

Aanbesteding SURFnet8 Photonic Layer
Aanbestedende Dienst: SURFnet B.V.
Referentie:

Omschrijving:

SURFnet is searching for a Partner that can provide a solution for the SURFnet8 photonic layer. The aim of the Tender Procedure is to award a Contract to a Partner that can provide the requested hardware, software and support.

For the next generations of the SURFnet network, SURFnet requires a new photonic layer. This Tender aims to renew the bandwidth providing photonic layer, which is used for SURFnet's domestic services and potentially the Cross Border Fiber (CBF) systems.

The scope of the Contract for delivering the SURFnet8 photonic layer consists of;

1. Hardware, i.e. the physical equipment including installation related materials;
2. Software and licenses (including software interfaces (APIs)) for planning, performance monitoring, troubleshooting, fault detection, provisioning, security and accounting, automation, and programmability;
3. Layer 0 and layer 1 control plane functionality;
4. Training and periodic training sessions for current staff and staff to be hired in the future, and external personnel;
5. A migration scenario from our existing Ciena CPL and DWDM layer to a new solution. This may include field service support and the provision of temporary hardware;
6. High level design activities for migration, introduction of new features or equipment, and complex changes;
7. M&S (Maintenance and Support). SURFnet will stock its own spares;
8. Installation and de-installation procedures for equipment and software;
9. Delivery and setup of a test bed.

Toelichting:

Dear Madam/Sir,

Please find herewith the answers to the additional questions received so far, concerning the SURFnet8 Photonic Layer tender. Insofar this information notice contains modification and/or additions to the Request for Proposals Document and/or previous information notices (Nota van Inlichtingen), the text in this notice prevails. Please take note of this document in preparing your response.

Kind regards,

Jac Kloots
SURFnet

Nr:

Categorie Eisen en criteria

Betreft RFP page 49, AR 29: RAMAN amplification sub-marine length (up to 240km)

Vraag

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Description:

Insertion losses in Rx and Tx path between EDFA pre- and post-amplifier and the line fiber connectors of the RAMAN module must be less than 3dB for the Rx path and 1dB for the Tx path, respectively

Question:

We would like to better understand this requirement. Where are these losses (a picture would clarify best) and why are there specific requirements on these losses?

Antwoord

Vrijgegeven: 21-07-2016

On a sub-marine fiber span, per direction, the RAMAN amplification function is located between an EDFA booster on one of the two cable landing stations and an EDFA pre-amplifier on the other cable landing station.

In the case of counter-propagating pumping, the C-band receive signal must not experience more than 3dB loss (caused by the optical components needed to insert the pump power and possibly other signals such as optical seeds, and signals needed for the supervisory channels, OTDR measurements etc...) between the point where the C-band signals enter the RAMAN pump unit and where they leave the RAMAN pump unit.

In analogy to the C-band receive signal, the C-band transmit signal must not experience more than 1dB loss (caused by the optical components needed to filter the remaining RAMAN pump power and other signals such as the signals needed for the supervisory channel). An insertion loss exceeding the before mentioned 3dB and 1dB, results in excess amplification and therefore undesirable OSNR degradation.

Nr:

Categorie Eisen en criteria

Betreft RFP page 48, MR56 Transponder remote client port status replication and loopback mode

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Vraag

Description:

replicate the local client port status to the remote client port to signal

Question:

What does replication mean? Does this mean any settings on the client port of the A-End should be automatically copied to the Z-End?

Antwoord

Vrijgegeven: 21-07-2016

In the context of this tender replication of the status of a client port means that, considering a transponder connection between site A and B, in case the client port goes down (up) on site A (for example because the customer brings its port down (up)) the client port on site B also goes down (up).

SURFnet interprets Tenderer's question as replication of configuration data ("any setting on the client port") from one port to the other. This is not a minimum requirement.

Nr:

Categorie Contractvoorwaarden

Betreft M&S Costs in the first year

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Vraag

The draft agreement Annex F, paragraph 8.3.2 proposes the M&S Costs to be provided for free in Year 1; yet Annex D TCO input form, tab M&S will calculate an M&S fee in Year 1. This seems contradictory. Will Surfnet pay this calculated M&S fee or not?

Antwoord

Vrijgegeven: 21-07-2016

No, as per proposed contract a first year warranty applies to any purchase and no M&S fee will be paid for items under warranty. The TCO model does not take warranty into account and does not take into account other purchases than Phase A and Phase B purchases.

Nr:

Categorie Eisen en criteria

Betreft 10G Services relation to the Core

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Vraag

Can we have more information where Surfnets deploys 10G (or lower) Services in the network? Is it expected from Candidates to perform OEO regeneration or any other action on those services?

In other words: are we expected to deliver the Optical Highway only?

Antwoord

Vrijgegeven: 21-07-2016

10G services are predominantly located in the access part of the network. Access rings must support 10G waves, however in case power budget runs out or dispersion tolerance becomes an issue, SURFnet will implement OEO regeneration or multiplexing onto a 100G waves on service platform equipment. In the case of transponders (only for 100G and beyond), OEO is considered.

Nr:

Categorie Eisen en criteria

Betreft MR15 - 17

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Vraag

What is the current Site layout for Site Type D&E

Antwoord

Vrijgegeven: 21-07-2016

Node types D and E are situated on the premises of our customers and are implemented in their main equipment room (MER). For this reason, there is a significant difference between sites. Typically, the space available varies between half a rack and one rack. In general power availability is 230V AC. ODFs are sometimes located in SURFnet's rack and sometimes concentrated on a patch panel in a different rack. If this information is not sufficient please specify the information you require in more detail.

Nr:

Categorie Eisen en criteria

Betreft MR40

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Vraag

In MR40 you state that 14HU is per Line Fiber. Can we assume this means per Nodal Degree? And is it to include Power Supplies and other overhead equipment?

Antwoord

Vrijgegeven: 21-07-2016

Yes. This applies to the larger core sites with (node type A and B), which are already on DWDM or will be brought on DWDM. The indicated height does not include Power Supplies, external to the chassis.

Nr:

Categorie Bestek/beschrijvend document

Betreft Annex D TCO Core Model

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Vraag

In Column AR of Tab Core Network Capacity Matrix you define the number of service platform 100G DWDM IF's. Do you expect candidates to offer transponders? Or are these Type III services/Alien Lambda's?

Antwoord

Vrijgegeven: 21-07-2016

Tenderer is to offer a transponder solution for 100G waves in the core network (Type I waves). Type II waves originate from service platforms under SURFnet control. Type III waves originate external to SURFnet. Offers for Type II and Type III interfaces are out of scope.