

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 MR36 page 43

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Vraag

For "MR 36: L0 and L1 control plane – restoration capabilities" , is there any requirement about the interrupted time due to restoration?

Antwoord**Vrijgegeven:** 10-08-2016

In case of a fibre break or other failure, which may cause one or more waves to fail, the control plane of the service layer (not part of this tender) will guarantee sub-second protection (<50ms) to high-priority traffic. Low priority traffic may experience a reduction in the bandwidth this traffic class relies on.

The L0/L1 control plane will start to restore the lost capacity by redeploying affected transponders. Once a new wave is in place the service layer can assign the restored bandwidth as it sees fit. The time it takes to setup the new wave must be similar to the time needed by the NMS to delete a wave and add a wave under disaster-free (normal) conditions. The excess time needed by the control plane to determine a routing solution (path and wavelength) for each affected wave is the result of the control plane and is determined automatically or is predetermined. Because SURFnet requests a control plane, SURFnet expects this excess time to be at least one order in magnitude smaller than the time it takes to delete and add the waves because if this takes more time, NOC engineers could do this manually and a control plane would add little. Once the bandwidth is restored the system may further optimize, but without any negative impact. For example, if deletion of a wave takes 30 seconds and addition of a wave takes 60 seconds, the determination of new path(s) and a wavelength(s) is expected to not exceed 9 seconds (<10%).

The same timescales also apply to possible preventive actions, taken by the control plane in case of, for example and if supported, an imminent fibre break, and other transmission impacting causes.

In case this clarification does not fully address Tenderer's concerns, Tenderer is kindly requested to further elaborate on the subject.

Nr:**Categorie** Bestek/beschrijvend document**Betreft** Page 54

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Vraag

In the document SURFnet describes (page 54) that the migration is done per span, starting at site-1 or site-4.

- Would our engineers be able to work on both sites simultaneously?
- Will on both sites a SURFnet field engineer be present to check the (client) traffic?

Antwoord**Vrijgegeven:** 10-08-2016

a. Engineers are allowed to work on both Site-1 and Site-4 under the condition that at least one service switch at intermediate sites (Site-2 and Site-3 in this example) remain connected to at least one switch situated at either Site-1 or Site-4 at any time and that after works have been completed connectivity to service switches situated at both Site-1 and Site-4 is restored. If Tenderer can indicate the type and nature of the work, SURFnet can provide a more detailed answer.

b. Yes, client traffic can be monitored remotely by NOC and assisting engineers on site.

Nr:**Categorie** Bestek/beschrijvend document**Betreft** Migration of SURFnet7 to SURFnet8

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Vraag

SURFnet is requesting a new 'coherent' core design with colorless and directionless capability and 100G traffic. It is unclear how we should treat the DWDM 10 GbE traffic that has to be migrated.

- Do we have to treat that as alien 10G wavelengths, impacting potential 100G waves?
- Do these 10G channels support colorless add/drop functionality?
- Should we multiplex these 10G services onto a 100G wavelength?

Antwoord**Vrijgegeven:** 10-08-2016

- a. Tenderer is allowed but not obliged to treat the 10G DWDM waves as alien waves. The large number of waves, varying add/drop points and wavelength, operation in the linear regime of the fibre, non-zero residual dispersion on most links are all measures that allow the non-linear Gaussian noise model to apply. SURFnet already operates several 100G links in its predominantly 10G DWDM production network.
- b. Tenderer's question cannot be answered by SURFnet because the answer depends on Tenderer's technology. For example, colourless add/drop can be achieved by a NxN-port fibre switch matrix attached to an N-port arrayed waveguide grating as well as by a WSS with a 1:N-port splitter. The 10G waves originate from and terminate onto intensity modulated direct detection 10G DWDM transceivers. For these 10G DWDM waves a filtered drop trail is required.
- c. Tenderer is not obliged to multiplex the 10G services onto a 100G wavelength. Other solutions, such as transporting the waves as Alien Waves, are also acceptable. Please present a solution you feel comfortable with from a technological point of view as well as from a TCO point of view.

Nr:

Categorie Bestek/beschrijvend document

Betreft Migration of SURFnet7 to SURFnet8

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Vraag

(Connected to the other question 41 on the "new 'coherent' core design") How many wavelengths will be running between type A and B/C nodes? And B and C nodes?

Antwoord

Vrijgegeven: 10-08-2016

During the remainder of SURFnet7, up until the transition to SURFnet8 the following numbers can be used for indicatory purposes:

The number of 10G waves in a span differ from span to span between 6 and 32. The number of waves dropped on type A, B, and C nodes ranges from 2 to 24 per degree. On type A nodes, up to a total of 96 waves are added and dropped. On type B/C nodes up to a total of 32 10G waves are added and dropped.

This does not include the projected 100G waves as outlined in the TCO model of Annex D. For the TCO model Tenderer is requested to assume the values specified in MR73.

Nr:

Categorie Bestek/beschrijvend document

Betreft Migration of SURFnet7 to SURFnet8

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Vraag

Will a second migration involve the removal of SURFnet 7 equipment with the OEO regeneration?

Antwoord

Vrijgegeven: 10-08-2016

Yes. The replacement of the SURFnet7 service switches by a new service layer equipment will lead to removal of the 10G DWDM waves.

Nr:

Categorie Contractvoorwaarden

Betreft Annex_F_Draft_agreement 20.4 page 20

44

Vraag

As indirect damages are not a legal concept under Dutch law, please add the following examples of such damages:

"loss of profit or revenues, loss of goodwill or reputation, loss of data or information, loss of interest, cost of interrupted operation of a network or punitive damages."

Antwoord

Vrijgegeven: 10-08-2016

Partly agreed. SURFnet will add to clause 20.4 : " such as loss of contracts or goodwill, any type of economic loss (including loss of profit, loss of revenue, loss of anticipated savings or loss of business), loss of Data. Etc.

Nr:

Categorie Contractvoorwaarden

Betreft Annex_F_Draft_agreement 18.2 page 19

- 45 **Vraag**
We suggest to add "Partner should be compensated for drafting transition procedures and other activities as part of the exit procedures."
Antwoord **Vrijgegeven:** 10-08-2016
Not agreed.
- Nr:**
- 46 **Categorie** Contractvoorwaarden
Betreft Annex_F_Draft_agreement 17.3.1 e page 18
Vraag
To guarantee the project will not be terminated unreasonably, we suggest to add "that a Party can only invoke such right in case the change of ownership is or is likely to have a detrimental effect on the other party."
Antwoord **Vrijgegeven:** 10-08-2016
Agreed but only with an additional text: ..." that a Party can only invoke such right in case the change of ownership is or is likely to have a detrimental effect on the other Party and the performance of its obligations under the Agreement"..
- Nr:**
- 47 **Categorie** Contractvoorwaarden
Betreft Annex_F_Draft_agreement 15.2.2 page 17
Vraag
Please define "major faults", what does Sufernet want to achieve.
Antwoord **Vrijgegeven:** 10-08-2016
Major Fault means any error or other deficiency as a result of which a Service/Equipment/Software is unsuitable for or not in conformity with its Intended Use.
- Nr:**
- 48 **Categorie** Contractvoorwaarden
Betreft Annex_F_Draft_agreement 15.2.1 page 17
Vraag
Please define "major faults", what does Sufernet want to achieve.
Antwoord **Vrijgegeven:** 10-08-2016
Major Fault means any error or other deficiency as a result of which a Service/Equipment/Software is unsuitable for or not in conformity with its Intended Use.
- Nr:**
- 49 **Categorie** Contractvoorwaarden
Betreft Annex_F_Draft_agreement 13.1 page 16
Vraag
To make it more detailed, we suggest to add the following conditions under which clause 13.10 will not apply:
a) any product or materials which are not of Partner's origin and/or which are furnished by SURFnet to Partner under this Contract;
b) use of the Services in combination with any other hardware, software or application not supplied or manufactured or otherwise approved by Partner;
c) SURFnet's failure to replace or update the Services as recommended by Partner to avoid a potential infringement.
Antwoord **Vrijgegeven:** 10-08-2016
a) Not agreed, Equipment and Software is defined as being provided by Partner; equipment and software provided by others is therefore already excluded.
b) Not agreed; the clause applies to the Equipment and Software as provided by partner, even if used in combination with other equipment and software.
c) Agreed, assuming that Partner has not only recommended this replacement or upgrade but has also provided, at its cost, the relevant Equipment and Software for the replacement or update.

- Nr:**
- Categorie** Contractvoorwaarden
Betreft Annex_F_Draft_agreement 13.9 page 16
Vraag
 To make it more clear, we suggest to add "subject to section 13.2 and 13.3 ": In the event of a difference of opinion between Parties regarding the ownership of the Intellectual Property Rights in a Service or parts of a Service, SURFnet may continue the Intended Use subject to section 13.2 and 13.3 until the dispute regarding the ownership of the Intellectual Property Rights has been settled.
Antwoord **Vrijgegeven:** 10-08-2016
 Not agreed.
- Nr:**
- Categorie** Contractvoorwaarden
Betreft Annex_F_Draft_agreement 13.7 page 15
Vraag
 Please define the terms IPR/Intellectual Property Rights.
Antwoord **Vrijgegeven:** 10-08-2016
 Intellectual Property Rights means all rights relating to any copyright (auteursrecht), patent (octrooi) patent application, trade name (handelsnaam), trademark (merk), database (databank), plantbreeder's rights (kwekersrecht), designs and models (teken- en modellen), utility models, chips, topography of semiconductor products ("topografie van halfgeleiderprodukten"), neighboring right (naburig recht), including applications for registration of any of them under the laws of the Netherlands and any similar or equivalent forms under any law or jurisdiction;
- Nr:**
- Categorie** Contractvoorwaarden
Betreft Annex_F_Draft_agreement 13.7 page 15
Vraag
 The ownership of corresponding IPR mentioned under this clause shall be discussed case by case, we suggest to change this article to "To the extent that a Service was or will be designed or created specifically for SURFnet and/or under the leadership or supervision of SURFnet or is or will be designed or created on the basis of SURFnet's instructions, the ownership of corresponding IPR shall be discussed by both parties case by case."
Antwoord **Vrijgegeven:** 10-08-2016
 Not agreed.
- Nr:**
- Categorie** Contractvoorwaarden
Betreft Annex_F_Draft_agreement 10.3 page 13
Vraag
 We suggest to change "may" to "is entitle to" :Upon expiry of the period as stated in article 8.3.2. Partner is entitle to invoice the costs for the M&S at the end of each quarter. The invoice must include, and subtract from the charge, any refunds for example due to removed Equipment and/or Software (Article 8.3.3).
Antwoord **Vrijgegeven:** 10-08-2016
 Agreed.: "may" will be changed to " is entitled to" .
- Nr:**
- Categorie** Contractvoorwaarden
Betreft Annex_F_Draft_agreement 10.2 page 13
Vraag
 We suggest to change "after" to "upon":20% of the total amount upon Acceptance of the Equipment and/or Software by or on behalf of SURFnet.

Antwoord**Vrijgegeven:** 10-08-2016

SURFnet does not understand the difference between 'after' and 'upon' in the context of this clause and SURFnet is of the opinion that the clause does not need changing. For the avoidance of doubt: Partner is entitled to invoice the remaining 20% of the agreed payment, once SURFnet has accepted the Service subject to clause 11 and has notified Partner of such Acceptance. Invoicing may therefore take place after Partner received such notice of Acceptance. Payment shall then take place within 30 days of receipt of the invoice.

Nr:**Categorie** Contractvoorwaarden**Betreft** Annex_F_Draft_agreement 10.2 page 13

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Vraag

Invoicing milestone for I&C service is missing, we suggest to add:
100% of PO amount upon service PAC by site (or batch), Partner is entitled to ask partial acceptance according to agreed delivery plan whatever the acceptance unit.

Antwoord**Vrijgegeven:** 10-08-2016

If by I&C service you mean integration and commission services, installation and commissioning activities by Partner are limited. Please see MR 74 and question 22 of the NvI 2016-07-29-1: Please note however that the answer to question 22 referred to the wrong MR (MR 72, this should have been MR 74). The correct answer should have been: "SURFnet will do the physical installation of the equipment, with the exception of MR74. During the migration of the first three branches Tenderer's field services will work with SURFnet engineers for the purpose of achieving a smooth migration for the remaining branches. This will bridge any gap between training and field practice."

The above means that no additional cost for integration and commissioning may be calculated and invoiced by Partner.

Nr:**Categorie** Contractvoorwaarden**Betreft** Annex_F_Draft_agreement 9.1.j page 13

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Vraag

To align with the comments of 9.1.i, we suggest that if the percentage deviation agreed under sub clause g) is more than 10% higher or lower then Partner shall lower or higher its prices by the agreed percentage within three (3) months after.

Antwoord**Vrijgegeven:** 10-08-2016

Not Agreed. This may lead to strategic pricing of Tenderers.

Nr:**Categorie** Contractvoorwaarden**Betreft** Annex_F_Draft_agreement 9.1.i page 13

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Vraag

We suggest to change "five percent (5%)" to "ten percent (10%)"

Antwoord**Vrijgegeven:** 10-08-2016

Agreed.

Nr:**Categorie** Contractvoorwaarden**Betreft** Annex_F_Draft_agreement 9.1 f page 13

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Vraag

We suggest to follow the industry practice:
Benchmarkers shall further take into account:
a sufficient number of comparators (if possible three comparators shall be a minimum sample);
only data that is not more than 16 months old;
the range and scope of Services being provided;
geographic location;
economies of scale;
the quality of the Services having regard to the amount charged;
the agreed service levels;
(where applicable) the charging structure over the life of the Contract and not merely the price levied in a particular year;
relevant commercial conditions, such as warranty provision;

Antwoord

Vrijgegeven: 10-08-2016

Not agreed. The relevant information will be identified in consultation with the Partner and if Partner has reasonable objections to a Benchmarkers, SURFnet shall select another Benchmarkers. The conditions and guarantees as set out in clause 9 are deemed sufficient to guarantee an objective outcome of the benchmark.

Nr:

Categorie Contractvoorwaarden

Betreft Annex_F_Draft_agreement 9 page 12

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Vraag

We suggest regarding "9. MARKET CONFORMITY AND BENCHMARK " following: "For the first time, 2 years after the Effective Date and no more than once per contract year, the benchmarkers shall be agreed by partner and shall be not be competitors of Partner."

Antwoord

Vrijgegeven: 10-08-2016

Not agreed. SURFnet reserves its rights to undertake a benchmark if circumstances give rise to doubts as to whether the prices of Tenderers are market conform. Such circumstances can not be predicted beforehand since Partner has influence over such circumstances.

Nr:

Categorie Contractvoorwaarden

Betreft Annex_F_Draft_agreement 5.2.2 page 10

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Vraag

SLA shall be agreed by both parties. We suggest to delete "In case Parties have not agreed to a final SLA within the aforementioned period, then SURFnet is entitled to unilaterally determine an appropriate final SLA."

Antwoord

Vrijgegeven: 10-08-2016

Not agreed. However SURFnet will add to the clause [...] taking into account the requirements in the Request for Proposal".

Nr:

Categorie Contractvoorwaarden

Betreft Annex_F_Draft_agreement 3 page 8

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Vraag

We suggest to delete "3. CONSORTIUM OF PARTNERS", since this clause is not applicable to us.

Antwoord

Vrijgegeven: 10-08-2016

If the awarding Tenderers is not a Consortium the clause shall not apply which is apparent from the wording of the article. Deletion is therefor not needed, however, for readability the sub articles will be removed (keeping all other numbering as is) and replaced by "not applicable".