer: If it is specified coded lock, then it should be coded lock.

Question: What kind of coding should it be? Should it be a digital electronic system or can it be just mechanical?

Answer: It can be either mechanical or electronic, but the ones that I have seen are digital.

Question: And these coded locks – do they have to be on the doors, on the panels and on the back door?

Answer: The requirements were formulated by the Center for Special Telecommunications, so, yes, everything should be there as it is specified. Every access to the rack should be secured with a coded lock. As an alternative, you can provide the rack with a simple lock with a key and also provide a safe to keep the key.

Question: The ultimate edition – should it be pre-installed or can it be separately provided as a separate item with DVD?

Answer: I think one of you asked this question before and we said it should be OEM, but all OEMs have a DVD anyway.

Question: By Video, do you mean you need a separate video card or can it be on board?

Answer: It can be integrated, but in that case it should not use part of the specified memory for Operation System.

Question: Does the printer have to be connected through USB or Network?

Answer: The printers should be local type.

LOT2

Question: MS SQL do you need Enterprise version?

Answer: Other MS SQL versions do not support Mirroring. We will need Enterprise version.

Question: Do you need 8 licenses?

Answer: Yes, if one needs one license per CPU socket and there are two servers with quad CPU, then it is 8.

Question: Is the MS SQL Database OEM?

Answer: It is not OEM it is separate.