Technical specifications call for tender EEA/ITS/03/001

Hardware, software and consultancy services for the local area network (LAN) at the European Environment Agency

1. Introduction

The European Environment Agency (EEA) has a local area network (LAN). All desktops, printers and servers, in excess of 250 devices, are linked up with a 100 Mbits/s switched network over category 5 UTP cables. A fibre based network backbone links the central network switches together with a capacity of 1 Gbits/s. In addition, a wireless network (IEEE 802.1b) has been installed and is used for certain specific needs.

The EEA is now requesting an offer for maintaining and upgrading its local area network (LAN).

2. Task description

- **2.1 Tasks** that the tenderer should be able to perform:
- (a) Provision of new hardware and software related to the above mentioned network installation.
- (b) Maintenance and diagnostics for network performance related issues.
- (c) Configuration of security related features for the current and future installation base of network components (like VLAN and VPN), including possible needs for IP telephony and IP V6.
- (d) Expansion of the current network coverage including cabling (copper or fibre) for desktop computers, servers, switches and patch panels.

2.2 Location of work

Network support and upgrades will require on-site work at EEA premises in Copenhagen for installation of network equipment and cabling. The maintenance contract for the operation of the network will require presence in the vicinity of Copenhagen, so that the contracted minimum down time can be guaranteed.

2.3 Disruption of services

Maintenance and installations of network components should have a minimum interference with the normal operation of EEA's IT infrastructure. Some installations and configurations will have to take place outside normal office hours.

3. Qualifications - conditions for participation (selection criteria):

Legal status

Copy of documents confirming the tenderer's:

- inclusion in a trade register

and/or

- VAT registration.

Financial capacity

Evidence of economic and financial capacity shall be furnished by one or more of the following documents:

- appropriate statements from banks or evidence of professional risk indemnity insurance.
- the presentation of balance sheets or extracts from balance sheets for at least the last two years for which accounts have been closed, where publication of the balance sheet is required under the company law of the country in which the economic operator is established.

Exclusion cases: The tenderer shall provide evidence that he/she is not in the situation described in Article 2.2 of the Agency's general terms and conditions applicable to contracts. The evidence shall be a recent certificate issued by the competent authority of the country concerned. Where no such certificate is issued it may be replaced by a sworn, or failing that, a solemn statement made before a judicial or administrative authority, a notary, or a qualified professional body in his/her country of origin or provenance.

Technical capacity

Provision of evidence in the tender documents:

- that the business activity of the company is relevant from the standpoint of the task in question by listing the principal services provided and supplies delivered in the past three years, with the sums, dates and recipients, public or private.
- of relevant knowledge, by enclosing CVs of the staff proposed for delivery of the consultancy services.
- of the average annual manpower and the number of managerial staff of the tenderer in the last three years.
- of ability to deliver the services at EEA's location in Copenhagen.
- of ability to repair or replace faulted equipment based on that the network should have a minimum downtime of 4 hours during office hours (08:00 17:00)

4. Award criteria (and relative weighting)

The economically most advantageous tender in terms of the following criteria:

- (a) Price of sample cases 30%
- (b) Price per consultancy hour (for senior and junior staff) 10%
- (c) Price for supporting the current base of network components (switches and WLAN hubs) 10%

(d) Quality and technological merit of products, qualification of consultants (assessed from CVs) and work offered together with compatibility with existing installation base of products at EEA and relevant industry standards, as assessed from independent performance measures, brand names, and technical documents submitted - 50%

5. Contract details

The winning contractor will be awarded a framework contract for four years on the condition that the criteria in the call for tender are constantly met.

The first specific agreement will be awarded for a period of one year on signature of the framework contract.

6. Technical specification of current installation

The EEA is occupying all six floors (basement, ground floor and floor 1-4) in the building at Kongens Nytorv 6. There are switches and patch panels in the basement, on second and forth floor connected with an optical fibre enabling network speed of up to 1 Gbits/s in the backbone. Servers and desktops are connected with CAT 5 UTP cables enabling a network speed of 100 Mbits/s.

Specification of network switches subject for support in the current installation base of switches:

9 pcs. of NBase/Xyplex NH2025 - GE with 24 UTP port

1 pcs. of NBase/Xyplex Optiswitch 800 with 72 UTP ports

1 pcs. of NBase/Xyplex Optiswitch 800 with 12 optical fibre modules (EM 2064 – 2GE)

1 pcs. of NBase/Xyplex Optiswitch 1200 with 88 UTP ports

8 pcs. of W-LAN (802.11b) access points 2102 from Allied systems

7. Sample cases

Specify and put price on the following sample cases.

7.1 Network expansion

Expansion of the physical network with cabling for 40 new network sockets (CAT 5 UTP) where each socket requires 25 metres of cabling in existing cable trays. As this is an example case all potential complications can be disregarded (like extra work when reaching between floors, going through walls and running out of sockets in the patch panel).

Forty new 100 MBits/s switched ports will be needed divided over two patch panel installation (2 switches a' 20 port each). 1 Gbit/s fibre supply exists already for each switch in each patch panel room.

Floor 00 The patch panel and switches in the basement is where the basement and ground floor's network sockets are connected to the local area network.

3 pcs. of NH2025-GE switches with 72 network ports. The patch panel has 192 sockets. No new ports needed.

- Floor 2 The patch panel and switches on second floor is where first and second floor's network sockets are connected to the local are network.
 6 pcs. ofNH2025-GE switches with 144 network ports. The patch panel has 408 sockets.
 An expansion of 20 new switched network ports necessary.
- Floor 4 The patch panel and switches on forth floor is where third and forth floor's network sockets are connected to the local are network.
 1 pcs. of Optiswitch 800 with 72 ports and 1 Optiswitch 1200 with 88 UTP ports.
 The patch panel has 400 sockets.
 An expansion of 20 new switched network ports necessary.

7.2 VLAN

A VLAN to separate 10 network ports (2 on each floor except basement) from our own internal network and only give them access directly to public Internet is also required.

7.3 IP version 6 upgrade

Upgrade of the network to use of IP V6. Description of necessary upgrades and cost related in the network with the above configuration including 100 client PCs and 20 servers.

7.4 Network monitoring

A solution for a network monitoring and load analyst system (based on this installation) that can detect congestions and other problems. NT Workstation and MegaVision (2.21 v.6) software is currently present.