

The following provides detailed descriptions of Cisco's Service Offerings. Please select the section of the document matching the service offering desired. If you have any questions, please email eacceptance@cisco.com.



SMARTnet and SMARnet On-Site Data Sheet
For Services purchased from Cisco Systems Inc.; Cisco Systems Canada Co.; Cisco Systems International B.V.;
Cisco Systems Australia Pty Ltd.; or Cisco Systems K.K..

Cisco's SMARTnet and SMARTnet Onsite Services contain a range of remote and onsite technical support options. This Data Sheet sets out the SMARTnet and SMARTnet Onsite Service options that are available to you for purchase. Your Purchase Order must itemize the options that you wish to purchase. Please read this Data Sheet carefully as it contains important information regarding the Services that you have purchased from us. This Data Sheet is part of the Agreement that you and Cisco have entered into.

1.0 DEFINITIONS.

- 1.1 **“Additional Services”** means installation of new hardware, system additions, Hardware upgrades, dispatch of a field engineer or non-mandatory engineering changes.
- 1.2 **“Advance Replacement”** means shipment of replacement FRU(s) in advance of receipt of failed/defective FRU(s).
- 1.3 **“Field Replacement Unit (FRU)”** means any component or sub assembly of an item or unit of Hardware which can reasonably be replaced at your location. FRU(s) may also be subject to size and weight limitations.
- 1.4 **“Four-Hour Response”** means: (i) for Advance Replacement Service, the four (4) hour time period commencing upon our problem diagnosis and determination that a FRU is required and ending when the FRU is delivered on-site; and (ii) for On-Site Service, means the four (4) hour time period commencing upon our problem diagnosis and determination that remedial On-Site Service is required and ending when our personnel arrive on-site.
- 1.5 **“Local Time”** means Local Time Monday through Friday (excluding our observed holidays)
- 1.6 **“Remedial Hardware Maintenance”** means diagnosis and on-site replacement of Hardware components with FRU(s).
- 1.7 **“Two-Hour Response”** means: (i) for Advance Replacement, the two (2) hour time period commencing upon our problem diagnosis and determination that a FRU is required and ending when the FRU is delivered on-site; and (ii) for On-Site Service, the two (2) hour time period commencing upon our problem diagnosis and determination that remedial On-Site Service is required and ending when our personnel arrive on-site.

2.0 OUR SERVICE RESPONSIBILITIES.

For the term of our Agreement, we or one of our contractors will always provide you with the Services set out in Section 2.1 and we or one of our contractors will provide one or more of the Services set out in Section 2.2 depending upon the Service option that you have selected:

2.1 Services.

- 2.1.1 TAC access 24 hours per day, 7 days per week to assist with Product use, configuration and trouble shooting issues and access to Cisco.com.
- 2.1.2 Work-around solutions or patches to reported Software problems using reasonable commercial efforts. We will either make available a Software patch from the Cisco.com Software Center (www.cisco.com/software) or ship a Maintenance Release to you for the Product experiencing the problem.
- 2.1.3 Updates where available and where you request these for supported Software. Note that Updates are limited to Software releases for which you have a valid, paid up license for each applicable Hardware platform, and for Products that are covered under a current Equipment List.
- 2.1.4 If a Feature Set Upgrade is licensed by you with a valid support contract attached, you will be entitled to Updates (subject to anything to the contrary contained in this Agreement) at the upgraded level for the licensed Hardware.
- 2.1.5 Software releases and any supporting documentation will be made available from the Cisco.com Software Center (www.cisco.com/software) or on physical media such as CDROM. Applicable supporting documentation, if available, is limited to one copy per Software release. You can, however, purchase additional copies from us.
- 2.1.6 Access to Cisco.com. This system provides you with helpful technical and general information on Cisco Products as well as access to our on-line Software Center library. Please note though that access restrictions identified by us from time to time may apply.

2.2 Advance Replacement and On-site Services. We shall use commercially reasonable efforts to provide you with the Advance Replacement Services and/or On-site Services that you have selected and detailed in Parts I and II below and where available. Some of our Services are subject to geographic and weight restrictions depending upon your location. You can always check to see where a specific level of Service is

available by accessing our Service Availability Matrix at: http://www.cisco.com/cgi-bin/front.x/agents/SAM/cca_sam_landing.cgi. Please note that destination country importation, compliance with US export controls and customs processes may condition actual delivery times. FRUs will be shipped DDU (delivery, duty unpaid) using our preferred carriers, freight prepaid by us, excluding import duties, taxes and fees where applicable. If you would like to use the services of an alternative carrier then this will be at your expense. Chassis and line card Advance Replacement Service must be at the same level of coverage. We will provide you with Advance Replacement(s) that are either new or equivalent to new. Our Advance Replacement and On-Site Support Services are not available for certain consumables (for example, cables, blower assemblies, power cords and mounting hardware).

Part I - Advance Replacement Services:

- 1) *SMARTnet 8x5xNext Business Day:*
An Advance Replacement will ship to arrive the next business day provided that our determination of Hardware failure has been made before 3:00 p.m., Local Time. If you make a request after 3:00 p.m., Local Time, we will ship the Advance Replacement the next business day.
- 2) *SMARTnet 8x5x4:*
Advance Replacement on a Four-Hour Response basis between 9:00am and 5:00pm Local Time the same business day, provided that our determination of Hardware failure has been made before 1:00 p.m., Local Time. If you make a request after 1:00 p.m. Local Time, we will deliver the Advance Replacement the morning of the next business day.
- 3) *SMARTnet 24x7x4:*
Advance Replacement parts on a Four-Hour Response basis twenty-four (24) hours per day, seven (7) days per week, including Cisco-observed holidays.
- 4) *SMARTnet 24x7x2:*
Advance Replacement on a Two-Hour Response basis twenty-four (24) hours per day, seven (7) days per week, including Cisco-observed holidays.

Part II - SMARTnet On-Site Support Services:

- 1) *SMARTnet On-Site 8x5xNext Business Day:*
Next-business-day Remedial Hardware Maintenance, together with parts, labor and materials, by 5:00 p.m. Local Time provided our determination that on-site Service is required has been made before 3:00 p.m. Local Time the prior day (otherwise, second business day will be provided for calls placed after 3:00 p.m. Local Time).
- 2) *SMARTnet On-Site 8x5x4:*
Four Hour Response for Remedial Hardware Maintenance service between 9.00am and 5.00pm Local Time the same business day, together with parts, labor and materials, provided our determination that on-site service is required has been made before 1:00pm Local Time.
- 3) *SMARTnet On-Site 24x7x4:*
Four Hour Response for Remedial Hardware Maintenance twenty four (24) hours per day, seven (7) days per week including Cisco observed holidays.
- 4) *SMARTnet On-Site 24x7x2:*
Two Hour Response for Remedial Hardware Maintenance twenty four (24) hours per day, seven (7) days per week including Cisco observed holidays.

3.0 YOUR RESPONSIBILITIES.

To enable us to provide you with the Service that you have selected we need you to do the following:

- 3.1 Provide a priority level as described in the Problem Prioritization and Escalation Guideline at Appendix A for all the calls you place.
- 3.2 Provide reasonable access to the Product through the Internet or via modem and systems passwords so that we can diagnose or correct problems remotely.
- 3.3 Use the latest release of Software, where we advise you that this will correct a reported Software problem.
- 3.4 Provide thirty (30) days Notice to us of any requested addition(s) to your Equipment List.
- 3.5 Notify us, using Cisco.com, of Product on the Equipment List, which you have moved to a new location within thirty (30) days of such relocation. Please be aware that the Services will be provided to you beginning thirty (30) days after receipt of your notification. We will also need you to notify us of any modification to the Product and configuration including upgrades or changes to FRUs not in the original configuration within five (5) days of such modification.
- 3.6 Where you have purchased the Services detailed under Section 2.2 Part I:
 - 3.6.1 pay for all travel expenses if you have requested us to perform on-site services for you. Engineering time will be billed at the then current applicable time and materials rates.
 - 3.6.2 return to us all defective or returned Product in accordance with our RMA procedure. We will need you to provide a new Purchase Order number to our Asset Recovery team to facilitate the billing of Product not returned. Our RMA procedure is available on Cisco.com.

- 3.6.3 you are responsible for the following when returning Product to us: (a) proper packaging, including description of failure and written specifications of any other changes or alterations; (b) insurance of all packages for replacement cost to be shipped FOB to our designated repair center; and (c) returns must be received within thirty (30) days; otherwise, the list price of the Hardware will be charged. Hardware received after we have issued an invoice is accepted at ten percent (10%) of the invoice amount only.
- 3.7 Where you have purchased the Services detailed under Section 2.2 Part II:
 - 3.7.1 provide an appropriate work environment and reasonable access, working space including heat, light, ventilation, electric current and outlets, and local telephone extension (or toll free domestic and international access to Cisco) for the use of our service personnel in the Product's physical location.
 - 3.7.2 back-up Software images and configurations on a regularly scheduled basis and provide those images and configurations to our on-site personnel in connection with Remedial Hardware Maintenance.
 - 3.7.3 Ensure all Products are installed below ten (10) feet. For Products installed above four (4) feet, provide ladders that reach the height of the Product.
 - 3.7.4 Provide us with the name of a point of contact prior to delivery to equipment by our personnel.
 - 3.7.5 provide TFTP capabilities or internet access for the purpose of downloading software images by our on-site personnel.
 - 3.7.6 Provide safety and security protection of our personnel or its subcontractors for your unmanned sites.
- 3.8 As you know, you are only entitled to receive Services for Product for which you have paid the applicable licensing and support fees. From time-to-time we may perform an audit of your installed base and review your records (upon reasonable advance notice) to validate entitlement. We will charge you a fee if we find that unauthorized support is being provided. This fee includes amounts which should have been paid, interest, attorneys' and audit fees. We require that you to take all necessary action (for example, disabling passwords) to ensure that any former employees and/or contractors do not access or use the Service.
- 3.9 Provide valid and applicable serial numbers for all Product problems and issues reported to us or where you are seeking information from us in connection with Product use. We may also require you to provide additional information in the form of location of the Product, city location details and zip code information.
- 3.10 When requested, provide us with a list of all personnel that you have authorized to contact us or access Cisco.com for Services and to download Software from Cisco.com or our PUT. You are responsible for reviewing the list on an annual basis and adding or removing personnel as necessary.

4.0 SERVICES NOT COVERED UNDER SMARTnet and SMARTnet Onsite.

Certain services are not covered or are subject to additional charges:

- 4.1 Any customization of, or labor to install, software.
- 4.2 Provision of Software Application Services. For purposes of this Exhibit, "Software Application Services" means services for non-resident/stand alone Software which include but are not limited to Cisco's network management Software, security Software, IP telephony Software, internet appliance Software, Cisco Software and Cisco IP.
- 4.3 Furnishing of accessories or the replacement of expendable parts (for example, cables, blower assemblies, power cords, and rack mounting kits).
- 4.4 Electrical or site work external to the Products.
- 4.5 Support or replacement of Product that is altered, modified, mishandled, destroyed or damaged by one or more of the following: (i) natural causes; (ii) environmental effects; (iii) your failure to take any required actions; (iv) misuse of the product or use other than as specified in the applicable Cisco-supplied documentation; or (v) an act or omission of a third party.
- 4.6 Services to resolve Software or Hardware problems resulting from third party products or causes beyond our control.
- 4.7 Services for non-Cisco software or hardware.
- 4.8 Any Hardware and/or memory upgrade required to run new or updated Software.
- 4.9 Additional Services are provided at the then-current time and materials rates.
- 4.10 Major, minor, and maintenance releases of Microsoft® or other third-party operating system, middleware or application software platforms. You should contact your Microsoft® or other third-party software vendor directly to obtain information on acquiring releases and/or bug fixes related to Microsoft® or other third party software platforms.
- 4.11 Service for Hardware that is installed outdoors or that is installed indoors but requires special equipment to perform such Service (for example, hoists, harness, ladders in excess of 8 feet).
- 4.12 Support for Product for which you are unable to provide us a valid and applicable serial number. In the event that you are unable to provide a valid and applicable serial number(s) for Product and we agree to provide Services then the fees payable by you shall be at our then-current time and materials rates.
- 4.13 Services for Product for which SMARTnet support has lapsed are subject to our prevailing reinstatement fees.

- 4.14 Feature Set Upgrades may not be downloaded from Cisco.com without payment of our then-current license fees.
- 4.15 Any expenses that we incur to visit your location, except as required during escalation of problems by us.
- 4.16 Pre-assembly of FRUs is not available unless otherwise agreed by us in writing.
- 4.17 Configuration services for any Software. 4.18 Services for Product that is available through new product introduction, field trial equipment, and that we obtain through acquisition prior to First Customer Ship.
- 4.19 Hardware replacement in quantities greater than three (3) FRUs, including those replacements due to pervasive issues documented in an engineering change notice or field alert unless we have troubleshot failed Hardware down to the FRU level.
- 4.20 Requests for Service at any unmanned site where your representative is unavailable to receive the FRU.

APPENDIX A - CISCO PROBLEM PRIORITIZATION AND ESCALATION GUIDELINE

PROBLEM PRIORITY DEFINITIONS. You must assign a priority to all problems submitted to us :

Priority 1: An existing network is down or there is a critical impact to your business operation. We will both commit full-time resources to resolve the situation.

Priority 2: Operation of an existing network is severely degraded, or significant aspects of the your business operation are being negatively impacted by unacceptable network performance. We will both commit full-time resources during Local Time to resolve the situation.

Priority 3: Operational performance of the network is im paired while most business operations remain functional. We are both willing to commit resources during Local Time to restore service to satisfactory levels.

Priority 4: Information is required on Software capabilities, installation, or configuration. There is little or no impact to your business operation. We are both willing to provide resources during Local Time to provide information or assistance as requested.

If you do not feel that adequate progress is being made or that the quality of our service is satisfactory, we encourage you to escalate the problem to the appropriate level of management by asking for the TAC Duty Manager.

CISCO ESCALATION GUIDELINE:

Elapsed Time	Priority 1	Priority 2	Priority 3	Priority 4
1 Hour	Customer Engineering Manager			
4 Hours	Technical Support Director	Customer Engineering Manager		
24 Hours	Vice President, Customer Advocacy	Technical Support Director		
48 Hours	President/CEO	Vice President, Customer Advocacy		
72 Hours			Customer Engineering Manager	
96 Hours		President/CEO	Technical Support Director	Customer Engineering Manager

Note: Priority 1 problem escalation times are measured in calendar hours 24 hours per day, 7 days per week. Priority 2, 3, and 4 escalation times correspond with Standard Business Hours.



Software Application Support Data Sheet
For Services purchased from Cisco Systems Inc.; Cisco Systems Canada Co.; Cisco Systems International B.V.;
Cisco Systems Australia Pty Ltd.; or Cisco Systems K.K..

Cisco's Software Application Services contain two services to support your Application Software: Cisco Software Application Support and Cisco Application Software Support plus Upgrades. These services can help you maximize the value of your Application Software by providing remote technical support and access to software updates and upgrades. This Data Sheet sets out the Application Software Service options available. Your Purchase Order must itemize the option that you have actually purchased. Please read this Data Sheet carefully as it contains important information regarding the Services that you have purchased from us. This Data Sheet is part of the Agreement that we have entered into.

1.0 DEFINITIONS.

- 1.1 **"Application Software"** means non-resident/stand alone Software products listed on the price list which include but are not limited to our network management Software, security Software, IP telephony Software, internet appliance Software, Cisco ICM Software, IPCC Software ,and Cisco Customer Interaction Suite Software.
- 1.2 **"Third Party Products"** means third party hardware and software, and all upgrades thereto, that are designated by us as required for (i) the operation of Application Software in conformance with our applicable Application Software documentation, and (ii) our support of the Application Software.

2.0 SERVICE RESPONSIBILITIES OF CISCO.

For the term of our support agreement, we or one of our contractors will provide you with the Services set out in Section 2.1 and we or one of our contractors will provide one of the Services set out in Section 2.2 if you have selected this in your Purchase Order:

- 2.1 Software Application Support ("SAS").
 - 2.1.1 TAC access 24 hours per day, 7 days per week to assist with Application Software use, configuration and trouble shooting issues and access to Cisco.com.
 - 2.1.2 Work-around solutions or patches to reported Application Software problems using reasonable commercial efforts. For an Application Software patch, we will provide a Maintenance Release to you for the Application Software experiencing the problem, as follows: (a) via download from Cisco.com (as available), or (b) shipment of Application Software or media via our nominated carrier. Requests for alternate carriers will be at your expense.
 - 2.1.3 Updates, comprising Minor Releases and Maintenance Releases but not including Major Releases. Such Updates are limited to Software releases that have been validly licensed and paid for and are covered under a current Equipment List. The Application Software releases and supporting documentation will be made available from the Cisco.com Software Center (www.cisco.com/software) or on media such as CDROM, through the Cisco Product Upgrade Tool (www.cisco.com/upgrade). Applicable supporting documentation, if available, is limited to one copy per release. Additional copies may be purchased from us.
 - 2.1.4 Provide access to Cisco.com. This system provides you with online technical and general information on our Application Software and access to our on-line Software Center library and may be subject to access restrictions as identified by us from time to time.
- 2.2 Software Application Support Plus Upgrades ("SASU"):
 - 2.2.1 Provide Application Software Support as specified in Section 2.1 above.
 - 2.2.2 Provide, upon your request, Updates comprising Major Releases, Minor Releases and Maintenance Releases for Application Software. The Application Software releases and supporting documentation will be made available from the Cisco.com Software Center (www.cisco.com/software) or on media such as CDROM, through the Cisco Product Upgrade Tool (www.cisco.com/upgrade). Applicable supporting documentation, if available, is limited to one copy per release. Additional copies may be purchased from us.
- 2.3 Software Application Services (SAS or SASU) will commence on the date of shipment of the Application Software plus one day.

3.0 SERVICE RESPONSIBILITIES OF CUSTOMER.

To enable us to provide you with the Service that you have selected we need you to do the following:

- 3.1 Provide a priority level as described in Appendix A for all calls you place.
- 3.2 Provide current shipment contact information (as necessary), as follows: contact name, title, address, email address, or FAX number.
- 3.3 Verify any in-transit damage of Application Software media.

- 3.4 Provide, at no charge to us, reasonable access to the Application Software through the Internet or via modem, as we determine in order to establish a data communication link between you and us, such that problems may be diagnosed and, where possible, corrected remotely. You agree to make available to us current system passwords as necessary to provide such remote diagnosis and support.
- 3.5 Use the latest Application Software release and latest third party software release if required by us to correct a reported Application Software problem.
- 3.6 Pay all engineering time and any travel and out-of-pocket expenses if we are requested by you to perform on-site services or services outside the scope of this Data Sheet. Engineering time will be billed at the then-current applicable time and materials rates.
- 3.7 Be responsible for providing any Hardware required to perform fault isolation.
- 3.8 You are only entitled to receive Services on Application Software for which you have: (i) a valid and current license for the latest Major and Minor Release; and (ii) paid the applicable software license and support fee. We reserve the right, upon reasonable advance notice, to perform an audit of your Application Software and records to validate entitlement and to charge for support if we determine that unauthorized support is being provided, as well as interest and attorneys' and audit fees.
- 3.9 Responsibility for all reasonable efforts to isolate the Application Software problem prior to requesting support from the TAC.
- 3.10 Responsibility for acquiring, installing, configuring and providing technical support for all: (i) Third Party Products, including upgrades thereto required by us or services related thereto; and (ii) network infrastructure, including but not limited to local and wide area data networks and equipment required by us for operation of Application Software
- 3.11 Upon our request, provide a list of all personnel you authorize to contact us or access Cisco.com for services and to download Software from Cisco.com or Cisco's PUT. You are responsible for reviewing the list on an annual basis to add or remove personnel as necessary.
- 3.12 Maintain your entire Application Software implementation currently in use under Software Application Services in order for us to provide Software Application Services for any portion of your Application Software implementation.
- 3.13 Upon opening a case with TAC, provide us the Cisco Service contract number for the Application Software for which we are requested to provide service and support. In the event that you are unable to provide a valid and applicable Contract number for the Application Software and we agree to provide Services, then the fees payable by you shall be at our then-current time and materials or non-contract service rates.

4.0 SERVICES NOT COVERED UNDER THIS EXHIBIT.

Certain services are not covered or are subject to additional charges:

- 4.1 Hardware repair and/or replacements or the provision of any Hardware or Third Party Products required to support an Update of Application Software.
- 4.2 Service will not be provided for Application Software unless you have a valid license for the then-current Major and Minor Release.
- 4.3 Support of Software other than Cisco Application Software, such as Cisco IOS or CAT OS, may be purchased under SMARTnet or SMARTnet On-Site.
- 4.4 Any customization or installation of Application Software (including installation of Updates).
- 4.5 Application Software releases that are not within the same operating platform, licensing capacity (e.g., single user, multi-user) or Application Software family as originally acquired.
- 4.6 Furnishing of accessories or the replacement of expendable parts (e.g., cables, blower assemblies, power cords, rack mounting kits).
- 4.7 Electrical or site work. 4.8 On-site support. 4.9 Support or replacement of Application Software that is altered, modified, mishandled, destroyed or damaged by one or more of the following: (i) natural causes; (ii) environmental effects; (iii) your failure to take any required actions; (iv) misuse of the Application Software or use other than as specified in the applicable Cisco-supplied documentation; or (v) an act or omission of a third party..
- 4.10 Services to resolve software problems resulting from Third Party Products, causes beyond our control, or your failure to perform your responsibilities under the Agreement.
- 4.11 Any Hardware and/or memory upgrade or Third Party Product upgrade required to run new or updated Application Software.
- 4.12 Support of Deliverables provided under a SOW.
- 4.13 Support of Third Party Products.
- 4.14 Services for Application Software for which support has lapsed are subject to our prevailing reinstatement fees.

APPENDIX A - CISCO PROBLEM PRIORITIZATION AND ESCALATION GUIDELINE

You must assign a priority to all problems submitted to us.

PROBLEM PRIORITY DEFINITIONS:

- Priority 1: An existing network is down or there is a critical impact to your business operation. We will both commit full-time resources to resolve the situation.
- Priority 2: Operation of an existing network is severely degraded, or significant aspects of your business operation are being negatively impacted by unacceptable network performance. We will both commit full-time resources during Local Time to resolve the situation.
- Priority 3: Operational performance of the network is impaired while most business operations remain functional. We are both willing to commit resources during Local Time to restore service to satisfactory levels.
- Priority 4: Information is required on our Application Software capabilities, installation, or configuration. There is little or no impact to your business operation. We are both willing to provide resources during Local Time to provide information or assistance as requested.

If you do not feel that there is adequate progress being made or that the quality of Cisco service is satisfactory, we encourage you to escalate the problem to the appropriate level of management by asking for the TAC Duty Manager.

CISCO ESCALATION GUIDELINE:

Elapsed Time	Priority 1	Priority 2	Priority 3	Priority 4
1 Hour	Customer Engineering Manager			
4 Hours	Technical Support Director	Customer Engineering Manager		
24 Hours	Vice President, Customer Advocacy	Technical Support Director		
48 Hours	President/CEO	Vice President, Customer Advocacy		
72 Hours			Customer Engineering Manager	
96 Hours		President/CEO	Technical Support Director	Customer Engineering Manager

Note: Priority 1 problem escalation times are measured in calendar hours 24 hours per day, 7 days per week. Priority 2, 3, and 4 escalation times correspond with Standard Business Hours.



Advanced Services: Focused Technical Support and Network Optimization Support Data Sheet For Services purchased from Cisco Systems Inc. (U.S. and Latin America)

Cisco Advanced Services provide responsive, preventative and consultative support of Cisco technologies and are focused on helping to address your specific networking needs. The two programs included within this Data Sheet are Focused Technical Support and Network Optimization Support.

The goal of Focused Technical Support is to build on the core operational Technical Support Services maintenance (SMARTnet, SMARTnet On-Site and Software Application Support Services) and to deliver responsive, rapid problem escalation through personalized attention and special access to engineering resources with specific knowledge of your Network and operational processes.

The goal of Network Optimization Support is to provide advice on capacity planning, configuration management and software migration for Cisco Network infrastructure to help maximize your network return on investment.

The Services set out in this Data Sheet are designed to supplement core operational Technical Support Services and all the Products in your Network need to be supported with a minimum of SMARTnet, SMARTnet On-Site or Software Application Support Services). Your Purchase Order must itemize the specific options that you have actually purchased. Please read this Data Sheet carefully as it contains important terms regarding the Services that you have purchased from us. This Data Sheet is part of the Agreement that we have entered into.

To help you navigate through this Data Sheet we have listed the Services that are available to you and cross referenced the relevant Sections. Sections 4, 5 and 6 will apply to any Service that you purchase from us. If you have purchased:

- a. Focused Technical Support – Operations Management: We will provide you with the Services in Section 2.1. You will need to meet your obligations at Section 3.1
- b. Focused Technical Support – Focused Engineering: We will provide you with the Services in Section 2.2. You will need to meet your obligations in Section 3.2.
- c. Focused Technical Support – High Touch Technical Support Option: We will provide you with the Services in Section 2.3. You will need to meet your obligations in Section 3.3.
- d. Network Infrastructure Design Assistance: We will provide you with the Services in Sections B1 and 2.4. You will need to comply with your obligations in Sections 3.4 and 3.5.
- e. Network Infrastructure Implementation Plan Assistance: We will provide you with the Services in Section B1 and 2.5. You will need to meet your obligations in Sections 3.4 and 3.6.
- f. Network Infrastructure Remote Deployment Support: We will provide you with the Services in Sections B1 and 2.6. You will need to meet your obligations in Sections 3.4 and 3.7.
- g. Cisco Network Infrastructure Software Strategy: then we will provide you with the Services in Section B1 and 2.7. You will need to meet your obligations in Sections 3.4 and 3.8
- h. Network Infrastructure Remote Software Upgrade Support: We will provide you with the Services in Section B1 and 2.8. You will need to meet your obligations in Sections 3.4 and 3.9.
- i. Network Infrastructure Performance Engineering and Optimization: We will provide you with the Services in Section B1 and 2.9. You will need to meet your obligations in Sections 3.4 and 3.10.
- j. Network Infrastructure Knowledge Transfer and Mentoring: We will provide you with the Services in Sections B1 and 2.10. You will need to meet your obligations in Sections 3.4 and 3.11.
- k. Network Infrastructure Performance Audit Option: We will provide you with the Services in Sections B1 and 2.11. You will need to meet your obligations in Sections 3.4 and 3.12.
- l. Network Infrastructure Design Review Option: We will provide you with the Services in Section B1 and 2.12. You will need to meet your obligations in Sections 3.4 and 3.5.
- n. Network Infrastructure Implementation Plan Review Option: We will provide you with the Services in Sections B1 and 2.13. You will need to meet your obligations in Sections 3.4 and 3.6.

- o. Network Infrastructure Software Strategy Review Option: We will provide you with the Services in Sections B1 and 2.14. You will need to meet your obligations in Sections 3.4 and 3.8.
- p. Network Infrastructure Onsite Support Option: We will provide you with the Services in Sections B1 and 2.15. You will need to meet your obligations in Sections 3.4 and 3.13.
- q. Network Infrastructure Deployment Project Management Support Option: We will provide you with the Services in Section B1 and 2.16. You will need to meet your obligations in Sections 3.4 and 3.9.
- r. Network Infrastructure Deployment Project Management Support Option: We will provide you with the Services in Section B1 and 2.17. You will need to meet your obligations in Sections 3.4 and 3.15.
- s. Network Infrastructure Detailed Design Development Option: We will provide you with the Services in Sections B1 and 2.18. You will need to meet your obligations in Sections 3.4 and 3.16.
- t. Network Infrastructure Implementation Engineering Option: We will provide you with the Services in Sections B1 and 2.19. You will need to meet your obligations in Sections 3.4 and 3.17.

1.0 DEFINITIONS.

- 1.1 **“Additional Services”** means installation of new Hardware, system additions, Hardware upgrades, or non-mandatory engineering changes.
- 1.2 **“Data Collection Tools”** means Hardware or Software tools that allow us to provide troubleshooting on critical cases, data analysis and report generation capabilities.
- 1.3 **“Event”** means notification of your performance of a planned Network Hardware, Software, or configuration change.
- 1.4 **“Level 1”** means support where technical staff with the appropriate skills perform installations, remedial Hardware maintenance and basic Hardware and Software configurations on Cisco Product(s).
- 1.5 **“Level 2”** means support where technical staff with the appropriate skills perform isolation, replication and diagnosis of internetworking based problems on Cisco Product(s). You should not report Software bugs to us until you have attempted to identify their source and validated the identification in your Network through appropriate testing. If you cannot duplicate the bug in your Network, we will jointly attempt to replicate and resolve those bugs in either your Network or ours. Whichever Network we agree upon, you will need to work to address the bugs on a best efforts basis to replicate them in your Network and to document your diagnosis and resolution activity before seeking our input.
- 1.6 **“Network”** means a set of interconnected and inter-working Cisco supported Hardware and Software that is implemented, operated, and supported by you from a single Network Operations Center (“NOC”).
- 1.7 **“Network Infrastructure”** means your core transport and aggregation Network technology (i.e., Metro Optical, ATM/FR, IP Core and Cisco security devices including but not limited to Firewall, IDS and VPN3000).
- 1.8 **“Network Infrastructure Size”** means the total value of Products in your Network and is based on the global list price of the Products that you have purchased.
- 1.9 **“Device Type”** means a Cisco supported Hardware product (for example, Catalyst 6509, GSR 12000 and Cisco 7200).
- 1.10 **“Feature Category”** means a Cisco supported and configured category of technical functionality on a specific Device Type (for example, OSPF routing protocol, Novell routed protocol, Fast Ethernet interface type).

2.0 OUR SERVICE RESPONSIBILITIES.

A. FOCUSED TECHNICAL SUPPORT. The purchase of Focused Engineering Services is the minimum requirement for you to be able to purchase Operations Management Services. For the term of our Agreement, we will use commercially reasonable efforts to provide you with one or more of the Services set out below depending upon the Service option you have selected:

2.1 Operations Management.

- 2.1.1 Facilitate Hardware and Software problem resolution case management on a reactive basis for technical issues reported to us by you in addition to helping you to determine if appropriate resources are being applied to the technical issues reported.
- 2.1.2 Perform operational analysis, not to exceed sixteen (16) per year, on critical issues by identifying your knowledge gaps and operational abnormalities/gaps. We will provide recommendations and identify

possible solutions that you may elect to implement to help close those knowledge and system quality gaps.

- 2.1.3 Conduct regularly scheduled conference calls with you to discuss operational TAC issues, track open cases and report progress on resolution of open cases generally.
- 2.1.4 Conduct bi-annual onsite visits to help you to review quarterly operational trend analysis reports prepared by us and that address your cases submitted to TAC. The reports will cover, amongst other things, reactive support contract usage, case statistics, quality issues, case trending (by product type, case priority, etc.), Network trending and Return Materials Authorization (“RMA”) trending.
- 2.1.5 Provide informal instructional sessions on troubleshooting tools, and processes during our onsite visits.
- 2.1.6 Notify TAC, and the engineer familiar with your Network (“Advanced Services Engineer”), if such Service has been ordered, of any planned Event by pre-opening a case and alerting TAC of relevant information related to the scheduled Event, not to exceed two (2) Events per month.

2.2 **Focused Engineering.**

- 2.2.1 Designate an engineer (“Advanced Services Engineer”) to act as the primary technical support for critical cases at the Network level.
- 2.2.2 Provide problem resolution of critical cases at the Network level.
- 2.2.3 Provide technical representation in regularly scheduled conference calls.
- 2.2.4 Visit your nominated site location to gather information and details of any changes to your Network. We will review critical cases and review problem root cause analysis with you. A maximum of two (2) visits per year may be conducted.
- 2.2.5 Perform root cause analysis, not to exceed four (4) per year, on technical issues relating to your Network Infrastructure. Performance of root cause analysis is dependant upon us having all necessary available information with which to perform a root cause analysis.
- 2.2.6 Provide Software recommendations to address your documented and communicated Network functionality requirements. Our recommendations (focused on recommending appropriate Updates) shall apply to critical cases in respect of an affected area of your Network.
- 2.2.7 Provide certain Data Collection Tools during the term of the Services. Data Collection Tools may or may not include Hardware or Software. We retain full right, title and interest to the Data Collection Tools.

2.3 **High Touch Technical Support Option.** In order to receive this option, you must have purchased **Operations Management and Focused Engineering**. Under this option, we shall provide the following Services, where available, on a twenty-four (24) hours per day, seven (7) days per week basis :

- 2.3.1 Direct access to the High Touch Technical Support team via a Cisco provided phone number.
- 2.3.2 Response to you within fifteen (15) minutes on Priority 1 or Priority 2 calls. For Priority 3 and Priority 4 calls, our response shall be within sixty (60) minutes.

B. NETWORK OPTIMIZATION SUPPORT. The purchase of Focused Engineering Services set out in Part A, together with those components of our Network Optimization Support (“NOS”) comprising Cisco Network Infrastructure Software Strategy and Network Infrastructure Remote Software Upgrade Support Services is the minimum requirement for you to be able to purchase the other NOS Services set out in Part B. We will use commercially reasonable efforts to provide these Services for your Network Infrastructure during Standard Business Hours (unless stated otherwise). The following General Support provisions will apply to all Service options that you have selected:

B.1 **General Support.**

- B.1.1 Designate an engineer (“Advanced Services Engineer”) to act as the primary interface with you for your Network Infrastructure.
- B.1.2 Schedule four quarterly visits per year (not to exceed eight (8) days in aggregate) with you to visit your site and review proactive deliverables and activities and help you plan for the next quarter. Where you have ordered Focused Engineering Service, the two visits specified in that Service component will be included in the four total visits described in this General Support section. Any additional visits will be charged at our then-current travel and labor rates.

- B.1.3 Schedule periodic conference calls (usually weekly) to review your Network Infrastructure status, planning and the Services being provided.
- B.1.4 Establish a Customer-specific Cisco email alias to facilitate communication with Cisco Advanced Services Engineers.
- B.1.5 Provide certain Data Collection Tools during the term of the Services. Data Collection Tools may or may not include Hardware or Software. We retain full right, title and interest to the Data Collection Tools. In addition to Cisco provided tools, the Advanced Services Engineer may utilize the data that you have provided to us, scripts or internal tools to assist us in collecting data from your Network.

2.4 Network Infrastructure Design Assistance.

- 2.4.1 We will consult with your networking staff in a series of face-to-face and remotely conducted meetings to develop a thorough understanding of your Network Infrastructure design requirements. The focus here will be on concerns around resiliency, self-recovery, scalability, the ability to handle increased traffic demands and Quality of Service (“QoS”).
- 2.4.2 Provide a Network Infrastructure design review that may include, amongst other information, the following:
 - Review of your design requirements, priorities, and goals
 - Analysis of impact of new requirements to your existing Network Infrastructure
 - Review of your Network Infrastructure architecture and topology
 - Review of your protocol selection and configuration
 - Review of feature selection and configuration
 - Report describing design review together with our recommendations

The number of design reviews that we provide will vary depending on the size of your Network Infrastructure and Network expansion plans and shall be limited to the amount shown below:

Network Infrastructure Size	Design Reviews
<\$40M	2
\$40M-\$80M	3
>\$80M	4

- 2.4.3 Provide ongoing, informal Network Infrastructure design and architecture consultation.
- 2.4.4 Provide ongoing information on design related Cisco Security Alerts that may impact key Network Infrastructure Products.

2.5 Network Infrastructure Implementation Plan Assistance.

- 2.5.1 We will evaluate and understand your implementation and deployment plan through a series of remotely conducted meetings and interviews with your staff. We will review your deployment plan, identify possible Network disruptions and provide sample configurations that you can leverage to determine if devices in your Network Infrastructure are properly configured to support the services you intend to offer.
- 2.5.2 Provide a Network Infrastructure implementation plan review that may include, amongst other information, the following:
 - Review and analysis of your Network Infrastructure deployment and integration plan
 - Review of proposed configuration templates
 - Review of turn-up test plan
 - Analysis of any changes that Network operations staff should be alerted to
 - Report on recommendations.

The number of implementation plan reviews will vary depending on the size of your Network Infrastructure and Network expansion plans and shall be limited to the amount shown below:

Network Infrastructure Size	Implementation Plan Reviews
<\$40M	2
\$40M-\$80M	3
>\$80M	4

- 2.5.3 Provide ongoing, informal Hardware and configuration change impact analyses, reviews, and recommendations. The number of monthly change impact reviews will vary depending on the size of your Network Infrastructure and Network expansion plans and shall be limited to the amount shown below:

Network Infrastructure Size	Change Impact Review (Monthly)
<\$40M	2
\$40-\$80M	3
>\$80M	4

- 2.6 **Network Infrastructure Remote Deployment Support.** We will provide you with remote resource to help address problems with your Network Infrastructure Hardware and configuration issues during a major deployment into a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes), provided that we have received not less than twenty-one (21) days prior written notice of a request by you for this support. You will need to submit a detailed request and schedule to us before we can provide this support to you. The number of Events and total aggregate standby time will vary depending on the size of your Network Infrastructure and Network activity and will be limited in any one-month period for all Hardware, configuration, and Software Events combined as shown below. (Note: Software Events are covered under Network Infrastructure Remote Software Upgrade Support)

Network Infrastructure Size	Total Number of H/W, S/W and Configuration Events Combined (Monthly)	Total Aggregate Standby Time (Hourly)
<\$40M	2	16
\$40M-\$80M	3	20
>\$80M	4	24

2.7 **Cisco Network Infrastructure Software Strategy.**

- 2.7.1 Provide Software strategy assessment(s), based on your ongoing functional and technical Network Infrastructure requirements. Each assessment typically includes, amongst other information, the following:
- Review of your feature requirements and performance/availability objectives
 - Review of new Software feature releases (for example, Cisco IOS, other Cisco OS Software and Cisco micro-code) with respect to your business goals
 - IOS software inventory and profile report
 - Software strategy report that includes an analysis report outlining the recommended releases of Software for your Network Infrastructure environment and the potential impact that running such releases may have on your Network
 - Review of your Software verification test plan and report on recommended changes
 - Assist in the preparation and review of your Software migration plan
- 2.7.2 Provide ongoing, informal Software impact analysis, review, and recommendations.
- 2.7.3 Provide ongoing information on software related Cisco Security Alerts that may impact key Network Infrastructure components
- 2.7.4 Provide proactive critical bug notification for the recommended Software on key Network Infrastructure components.
- 2.7.5 The number of Software impact analysis reviews, assessments and frequency of proactive bug notifications will vary depending on the size of your Network Infrastructure and Network activity and shall be limited to the amount shown below:

Network Infrastructure Size	Assessments (yearly) (Section 2.7.1)	Software Impact Analysis (Section 2.7.2)	Proactive Bug Reports (Section 2.7.3)
<\$10M	1	6/yr.	Monthly
\$10M-\$40M	2	1/mo.	Weekly
\$40M-\$80M	2	2/mo.	Weekly
\$80M-\$160M	2	3/mo.	Weekly
>\$160M	2	4/mo.	Weekly

- 2.8 **Network Infrastructure Remote Software Upgrade Support.** Provides you with remote resource to help address problems with your Network Infrastructure Software during major upgrades on a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day a week standby basis to remotely assist you in major Software upgrades, provided that we receive at least twenty-one (21) days prior written notice from you. You will need to submit a detailed request and schedule to us prior to any such activity. The number of Events and total aggregate standby time will vary depending on the size of your Network Infrastructure and Network activity and will be limited in any one-month period for all Hardware, configuration, and Software Events combined as shown below. (Note – Hardware and configuration Events are covered under Network Infrastructure Remote Deployment Support).

Network Infrastructure Size	Total Number of H/W, S/W and Config. Events Combined	Total Aggregate Standby Time (Hourly)
<\$10M	6/yr.	8
\$10M-\$40M	2/mo.	16
\$40M-\$80M	3/mo.	20
>\$80M	4/mo.	24

2.9 **Network Infrastructure Performance Engineering and Optimization.**

2.9.1 Provide a performance analysis of your Network Infrastructure to identify potential performance and optimization issues and review the validity of key device configurations in the context of new traffic patterns or changes in Network size that are planned or have been implemented by you. Such performance analysis typically includes the following:

- Collection of key performance data
- Identification of exception reports
- Analysis of key device configurations
- Analysis of resource utilization
- Assistance to define Network-specific performance criteria
- Report on performance optimization recommendations such as system tuning and protocol optimization changes

The number of performance analyses will vary depending on the size of your Network Infrastructure and Network expansion plans and shall be limited to the amount shown below:

Network Infrastructure Size	Performance Analyses
<\$40M	4
\$40M-\$80M	5
>\$80M	6

2.9.2 Perform ongoing, informal performance tuning checks for your Network Infrastructure.

2.9.3 Provide ongoing information on performance related Cisco Security Alerts that may impact key Network Infrastructure Products.

- 2.10 **Network Infrastructure Knowledge Transfer and Mentoring.** Provide you annually with up to four (4) technical update meetings each with duration of up to four (4) hours. These meetings shall be conducted at your site by an Advanced Services Engineer or another senior Cisco engineer with a view to providing a technical update training on a topic that is mutually agreed upon and relevant to the Products and Cisco technologies existing on your Network Infrastructure. These meetings are usually held in conjunction with the four quarterly review meetings per year.

C. NETWORK OPTIMIZATION SUPPORT SERVICE OPTIONS. The following Service options are available only in conjunction with the Services set out in Part B unless otherwise stated. We will use commercially reasonable efforts to provide the Service Option(s) that you have purchased:

2.11 **Network Infrastructure Performance Audit Option.** Under this option, which is available under NOS or as a stand alone Service offering, we will provide the following Services during Standard Business Hours, unless stated otherwise:

- 2.11.1 Provide one (1) Network Infrastructure performance audit as selected by you out of those currently available and identified by us from time to time. The audit typically includes the following:
- Performance report at node and interface level
 - Configuration report: protocol, node and interface

- Software report including conflicts and inconsistencies
 - Hardware report including conflicts and inconsistencies: HW versions, firmware versions , micro-code versions, board revisions
- 2.11.2 Provide detailed recommendations, with a view towards helping you to optimize your Network Infrastructure stability.
- 2.12 **Network Infrastructure Design Review Option.** You must have **Network Infrastructure Design Assistance** across your Network Infrastructure in order to the purchase the Network Infrastructure Design Review described in this section. Under this option, we will perform one (1) additional Network Infrastructure Design Review to those purchased under Section 2.4.2 during Standard Business Hours, unless stated otherwise.
- 2.13 **Network Infrastructure Implementation Plan Review Option.** You must have **Network Infrastructure Implementation Plan Assistance** across your Network Infrastructure in order to the purchase the Network Infrastructure Implementation Plan Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:
- 2.13.1 Perform one (1) implementation plan review that typically includes the following:
- Review and analysis of your Network Infrastructure deployment and integration plan
 - Review of proposed sample configurations
 - Review of turn-up test plan
 - Analysis of any changes that your Network operations staff should be alerted to
 - Report on recommendations.
- 2.13.2 Provide you with remote deployment support for up to three (3) months from completion of report provided under this option. We will make available, upon receipt of not less than twenty-one (21) days prior written request by you, a designated support contact who can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes). You agree to submit a detailed request and schedule to us prior to any such activity. Such request for assistance shall be limited one (1) Event with a total standby time of eight (8) hours in any one-month period.
- 2.14 **Network Infrastructure Software Strategy Review Option.** You must have **Network Infrastructure Software Strategy** across your Network Infrastructure in order to purchase the Network Infrastructure Software Strategy Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:
- 2.14.1 Provide one (1) Software strategy assessment, based on your ongoing functional and technical Network Infrastructure requirements. Such assessment typically includes the following:
- Review of feature requirements and performance/availability objectives
 - Review of new Software feature releases (for example, Cisco IOS, other Cisco OS Software, and Cisco micro-code) with respect to your business goals
 - IOS software inventory and profile report
 - Software strategy report that includes an analysis report outlining the recommended releases of Software for your Network Infrastructure environment and the potential impact that running such releases may have on your Network
 - Review of your Software verification test plan and report on recommended changes
 - Assist in the preparation and review of Software migration plan.
- 2.14.2 Provide you with remote deployment support for up to three (3) months from completion of the report provided under this option. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-days a week standby basis to remotely assist you in major Software upgrades provided you give us not less than twenty-one (21) days prior written notice. Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity. Such request for assistance shall be limited one (1) Event with a total standby time of eight (8) hours in any one-month period.
- 2.15 **Network Infrastructure Onsite Support Option.** You must have the Services set forth at Sections 2.1, 2.2 and 2.4-2.10 provided across your Network in order to purchase the Network Infrastructure Onsite Support described in this Section 2.15. The locally based Cisco Advanced Services engineer will provide the Services detailed in this Section 2.15 for two (2) days or five (5) days per week at one of your locations depending upon the amount of time ordered by you. The locally based Cisco Advance Services engineer will not be available to provide the Services detailed in this Section 2.15 for a period of one (1) week each Cisco quarter. Under this option, Cisco shall provide the following Services during Standard Business Hours, unless stated otherwise:
- 2.15.1 Provide you with a locally based Cisco Advanced Services engineer to help you with the responsibilities you

have so that we can provide the NOS deliverables as ordered. This may include:

- Directing the collection of information for design or implementation reviews
- Driving data collection activities for performance analyses

2.15.2 Provide you with ongoing, hands-on technical leadership from a locally based Cisco Advanced Services engineer to help you to plan and execute the NOS design, implementation, performance engineering, and network optimization recommendations.

2.16 **Network Infrastructure Software Upgrade Assistance Option.** You must have **Network Infrastructure Software Strategy and Network Infrastructure Remote Software Upgrade Support** across your Network Infrastructure in order to purchase the Network Infrastructure Software Upgrade Assistance described in this section. Under this option, we will provide the following Services during Standard Business Hours for a predetermined period of time (from 1-12 months in increments of one month), unless stated otherwise:

2.16.1 Team with your engineers to create a Software Test Plan utilizing our test templates and best practices as detailed in Software Strategy Assessment report for up to two (2) Device Types and six (6) Feature Categories for a single Software upgrade project. The actual number of Device Types and Features Categories will vary depending upon what you actually order.

2.16.2 Provide remote support for your engineers during Software test plan execution, provide interface to our team to resolve any issues identified during testing and review the test results.

2.16.3 Team with your engineers to create a Software Migration Project Plan for the Software upgrade in your Network for up to two (2) Device Types and six (6) Feature Categories for a single Software upgrade project. The actual number of Device Types and Features Categories will vary depending upon what you actually order.

2.16.4 Team with your engineers to create Methods & Procedures for each Device Type utilizing our templates and knowledge bases.

2.16.5 Provide consultative, onsite software upgrade support at your central NOC or NIS location during one maintenance window, which may be outside of Standard Business Hours. This includes teaming with your engineers to perform post-upgrade verification testing and one day of onsite "day 2" support (i.e. support provided in a production and operational environment during Standard Business Hours following the upgrade and verification testing). The actual number of maintenance windows may vary depending upon what you actually order.

2.17 **Network Infrastructure Deployment Project Management Support Option.** This option does not require the purchase of any other NOS Service component or Option. This option provides Network project management assistance during the planning, design, and implementation phases of a major Network Infrastructure deployment project. Under this option, we will provide the following Services during Standard Business Hours for a predetermined period of time (from 1-12 months in increments of one month), unless stated otherwise:

2.17.1 Team with you to develop plan for rolling out new Hardware, Software or configurations that may include:

- Detailed set of tasks (Work Breakdown Structure)
- Schedules including critical dependencies (Project schedule)
- Identification of significant risk factors (Risk Mitigation Plan)
- Procedures for managing project documentation, assets, and issues
- Processes for project reporting
- Contact lists, escalation lists

2.17.2 Provide project management expertise to help facilitate your project management team's execution of its deployment plan and may include assistance in the following areas:

- Kick-off meeting (s)
- Managing site survey schedule
- Managing pilot
- Project meetings to review status and address project deployment related issues
- General communications
- Coordinating resources around the project deployment
- Track, manage, update the project deployment schedule
- Team with customer to build staging plan and manage the project deployment schedule
- Project documentation
- Implementation of Risks Mitigation Plans and ongoing risk identification

- Ongoing mentoring of your project management team on project management methodology

Network Infrastructure Deployment Project Management Support is provided for a predetermined period as set forth on the Purchase Order and agreed by us. If there are delays outside of our control, we shall not be held responsible for activities that are not completed. You can purchase an additional Network Infrastructure Deployment Project Management Support options to extend the Service.

- 2.18 **Network Infrastructure Detailed Design Development Option.** This option does not require the purchase of any other NOS Service component or Option. If it is purchased with Network Infrastructure Design Assistance, then it replaces one of the Design Reviews provided under that Service. Under this option, we will provide the following Services during Standard Business Hours for a predetermined period of time (from 1-12 months in increments of one month), unless stated otherwise. These activities are for a single detailed design project with up to two (2) Device Types. Actual number of Device Types will vary depending upon what you actually order:
- 2.18.1 We will summarize and help you to validate your Network design requirements using the following inputs:
- Interviews with your personnel to gather business and technical requirements
 - Documentation that you have supplied to us, detailing business and technical requirements, for example, marketing services description, technical services description
 - High Level Network Design that covers your proposed Network
 - Your existing network design
- 2.18.2 Team with you to create a Low-level Network Design Document, which typically includes,
- Data Flow Specification
 - Services of the Network
 - Physical Network Topology
 - Logical Network Design
 - Routing strategy (for example, OSPF, BGP and ERGIP)
 - Definition of the outbound interfaces to Customer network management system
 - Addressing Strategy (e.g., IP, IPX, Subnetting, VLSM, Summarization)
- 2.18.3 Provide up to three (3) Network design feedback / review sessions. Your design engineers will need to handle any changes beyond the final review session.
- 2.19 **Network Infrastructure Implementation Engineering Option.** This option does not require the purchase of any other NOS Service component or Option. If it is purchased with Network Infrastructure Implementation Plan Assistance, then it replaces one of the Implementation Plan Reviews provided under that service. Under this option, we will provide the following Services during Standard Business Hours for a predetermined period of time (from 1-12 months in increments of one month) These activities are for a single implementation project with up to two (2) Device Types. Actual number of Device Types will vary depending upon what you actually order:
- 2.19.1 Team with you to undertake site surveys for up to three (3) representative sites. The actual number of sites will vary depending upon what you actually order.
- 2.19.2 Team with you to develop a Network staging plan that typically includes:
- Physical and logical topologies
 - Configurations
 - Testing scripts
 - Acceptance criteria
- 2.19.3 Team with you to develop Network implementation plans (NIP) for up to three (3) representative sites. The actual number will vary depending upon what you actually order. A NIP may include:
- Site-specific installation tasks and checklists
 - Documentation of node and site specific information
 - Guidelines for the Implementation Engineer(s)
 - Installation and site commissioning tests
- 2.19.4 Team with you to develop a Network Ready for Use Plan

- 2.19.5 Team with you to execute the NIP for up to three (3) representative sites . The actual number will vary depending upon what you actually order. The assistance may include:
 - Assisting your engineers with loading device configurations
 - Assisting your engineers with executing test plans and documenting results
 - Assisting your engineers with resolving implementation issues
- 2.19.6 Provide remote support for your engineers during the execution of the Network Ready For Use Plan
- 2.19.7 Provide consultative, onsite support at your central location during integration of the new Network implementation with your existing Network during one (1) maintenance window. Team with your engineers to perform post-implementation verification testing and one (1) day of onsite "day 2" support. The actual number of maintenance windows will vary depending upon what you actually order.
- 2.19.8 Network Infrastructure Implementation Engineering is provided for a predetermined period of time as set forth on the Purchase Order and agreed by us. If there are delays outside of our control, we shall not be responsible for activities that are not completed. You can purchase an additional Network Infrastructure Implementation Engineering options to extend the Service.

3.0 SERVICE RESPONSIBILITIES OF CUSTOMERS. To enable us to provide you with the Service that you have selected we need you to do the following:

A. FOCUSED TECHNICAL SUPPORT.

3.1 Operations Management.

- 3.1.1 Designate a representative to act as our primary interface.
- 3.1.2 Coordinate our onsite visits and provide us with not less than thirty (30) days' notice of any visit you reschedule. Rescheduled visits will be subject to additional fees.
- 3.1.3 Attend regularly scheduled conference calls for open case reviews.

3.2 Focused Engineering.

- 3.2.1 Designate an individual within your technical support organization to serve as a liaison to our Advanced Services Engineer.
- 3.2.2 Ensure that your personnel know how to initiate cases and access Focused Engineering Support.
- 3.2.3 Advise us of your standard operating procedures as they relate to your business practices, internal operational nomenclature and Network to allow us to effectively communicate and discuss cases with you and your staff in the context of your business environment.
- 3.2.4 Provide all necessary information to enable us to perform root cause analysis.
- 3.2.5 Provide us with reasonable electronic access to your Network.
- 3.2.6 Provide us with a Network topology map, configuration information, and information of new features being implemented.
- 3.2.7 Notify our Advanced Services Engineer of any major technology additions or changes to your Network.
- 3.2.8 Provide all necessary device, platform, feature, and release train requirements that exist in your environment.
- 3.2.9 Agree that we will only support generally available Products and Software releases/versions unless we agree otherwise.
- 3.2.10 Ensure that Data Collection Tools are located in a secure area at your site, within a Network environment protected within a firewall and on a secure LAN, with access restricted to those of your employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the output of the Data Collection Tools. Where Data Collection Tools provided by Cisco represent Software, you will need to make appropriate computers available and download Software as needed. You will need to immediately return Data Collection Tool(s) to us upon the earlier of: (i) expiration or termination of the Services or (ii) upon our request that the Data Collection Tools(s) be returned to us.

3.3 High Touch Technical Support. Report Priority 1 & 2 problems by telephone. We will provide you with valid telephone numbers. Response times do not include problems reported via Cisco.com or other electronic means.

- B. NETWORK OPTIMIZATION SUPPORT.** To enable us to provide you with the Service that you have selected we need you to comply with the following General Responsibilities for all Services that you have selected under NOS baseline Service offering:
- 3.4 General Responsibilities**
- 3.4.1 Designate at least two (2) but not more than six (6) technical representatives (who are employees) in your centralized Network support center (“technical assistance center”), to act as the primary technical contacts for our Advanced Services Engineer. These contacts must be senior engineers with the authority to make any necessary changes to your Network configuration. One individual, who must be a senior member of your management or technical staff, will be designated as your primary point of contact to manage the implementation of the Services you have purchased (for example, chair the weekly conference calls, assist with prioritization of projects and activities).
 - 3.4.2 Within one (1) year from the commencement of this Exhibit, you must have at least one (1) Cisco Certified Internetworking Expert ("CCIE") trained employee or one (1) employee that has achieved, in our sole determination, an equal standard through training and experience as designated contacts .
 - 3.4.3 Your technical assistance center shall maintain centralized network management for your Network capable of providing Level 1 and Level 2 support.
 - 3.4.4 Provide our Advanced Services Engineer with reasonable electronic access to your Network.
 - 3.4.5 Ensure that Data Collection Tools are located in a secure area at your site, within a Network environment protected within a firewall and on a secure LAN, under lock and key and with access restricted to those of your employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the output of the Data Collection Tools. Where Data Collection Tools provided by Cisco represent Software, you will need to make appropriate computers available and download Software as needed. You shall remain responsible for any damage to or loss or theft of the Data Collection Tools while in Customer’s custody. You will need to immediately return Data Collection Tool(s) to us upon the earlier of: (i) expiration or termination of the Services or (ii) upon our request that the Data Collection Tools(s) be returned to us.
 - 3.4.6 Provide a Network topology map, configuration information, and information of new features being implemented as needed.
 - 3.4.7 Notify our Advanced Services Engineer of any major Network changes (for example topology, configuration, new IOS releases).
 - 3.4.8 Notify us in writing within ten (10) days of any change to the composition of your Network. We may require modifications to the fee payable if the Network composition has increased beyond our original pricing quote for Services.
 - 3.4.9 Create and manage an internal email alias for communication with our Advances Services Engineer.
 - 3.4.10 Retain overall responsibility for any business process impact and any process change implementations.
- 3.5 Network Infrastructure Design Assistance and Network Infrastructure Design Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.5.1 Your Network Infrastructure design.
 - 3.5.2 The business and technical requirements for your new design.
 - 3.5.3 Any constraints faced by you.
 - 3.5.4 Current and planned traffic characteristics.
- 3.6 Network Infrastructure Implementation Plan Assistance and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.6.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
 - 3.6.2 Identify low risk and high risk areas of your Network based on the Network Infrastructure traffic.
 - 3.6.3 Your Implementation plan and deployment schedule.
 - 3.6.4 Maintenance window information and any other constraints.
 - 3.6.5 Your change control process.
- 3.7 Network Infrastructure Remote Deployment Support and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities, we need you to provide the following:
- 3.7.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).

- 3.7.2 Identify low risk and high risk areas of the Network based on the Network Infrastructure traffic.
- 3.7.3 Your Implementation plan and deployment schedule.
- 3.7.4 Maintenance window information and any other constraints.
- 3.7.5 Your change control process.
- 3.7.6 Contact information and details of your escalation process.
- 3.7.7 Review details of planned Network changes with our Advanced Services Engineer.
- 3.8 **Network Infrastructure Software Strategy and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.8.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.8.2 Your business and technical requirements for new Software releases.
 - 3.8.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.8.4 Your certification process and lab testing process.
 - 3.8.5 Your change control process.
- 3.9 **Network Infrastructure Remote Software Upgrade Support and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.9.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.9.2 Your business and technical requirements for new Software releases.
 - 3.9.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.9.4 Your certification process and lab testing process.
 - 3.9.5 Your change control process.
 - 3.9.6 Contact information and details of your escalation process.
 - 3.9.7 Review details of planned Network changes with our Advanced Services Engineer.
- 3.10 **Network Infrastructure Performance Engineering and Optimization.** In addition to the General Responsibilities, we need you to provide the following:
 - 3.10.1 Any service level agreements or Network Infrastructure performance requirements.
 - 3.10.2 Details of critical applications supported by your Network Infrastructure.
 - 3.10.3 Expected Network growth, application mix changes.
 - 3.10.4 Data collection activities as needed to facilitate a specific Cisco analysis.
- 3.11 **Network Infrastructure Knowledge Transfer and Mentoring.** In addition to the General Responsibilities we need you to: (1) provide us with a set of requirements on the topics you want us to cover and background information on the skill sets of your proposed audience; and (2) ensure that facilities and equipment are available to host the Transfer of Information (“TOI”) sessions.
- 3.12 **Network Infrastructure Performance Audit Option.** In addition to the General Responsibilities, Customer shall:
 - 3.12.1 Ensure that your key Networking and operational personnel are available to participate in interview sessions as required in support of the selected audit.
 - 3.12.2 Provide assessments and audit data collection support. You will need to help install the Data Collection Tools into your production, and if applicable, test Network environment. You will need to ensure that we have all relevant device information needed for the audits, including the required device lists.
 - 3.12.3 Provide all information and data that you have gathered from tools used by you for Network data analysis and monitoring.
- 3.13 **Network Infrastructure Onsite Support Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.13.1 Reasonable access to computer equipment, workstation, facilities, workspace and telephone for our locally based Cisco Advanced Services Engineer’s use.

- 3.13.2 Contractor badge for locally based Cisco Advanced Services Engineer to enable unescorted access into your buildings.
- 3.13.3 Involve our locally based Cisco Advanced Services Engineer in your Network Infrastructure planning and operations meetings (including, but not limited to meetings involving the execution of NOS design, implementation, software or performance engineering recommendations).
- 3.14 **Network Infrastructure Software Upgrade Assistance Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.14.1 Designate a single point of contact to whom all of our communications may be addressed and who has authority to act on all aspects of the Services for this engagement.
 - 3.14.2 Designate a project manager who has overall responsibility for the success of your Network deployment.
 - 3.14.3 Details of current releases running in the Network Infrastructure and current configuration templates.
 - 3.14.4 Your business and technical requirements for the Software upgrade.
 - 3.14.5 Details of planned Network changes, for example, new technology applications or major design changes (both short term and long term).
 - 3.14.6 Your Software verification process and lab testing process.
 - 3.14.7 Your Software change control process.
 - 3.14.8 Contact information and details of your escalation process.
- 3.15 **Network Infrastructure Deployment Project Management Support Option.** In addition to the General Responsibilities you need to do the following:
 - 3.15.1 Designate an overall single point of contact to whom all of our communications may be addressed and who has authority to act on all aspects of the Services for this engagement.
 - 3.15.2 Designate a project manager who has overall responsibility for the success of your Network deployment.
 - 3.15.3 Provide our project manager with a list of your contacts and their designated roles and responsibilities for your Network deployment.
 - 3.15.4 Identify primary and backup authorized site contacts who shall be accountable for providing us with necessary information, obtaining access clearances and who can interface as required with other organizations.
 - 3.15.5 Participate in regularly scheduled project review meetings or conference calls.
 - 3.16.6 Coordinate your and any external third party activities, deliverables and schedules.
 - 3.15.7 Provide our project manager with confirmation of any scheduled deployment activity within three (3) business days of a scheduled roll-out.
 - 3.15.8 Notify our project manager of any schedule deployment changes within three (3) business days of any scheduled activity. We will use reasonable efforts to accommodate schedule changes and/or cancellations made after this time.
- 3.16 **Network Infrastructure Detailed Design Development Option.** In addition to the General Responsibilities you need to do the following:
 - 3.16.1 Ensure that your key Networking and operational personnel are available to participate in interview sessions as required to enable us to understand the business and technical requirements for your Network.
 - 3.16.2 Provide us with details of your Network design objectives (for example, Network strategy and requirements, desired Network performance (throughput/data rate, coverage and number of users), security requirements, data usage (for example email and internet access), types of applications (for example AutoCAD), future growth requirements and network build out time frames).
 - 3.16.3 Provide us with details of your current Network topology, including access, distribution, and core layers, types of switches and routers in each layer, IP addressing and subnetting for each layer, and features/services that have been enabled on your Network
 - 3.16.4 Provide us with physical and logical Network schematics for your existing Network where applicable.
 - 3.16.5 Designate key Networking contacts that shall be available for ongoing information gathering and feedback during design development.

3.16.6 Ensure that your key Networking and operational personnel are available to participate in scheduled Network design feedback sessions or conference calls.

3.17 **Network Infrastructure Implementation Engineering Assistance Option.** In addition to the General Responsibilities you need to do the following:

3.17.1 Provide us with: (i) a detailed Network design that provides physical and logical schematics (Visio preferred) for the Network implementation prior to Service commencement; and (ii) where requested, physical and logical schematics for other Network elements not included in the scope of this project.

3.17.2 Provide us with an inventory of Product to be implemented.

3.17.3 Unless otherwise agreed by the parties, respond within two (2) business days of our request for documentation or information needed for the project.

3.17.4 Perform site surveys with our assistance using templates provided by us. Provide us with completed site survey forms to review.

3.17.5 Complete site preparation taking into account site survey results and any recommendations we make. This includes but is not limited to ensuring that suitable environmental conditions are met and adequate power is available and tested and that all Network services and circuit IDs are clearly identified.

3.17.6 Build, configure and test our products in accordance with the Network Staging Plan documentation we have provided you with.

3.17.7 Provide full details of your building layout, including the floor plan, cabling and power location for applicable sites prior to finalization of the NIP.

3.17.8 Install, configure and test our Products in accordance with the NIP documentation provided by us.

3.17.9 Notify us of any implementation scheduling change at least seventy-two (72) hours prior to the agreed implementation date.

3.17.10 Manage delivery, installation, and configuration of Product not provided by us, that is required to work with, or form part of the Network that is being implemented.

3.17.11 Provide full access to your sites and facilities, including where applicable, computer equipment, network equipment, and data centers as well as works pace and phones for our use during the engagement.

4.0 **SERVICES NOT COVERED UNDER THIS EXHIBIT.**

Certain services are not covered:

4.1 Provision of Services for Network applications (for example, CDN, Public Voice, IP Packet Telephony, Broadband). Network applications are not covered under the Network Optimization Support, but can be purchased separately for an additional fee.

4.2 Any customization of, or labor to install, Software and Hardware (including installation of Updates).

4.3 Provision of Software Application Services. For purposes of this Exhibit, "Software Application Services" means services for non-resident/stand alone Software which include but are not limited to Cisco's network management Software, security Software, IP telephony Software, internet appliance Software, Cisco Intelligent Contact Management Software and Cisco IP Contact Center Software.

4.4 Furnishing of supplies, accessories or the replacement of expendable parts (e.g., cables, blower assemblies, power cords, and rack mounting kits).

4.5 Electrical or site work external to the Products.

4.6 Support or replacement of Product that is altered, modified, mishandled, destroyed or damaged by one or more of the following: (i) natural causes; (ii) environmental failures; (iii) your failure to take any required actions; (iv) a negligent or willful act or omission by you or use by you other than as specified in the applicable Cisco-supplied documentation; or (v) an act or omission of a third party.

4.7 Services or software to resolve Software or Hardware problems resulting from third party product or causes beyond Cisco's control or failure to perform your responsibilities set out in this Data Sheet.

4.8 Services for non-Cisco Software installed on any Cisco Product.

- 4.9 Any Hardware or third party product upgrade required to run new or updated Software.
- 4.10 Additional Services are provided at the then-current time and materials rates.
- 4.11 Except as otherwise provided in this Data Sheet, Software entitlement, including media, documentation, binary code, source code or access in electronic or other form is not provided. In addition, no right, use or license to our Software is granted by this Data Sheet and you acknowledge and agree that you obtain no such rights.
- 4.12 Additional onsite visits and standby services beyond the number of visits/Events specified in the applicable service option, except as otherwise agreed, are provided at Cisco then-current travel and labor rates for such service on a time and material or non-contract service basis.

5.0 LICENSING.

In the event that we provide Software (whether on a Data Collection Tool or otherwise), we grant to you a nonexclusive and nontransferable license to use the Software, in object code form only, on the Data Collection Tool on which such Software is provided or, if no Data Collection Tool is provided, on a single Hardware chassis, until the earlier of: (i) the expiration or termination of the device; or (ii) our request that the Data Collection Tool(s) be returned to us. You have no right and you specifically agrees not to: (a) rent, lease, distribute, sell, transfer or sublicense your license rights to any other person, or use the Software on unauthorized or secondhand equipment; (b) make error corrections to or otherwise modify or adapt the Software nor create derivative works based upon the Software, or to permit third parties to do the same; or (c) copy, in whole or in part any Software or document (except reasonable backup copies), decompile, decrypt, reverse engineer, disassemble or otherwise reduce all or any portion of the Software to human-readable form. We shall make available any interface information which you are entitled to under applicable law upon written notice request and payment of Cisco's applicable fee.

6.0 LIMITATIONS.

YOU ARE SOLELY RESPONSIBLE FOR DETERMINATION AND IMPLEMENTATION OF YOUR NETWORK DESIGN REQUIREMENTS. IN NO EVENT SHALL WE BE LIABLE FOR (A) ANY DISCLOSURE OF THE CONTENTS OR OUTPUT OF PERFORMANCE ANALYSES, NETWORK OR OTHER REPORTS AND/OR DATA COLLECTION TOOLS BY YOUR EMPLOYEE(S) OR THIRD PARTY(S); (B) THE SECURITY OF YOUR NETWORK OR FOR ANY UNAUTHORIZED ACCESS TO SUCH NETWORK BY YOUR EMPLOYEE(S), CONTRACTOR(S), OR THIRD PARTY(S); OR (C) THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED IN ANY DESIGN REPORT.



Advanced Services: Focused Technical Support and Network Optimization Support Data Sheet For Services purchased from Cisco Systems International B.V.

Cisco Advanced Services provide responsive, preventative and consultative support of Cisco technologies and are focused on helping to address your specific networking needs. The two programs included within this Data Sheet are Focused Technical Support and Network Optimization Support.

The goal of Focused Technical Support is to build on the core operational Technical Support Services maintenance (SMARTnet, SMARTnet On-Site and Software Application Support Services) and to deliver responsive, rapid problem escalation through personalized attention and special access to engineering resources with specific knowledge of your Network and operational processes.

The goal of Network Optimization Support is to provide advice on capacity planning, configuration management and software migration for Cisco Network infrastructure to help maximize your network return on investment.

The Services set out in this Data Sheet are designed to supplement core operational Technical Support Services and all the Products in your Network need to be supported with a minimum of SMARTnet, SMARTnet On-Site or Software Application Support Services). Your Purchase Order must itemize the specific options that you have actually purchased. Please read this Data Sheet carefully as it contains important terms regarding the Services that you have purchased from us. This Data Sheet is part of the Agreement that we have entered into.

To help you navigate through this Data Sheet we have listed the Services that are available to you and cross referenced the relevant Sections. Sections 4, 5 and 6 will apply to any Service that you purchase from us. If you have purchased:

- a. Focused Technical Support – Operations Management: We will provide you with the Services in Section 2.1. You will need to meet your obligations at Section 3.1
- b. Focused Technical Support – Focused Engineering: We will provide you with the Services in Section 2.2. You will need to meet your obligations in Section 3.2.
- c. Network Infrastructure Design Assistance: We will provide you with the Services in Sections B1 and 2.4. You will need to comply with your obligations in Sections 3.4 and 3.5.
- d. Network Infrastructure Implementation Plan Assistance: We will provide you with the Services in Section B1 and 2.5. You will need to meet your obligations in Sections 3.4 and 3.6.
- e. Network Infrastructure Remote Deployment Support: We will provide you with the Services in Sections B1 and 2.6. You will need to meet your obligations in Sections 3.4 and 3.7.
- f. Cisco Network Infrastructure Software Strategy: then we will provide you with the Services in Section B1 and 2.7. You will need to meet your obligations in Sections 3.4 and 3.8
- g. Network Infrastructure Remote Software Upgrade Support: We will provide you with the Services in Section B1 and 2.8. You will need to meet your obligations in Sections 3.4 and 3.9.
- h. Network Infrastructure Performance Engineering and Optimization: We will provide you with the Services in Section B1 and 2.9. You will need to meet your obligations in Sections 3.4 and 3.10.
- i. Network Infrastructure Knowledge Transfer and Mentoring: We will provide you with the Services in Sections B1 and 2.10. You will need to meet your obligations in Sections 3.4 and 3.11.
- j. Network Infrastructure Performance Audit Option: We will provide you with the Services in Sections B1 and 2.11. You will need to meet your obligations in Sections 3.4 and 3.12.
- k. Network Infrastructure Design Review Option: We will provide you with the Services in Section B1 and 2.12. You will need to meet your obligations in Sections 3.4 and 3.5.
- l. Network Infrastructure Implementation Plan Review Option: We will provide you with the Services in Sections B1 and 2.13. You will need to meet your obligations in Sections 3.4 and 3.6.
- m. Network Infrastructure Software Strategy Review Option: We will provide you with the Services in Sections B1 and 2.14. You will need to meet your obligations in Sections 3.4 and 3.8.

1.0 DEFINITIONS.

- 1.1 **“Additional Services”** means installation of new Hardware, system additions, Hardware upgrades, or non-mandatory engineering changes.
- 1.2 **“Standard Business Hours”** means 9:00am to 5:00pm CET.
- 1.3 **“Data Collection Tools”** means Hardware or Software tools that support the ability to provide troubleshooting on critical cases, data analysis and report generation capabilities.
- 1.3 **“Event”** means notification by Customer of its performance of a planned Network, Hardware, Software or configuration change.
- 1.4 **“Level 1”** means support which is defined as having the necessary technical staff with the appropriate skills perform installations, remedial Hardware maintenance and basic Hardware and Software configurations on Cisco Product(s).
- 1.5 **“Level 2”** means support that is defined as having the necessary technical staff with the appropriate skills perform isolation, replication and diagnosis of internetworking based problems on Cisco Product(s). You should not report Software bugs to us until you have attempted to identify their source and validated the identification in your Network through appropriate testing. If you cannot duplicate the bug in your Network, we will jointly attempt to replicate and resolve those bugs in either your Network or ours. Whichever Network we agree upon, you will need to work to address the bugs on a best efforts basis to replicate them in your Network to document your diagnosis and resolution activity before seeking our input.
- 1.6 **“Network”** means a set of interconnected and inter-working Cisco supported Hardware and Software that is implemented, operated, and supported by you from a single Network Operations Center (“NOC”).
- 1.7 **“Network Infrastructure”** means your core transport and aggregation Network technology (i.e., Metro Optical, ATM/FR, IP Core and Cisco security devices including but not limited to Firewall, IDS and VPN3000).

2.0 OUR SERVICE RESPONSIBILITIES.

- A. **FOCUSED TECHNICAL SUPPORT.** The purchase of Focused Engineering Services is the minimum requirement for you to be able to purchase Operations Management Services. For the term of our Agreement, we will use commercially reasonable efforts to provide you with one or more of the Services set out below depending upon the Service option you have selected. We shall provide a quote for Services (“Quote”) setting out the extent of the Services that we shall provide to you, unless stated otherwise in this Data Sheet, and the period during which such Services shall be provided. You shall issue a Purchase Order that references the Quote agreed between us and that, additionally, acknowledges and agrees to the terms contained therein:
 - 2.1 **Operations Management.** We shall provide the following Services during Standard Business Hours (unless otherwise stated):
 - 2.1.1 Facilitate Hardware and Software problem resolution case management on a reactive basis for technical issues reported to us by you in addition to helping you to determine if appropriate resources are being applied to the technical issues reported.
 - 2.1.2 Perform operational analysis, not to exceed sixteen (16) days per year, on critical issues by identifying your knowledge gaps and operational abnormalities/gaps. We will provide recommendations and identify possible solutions that you may elect to implement to help close those knowledge and system quality gaps.
 - 2.1.3 Conduct regularly scheduled conference calls with you to discuss operational TAC issues, track open cases and report progress on resolution of open cases.
 - 2.1.4 Bi-annual onsite visits to help you to review quarterly operational trend analysis reports prepared by us and that address your cases submitted to TAC. The reports will cover, amongst other things, reactive support contract usage, case statistics, quality issues, case trending (by product type, case priority, etc.), Network trending and Return Materials Authorization (“RMA”) trending.
 - 2.1.5 Provide informal instructional sessions on troubleshooting tools and processes during our onsite visits.
 - 2.1.6 Notify TAC, and the engineer familiar with your Network (“Advanced Services Engineer”), if such Focused Engineering Service has been ordered, of any planned Event by pre-opening a case and alerting TAC of relevant information related to the scheduled Event, not to exceed two (2) Events per month.
 - 2.2 **Focused Engineering.** Cisco shall provide the following Services during Standard Business Hours (unless otherwise stated):

- 2.2.1 Designate an engineer Advanced Services Engineer to act as the primary technical support for critical cases at the Network level.
- 2.2.2 Provide problem resolution of critical cases at the Network level.
- 2.2.3 Provide technical representation in regularly scheduled conference calls.
- 2.2.4 Visit your nominated site location to gather information/changes to your Network. We will review critical cases and review problem root cause analysis with you. A maximum of two (2) visits per year may be conducted.
- 2.2.5 Perform root cause analysis, not to exceed four (4) analyses per year, on technical issues relating to your Network Infrastructure. Performance of root cause analysis is dependant upon us having all available information necessary and required to perform a root cause analysis.
- 2.2.6 Provide Software recommendations to address your documented and communicated Network functionality requirements. Our recommendations (focused on recommending appropriate Updates) shall apply to critical cases in respect of an affected area of your Network.
- 2.2.7 Provide certain Data Collection Tools during the term of the Services. Data Collection Tools may or may not include Hardware or Software. We retain full right, title and interest to the Data Collection Tools.

B. NETWORK OPTIMIZATION SUPPORT. The purchase of Focused Engineering Services set out in Part A, together with those components of our Network Optimization Support ("NOS") comprising Cisco Network Infrastructure Software Strategy and Network Infrastructure Remote Software Upgrade Support Services is the minimum requirement for you to be able to purchase the other NOS Services set out in Part B. We will use commercially reasonable efforts to provide these Services for your Network Infrastructure during Standard Business Hours (unless stated otherwise). The following General Support provisions will apply to all Service options that you have selected:

B.1 General Support.

- B.1.1 Designate an engineer Advanced Services Engineer to act as the primary interface with you for your Network Infrastructure.
- B.1.2 Schedule four quarterly visits per year (not to exceed eight (8) days in aggregate) with you to visit your site and review proactive deliverables and activities and help you plan for the next quarter. Where you have ordered Focused Engineering Service, the two visits specified in that Service component will be included in the four total visits described in this General Support section. Any additional visits will be charged at our then-current travel and labor rates.
- B.1.3 Schedule periodic conference calls (usually weekly) to review your Network Infrastructure status, planning and the Services being provided.
- B.1.4 Establish a Customer-specific Cisco email alias to facilitate communication with Cisco Advanced Services Engineers.
- B.1.5 Provide certain Data Collection Tools during the term of the Services. Data Collection Tools may or may not include Hardware or Software. We retain full right, title and interest to the Data Collection Tools. In addition to Cisco provided tools, the Advanced Services Engineer may utilize the data that you have provided to us, scripts or internal tools to assist us in collecting data from your Network.

2.4 Network Infrastructure Design Assistance.

- 2.4.1 We will consult with your networking staff in a series of face-to-face and remotely conducted meetings to develop a thorough understanding of your Network Infrastructure design requirements. The focus here will be on concerns around resiliency, self-recovery, scalability, the ability to handle increased traffic demands and Quality of Service ("QoS").
- 2.4.2 Provide a Network Infrastructure design review that may include, amongst other information, the following:
 - Review of your design requirements, priorities, and goals
 - Analysis of impact of new requirements to your existing Network Infrastructure
 - Review of your Network Infrastructure architecture and topology
 - Review of your protocol selection and configuration
 - Review of feature selection and configuration
 - Report describing design review together with our recommendations

- 2.4.3 Provide ongoing, informal Network Infrastructure design and architecture consultation.
- 2.4.4 Provide ongoing information on design related Cisco Security Alerts that may impact key Network Infrastructure Products.
- 2.5 **Network Infrastructure Implementation Plan Assistance.**
- 2.5.1 We will evaluate and understand your implementation and deployment plan through a series of remotely conducted meetings and interviews with your staff. We will review your deployment plan, identify possible Network disruptions and provide sample configurations that you can leverage to determine if devices in your Network Infrastructure are properly configured to support the services you intend to offer.
- 2.5.2 Provide a Network Infrastructure implementation plan review that may include, amongst other information, the following:
- Review and analysis of your Network Infrastructure deployment and integration plan
 - Review of proposed configuration templates
 - Review of turn-up test plan
 - Analysis of any changes that Network operations staff should be alerted to
 - Report on recommendations.
- 2.5.3 Provide ongoing, informal Hardware and configuration change impact analyses, reviews, and recommendations.
- 2.6 **Network Infrastructure Remote Deployment Support.** We will provide you with remote resource to help address problems with your Network Infrastructure Hardware and configuration issues during a major deployment into a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes), provided that we have received not less than twenty-one (21) days prior written notice of a request by you for this support. You will need to submit a detailed request and schedule to us before we can provide this support to you. The number of Events shall not exceed two (2) per month and the total aggregate standby time will be limited in any one-month period for all Hardware, configuration, and Software Events combined to sixteen (16) hours per month. (Note: Software Events are covered under Network Infrastructure Remote Software Upgrade Support).
- 2.7 **Cisco Network Infrastructure Software Strategy.**
- 2.7.1 Provide Software strategy assessment(s), based on your ongoing functional and technical Network Infrastructure requirements. Each assessment typically includes, amongst other information, the following:
- Review of your feature requirements and performance/availability objectives
 - Review of new Software feature releases (for example, Cisco IOS®, other Cisco OS Software and Cisco micro-code) with respect to your business goals
 - IOS software inventory and profile report
 - Software strategy report that includes an analysis report outlining the recommended releases of Software for your Network Infrastructure environment and the potential impact that running such releases may have on your Network
 - Review of your Software verification test plan and report on recommended changes
 - Assist in the preparation and review of your Software migration plan
- 2.7.2 Provide, if required, ongoing, informal Software impact analysis, review, and recommendations.
- 2.7.3 Provide ongoing information on Software related Cisco Security Alerts that may impact key Network Infrastructure components
- 2.7.4 Provide weekly proactive critical bug notification. These notifications will be for three (3) Software releases, specified by you and installed on key Network Infrastructure components.
- 2.8 **Network Infrastructure Remote Software Upgrade Support.** Provides you with remote resource to help address problems with your Network Infrastructure Software during major upgrades on a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day a week standby basis to remotely assist you in major Software upgrades, provided that we receive at least twenty-one (21) days prior written notice from you. You will need to submit a detailed request and schedule to us prior to any such activity. The number of Events shall not exceed two (2) per month and the total aggregate standby time will be limited in any one-month

period for all Hardware and configuration and Software Events combined to sixteen (16) hours per month. (Note – Hardware and configuration Events are covered under Network Infrastructure Remote Deployment Support).

2.9 **Network Infrastructure Performance Engineering and Optimization.**

2.9.1 Provide a performance analysis of your Network Infrastructure to identify potential performance and optimization issues and review the validity of key device configurations in the context of new traffic patterns or changes in Network size that are planned or have been implemented by you. Such performance analysis typically includes the following:

- Collection of key performance data
- Identification of exception reports
- Analysis of key device configurations
- Analysis of resource utilization
- Assistance to define Network-specific performance criteria
- Report on performance optimization recommendations such as system tuning and protocol optimization changes

2.9.2 Perform ongoing, informal performance tuning checks for your Network Infrastructure.

2.9.3 Provide ongoing information on performance related Cisco Security Alerts that may impact key Network Infrastructure Products.

2.10 **Network Infrastructure Knowledge Transfer and Mentoring.** Provide you annually with up to four technical update meetings each with duration of up to one (1) day. These meetings shall be conducted at your site by Advanced Services Engineer or another senior Cisco engineer with a view to providing a technical update training on a topic that is mutually agreed upon and relevant to the Products and Cisco technologies existing on your Network Infrastructure. These meetings are usually held in conjunction with the four quarterly review meetings per year organized under Section B1.

C. NETWORK OPTIMIZATION SUPPORT SERVICE OPTIONS. The following Service options are available only in conjunction with the Services set out in Part B unless otherwise stated. We will use commercially reasonable efforts to provide the Service Option(s) that you have purchased:

2.11 **Network Infrastructure Performance Audit Option.** Under this option, which is available under NOS or as a stand alone Service offering, we will provide the following Services during Standard Business Hours, unless stated otherwise:

2.11.1 Provide one (1) Network Infrastructure performance audit as selected by you out of those currently available and identified by us from time to time. The audit typically includes the following:

- Performance report at node and interface level
- Configuration report: protocol, node and interface
- Software report including conflicts and inconsistencies
- Hardware report including conflicts and inconsistencies: Hardware versions, firmware versions, micro-code versions, board revisions

2.11.2 Provide detailed recommendations, with a view towards helping you to optimize your Network Infrastructure stability.

2.12 **Network Infrastructure Design Review Option.** You must have **Network Infrastructure Design Assistance** across your Network Infrastructure in order to purchase the Network Infrastructure Design Review described in this section. Under this option, we will perform one (1) additional Network Infrastructure Design Review to those purchased under Section 2.4.2 during Standard Business Hours, unless stated otherwise.

2.13 **Network Infrastructure Implementation Plan Review Option.** You must have **Network Infrastructure Implementation Plan Assistance** across your Network Infrastructure in order to purchase the Network Infrastructure Implementation Plan Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:

2.13.1 Perform one (1) implementation plan review that typically includes the following:

- Review and analysis of your Network Infrastructure deployment and integration
- Review of proposed sample configurations
- Review of turn-up test plan
- Analysis of any changes that your Network operations staff should be alerted to
- Report on recommendations.

2.13.2 Provide Customer with remote deployment support for up to three (3) months from completion of report provided under this option. Cisco will make available, upon receipt of not less than twenty-one (21) days prior written request by Customer to Cisco, a designated support contact who can accept trouble calls on a 24-hour 7-day standby basis to remotely assist Customer in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes). Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity. Such request for assistance shall be limited one (1) Event with a total standby time of eight (8) hours in any one-month period.

2.14 **Network Infrastructure Software Strategy Review Option.** You must have **Network Infrastructure Software Strategy** across your Network Infrastructure in order to purchase the Network Infrastructure Software Strategy Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:

2.14.1 Provide one (1) Software strategy assessment, based on your ongoing functional and technical Network Infrastructure requirements. Such assessment typically includes the following:

- Review of feature requirements and performance/availability objectives
- Review of new Software feature releases (for example, Cisco IOS®, other Cisco OS Software, and Cisco micro-code) with respect to your business goals
- IOS software inventory and profile report
- Software strategy report that includes an analysis report outlining the recommended releases of Software for your Network Infrastructure environment and the potential impact that running such releases may have on your Network
- Review of your Software verification test plan and report on recommended changes
- Assist in the preparation and review of Software migration plan.

2.14.2 Provide you with remote deployment support for up to three (3) months from completion of the report provided under this option. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-days a week standby basis to remotely assist you in major Software upgrades provided you give us not less than twenty-one (21) days prior written notice. Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity. Such request for assistance shall be limited one (1) Event with a total standby time of eight (8) hours in any one-month period.

3.0 SERVICE RESPONSIBILITIES OF CUSTOMERS.

To enable us to provide you with the Service that you have selected we need you to do the following:

A. FOCUSED TECHNICAL SUPPORT.

3.1 Operations Management.

- 3.1.1 Designate a representative to act as our primary interface.
- 3.1.2 Coordinate our onsite visits and provide us with not less than thirty (30) day notice of any visit you reschedule. Rescheduled visits will be subject to additional fees.
- 3.1.3 Attend regularly scheduled conference calls for open case reviews.

3.2 Focused Engineering.

- 3.2.1 Designate one or more person(s) from within your technical support organization to serve as a liaison to our Advanced Services Engineer.
- 3.2.2 Provide your designated person(s) with instructions on process and procedures to initiate cases and access Focused Engineering Support.
- 3.2.3 Advise us of your standard operating procedures as they relate to your business practices, internal operational nomenclature and Network to allow us to effectively communicate and discuss cases with you and your staff in the context of your business environment.
- 3.2.4 Provide all necessary information to enable us to perform root cause analysis.
- 3.2.5 Provide us with reasonable electronic access to your Network.
- 3.2.6 Provide us with a Network topology map, configuration information, and information of new features being implemented as needed.
- 3.2.7 Notify our Advanced Services Engineer of any major technology additions or changes to your Network.
- 3.2.8 Provide all necessary device, platform, feature, and release train requirements that exist in your environment.

- 3.2.9 Agree that we will only support generally available Products and Software releases/versions unless we agree otherwise.
 - 3.2.10 Ensure that Data Collection Tools are located in a secure area at your site, within a Network environment protected within a firewall and on a secure LAN, with access restricted to those of your employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the output of the Data Collection Tools. Where Data Collection Tools provided by Cisco represent Software, you will need to make appropriate computers available and download Software as needed. You will need to immediately return Data Collection Tool(s) to us upon the earlier of: (i) expiration or termination of the Services or (ii) upon our request that the Data Collection Tools(s) be returned to us.
 - 3.2.11 Report Priority 1 and 2 problems directly (for example, by telephone) using the number that we provide to you. Response times do not include problems reported via Cisco.com or other electronic means.
- B. NETWORK OPTIMIZATION SUPPORT.** To enable us to provide you with the Service that you have selected we need you to comply with the following General Responsibilities for all Services that you have selected under NOS baseline Service offering:
- 3.4 General Responsibilities**
- 3.4.1 Designate at least two (2) but not more than six (6) technical representatives (who are employees) in your centralized Network support center ("technical assistance center"), to act as the primary technical contacts for our Advanced Services Engineer. These contacts must be senior engineers with the authority to make any necessary changes to your Network configuration. One individual, who must be a senior member of your management or technical staff, will be designated as your primary point of contact to manage the implementation of the Services you have purchased (for example, chair the weekly conference calls, assist with prioritization of projects and activities).
 - 3.4.2 Within one (1) year from the commencement of your Agreement, you must have at least one (1) Cisco Certified Internetworking Expert ("CCIE") trained employee or one (1) employee that has achieved, in our sole determination, an equal standard through training and experience as designated contacts.
 - 3.4.3 Your technical assistance center shall maintain centralized network management for your Network capable of providing Level 1 and Level 2 support.
 - 3.4.4 Provide our Advanced Services Engineer with reasonable electronic access to your Network.
 - 3.4.5 Ensure that Data Collection Tools are located in a secure area at your site, within a Network environment protected within a firewall and on a secure LAN, under lock and key and with access restricted to those of your employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the output of the Data Collection Tools. Where Data Collection Tools provided by Cisco represent Software, you will need to make appropriate computers available and download Software as needed. You shall remain responsible for any damage to or loss or theft of the Data Collection Tools while in Customer's custody. You will need to immediately return Data Collection Tool(s) to us upon the earlier of: (i) expiration or termination of the Services or (ii) upon our request that the Data Collection Tools(s) be returned to us.
 - 3.4.6 Provide a Network topology map, configuration information, and information of new features being implemented as needed.
 - 3.4.7 Notify our Advanced Services Engineer as soon as possible of any major Network changes (for example topology, configuration, new IOS releases).
 - 3.4.8 Notify us in writing within ten (10) days of any change to the composition of your Network. We may require modifications to the fee payable if the Network composition has increased beyond our original pricing quote for Services.
 - 3.4.9 Create and manage an internal email alias for communication with our Advances Services Engineer.
 - 3.4.10 Retain overall responsibility for any business process impact and any process change implementations.
- 3.5 Network Infrastructure Design Assistance and Network Infrastructure Design Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.5.1 Your Network Infrastructure design.
 - 3.5.2 The business and technical requirements for your new design.
 - 3.5.3 Any constraints faced by you.
 - 3.5.4 Current or future planned applications that will run on the supported Infrastructure.

- 3.6 **Network Infrastructure Implementation Plan Assistance and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.6.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
 - 3.6.2 Identify low risk and high risk areas of your Network based on the Network Infrastructure traffic.
 - 3.6.3 Your Implementation plan and deployment schedule.
 - 3.6.4 Maintenance window information and any other constraints.
 - 3.6.5 Your change control process.
- 3.7 **Network Infrastructure Remote Deployment Support and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities, we need you to provide the following:
- 3.7.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
 - 3.7.2 Identify low risk and high risk areas of the Network based on the Network Infrastructure traffic.
 - 3.7.3 Your Implementation plan and deployment schedule.
 - 3.7.4 Maintenance window information and any other constraints.
 - 3.7.5 Your change control process.
 - 3.7.6 Contact information and details of your escalation process.
 - 3.7.7 Review details of planned Network changes with our Advanced Services Engineer.
- 3.8 **Network Infrastructure Software Strategy and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.8.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.8.2 Your business and technical requirements for new Software releases.
 - 3.8.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.8.4 Your certification process and lab testing process.
 - 3.8.5 Your change control process.
- 3.9 **Network Infrastructure Remote Software Upgrade Support and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.9.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.9.2 Your Business and technical requirements for new Software releases.
 - 3.9.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.9.4 Your certification process and lab testing process.
 - 3.9.5 Your change control process.
 - 3.9.6 Contact information and details of your escalation process.
 - 3.9.7 Review details of planned Network changes with our Advanced Services Engineer.
- 3.10 **Network Infrastructure Performance Engineering and Optimization.** In addition to the General Responsibilities, we need you to provide the following:
- 3.10.1 Any service level agreements or Network Infrastructure performance requirements.
 - 3.10.2 Details of critical applications supported by your Network Infrastructure.
 - 3.10.3 Expected Network growth, application mix changes.
 - 3.10.4 Data collection activities as needed to facilitate a specific Cisco analysis.
- 3.11 **Network Infrastructure Knowledge Transfer and Mentoring.** In addition to the General Responsibilities we need you to: (1) provide us with a set of requirements on the topics you want us to cover and background information on the skill sets of your proposed audience; and (2) ensure that facilities and equipment are available to host the Transfer of Information (“TOI”) sessions.
- 3.12 **Network Infrastructure Performance Audit Option.** In addition to the General Responsibilities, Customer shall:

- 3.12.1 Ensure that your key Networking and operational personnel are available to participate in interview sessions as required in support of the selected audit.
- 3.12.2 Provide assessments and audit data collection support. You will need to help install the Data Collection Tools into your production, and if applicable, test Network environment. You will need to ensure that we have all relevant device information needed for the audits, including the required device lists.
- 3.12.3 Provide all information and data that you have gathered from tools used by you for Network data analysis and monitoring.

4.0 SERVICES NOT COVERED UNDER THIS EXHIBIT.

Certain services are not covered:

- 4.1 Provision of Services for Network applications (for example, CDN, Public Voice, IP Packet Telephony, Broadband). Network applications are not covered under the Network Optimization Support, but can be purchased separately for an additional fee.
- 4.2 Any customization of, or labor to install, Software and Hardware (including installation of Updates).
- 4.3 Provision of Software Application Services. For purposes of this Exhibit, "Software Application Services" means services for non-resident/stand alone Software which include but are not limited to Cisco's network management Software, security Software, IP telephony Software, internet appliance Software, Cisco Intelligent Contact Management Software and Cisco IP Contact Center Software.
- 4.4 Furnishing of supplies, accessories or the replacement of expendable parts (e.g., cables, blower assemblies, power cords, and rack mounting kits).
- 4.5 Electrical or site work external to the Products.
- 4.6 Support or replacement of Product that is altered, modified, mishandled, destroyed or damaged by one or more of the following: (i) natural causes; (ii) environmental failures; (iii) your failure to take any required actions; (iv) a negligent or willful act or omission by you or use by you other than as specified in the applicable Cisco-supplied documentation; or (v) an act or omission of a third party.
- 4.7 Services or software to resolve Software or Hardware problems resulting from third party product or causes beyond Cisco's control or failure to perform your responsibilities set out in this Data Sheet.
- 4.8 Services for non-Cisco Software installed on any Cisco Product.
- 4.9 Any Hardware or third party product upgrade required to run new or updated Software.
- 4.10 Additional Services are provided at the then-current time and materials rates.
- 4.11 Except as otherwise provided in this Data Sheet, Software entitlement, including media, documentation, binary code, source code or access in electronic or other form is not provided. In addition, except as otherwise provided, no right, use or license to our Software is granted by this Data Sheet and you acknowledge and agree that you obtain no such rights.
- 4.12 Additional onsite visits and standby services beyond the number of visits/Events specified in the Quote, except as otherwise agreed, are provided at Cisco then-current travel and labor rates for such service on a time and material or non-contract service basis.

5.0 LICENSING.

In the event that we provide Software (whether on a Data Collection Tool or otherwise), we grant you a nonexclusive and nontransferable license to use the Software, in object code form only, on the Data Collection Tool on which such Software is provided or, if no Data Collection is provided, on a single Hardware chassis, until the earlier of: (i) the expiration or termination of the Device; or (ii) our request that the Data Collection Tool(s) be returned to us. You have no right and you specifically agrees not to: (a) rent, lease, distribute, sell, transfer or sublicense your license rights to any other person, or use the Software on unauthorized or secondhand equipment; (b) make error corrections to or otherwise modify or adapt the Software nor create derivative works based upon the Software, or to permit third parties to do the same; or (c) copy, in whole or in part, any Software or document (except for reasonable backup copies), decompile, decrypt, reverse engineer, disassemble or otherwise reduce all or any portion of the Software to human-readable form. We shall make available any interface information which you are entitled to under applicable law upon written notice request and payment of Cisco's applicable fee.

6.0 LIMITATIONS.

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT YOU ARE SOLELY RESPONSIBLE FOR DETERMINATION AND IMPLEMENTATION OF YOUR NETWORK DESIGN REQUIREMENTS. IN NO EVENT SHALL WE BE LIABLE FOR (A) ANY DISCLOSURE OF THE CONTENTS OR OUTPUT OF PERFORMANCE ANALYSES, NETWORK OR OTHER REPORTS AND/OR DATA COLLECTION TOOLS BY YOUR EMPLOYEE(S) OR THIRD PARTY(S); (B) THE SECURITY OF YOUR NETWORK OR FOR ANY UNAUTHORIZED ACCESS TO SUCH NETWORK BY YOUR EMPLOYEE(S), CONTRACTOR(S), OR THIRD PARTY(S); OR (C) THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED IN ANY DESIGN REPORT.



Advanced Services: Focused Technical Support and Network Optimization Support Data Sheet For Services purchased from Cisco Systems Australia Pty Ltd.

Cisco Advanced Services provide responsive, preventative and consultative support of Cisco technologies and are focused on helping to address your specific networking needs. The two programs included within this Data Sheet are Focused Technical Support and Network Optimization Support.

The goal of Focused Technical Support is to build on the core operational Technical Support Services maintenance (SMARTnet, SMARTnet On-Site and Software Application Support Services) and to deliver responsive, rapid problem escalation through personalized attention and special access to engineering resources with specific knowledge of your Network and operational processes.

The goal of Network Optimization Support is to provide advice on capacity planning, configuration management and software migration for Cisco Network infrastructure to help maximize your network return on investment.

The Services set out in this Data Sheet are designed to supplement core operational Technical Support Services and all the Products in your Network need to be supported with a minimum of SMARTnet, SMARTnet On-Site or Software Application Support Services). Your Purchase Order must itemize the specific options that you have actually purchased. Please read this Data Sheet carefully as it contains important terms regarding the Services that you have purchased from us. This Data Sheet is part of the Agreement that we have entered into.

To help you navigate through this Data Sheet we have listed the Services that are available to you and cross referenced the relevant Sections. Sections 4, 5 and 6 will apply to any Service that you purchase from us. If you have purchased:

- a. Focused Technical Support – Operations Management: We will provide you with the Services in Section 2.1. You will need to meet your obligations at Section 3.1
- b. Focused Technical Support – Focused Engineering: We will provide you with the Services in Section 2.2. You will need to meet your obligations in Section 3.2.
- c. Network Infrastructure Design Assistance: We will provide you with the Services in Sections B1 and 2.4. You will need to comply with your obligations in Sections 3.4 and 3.5.
- d. Network Infrastructure Implementation Plan Assistance: We will provide you with the Services in Section B1 and 2.5. You will need to meet your obligations in Sections 3.4 and 3.6.
- e. Network Infrastructure Remote Deployment Support: We will provide you with the Services in Sections B1 and 2.6. You will need to meet your obligations in Sections 3.4 and 3.7.
- f. Cisco Network Infrastructure Software Strategy: then we will provide you with the Services in Section B1 and 2.7. You will need to meet your obligations in Sections 3.4 and 3.8
- g. Network Infrastructure Remote Software Upgrade Support: We will provide you with the Services in Section B1 and 2.8. You will need to meet your obligations in Sections 3.4 and 3.9.
- h. Network Infrastructure Performance Engineering and Optimization: We will provide you with the Services in Section B1 and 2.9. You will need to meet your obligations in Sections 3.4 and 3.10.
- i. Network Infrastructure Knowledge Transfer and Mentoring: We will provide you with the Services in Sections B1 and 2.10. You will need to meet your obligations in Sections 3.4 and 3.11.
- j. Network Infrastructure Performance Audit Option: We will provide you with the Services in Sections B1 and 2.11. You will need to meet your obligations in Sections 3.4 and 3.12.
- k. Network Infrastructure Design Review Option: We will provide you with the Services in Section B1 and 2.12. You will need to meet your obligations in Sections 3.4 and 3.5.
- l. Network Infrastructure Implementation Plan Review Option: We will provide you with the Services in Sections B1 and 2.13. You will need to meet your obligations in Sections 3.4 and 3.6.
- m. Network Infrastructure Software Strategy Review Option: We will provide you with the Services in Sections B1 and 2.14. You will need to meet your obligations in Sections 3.4 and 3.8.

1.0 DEFINITIONS.

- 1.1 **“Additional Services”** means installation of new Hardware, system additions, Hardware upgrades, or non-mandatory engineering changes.
- 1.2 **“Data Collection Tools”** means Hardware or Software tools that support the ability to provide troubleshooting on critical cases, data analysis and report generation capabilities.
- 1.3 **“Event”** means notification by Customer of its performance of a planned Network, Hardware, Software or configuration change.
- 1.4 **“Level 1”** means support which is defined as having the necessary technical staff with the appropriate skills perform installations, remedial Hardware maintenance and basic Hardware and Software configurations on Cisco Product(s).
- 1.5 **“Level 2”** means support that is defined as having the necessary technical staff with the appropriate skills perform isolation, replication and diagnosis of internetworking based problems on Cisco Product(s). You should not report Software bugs to us until you have attempted to identify their source and validated the identification in your Network through appropriate testing. If you cannot duplicate the bug in your Network, we will jointly attempt to replicate and resolve those bugs in either your Network or ours. Whichever Network we agree upon, you will need to work to address the bugs on a best efforts basis to replicate them in your Network and to document your diagnosis and resolution activity before seeking our input.
- 1.6 **“Network”** means a set of interconnected and inter-working Cisco supported Hardware and Software that is implemented, operated, and supported by you from a single Network Operations Center (“NOC”).
- 1.7 **“Network Infrastructure”** means your core transport and aggregation Network technology (i.e., Metro Optical, ATM/FR and IP Core).
- 1.8 **“Technology Application”** means specific technologies, including, but not limited to, Content Networking, Broadband and IP Telephony that do not operate at the Network Infrastructure level.

2.0 OUR SERVICE RESPONSIBILITIES.

- A. **FOCUSED TECHNICAL SUPPORT.** The purchase of Focused Engineering Services is the minimum requirement for you to be able to purchase Operations Management Services. For the term of our Agreement, we will use commercially reasonable efforts to provide you with one or more of the Services set out below depending upon the Service option you have selected. We shall provide a quote for Services (“Quote”) setting out the extent of the Services that we shall provide to you, unless stated otherwise in this Data Sheet, and the period during which such Services shall be provided. You shall issue a Purchase Order that references the Quote agreed between us and that, additionally, acknowledges and agrees to the terms contained therein:
- 2.1 **Operations Management.** We shall provide the following Services during Standard Business Hours (unless otherwise stated):
 - 2.1.1 Facilitate Hardware and Software problem resolution case management on a reactive basis for technical issues reported to us by you in addition to helping you to determine if appropriate resources are being applied to the technical issues reported.
 - 2.1.2 Perform operational analysis, not to exceed sixteen (16) days per year, on critical issues by identifying your knowledge gaps and operational abnormalities/gaps. We will provide recommendations and identify possible solutions that you may elect to implement to help close those knowledge and system quality gaps.
 - 2.1.3 Conduct regularly scheduled conference calls with you to discuss operational TAC issues, track open cases and report progress on resolution of open cases.
 - 2.1.4 Review of quarterly operational trend analysis reports prepared by us and that address your cases submitted to TAC. The reports will cover, amongst other things, reactive support contract usage, case statistics, quality issues, case trending (by product type, case priority, etc.), Network trending and Return Materials Authorization (“RMA”) trending.
 - 2.1.5 Provide informal instructional sessions on troubleshooting tools and processes during our onsite visits.
 - 2.1.6 Notify TAC, and the engineer familiar with your Network (“Advanced Services Engineer”), if such Focused Engineering Service has been ordered, of any planned Event by pre-opening a case and alerting TAC of relevant information related to the scheduled Event, not to exceed two (2) Events per month.

2.2 **Focused Engineering.** Cisco shall provide the following Services during Standard Business Hours (unless otherwise stated):

- 2.2.1 Designate an engineer Advanced Services Engineer to act as the primary technical support for critical cases at the Network level. Any trouble calls that you place outside of Standard Business Hours will be handled directly by Cisco's TAC.
- 2.2.2 Provide problem resolution of complex and critical cases at the Network level.
- 2.2.3 Provide technical representation in regularly scheduled conference calls.
- 2.2.4 Visit your nominated site location to gather information/changes to your Network. We will review critical cases and review problem root cause analysis with you. A maximum of four (4) visits per year may be conducted.
- 2.2.5 Perform root cause analysis, not to exceed four (4) analyses per year, on technical issues relating to your Network Infrastructure. Performance of root cause analysis is dependant upon us having all available information necessary and required to perform a root cause analysis.
- 2.2.6 Provide Software recommendations to address your documented and communicated Network functionality requirements. Our recommendations (focused on recommending appropriate Updates) shall apply to critical cases in respect of an affected area of your Network.
- 2.2.7 Conduct informal peer-to-peer mentoring and training in the form of a one (1) day training session (not to exceed four (4) per year) between our engineers. The training sessions will address the basics of troubleshooting and provide a general understanding of Products within your Network in additions to addressing Network Infrastructure and specific Product training.

B. NETWORK OPTIMIZATION SUPPORT. The purchase of Focused Engineering Services set out in Part A, together with those components of our Network Optimization Support ("NOS") comprising Cisco Network Infrastructure Software Strategy and Network Infrastructure Remote Software Upgrade Support Services is the minimum requirement for you to be able to purchase the other NOS Services set out in Part B. We will use commercially reasonable efforts to provide these Services for your Network Infrastructure during Standard Business Hours (unless stated otherwise). The following General Support provisions will apply to all Service options that you have selected:

B.1 General Support.

- B.1.1 Designate an engineer ("Advanced Services Engineer") to act as the primary interface with you for your Network Infrastructure.
- B.1.2 Schedule four quarterly visits per year (not to exceed eight (8) days in aggregate) with you to visit your site and review proactive deliverables and activities and help you plan for the next quarter. Any additional visits will be charged at our then-current travel and labor rates.
- B.1.3 Schedule periodic conference calls (usually weekly) to review your Network Infrastructure status, planning and the Services being provided.
- B.1.4 Establish a Customer-specific Cisco email alias to facilitate communication with Cisco Advanced Services Engineers.
- B.1.5 Provide certain Data Collection Tools during the term of the Services. Data Collection Tools may or may not include Hardware or Software. We retain full right, title and interest to the Data Collection Tools. In addition to Cisco provided tools, the Advanced Services Engineer may utilize the data that you have provided to us, scripts or internal tools to assist us in collecting data from your Network.

2.4 Network Infrastructure Design Assistance.

- 2.4.1 We will consult with your networking staff in a series of face-to-face and remotely conducted meetings to develop a thorough understanding of your Network Infrastructure design requirements. The focus here will be on concerns around resiliency, self-recovery, scalability and the ability to handle increased traffic demands.
- 2.4.2 Provide a Network Infrastructure design review that may include, amongst other information, the following:
 - Review of your design requirements, priorities, and goals
 - Analysis of impact of new requirements to your existing Network Infrastructure
 - Review of your Network Infrastructure architecture and topology
 - Review of your protocol selection and configuration

- Review of feature selection and configuration
 - Report describing design review together with our recommendations
- The number of design reviews is limited to two (2) per year.

2.4.3 Provide ongoing, informal Network Infrastructure design and architecture consultation.

2.5 Network Infrastructure Implementation Plan Assistance.

2.5.1 We will evaluate and understand your implementation and deployment plan through a series of remotely conducted meetings and interviews with your staff. We will review your deployment plan, identify possible Network disruptions and provide sample configurations that you can leverage to determine if devices in your Network Infrastructure are properly configured to support the services you intend to offer.

2.5.2 Provide a Network Infrastructure implementation plan review that may include, amongst other information, the following:

- Review and analysis of your Network Infrastructure deployment and integration plan
- Review of proposed configuration templates
- Review of turn-up test plan
- Analysis of any changes that Network operations staff should be alerted to
- Report on recommendations.

The number of implementation plan reviews is limited to two (2) per year.

2.5.3 Provide ongoing, informal change impact analyses.

2.6 Network Infrastructure Remote Deployment Support. We will provide you with remote resource to help address problems with your Network Infrastructure Hardware and configuration issues during a major deployment into a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes), provided that we have received not less than twenty-one (21) days prior written notice of a request by you for this support. You will need to submit a detailed request and schedule to us before we can provide this support to you. The number of Events shall not exceed two (2) per month and the total aggregate standby time will be limited in any one-month period for all Hardware, configuration, and Software Events combined to sixteen (16) hours per month. (Note: Software Events are covered under Network Infrastructure Remote Software Upgrade Support).

2.7 Cisco Network Infrastructure Software Strategy.

2.7.1 Provide Software strategy assessment(s), based on your ongoing functional and technical Network Infrastructure requirements. Each assessment typically includes, amongst other information, the following:

- Review of your feature requirements and performance/availability objectives
- Review of new Software feature releases (for example, Cisco IOS®, other Cisco OS Software and Cisco micro-code) with respect to your business goals
- Software strategy report that includes an analysis report outlining the recommended releases of Software for your Network Infrastructure environment and the potential impact that running such releases may have on your Network
- Review of your Software verification test plan and report on recommended changes
- Assist in the preparation and review of your Software migration plan

The number of Software strategy assessments is limited to two (2) per year.

2.7.2 Provide, if required, one (1) informal Software impact analysis, review, and recommendation per month.

2.7.3 Provide periodic, proactive critical bug notification. These notifications will be for three (3) Software releases, specified by you and installed on key Network Infrastructure components.

2.8 Network Infrastructure Remote Software Upgrade Support. Provides you with remote resource to help address problems with your Network Infrastructure Software during major upgrades on a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day a week standby basis to remotely assist you in major Software upgrades, provided that we receive at least twenty-one (21) days prior written notice from you. You will need to submit a detailed request and schedule to us prior to any such activity. The number of Events shall not exceed two (2) per month and the total aggregate standby time will be limited in any one-month period for all Hardware and configuration and Software Events combined to sixteen (16) hours per month. (Note – Hardware and configuration Events are covered under Network Infrastructure Remote Deployment Support).

- 2.9 **Network Infrastructure Performance Engineering and Optimization.**
- 2.9.1 Provide a performance analysis and stability report on your Network Infrastructure to identify potential performance and optimization issues and review the validity of key device configurations in the context of new traffic patterns or changes in Network size that are planned or have been implemented by you. Such performance analysis typically includes the following:
- Collection of key performance data
 - Identification of exception reports
 - Analysis of key device configurations
 - Analysis of resource utilization
 - Assistance to define Network-specific performance criteria
 - Report on performance optimization recommendations such as system tuning and protocol optimization changes
- The number of performance analyses is limited to two (2) per year.
- 2.9.2 Perform ongoing, informal performance tuning checks for your Network Infrastructure.
- 2.10 **Network Infrastructure Knowledge Transfer and Mentoring.** Provide you annually with up to four (4) technical update meetings each with duration of up to four (4) hours. These meetings shall be conducted at your site by Advanced Services Engineer or another senior Cisco engineer with a view to providing a technical update training on a topic that is mutually agreed upon and relevant to the Products and Cisco technologies existing on your Network Infrastructure. These meetings are usually held in conjunction with the four (4) quarterly review meetings per year.
- 2.11 **Network Infrastructure Performance Audit.** The Network Infrastructure Performance Audit described in this Section is either (a) part of the NOS baseline Service offering; or (b) orderable as a standalone Service offering that does not include the provision of General Support in Section B1 above. We will provide the following Services during Standard Business Hours, unless stated otherwise:
- 2.11.1 Provide one (1) Network Infrastructure Performance Audit as selected by you out of those currently available and identified by us from time to time. The audit typically includes the following:
- Performance report at node and interface level
 - Configuration report: protocol, node and interface
 - Software report including conflicts and inconsistencies
 - Hardware report including conflicts and inconsistencies: Hardware versions, firmware versions, micro-code versions, board revisions
- 2.11.2 Provide detailed recommendations, with a view towards helping you to optimize your Network Infrastructure stability.
- 2.12 **Network Inventory and Device Configuration Report.** Provide an inventory support service using Data Collection Tools to identify the quantity and type of Hardware on your Network and the range of Network Software releases running on your Network. The number of Network inventory and device configuration reports is limited to two (2) per year.
- C. NETWORK OPTIMIZATION SUPPORT SERVICE OPTIONS.** The following Service options are available only in conjunction with the Services set out in Part B unless otherwise stated. We will use commercially reasonable efforts to provide the Service Option(s) that you have purchased:
- 2.13 **Network Infrastructure Design Review Option.** You must have **Network Infrastructure Design Assistance** across your Network Infrastructure in order to purchase the Network Infrastructure Design Review described in this section. Under this option, we will perform one (1) additional Network Infrastructure Design Review to those purchased under Section 2.4.2 during Standard Business Hours, unless stated otherwise.
- 2.14 **Network Infrastructure Implementation Plan Review Option.** You must have **Network Infrastructure Implementation Plan Assistance** across your Network Infrastructure in order to purchase the Network Infrastructure Implementation Plan Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:
- 2.14.1 Perform one (1) implementation plan review that typically includes the following:
- Review and analysis of your Network Infrastructure deployment and integration plan
 - Review of proposed sample configurations
 - Review of turn-up test plan
 - Analysis of any changes that your Network operations staff should be alerted to
 - Report on recommendations.

2.14.2 Provide you with remote deployment support for up to three (3) months from completion of report provided under this option. Cisco will make available, upon receipt of not less than twenty-one (21) days prior written request by you, a designated support contact who can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes). You agree to submit a detailed request and schedule to us prior to any such activity.

2.15 **Network Infrastructure Software Strategy Review Option.** You must have **Network Infrastructure Software Strategy** across your Network Infrastructure in order to purchase the Network Infrastructure Software Strategy Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:

2.15.1 Provide one (1) Software strategy assessment that typically includes the following:

- Review of feature requirements and performance/availability objectives
- Review of new Software feature releases (for example, Cisco IOS, other Cisco OS Software, and Cisco micro-code) with respect to your business goals
- Report recommending a set of Software releases for your for your Network Infrastructure environment
- Review of your Software test plan and report on recommended changes
- Assist in the preparation and review of Software migration plan.

2.15.2 Provide you with remote deployment support for up to three (3) months from completion of the report provided under this option. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-days a week standby basis to remotely assist you in major Software upgrades provided you give us not less than twenty-one (21) days prior written notice. Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity.

3.0 SERVICE RESPONSIBILITIES OF CUSTOMERS.

To enable us to provide you with the Service that you have selected we need you to do the following:

A. FOCUSED TECHNICAL SUPPORT.

3.1 Operations Management.

- 3.1.1 Designate a representative to act as our primary interface.
- 3.1.2 Coordinate our onsite visits and provide us with not less than thirty (30) days' notice of any visit you reschedule. Rescheduled visits will be subject to additional fees.
- 3.1.3 Attend regularly scheduled conference calls for open case reviews.

3.2 Focused Engineering.

- 3.2.1 Designate one or more person(s) from within your technical support organization to serve as a liaison to our Advanced Services Engineer.
- 3.2.2 Provide your designated person(s) with instructions on process and procedures to initiate cases and access Focused Engineering Support.
- 3.2.3 Advise us of your standard operating procedures as they relate to your business practices, internal operational nomenclature and Network to allow us to effectively communicate and discuss cases with you and your staff in the context of your business environment.
- 3.2.4 Provide all necessary information to enable us to perform root cause analysis.
- 3.2.5 Provide us with reasonable electronic access to your Network.
- 3.2.6 Provide us with a Network topology map, configuration information, and information of new features being implemented as needed.
- 3.2.7 Notify our Advanced Services Engineer of any major technology additions or changes to your Network.
- 3.2.8 Provide all necessary device, platform, feature, and release train requirements that exist in your environment.
- 3.2.9 Agree that we will only support generally available Products and Software releases/versions unless we agree otherwise.
- 3.2.10 Report problems directly (for example, by telephone) using the number that we provide to you. Response times do not include problems reported via Cisco.com or other electronic means.

- B. NETWORK OPTIMIZATION SUPPORT.** To enable us to provide you with the Service that you have selected we need you to comply with the following General Responsibilities for all Services that you have selected under NOS baseline Service offering:
- 3.4 General Responsibilities**
- 3.4.1 Designate at least two (2) but not more than six (6) technical representatives (who are employees) in your centralized Network support center (“technical assistance center”) or design engineering team, together with one (1) technical representative to act as the primary technical interface for our Advanced Services Engineer.
 - 3.4.2 Within one (1) year from the commencement of your Agreement, you must have at least one (1) Cisco Certified Internetworking Expert ("CCIE") trained employee or one (1) employee that has achieved, in our sole determination, an equal standard through training and experience as designated contacts .
 - 3.4.3 Your technical assistance center shall maintain centralized network management for your Network capable of providing Level 1 and Level 2 support.
 - 3.4.4 Provide our Advanced Services Engineer with reasonable electronic access to your Network.
 - 3.4.5 Ensure that Data Collection Tools are located in a secure area at your site, within a Network environment protected within a firewall and on a secure LAN, under lock and key and with access restricted to those of your employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the output of the Data Collection Tools. Where Data Collection Tools provided by Cisco represent Software, you will need to make appropriate computers available and download Software as needed. You shall remain responsible for any damage to or loss or theft of the Data Collection Tools while in Customer’s custody. You will need to immediately return Data Collection Tool(s) to us upon the earlier of: (i) expiration or termination of the Services or (ii) upon our request that the Data Collection Tools(s) be returned to us.
 - 3.4.6 Provide a Network topology map, configuration information, and information of new features being implemented as needed.
 - 3.4.7 Notify our Advanced Services Engineer as soon as possible of any major Network changes (for example topology, configuration, new IOS releases).
 - 3.4.8 Notify us in writing within ten (10) days of any change to the composition of your Network. We may require modifications to the fee payable if the Network composition has increased beyond our original pricing quote for Services.
 - 3.4.9 Create and manage an internal email alias for communication with our Advances Services Engineer.
 - 3.4.10 Retain overall responsibility for any business process impact and any process change implementations.
- 3.5 Network Infrastructure Design Assistance and Network Infrastructure Design Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.5.1 Your Network Infrastructure design.
 - 3.5.2 The business and technical requirements for your new design.
 - 3.5.3 Any constraints faced by you.
 - 3.5.4 Current or future planned applications that will run on the supported Infrastructure.
 - 3.5.5 Current and planned traffic characteristics
- 3.6 Network Infrastructure Implementation Plan Assistance and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.6.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
 - 3.6.2 Identify low risk and high risk areas of your Network based on the Network Infrastructure traffic.
 - 3.6.3 Your Implementation plan and deployment schedule.
 - 3.6.4 Maintenance window information and any other constraints.
 - 3.6.5 Your change control process.
- 3.7 Network Infrastructure Remote Deployment Support and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities, we need you to provide the following:
- 3.7.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
 - 3.7.2 Identify low risk and high risk areas of the Network based on the Network Infrastructure traffic.

- 3.7.3 Your Implementation plan and deployment schedule.
- 3.7.4 Maintenance window information and any other constraints.
- 3.7.5 Your change control process.
- 3.7.6 Contact information and details of your escalation process.
- 3.7.7 Review details of planned Network changes with our Advanced Services Engineer.
- 3.8 **Network Infrastructure Software Strategy and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.8.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.8.2 Your Business and technical requirements for new Software releases.
 - 3.8.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.8.4 Your certification process and lab testing process.
 - 3.8.5 Your change control process.
- 3.9 **Network Infrastructure Remote Software Upgrade Support and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.9.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.9.2 Your business and technical requirements for new Software releases.
 - 3.9.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.9.4 Your certification process and lab testing process.
 - 3.9.5 Your change control process.
 - 3.9.6 Contact information and details of your escalation process.
 - 3.9.7 Review details of planned changes with our Advanced Services Engineer.
- 3.10 **Network Infrastructure Performance Engineering and Optimization.** In addition to the General Responsibilities, we need you to provide the following:
 - 3.10.1 Any service level agreements or Network Infrastructure performance requirements.
 - 3.10.2 Details of critical applications supported by your Network Infrastructure.
 - 3.10.3 Expected Network growth, application mix changes.
 - 3.10.4 Data collection activities as needed to facilitate a specific Cisco analysis.
- 3.11 **Network Infrastructure Knowledge Transfer and Mentoring.** In addition to the General Responsibilities we need you to: (1) provide us with a set of requirements on the topics you want us to cover and background information on the skill sets of your proposed audience; and (2) ensure that facilities and equipment are available to host the Transfer of Information (“TOI”) sessions.
- 3.12 **Network Infrastructure Performance Audit Option.** In addition to the General Responsibilities, Customer shall:
 - 3.12.1 Ensure that your key Networking and operational personnel are available to participate in interview sessions as required in support of the selected audit.
 - 3.12.2 Provide assessments and audit data collection support. You will need to help install the Data Collection Tools into your production, and if applicable, test Network environment. You will need to ensure that we have all relevant device information needed for the audits, including the required device lists.
 - 3.12.3 Provide all information and data that you have gathered from tools used by you for Network data analysis and monitoring. You shall remain responsible for any damage to or loss or theft of the Data Collection Tools while in Customer’s custody. You must immediately return Data Collection Tools to us upon the earlier of: (i) expiration or termination of the Exhibit; or (ii) our request to you that Data Collection Tools be returned.

4.0 SERVICES NOT COVERED UNDER THIS EXHIBIT.

Certain services are not covered:

- 4.1 Provision of Services for Technology applications. Technology applications are not covered under the Network Optimization Support, but can be purchased separately for an additional fee.
- 4.2 Any customization of, or labor to install, Software and Hardware (including installation of Updates).
- 4.3 Provision of Software Application Services. For purposes of this Exhibit, "Software Application Services" means services for non-resident/stand alone Software which include but are not limited to Cisco's network management Software, security Software, IP telephony Software, internet appliance Software , Cisco Intelligent Contact Management Software and Cisco IP Contact Center Software.
- 4.4 Furnishing of supplies, accessories or the replacement of expendable parts (e.g., cables, blower assemblies, power cords, and rack mounting kits).
- 4.5 Electrical or site work external to the Products.
- 4.6 Support or replacement of Product that is altered, modified, mishandled, destroyed or damaged by one or more of the following: (i) natural causes; (ii) environmental failures; (iii) your failure to take any required actions; (iv) a negligent or willful act or omission by you or use by you other than as specified in the applicable Cisco-supplied documentation; or (v) an act or omission of a third party.
- 4.7 Services or software to resolve Software or Hardware problems resulting from third party product or causes beyond Cisco's control or failure to perform your responsibilities set out in this Data Sheet.
- 4.8 Services for non-Cisco Software installed on any Cisco Product.
- 4.9 Any Hardware or third party product upgrade required to run new or updated Software.
- 4.10 Additional Services are provided at the then-current time and materials rates.
- 4.11 Except as otherwise provided in this Data Sheet, Software entitlement, including media, documentation, binary code, source code or access in electronic or other form is not provided. In addition, except as otherwise provided, no right, use or license to our Software is granted by this Data Sheet and you acknowledge and agree that you obtain no such rights.
- 4.12 Additional onsite visits and standby services beyond the number of visits/Events specified in the Quote, except as otherwise agreed, are provided at Cisco then-current travel and labor rates for such service on a time and material or non-contract service basis.

5.0 LICENSING.

In the event that we provide Software (whether on a Data Collection Tool or otherwise), we grant you a nonexclusive and nontransferable license to use the Software, in object code form only, on the Data Collection Tool on which such Software is provided or, if no Data Collection is provided, on a single Hardware chassis, until the earlier of: (i) the expiration or termination of the Device; or (ii) our request that the Data Collection Tool(s) be returned to us. You have no right and you specifically agree not to: (a) rent, lease, distribute, sell, transfer or sublicense your license rights to any other person, or use the Software on unauthorized or secondhand equipment; (b) make error corrections to or otherwise modify or adapt the Software nor create derivative works based upon the Software, or to permit third parties to do the same; or (c) copy, in whole or in part, any Software or document (except for reasonable backup copies), decompile, decrypt, reverse engineer, disassemble or otherwise reduce all or any portion of the Software to human-readable form. We shall make available any interface information which you are entitled to under applicable law upon written notice request and payment of Cisco's applicable fee.

6.0 LIMITATIONS.

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT YOU ARE SOLELY RESPONSIBLE FOR DETERMINATION AND IMPLEMENTATION OF YOUR NETWORK DESIGN REQUIREMENTS. IN NO EVENT SHALL WE BE LIABLE FOR (A) ANY DISCLOSURE OF THE CONTENTS OR OUTPUT OF PERFORMANCE ANALYSES, NETWORK OR OTHER REPORTS AND/OR DATA COLLECTION TOOLS BY YOUR EMPLOYEE(S) OR THIRD PARTY(S); (B) THE SECURITY OF YOUR NETWORK OR FOR ANY UNAUTHORIZED ACCESS TO SUCH NETWORK BY YOUR EMPLOYEE(S), CONTRACTOR(S), OR THIRD PARTY(S); OR (C) THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED IN ANY DESIGN REPORT.



Advanced Services: Focused Technical Support and Network Optimization Support Data Sheet For Services purchased from Cisco Systems Canada Co.

Cisco Advanced Services provide responsive, preventative and consultative support of Cisco technologies and are focused on helping to address your specific networking needs. The two programs included within this Data Sheet are Focused Technical Support and Network Optimization Support.

The goal of Focused Technical Support is to build on the core operational Technical Support Services maintenance (SMARTnet, SMARTnet On-Site and Software Application Support Services) and to deliver responsive, rapid problem escalation through personalized attention and special access to engineering resources with specific knowledge of your Network and operational processes.

The goal of Network Optimization Support is to provide advice on capacity planning, configuration management and software migration for Cisco Network infrastructure to help maximize your network return on investment.

The Services set out in this Data Sheet are designed to supplement core operational Technical Support Services and all the Products in your Network need to be supported with a minimum of SMARTnet, SMARTnet On-Site or Software Application Support Services). Your Purchase Order must itemize the specific options that you have actually purchased. Please read this Data Sheet carefully as it contains important terms regarding the Services that you have purchased from us. This Data Sheet is part of the Agreement that we have entered into.

To help you navigate through this Data Sheet we have listed the Services that are available to you and cross referenced the relevant Sections. Sections 4, 5 and 6 will apply to any Service that you purchase from us. If you have purchased:

- a. Focused Technical Support – Operations Management: We will provide you with the Services in Section 2.1. You will need to meet your obligations at Section 3.1
- b. Focused Technical Support – Focused Engineering: We will provide you with the Services in Section 2.2. You will need to meet your obligations in Section 3.2.
- c. Focused Technical Support – High Touch Technical Support Option: We will provide you with the Services in Section 2.3. You will need to meet your obligations in Section 3.3.
- d. Network Infrastructure Design Assistance: We will provide you with the Services in Sections B1 and 2.4. You will need to comply with your obligations in Sections 3.4 and 3.5.
- e. Network Infrastructure Implementation Plan Assistance: We will provide you with the Services in Section B1 and 2.5. You will need to meet your obligations in Sections 3.4 and 3.6.
- f. Network Infrastructure Remote Deployment Support: We will provide you with the Services in Sections B1 and 2.6. You will need to meet your obligations in Sections 3.4 and 3.7.
- g. Cisco Network Infrastructure Software Strategy: then we will provide you with the Services in Section B1 and 2.7. You will need to meet your obligations in Sections 3.4 and 3.8
- h. Network Infrastructure Remote Software Upgrade Support: We will provide you with the Services in Section B1 and 2.8. You will need to meet your obligations in Sections 3.4 and 3.9.
- i. Network Infrastructure Performance Engineering and Optimization: We will provide you with the Services in Section B1 and 2.9. You will need to meet your obligations in Sections 3.4 and 3.10.
- j. Network Infrastructure Knowledge Transfer and Mentoring: We will provide you with the Services in Sections B1 and 2.10. You will need to meet your obligations in Sections 3.4 and 3.11.
- k. Network Infrastructure Performance Audit Option: We will provide you with the Services in Sections B1 and 2.11. You will need to meet your obligations in Sections 3.4 and 3.12.
- l. Network Infrastructure Design Review Option: We will provide you with the Services in Section B1 and 2.12. You will need to meet your obligations in Sections 3.4 and 3.5.
- n. Network Infrastructure Implementation Plan Review Option: We will provide you with the Services in Sections B1 and 2.13. You will need to meet your obligations in Sections 3.4 and 3.6.

- o. Network Infrastructure Software Strategy Review Option: We will provide you with the Services in Sections B1 and 2.14. You will need to meet your obligations in Sections 3.4 and 3.8.

1.0 DEFINITIONS.

- 1.1 **“Additional Services”** means installation of new Hardware, system additions, Hardware upgrades, or non-mandatory engineering changes.
- 1.2 **“Data Collection Tools”** means Hardware or Software tools that allow us to provide troubleshooting on critical cases, data analysis and report generation capabilities.
- 1.3 **“Event”** means notification of your performance of a planned Network Hardware, Software, or configuration change.
- 1.4 **“Level 1”** means support where technical staff with the appropriate skills perform installations, remedial Hardware maintenance and basic Hardware and Software configurations on Cisco Product(s).
- 1.5 **“Level 2”** means support where technical staff with the appropriate skills perform isolation, replication and diagnosis of internetworking based problems on Cisco Product(s). You should not report Software bugs to us until you have attempted to identify their source and validated the identification in your Network through appropriate testing. If you cannot duplicate the bug in your Network, we will jointly attempt to replicate and resolve those bugs in either your Network or ours. Whichever Network we agree upon, you will need to work to address the bugs on a best efforts basis to replicate them in your Network and to document your diagnosis and resolution activity before seeking our input.
- 1.6 **“Network”** means a set of interconnected and inter-working Cisco supported Hardware and Software that is implemented, operated, and supported by you from a single Network Operations Center (“NOC”).
- 1.7 **“Network Infrastructure”** means your core transport and aggregation Network technology (for example, Metro Optical, ATM/FR and IP Core).
- 1.8 **“Network Infrastructure Size”** means the total value of Products in your Network and is based on the global list price of the Products that you have purchased.

2.0 OUR SERVICE RESPONSIBILITIES.

- A. **FOCUSED TECHNICAL SUPPORT.** The purchase of Focused Engineering Services is the minimum requirement for you to be able to purchase Operations Management Services. For the term of our Agreement, we will use commercially reasonable efforts to provide you with one or more of the Services during Standard Business Hours (unless otherwise stated):

2.1 Operations Management.

- 2.1.1 Facilitate Hardware and Software problem resolution case management on a reactive basis for technical issues reported to us by you in addition to helping you to determine if appropriate resources are being applied to the technical issues reported.
- 2.1.2 Perform operational analysis, not to exceed sixteen (16) per year, on critical issues by identifying your knowledge gaps and operational abnormalities/gaps. We will provide recommendations and identify possible solutions that you may elect to implement to help close those knowledge and system quality gaps.
- 2.1.3 Conduct regularly scheduled conference calls with you to discuss operational TAC issues, track open cases and report progress on resolution of open cases.
- 2.1.4 Conduct bi-annual onsite visits to help you to review quarterly operational trend analysis reports prepared by us and that address your cases submitted to TAC. The reports will cover, amongst other things, reactive support contract usage, case statistics, quality issues, case trending (by product type, case priority, etc.), Network trending and Return Materials Authorization (“RMA”) trending.
- 2.1.5 Provide informal instructional sessions on troubleshooting tools, and processes during our onsite visits.
- 2.1.6 Notify TAC, and the engineer familiar with your Network (“Advanced Services Engineer”), if such Service has been ordered, of any planned Event by pre-opening a case and alerting TAC of relevant information related to the scheduled Event, not to exceed two (2) Events per month.

2.2 Focused Engineering.

- 2.2.1 Designate an engineer (“Advanced Services Engineer”) to act as the primary technical support for critical cases at the Network level.

- 2.2.2 Provide problem resolution of critical cases at the Network level.
 - 2.2.3 Provide technical representation in regularly scheduled conference calls.
 - 2.2.4 Visit your nominated site location to gather information and details of any changes to your Network. We will review critical cases and review problem root cause analysis with you. A maximum of two (2) visits per year may be conducted.
 - 2.2.5 Perform root cause analysis, not to exceed four (4) per year, on technical issues relating to your Network Infrastructure. Performance of root cause analysis is dependant upon us having all necessary available information with which to perform a root cause analysis.
 - 2.2.6 Provide Software recommendations to address your documented and communicated Network functionality requirements. Our recommendations (focused on recommending appropriate Updates) shall apply to critical cases in respect of an affected area of your Network.
 - 2.2.7 Provide certain Data Collection Tools during the term of the Services. Data Collection Tools may or may not include Hardware or Software. We retain full right, title and interest to the Data Collection Tools.
- 2.3 **High Touch Technical Support Option.** In order to receive this option, you must have purchased **Operations Management and Focused Engineering**. Under this option, we shall provide the following Services, where available, on a twenty-four (24) hours per day, seven (7) days per week basis :
- 2.3.1 Direct access to the High Touch Technical Support team via a Cisco provided phone number.
 - 2.3.2 Response to you within fifteen (15) minutes on Priority 1 or Priority 2 calls. For Priority 3 and Priority 4 calls, our response shall be within sixty (60) minutes.
- B. NETWORK OPTIMIZATION SUPPORT.** The purchase of Focused Engineering Services set out in Part A, together with those components of our Network Optimization Support (“NOS”) comprising Cisco Network Infrastructure Software Strategy and Network Infrastructure Remote Software Upgrade Support Services is the minimum requirement for you to be able to purchase the other NOS Services set out in Part B. We will use commercially reasonable efforts to provide these Services for your Network Infrastructure during Standard Business Hours (unless stated otherwise). The following General Support provisions will apply to all Service options that you have selected:
- B.1 General Support.**
- B.1.1 Designate an engineer (“Advanced Services Engineer”) to act as the primary interface with you for your Network Infrastructure.
 - B.1.2 Schedule four quarterly visits per year (not to exceed eight (8) days in aggregate) with you to visit your site and review proactive deliverables and activities and help you plan for the next quarter. Where you have ordered Focused Engineering Service, the two visits specified in that Service component will be included in the four total visits described in this General Support section. Any additional visits will be charged at our then-current travel and labor rates.
 - B.1.3 Schedule periodic conference calls (usually weekly) to review your Network Infrastructure status, planning and the Services being provided.
 - B.1.4 Establish a Customer-specific Cisco email alias to facilitate communication with Cisco Advanced Services Engineers.
 - B.1.5 Provide certain Data Collection Tools during the term of the Services. Data Collection Tools may or may not include Hardware or Software. We retain full right, title and interest to the Data Collection Tools. In addition to Cisco provided tools, the Advanced Services Engineer may utilize the data that you have provided to us, scripts or internal tools to assist us in collecting data from your Network.
- 2.4 **Network Infrastructure Design Assistance.**
- 2.4.1 We will consult with your networking staff in a series of face-to-face and remotely conducted meetings to develop a thorough understanding of your Network Infrastructure design requirements. The focus here will be on concerns around resiliency, self-recovery, scalability, the ability to handle increased traffic demands and Quality of Service (“QoS”).
 - 2.4.2 Provide a Network Infrastructure design review that may include, amongst other information, the following:

- Review of your design requirements, priorities, and goals
- Analysis of impact of new requirements to your existing Network Infrastructure
- Review of your Network Infrastructure architecture and topology
- Review of your protocol selection and configuration
- Review of feature selection and configuration
- Report describing design review together with our recommendations

The number of design reviews that we provide will vary depending on the size of your Network Infrastructure and Network expansion plans and shall be limited to the amount shown below:

Network Infrastructure Size	Design Reviews
<\$40M	2
\$40M-\$80M	3
>\$80M	4

2.4.3 Provide ongoing, informal Network Infrastructure design and architecture consultation.

2.5 **Network Infrastructure Implementation Plan Assistance.**

2.5.1 We will evaluate and understand your implementation and deployment plan through a series of remotely conducted meetings and interviews with your staff. We will review your deployment plan, identify possible Network disruptions and provide sample configurations that you can leverage to determine if devices in your Network Infrastructure are properly configured to support the services you intend to offer.

2.5.2 Provide a Network Infrastructure implementation plan review that may include, amongs t other information, the following:

- Review and analysis of your Network Infrastructure deployment and integration plan
- Review of proposed configuration templates
- Review of turn-up test plan
- Analysis of any changes that Network operations staff should be alerted to
- Report on recommendations.

The number of implementation plan reviews will vary depending on the size of your Network Infrastructure and Network expansion plans and shall be limited to the amount shown below:

Network Infrastructure Size	Implementation Plan Reviews
<\$40M	2
\$40M-\$80M	3
>\$80M	4

2.5.3 Provide ongoing, informal Hardware and configuration change impact analyses, reviews, and recommendations. The number of monthly change impact reviews will vary depending on the size of your Network Infrastructure and Network expansion plans and shall be limited to the amount shown below:

Network Infrastructure Size	Change Impact Review (Monthly)
<\$40M	2
\$40-\$80M	3
>\$80M	4

2.6 **Network Infrastructure Remote Deployment Support.** We will provide you with remote resource to help address problems with your Network Infrastructure Hardware and configuration issues during a major deployment into a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes), provided that we have received not less than twenty-one (21) days prior written notice of a request by you for this support. You will need to submit a detailed request and schedule to us before we can provide this support to you. The number of Events and total aggregate standby time will vary depending on the size of your Network Infrastructure and Network activity and will be limited in any one-month period for all Hardware, configuration, and Software Events combined as shown below. (Note: Software Events are covered under Network Infrastructure Remote Software Upgrade Support)

Network Infrastructure Size	Total Number of H/W, S/W and Configuration Events Combined (Monthly)	Total Aggregate Standby Time (Hourly)
<\$40M	2	16
\$40M-\$80M	3	20
>\$80M	4	24

2.7 Cisco Network Infrastructure Software Strategy.

- 2.7.1 Provide Software strategy assessment(s), based on your ongoing functional and technical Network Infrastructure requirements. Each assessment typically includes, amongst other information, the following:
- Review of your feature requirements and performance/availability objectives
 - Review of new Software feature releases (for example, Cisco IOS, other Cisco OS Software and Cisco micro-code) with respect to your business goals
 - Software strategy report that includes an analysis report outlining the recommended releases of Software for your Network Infrastructure environment and the potential impact that running such releases may have on your Network
 - Review of your Software verification test plan and report on recommended changes
 - Assist in the preparation and review of your Software migration plan
- 2.7.2 Provide ongoing, informal Software impact analysis, review, and recommendations.
- 2.7.3 Provide proactive critical bug notification for the recommended Software on key Network Infrastructure components.
- 2.7.4 The number of Software impact analysis reviews, assessments and frequency of proactive bug notifications will vary depending on the size of your Network Infrastructure and Network activity and shall be limited to the amount shown below:

Network Infrastructure Size	Assessments (yearly) (Section 2.7.1)	Software Impact Analysis (Section 2.7.2)	Proactive Bug Reports (Section 2.7.3)
<\$10M	1	6/yr.	Monthly
\$10M-\$40M	2	1/mo.	Weekly
\$40M-\$80M	2	2/mo.	Weekly
\$80M-\$160M	2	3/mo.	Weekly
>\$160M	2	4/mo.	Weekly

- 2.8 Network Infrastructure Remote Software Upgrade Support.** Provides you with remote resource to help address problems with your Network Infrastructure Software during major upgrades on a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day a week standby basis to remotely assist you in major Software upgrades, provided that we receive at least twenty-one (21) days prior written notice from you. You will need to submit a detailed request and schedule to us prior to any such activity. The number of Events and total aggregate standby time will vary depending on the size of your Network Infrastructure and Network activity and will be limited in any one-month period for all Hardware, configuration, and Software Events combined as shown below. (Note – Hardware and configuration Events are covered under Network Infrastructure Remote Deployment Support).

Network Infrastructure Size	Total Number of H/W, S/W and Config. Events Combined	Total Aggregate Standby Time (Hourly)
<\$10M	6/yr.	8
\$10M-\$40M	2/mo.	16
\$40M-\$80M	3/mo.	20
>\$80M	4/mo.	24

2.9 Network Infrastructure Performance Engineering and Optimization.

- 2.9.1 Provide a performance analysis of your Network Infrastructure to identify potential performance and optimization issues and review the validity of key device configurations in the context of new traffic patterns or changes in Network size that are planned or have been implemented by you. Such performance analysis typically includes the following:

- Collection of key performance data
- Identification of exception reports
- Analysis of key device configurations
- Analysis of resource utilization
- Assistance to define Network-specific performance criteria
- Report on performance optimization recommendations such as system tuning and protocol optimization changes

The number of performance analyses will vary depending on the size of your Network Infrastructure and Network expansion plans and shall be limited to the amount shown below:

Network Infrastructure Size	Performance Analyses
<\$40M	4
\$40M-\$80M	5
>\$80M	6

- 2.9.2 Perform ongoing, informal performance tuning checks for your Network Infrastructure.
- 2.10 **Network Infrastructure Knowledge Transfer and Mentoring.** Provide you annually with up to four (4) technical update meetings each with duration of up to four (4) hours. These meetings shall be conducted at your site by and Advanced Services Engineer or another senior Cisco engineer with a view to providing a technical update training on a topic that is mutually agreed upon and relevant to the Products and Cisco technologies existing on your Network Infrastructure. These meetings are usually held in conjunction with the four quarterly review meetings per year.
- C. NETWORK OPTIMIZATION SUPPORT SERVICE OPTIONS.** The following Service options are available only in conjunction with the Services set out in Part B unless otherwise stated. We will use commercially reasonable efforts to provide the Service Option(s) that you have purchased:
- 2.11 **Network Infrastructure Performance Audit Option.** Under this option, which is available under NOS or as a stand alone Service offering, we will provide the following Services during Standard Business Hours, unless stated otherwise:
- 2.11.1 Provide one (1) Network Infrastructure Performance Audit as selected by you out of those currently available and identified by us from time to time. The audit typically includes the following:
- Performance report at node and interface level
 - Configuration report: protocol, node and interface
 - Software report including conflicts and inconsistencies
 - Hardware report including conflicts and inconsistencies: HW versions, firmware versions, micro-code versions, board revisions
- 2.11.2 Provide detailed recommendations, with a view towards helping you to optimize your Network Infrastructure stability.
- 2.12 **Network Infrastructure Design Review Option.** You must have **Network Infrastructure Design Assistance** across your Network Infrastructure in order to the purchase the Network Infrastructure Design Review described in this section. Under this option, we will perform one (1) additional Network Infrastructure Design Review to those purchased under Section 2.4.2 during Standard Business Hours, unless stated otherwise.
- 2.13 **Network Infrastructure Implementation Plan Review Option.** You must have **Network Infrastructure Implementation Plan Assistance** across your Network Infrastructure in order to the purchase the Network Infrastructure Implementation Plan Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:
- 2.13.1 Perform one (1) implementation plan review that typically includes the following:
- Review and analysis of your Network Infrastructure deployment and integration plan
 - Review of proposed sample configurations
 - Review of turn-up test plan
 - Analysis of any changes that your Network operations staff should be alerted to
 - Report on recommendations.
- 2.13.2 Provide you with remote deployment support for up to three (3) months from completion of report provided under this option. We will make available, upon receipt of not less than twenty-one (21) days prior written request by you, a designated support contact who can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes). Customer agree to submit a detailed request and

schedule to us prior to any such activity. Such request for assistance shall be limited one (1) Event with a total standby time of eight (8) hours in any one-month period.

2.14 **Network Infrastructure Software Strategy Review Option.** You must have **Network Infrastructure Software Strategy** across your Network Infrastructure in order to purchase the Network Infrastructure Software Strategy Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:

2.14.1 Provide one (1) Software strategy assessment that typically includes the following:

- Review of feature requirements and performance/availability objectives
- Review of new Software feature releases (for example, Cisco IOS, other Cisco OS Software, and Cisco micro-code) with respect to your business goals
- Report recommending a set of Software releases for your for your Network Infrastructure environment
- Review of your Software test plan and report on recommended changes
- Assist in the preparation and review of Software migration plan.

2.14.2 Provide you with remote deployment support for up to three (3) months from completion of the report provided under this option. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-days a week standby basis to remotely assist you in major Software upgrades provided you give us not less than twenty-one (21) days prior written notice. Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity. Such request for assistance shall be limited one (1) Event with a total standby time of eight (8) hours in any one-month period.

3.0 **SERVICE RESPONSIBILITIES OF CUSTOMERS.**

To enable us to provide you with the Service that you have selected we need you to do the following:

A. FOCUSED TECHNICAL SUPPORT.

3.1 Operations Management.

- 3.1.1 Designate a representative to act as our primary interface.
- 3.1.2 Coordinate our onsite visits and provide us with not less than thirty (30) days' notice of any visit you reschedule. Rescheduled visits will be subject to additional fees.
- 3.1.3 Attend regularly scheduled conference calls for open case reviews.

3.2 Focused Engineering.

- 3.2.1 Designate an individual within your technical support organization to serve as a liaison to our Advanced Services Engineer.
- 3.2.2 Ensure that your personnel know how to initiate cases and access Focused Engineering Support.
- 3.2.3 Advise us of your standard operating procedures as they relate to your business practices, internal operational nomenclature and Network to allow us to effectively communicate and discuss cases with you and your staff in the context of your business environment.
- 3.2.4 Provide all necessary information to enable us to perform root cause analysis.
- 3.2.5 Provide us with reasonable electronic access to your Network.
- 3.2.6 Provide us with a Network topology map, configuration information, and information of new features being implemented.
- 3.2.7 Notify our Advanced Services Engineer of any major technology additions or changes to your Network.
- 3.2.8 Provide all necessary device, platform, feature, and release train requirements that exist in your environment.
- 3.2.9 Agree that we will only support generally available Products and Software releases/versions unless we agree otherwise.
- 3.2.10 Ensure that Data Collection Tools are located in a secure area at your site, within a Network environment protected within a firewall and on a secure LAN, with access restricted to those of your employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the output of the Data Collection Tools. Where Data Collection Tools provided by Cisco represent Software, you will need to make appropriate computers available and download Software as needed.

- 3.3 **High Touch Technical Support.** Report Priority 1 & 2 problems by telephone. We will provide you with valid telephone numbers. Response times do not include problems reported via Cisco.com or other electronic means.
- B. NETWORK OPTIMIZATION SUPPORT.** To enable us to provide you with the Service that you have selected we need you to comply with the following General Responsibilities for all Services that you have selected under NOS baseline Service offering:
- 3.4 **General Responsibilities**
- 3.4.1 Designate at least two (2) but not more than six (6) technical representatives (who are employees) in your centralized Network support center ("technical assistance center"), to act as the primary technical contacts for our Advanced Services Engineer. These contacts must be senior engineers with the authority to make any necessary changes to your Network configuration. One individual, who must be a senior member of your management or technical staff, will be designated as your primary point of contact to manage the implementation of the Services you have purchased (for example, chair the weekly conference calls, assist with prioritization of projects and activities).
 - 3.4.2 Within one (1) year from the commencement of this Exhibit, you must have at least one (1) Cisco Certified Internetworking Expert ("CCIE") trained employee or one (1) employee that has achieved, in our sole determination, an equal standard through training and experience as designated contacts .
 - 3.4.3 Your technical assistance center shall maintain centralized network management for your Network capable of providing Level 1 and Level 2 support.
 - 3.4.4 Provide our Advanced Services Engineer with reasonable electronic access to your Network.
 - 3.4.5 Ensure that Data Collection Tools are located in a secure area at your site, within a Network environment protected within a firewall and on a secure LAN, under lock and key and with access restricted to those of your employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the output of the Data Collection Tools. Where Data Collection Tools provided by Cisco represent Software, you will need to make appropriate computers available and download Software as needed.
 - 3.4.6 Provide a Network topology map, configuration information, and information of new features being implemented as needed.
 - 3.4.7 Notify our Advanced Services Engineer of any major Network changes (for example topology, configuration, new IOS releases).
 - 3.4.8 Notify us in writing within ten (10) days of any change to the composition of your Network. We may require modifications to the fee payable if the Network composition has increased beyond our original pricing quote for Services.
 - 3.4.9 Create and manage an internal email alias for communication with our Advances Services Engineer.
- 3.5 **Network Infrastructure Design Assistance and Network Infrastructure Design Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.5.1 Your Network Infrastructure design.
 - 3.5.2 The business and technical requirements for your new design.
 - 3.5.3 Any constraints faced by you.
 - 3.5.4 Current and planned traffic characteristics.
- 3.6 **Network Infrastructure Implementation Plan Assistance and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.6.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
 - 3.6.2 Identify low risk and high risk areas of your Network based on the Network Infrastructure traffic.
 - 3.6.3 Your Implementation plan and deployment schedule.
 - 3.6.4 Maintenance window information and any other constraints.
 - 3.6.5 Your change control process.
- 3.7 **Network Infrastructure Remote Deployment Support and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities, we need you to provide the following:
- 3.7.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
 - 3.7.2 Identify low risk and high risk areas of the Network based on the Network Infrastructure traffic.

- 3.7.3 Your Implementation plan and deployment schedule.
- 3.7.4 Maintenance window information and any other constraints.
- 3.7.5 Your change control process.
- 3.7.6 Contact information and details of your escalation process.
- 3.7.7 Review details of planned Network changes with our Advanced Services Engineer.
- 3.8 **Network Infrastructure Software Strategy and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.8.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.8.2 Your business and technical requirements for new Software releases.
 - 3.8.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.8.4 Your certification process and lab testing process.
 - 3.8.5 Your change control process.
- 3.9 **Network Infrastructure Remote Software Upgrade Support and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.9.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.9.2 Your business and technical requirements for new Software releases.
 - 3.9.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.9.4 Your certification process and lab testing process.
 - 3.9.5 Your change control process.
 - 3.9.6 Contact information and details of your escalation process.
 - 3.9.7 Review details of planned Network changes with our Advanced Services Engineer.
- 3.10 **Network Infrastructure Performance Engineering and Optimization.** In addition to the General Responsibilities, we need you to provide the following:
 - 3.10.1 Any service level agreements or Network Infrastructure performance requirements.
 - 3.10.2 Details of critical applications supported by your Network Infrastructure.
 - 3.10.3 Expected Network growth, application mix changes.
 - 3.10.4 Data collection activities as needed to facilitate a specific Cisco analysis.
- 3.11 **Network Infrastructure Knowledge Transfer and Mentoring.** In addition to the General Responsibilities we need you to: (1) provide us with a set of requirements on the topics you want us to cover and background information on the skill sets of your proposed audience; and (2) ensure that facilities and equipment are available to host the Transfer of Information (“TOI”) sessions.
- 3.12 **Network Infrastructure Performance Audit Option.** In addition to the General Responsibilities, Customer shall:
 - 3.12.1 Ensure that your key Networking and operational personnel are available to participate in interview sessions as required in support of the selected audit.
 - 3.12.2 Provide assessments and audit data collection support. You will need to help install the Data Collection Tools into your production, and if applicable, test Network environment. You will need to ensure that we have all relevant device information needed for the audits, including the required device lists.
 - 3.12.3 Provide all information and data that you have gathered from tools used by you for Network data analysis and monitoring.

4.0 SERVICES NOT COVERED UNDER THIS EXHIBIT.

Certain services are not covered:

- 4.1 Provision of Services for Network applications (for example, CDN, Public Voice, IP Packet Telephony, Broadband). Network applications are not covered under the Network Optimization Support, but can be purchased separately for an additional fee.

- 4.2 Any customization of, or labor to install, Software and Hardware (including installation of Updates).
- 4.3 Provision of Software Application Services. For purposes of this Exhibit, "Software Application Services" means services for non-resident/stand alone Software which include but are not limited to Cisco's network management Software, security Software, IP telephony Software, internet appliance Software, Cisco Intelligent Contact Management Software and Cisco IP Contact Center Software.
- 4.4 Furnishing of supplies, accessories or the replacement of expendable parts (e.g., cables, blower assemblies, power cords, and rack mounting kits).
- 4.5 Electrical or site work external to the Products.
- 4.6 Support or replacement of Product that is altered, modified, mishandled, destroyed or damaged by one or more of the following: (i) natural causes; (ii) environmental failures; (iii) your failure to take any required actions; (iv) a negligent or willful act or omission by you or use by you other than as specified in the applicable Cisco-supplied documentation; or (v) an act or omission of a third party.
- 4.7 Services or software to resolve Software or Hardware problems resulting from third party product or causes beyond Cisco's control or failure to perform your responsibilities set out in this Data Sheet.
- 4.8 Services for non-Cisco Software installed on any Cisco Product.
- 4.9 Any Hardware or third party product upgrade required to run new or updated Software.
- 4.10 Additional Services are provided at the then-current time and materials rates.
- 4.11 Except as otherwise provided in this Data Sheet, Software entitlement, including media, documentation, binary code, source code or access in electronic or other form is not provided. In addition, no right, use or license to our Software is granted by this Data Sheet and you acknowledge and agree that you obtain no such rights.
- 4.12 Additional onsite visits and standby services beyond the number of visits/Events specified in the applicable service option, except as otherwise agreed, are provided at Cisco then-current travel and labor rates for such service on a time and material or non-contract service basis.

5.0 LICENSING.

In the event that we provide Software (whether on a Data Collection Tool or otherwise), we grant you a nonexclusive and nontransferable license to use the Software, in object code form only, on the Data Collection Tool on which such Software is provided or, if no Data Collection is provided, on a single Hardware chassis, until the earlier of: (i) the expiration or termination of the Device; or (ii) our request that the Data Collection Tool(s) be returned to us. You have no right and you specifically agree not to: (a) rent, lease, distribute, sell, transfer or sublicense your license rights to any other person, or use the Software on unauthorized or secondhand equipment; (b) make error corrections to or otherwise modify or adapt the Software nor create derivative works based upon the Software, or to permit third parties to do the same; or (c) copy, in whole or in part, any Software or document (except for reasonable backup copies), decompile, decrypt, reverse engineer, disassemble or otherwise reduce all or any portion of the Software to human-readable form. We shall make available any interface information which you are entitled to under applicable law upon written notice request and payment of Cisco's applicable fee.

6.0 LIMITATIONS.

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT YOU ARE SOLELY RESPONSIBLE FOR DETERMINATION AND IMPLEMENTATION OF YOUR NETWORK DESIGN REQUIREMENTS. IN NO EVENT SHALL WE BE LIABLE FOR (A) ANY DISCLOSURE OF THE CONTENTS OR OUTPUT OF PERFORMANCE ANALYSES, NETWORK OR OTHER REPORTS AND/OR DATA COLLECTION TOOLS BY YOUR EMPLOYEE(S) OR THIRD PARTY(S); (B) THE SECURITY OF YOUR NETWORK OR FOR ANY UNAUTHORIZED ACCESS TO SUCH NETWORK BY YOUR EMPLOYEE(S), CONTRACTOR(S), OR THIRD PARTY(S); OR (C) THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED IN ANY DESIGN REPORT.



Advanced Services: Focused Technical Support and Network Optimization Support Data Sheet For Services purchased from Cisco Systems Inc. (Asia Pacific excluding Australia and Japan)

Cisco Advanced Services provide responsive, preventative and consultative support of Cisco technologies and are focused on helping to address your specific networking needs. The two programs included within this Data Sheet are Focused Technical Support and Network Optimization Support.

The goal of Focused Technical Support is to build on the core operational Technical Support Services maintenance (SMARTnet, SMARTnet On-Site and Software Application Support Services) and to deliver responsive, rapid problem escalation through personalized attention and special access to engineering resources with specific knowledge of your Network and operational processes.

The goal of Network Optimization Support is to provide advice on capacity planning, configuration management and software migration for Cisco Network infrastructure to help maximize your network return on investment.

The Services set out in this Data Sheet are designed to supplement core operational Technical Support Services and all the Products in your Network need to be supported with a minimum of SMARTnet, SMARTnet On-Site or Software Application Support Services). Your Purchase Order must itemize the specific options that you have actually purchased. Please read this Data Sheet carefully as it contains important terms regarding the Services that you have purchased from us. This Data Sheet is part of the Agreement that we have entered into.

To help you navigate through this Data Sheet we have listed the Services that are available to you and cross referenced the relevant Sections. Sections 4, 5 and 6 will apply to any Service that you purchase from us. If you have purchased:

- a. Focused Technical Support – Operations Management: We will provide you with the Services in Section 2.1. You will need to meet your obligations at Section 3.1
- b. Focused Technical Support – Focused Engineering: We will provide you with the Services in Section 2.2. You will need to meet your obligations in Section 3.2.
- c. Network Infrastructure Design Assistance: We will provide you with the Services in Sections B1 and 2.4. You will need to comply with your obligations in Sections 3.4 and 3.5.
- d. Network Infrastructure Implementation Plan Assistance: We will provide you with the Services in Section B1 and 2.5. You will need to meet your obligations in Sections 3.4 and 3.6.
- e. Network Infrastructure Remote Deployment Support: We will provide you with the Services in Sections B1 and 2.6. You will need to meet your obligations in Sections 3.4 and 3.7.
- f. Cisco Network Infrastructure Software Strategy: then we will provide you with the Services in Section B1 and 2.7. You will need to meet your obligations in Sections 3.4 and 3.8
- g. Network Infrastructure Remote Software Upgrade Support: We will provide you with the Services in Section B1 and 2.8. You will need to meet your obligations in Sections 3.4 and 3.9.
- h. Network Infrastructure Performance Engineering and Optimization: We will provide you with the Services in Section B1 and 2.9. You will need to meet your obligations in Sections 3.4 and 3.10.
- i. Network Infrastructure Knowledge Transfer and Mentoring: We will provide you with the Services in Sections B1 and 2.10. You will need to meet your obligations in Sections 3.4 and 3.11.
- j. Network Infrastructure Performance Audit Option: We will provide you with the Services in Sections B1 and 2.11. You will need to meet your obligations in Sections 3.4 and 3.12.
- k. Network Infrastructure Design Review Option: We will provide you with the Services in Section B1 and 2.12. You will need to meet your obligations in Sections 3.4 and 3.5.
- l. Network Infrastructure Implementation Plan Review Option: We will provide you with the Services in Sections B1 and 2.13. You will need to meet your obligations in Sections 3.4 and 3.6.
- m. Network Infrastructure Software Strategy Review Option: We will provide you with the Services in Sections B1 and 2.14. You will need to meet your obligations in Sections 3.4 and 3.8.

1.0 DEFINITIONS.

- 1.1 **“Additional Services”** means installation of new Hardware, system additions, Hardware upgrades, or non-mandatory engineering changes.
- 1.2 **“Data Collection Tools”** means Hardware or Software tools that support the ability to provide troubleshooting on critical cases, data analysis and report generation capabilities.
- 1.3 **“Event”** means notification by Customer of its performance of a planned Network, Hardware, Software or configuration change.
- 1.4 **“Level 1”** means support which is defined as having the necessary technical staff with the appropriate skills perform installations, remedial Hardware maintenance and basic Hardware and Software configurations on Cisco Product(s).
- 1.5 **“Level 2”** means support that is defined as having the necessary technical staff with the appropriate skills perform isolation, replication and diagnosis of internetworking based problems on Cisco Product(s). You should not report Software bugs to us until you have attempted to identify their source and validated the identification in your Network through appropriate testing. If you cannot duplicate the bug in your Network, we will jointly attempt to replicate and resolve those bugs in either your Network or ours. Whichever Network we agree upon, you will need to work to address the bugs on a best efforts basis to replicate them in your Network and to document your diagnosis and resolution activity before seeking our input.
- 1.6 **“Network”** means a set of interconnected and inter-working Cisco supported Hardware and Software that is implemented, operated, and supported by you from a single Network Operations Center (“NOC”).
- 1.7 **“Network Infrastructure”** means your core transport and aggregation Network technology (i.e., Metro Optical, ATM/FR and IP Core).
- 1.8 **“Technology Application”** means specific technologies, including, but not limited to, Content Networking, Broadband and IP Telephony that do not operate at the Network Infrastructure level.

2.0 OUR SERVICE RESPONSIBILITIES.

- A. FOCUSED TECHNICAL SUPPORT.** The purchase of Focused Engineering Services set out in Part A, together with those components of our Network Optimization Support (“NOS”) comprising Cisco Network Infrastructure Software Strategy and Network Infrastructure Remote Software Upgrade Support Services is the minimum requirement for you to be able to purchase the other NOS Services set out in Part B. For the term of our Agreement, we will use commercially reasonable efforts to provide you with one or more of the Services set out below depending upon the Service option you have selected. We shall provide a quote for Services (“Quote”) setting out the extent of the Services that we shall provide to you, unless stated otherwise in this Data Sheet, and the period during which such Services shall be provided. You shall issue a Purchase Order that references the Quote agreed between us and that, additionally, acknowledges and agrees to the terms contained therein:
- 2.1 **Operations Management.** We shall provide the following Services during Standard Business Hours (unless otherwise stated):
 - 2.1.1 Facilitate Hardware and Software problem resolution case management on a reactive basis for technical issues reported to us by you in addition to helping you to determine if appropriate resources are being applied to the technical issues reported.
 - 2.1.2 Perform operational analysis, not to exceed sixteen (16) days per year, on critical issues by identifying your knowledge gaps and operational abnormalities/gaps. We will provide recommendations and identify possible solutions that you may elect to implement to help close those knowledge and system quality gaps.
 - 2.1.3 Conduct regularly scheduled conference calls with you to discuss operational TAC issues, track open cases and report progress on resolution of open cases.
 - 2.1.4 Review of quarterly operational trend analysis reports prepared by us and that address your cases submitted to TAC. The reports will cover, amongst other things, reactive support contract usage, case statistics, quality issues, case trending (by product type, case priority, etc.), Network trending and Return Materials Authorization (“RMA”) trending.
 - 2.1.5 Provide informal instructional sessions on troubleshooting tools and processes during our onsite visits.
 - 2.1.6 Notify TAC, and the engineer familiar with your Network (“Advanced Services Engineer”), if such Focused Engineering Service has been ordered, of any planned Event by pre-opening a case and

alerting TAC of relevant information related to the scheduled Event, not to exceed two (2) Events per month.

2.2 Focused Engineering. Cisco shall provide the following Services during Standard Business Hours (unless otherwise stated):

- 2.2.1 Designate an engineer Advanced Services Engineer to act as the primary technical support for critical cases at the Network level. Any trouble calls that you place outside of Standard Business Hours will be handled directly by Cisco's TAC.
- 2.2.2 Provide problem resolution of complex and critical cases at the Network level.
- 2.2.3 Provide technical representation in regularly scheduled conference calls.
- 2.2.4 Visit your nominated site location to gather information/changes to your Network. We will review critical cases and review problem root cause analysis with you. A maximum of four (4) visits per year may be conducted.
- 2.2.5 Perform root cause analysis, not to exceed four (4) analyses per year, on technical issues relating to your Network Infrastructure. Performance of root cause analysis is dependant upon us having all available information necessary and required to perform a root cause analysis.
- 2.2.6 Provide Software recommendations to address your documented and communicated Network functionality requirements. Our recommendations (focused on recommending appropriate Updates) shall apply to critical cases in respect of an affected area of your Network.
- 2.2.7 Conduct informal peer-to-peer mentoring and training in the form of a one (1) day training session (not to exceed four (4) per year) between our engineers. The training sessions will address the basics of troubleshooting and provide a general understanding of Products within your Network in additions to addressing Network Infrastructure and specific Product training.

B. NETWORK OPTIMIZATION SUPPORT. Our Network Optimization Support ("NOS") consists of the provision of one or more of the Services described below. We will use commercially reasonable efforts provide these Services for your Network Infrastructure during Standard Business Hours (unless stated otherwise). The following General Support provisions will apply to all Service options that you have selected:

B.1 General Support.

- B.1.1 Designate an engineer ("Advanced Services Engineer") to act as the primary interface with you for your Network Infrastructure.
- B.1.2 Schedule four (4) quarterly visits per year (not to exceed eight (8) days in aggregate) with you to visit your site and review proactive deliverables and activities and help you plan for the next quarter. Any additional visits will be charged at our then-current travel and labor rates.
- B.1.3 Schedule periodic conference calls (usually weekly) to review your Network Infrastructure status, planning and the Services being provided.
- B.1.4 Establish a Customer-specific Cisco email alias to facilitate communication with Cisco Advanced Services Engineers.
- B.1.5 Provide certain Data Collection Tools during the term of the Services. Data Collection Tools may or may not include Hardware or Software. We retain full right, title and interest to the Data Collection Tools. In addition to Cisco provided tools, the Advanced Services Engineer may utilize the data that you have provided to us, scripts or internal tools to assist us in collecting data from your Network.

2.4 Network Infrastructure Design Assistance.

- 2.4.1 We will consult with your networking staff in a series of face-to-face and remotely conducted meetings to develop a thorough understanding of your Network Infrastructure design requirements. The focus here will be on concerns around resiliency, self-recovery, scalability and the ability to handle increased traffic demands.
- 2.4.2 Provide a Network Infrastructure design review that may include, amongst other information, the following:
 - Review of your design requirements, priorities, and goals
 - Analysis of impact of new requirements to your existing Network Infrastructure
 - Review of your Network Infrastructure architecture and topology
 - Review of your protocol selection and configuration

- Review of feature selection and configuration
- Report describing design review together with our recommendations

The number of design reviews is limited to two (2) per year.

2.4.3 Provide ongoing, informal Network Infrastructure design and architecture consultation.

2.5 Network Infrastructure Implementation Plan Assistance.

2.5.1 We will evaluate and understand your implementation and deployment plan through a series of remotely conducted meetings and interviews with your staff. We will review your deployment plan, identify possible Network disruptions and provide sample configurations that you can leverage to determine if devices in your Network Infrastructure are properly configured to support the services you intend to offer.

2.5.2 Provide a Network Infrastructure implementation plan review that may include, amongst other information, the following:

- Review and analysis of your Network Infrastructure deployment and integration plan
- Review of proposed configuration templates
- Review of turn-up test plan
- Analysis of any changes that Network operations staff should be alerted to
- Report on recommendations.

The number of implementation plan reviews is limited to two (2) per year.

2.5.3 Provide ongoing, informal change impact analyses.

2.6 Network Infrastructure Remote Deployment Support. We will provide you with remote resource to help address problems with your Network Infrastructure Hardware and configuration issues during a major deployment into a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes), provided that we have received not less than twenty-one (21) days prior written notice of a request by you for this support. You will need to submit a detailed request and schedule to us before we can provide this support to you. The number of Events shall not exceed two (2) per month and the total aggregate standby time will be limited in any one-month period for all Hardware, configuration, and Software Events combined to sixteen (16) hours per month. (Note: Software Events are covered under Network Infrastructure Remote Software Upgrade Support).

2.7 Cisco Network Infrastructure Software Strategy.

2.7.1 Provide Software strategy assessment(s), based on your ongoing functional and technical Network Infrastructure requirements. Each assessment typically includes, amongst other information, the following:

- Review of your feature requirements and performance/availability objectives
- Review of new Software feature releases (for example, Cisco IOS, other Cisco OS Software and Cisco micro-code) with respect to your business goals
- Software strategy report that includes an analysis report outlining the recommended releases of Software for your Network Infrastructure environment and the potential impact that running such releases may have on your Network
- Review of your Software verification test plan and report on recommended changes
- Assist in the preparation and review of your Software migration plan

The number of Software strategy assessments is limited to two (2) per year.

2.7.2 Provide, if required, one (1) informal Software impact analysis, review, and recommendation per month.

2.7.3 Provide periodic, proactive critical bug notification. These notifications will be for three (3) Software releases, specified by you and installed on key Network Infrastructure components.

2.8 Network Infrastructure Remote Software Upgrade Support. Provides you with remote resource to help address problems with your Network Infrastructure Software during major upgrades on a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day a week standby basis to remotely assist you in major Software upgrades, provided that we receive at least twenty-one (21) days prior written notice from you. You will need to submit a detailed request and schedule to us prior to any such activity. The number of Events shall not exceed two (2) per month and the total aggregate standby time will be limited in any one-month

period for all Hardware and configuration and Software Events combined to sixteen (16) hours per month. (Note – Hardware and configuration Events are covered under Network Infrastructure Remote Deployment Support).

2.9 **Network Infrastructure Performance Engineering and Optimization.**

2.9.1 Provide a performance analysis and stability report on your Network Infrastructure to identify potential performance and optimization issues and review the validity of key device configurations in the context of new traffic patterns or changes in Network size that are planned or have been implemented by you. Such performance analysis typically includes the following:

- Collection of key performance data
- Identification of exception reports
- Analysis of key device configurations
- Analysis of resource utilization
- Assistance to define Network-specific performance criteria
- Report on performance optimization recommendations such as system tuning and protocol optimization changes

The number of performance analyses is limited to two (2) per year.

2.9.2 Perform ongoing, informal performance tuning checks for your Network Infrastructure.

2.10 **Network Infrastructure Knowledge Transfer and Mentoring.** Provide you annually with up to four (4) technical update meetings each with duration of up to four (4) hours. These meetings shall be conducted at your site by Advanced Services Engineer or another senior Cisco engineer with a view to providing a technical update training on a topic that is mutually agreed upon and relevant to the Products and Cisco technologies existing on your Network Infrastructure. These meetings are usually held in conjunction with the four (4) quarterly review meetings per year.

2.11 **Network Infrastructure Performance Audit.** The Network Infrastructure Performance Audit described in this Section is either (a) part of the NOS baseline Service offering; or (b) orderable as a standalone Service offering that does not include the provision of General Support in Section B1 above. We will provide the following Services during Standard Business Hours, unless stated otherwise:

2.11.1 Provide one (1) Network Infrastructure Performance Audit as selected by you out of those currently available and identified by us from time to time. The audit typically includes the following:

- Performance report at node and interface level
- Configuration report: protocol, node and interface
- Software report including conflicts and inconsistencies
- Hardware report including conflicts and inconsistencies: Hardware versions, firmware versions, micro-code versions, board revisions

2.11.2 Provide detailed recommendations, with a view towards helping you to optimize your Network Infrastructure stability.

2.12 **Network Inventory and Device Configuration Report.** Provide an inventory support service using Data Collection Tools to identify the quantity and type of Hardware on your Network and the range of Network Software releases running on your Network. The number of Network inventory and device configuration reports is limited to two (2) per year.

C. NETWORK OPTIMIZATION SUPPORT SERVICE OPTIONS. The following Service options are available only in conjunction with the Services set out in Part B unless otherwise stated. We will use commercially reasonable efforts to provide the Service Option(s) that you have purchased:

2.13 **Network Infrastructure Design Review Option.** You must have **Network Infrastructure Design Assistance** across your Network Infrastructure in order to purchase the Network Infrastructure Design Review described in this section. Under this option, we will perform one (1) additional Network Infrastructure Design Review to those purchased under Section 2.4.2 during Standard Business Hours, unless stated otherwise.

2.14 **Network Infrastructure Implementation Plan Review Option.** You must have **Network Infrastructure Implementation Plan Assistance** across your Network Infrastructure in order to purchase the Network Infrastructure Implementation Plan Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:

2.14.1 Perform one (1) implementation plan review that typically includes the following:

- Review and analysis of your Network Infrastructure deployment and integration plan

- Review of proposed sample configurations
- Review of turn-up test plan
- Analysis of any changes that your Network operations staff should be alerted to
- Report on recommendations.

2.14.2 Provide you with remote deployment support for up to three (3) months from completion of report provided under this option. Cisco will make available, upon receipt of not less than twenty-one (21) days prior written request by you, a designated support contact who can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes). You agree to submit a detailed request and schedule to us prior to any such activity.

2.15 **Network Infrastructure Software Strategy Review Option.** You must have **Network Infrastructure Software Strategy** across your Network Infrastructure in order to purchase the Network Infrastructure Software Strategy Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:

2.15.1 Provide one (1) Software strategy assessment that typically includes the following:

- Review of feature requirements and performance/availability objectives
- Review of new Software feature releases (for example, Cisco IOS, other Cisco OS Software, and Cisco micro-code) with respect to your business goals
- Report recommending a set of Software releases for your Network Infrastructure environment
- Review of your Software test plan and report on recommended changes
- Assist in the preparation and review of Software migration plan.

2.15.2 Provide you with remote deployment support for up to three (3) months from completion of the report provided under this option. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-days a week standby basis to remotely assist you in major Software upgrades provided you give us not less than twenty-one (21) days prior written notice. Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity.

3.0 SERVICE RESPONSIBILITIES OF CUSTOMERS.

To enable us to provide you with the Service that you have selected we need you to do the following:

A. FOCUSED TECHNICAL SUPPORT.

3.1 Operations Management.

- 3.1.1 Designate a representative to act as our primary interface.
- 3.1.2 Coordinate our onsite visits and provide us with not less than thirty (30) days' notice of any visit you reschedule. Rescheduled visits will be subject to additional fees.
- 3.1.3 Attend regularly scheduled conference calls for open case reviews.

3.2 Focused Engineering.

- 3.2.1 Designate one or more person(s) from within your technical support organization to serve as a liaison to our Advanced Services Engineer.
- 3.2.2 Provide your designated person(s) with instructions on process and procedures to initiate cases and access Focused Engineering Support.
- 3.2.3 Advise us of your standard operating procedures as they relate to your business practices, internal operational nomenclature and Network to allow us to effectively communicate and discuss cases with you and your staff in the context of your business environment.
- 3.2.4 Provide all necessary information to enable us to perform root cause analysis.
- 3.2.5 Provide us with reasonable electronic access to your Network.
- 3.2.6 Provide us with a Network topology map, configuration information, and information of new features being implemented as needed.
- 3.2.7 Notify our Advanced Services Engineer of any major technology additions or changes to your Network.
- 3.2.8 Provide all necessary device, platform, feature, and release train requirements that exist in your environment.

- 3.2.9 Agree that we will only support generally available Products and Software releases/versions unless we agree otherwise.
 - 3.2.10 Report problems directly (for example, by telephone) using the number that we provide to you. Response times do not include problems reported via Cisco.com or other electronic means.
- B. NETWORK OPTIMIZATION SUPPORT.** To enable us to provide you with the Service that you have selected we need you to comply with the following General Responsibilities for all Services that you have selected under NOS baseline Service offering:
- 3.4 General Responsibilities**
- 3.4.1 Designate at least two (2) but not more than six (6) technical representatives (who are employees) in your centralized Network support center (“technical assistance center”) or design engineering team, together with one (1) technical representative to act as the primary technical interface for our Advanced Services Engineer.
 - 3.4.2 Within one (1) year from the commencement of your Agreement, you must have at least one (1) Cisco Certified Internetworking Expert (“CCIE”) trained employee or one (1) employee that has achieved, in our sole determination, an equal standard through training and experience as designated contacts .
 - 3.4.3 Your technical assistance center shall maintain centralized network management for your Network capable of providing Level 1 and Level 2 support.
 - 3.4.4 Provide our Advanced Services Engineer with reasonable electronic access to your Network.
 - 3.4.5 Ensure that Data Collection Tools are located in a secure area at your site, within a Network environment protected within a firewall and on a secure LAN, under lock and key and with access restricted to those of your employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the output of the Data Collection Tools. Where Data Collection Tools provided by Cisco represent Software, you will need to make appropriate computers available and download Software as needed.
 - 3.4.6 Provide a Network topology map, configuration information, and information of new features being implemented as needed.
 - 3.4.7 Notify our Advanced Services Engineer as soon as possible of any major Network changes (for example topology, configuration, new IOS releases).
 - 3.4.8 Notify us in writing within ten (10) days of any change to the composition of your Network. We may require modifications to the fee payable if the Network composition has increased beyond our original pricing quote for Services.
 - 3.4.9 Create and manage an internal email alias for communication with our Advances Services Engineer.
 - 3.4.10 Retain overall responsibility for any business process impact and any process change implementations.
- 3.5 Network Infrastructure Design Assistance and Network Infrastructure Design Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.5.1 Your Network Infrastructure design.
 - 3.5.2 The business and technical requirements for your new design.
 - 3.5.3 Any constraints faced by you.
 - 3.5.4 Current or future planned applications that will run on the supported Infrastructure.
 - 3.5.5 Current and planned traffic characteristics
- 3.6 Network Infrastructure Implementation Plan Assistance and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.6.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
 - 3.6.2 Identify low risk and high risk areas of your Network based on the Network Infrastructure traffic.
 - 3.6.3 Your Implementation plan and deployment schedule.
 - 3.6.4 Maintenance window information and any other constraints.
 - 3.6.5 Your change control process.
- 3.7 Network Infrastructure Remote Deployment Support and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities, we need you to provide the following:

- 3.7.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
- 3.7.2 Identify low risk and high risk areas of the Network based on the Network Infrastructure traffic.
- 3.7.3 Your Implementation plan and deployment schedule.
- 3.7.4 Maintenance window information and any other constraints.
- 3.7.5 Your change control process.
- 3.7.6 Contact information and details of your escalation process.
- 3.7.7 Review details of planned Network changes with our Advanced Services Engineer.
- 3.8 **Network Infrastructure Software Strategy and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.8.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.8.2 Your business and technical requirements for new Software releases.
 - 3.8.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.8.4 Your certification process and lab testing process.
 - 3.8.5 Your change control process.
- 3.9 **Network Infrastructure Remote Software Upgrade Support and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.9.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.9.2 Your business and technical requirements for new Software releases.
 - 3.9.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.9.4 Your certification process and lab testing process.
 - 3.9.5 Your change control process.
 - 3.9.6 Contact information and details of your escalation process.
 - 3.9.7 Review details of planned changes with our Advanced Services Engineer.
- 3.10 **Network Infrastructure Performance Engineering and Optimization.** In addition to the General Responsibilities, we need you to provide the following:
 - 3.10.1 Any service level agreements or Network Infrastructure performance requirements.
 - 3.10.2 Details of critical applications supported by your Network Infrastructure.
 - 3.10.3 Expected Network growth, application mix changes.
 - 3.10.4 Data collection activities as needed to facilitate a specific Cisco analysis.
- 3.11 **Network Infrastructure Knowledge Transfer and Mentoring.** In addition to the General Responsibilities we need you to: (1) provide us with a set of requirements on the topics you want us to cover and background information on the skill sets of your proposed audience; and (2) ensure that facilities and equipment are available to host the Transfer of Information (“TOI”) sessions.
- 3.12 **Network Infrastructure Performance Audit Option.** In addition to the General Responsibilities, Customer shall:
 - 3.12.1 Ensure that your key Networking and operational personnel are available to participate in interview sessions as required in support of the selected audit.
 - 3.12.2 Provide assessments and audit data collection support. You will need to help install the Data Collection Tools into your production, and if applicable, test Network environment. You will need to ensure that we have all relevant device information needed for the audits, including the required device lists.
 - 3.12.3 Provide all information and data that you have gathered from tools used by you for Network data analysis and monitoring. You shall remain responsible for any damage to or loss or theft of the Data Collection Tools while in Customer's custody. You must immediately return Data Collection Tools to us upon the earlier of: (i) expiration or termination of the Exhibit; or (ii) our request to you that Data Collection Tools be returned.

4.0 SERVICES NOT COVERED UNDER THIS EXHIBIT.

Certain services are not covered:

- 4.1 Provision of Services for Technology applications. Technology applications are not covered under the Network Optimization Support, but can be purchased separately for an additional fee.
- 4.2 Any customization of, or labor to install, Software and Hardware (including installation of Updates).
- 4.3 Provision of Software Application Services. For purposes of this Exhibit, "Software Application Services" means services for non-resident/stand alone Software which include but are not limited to Cisco's network management Software, security Software, IP telephony Software, internet appliance Software , Cisco Intelligent Contact Management Software and Cisco IP Contact Center Software.
- 4.4 Furnishing of supplies, accessories or the replacement of expendable parts (e.g., cables, blower assemblies, power cords, and rack mounting kits).
- 4.5 Electrical or site work external to the Products.
- 4.6 Support or replacement of Product that is altered, modified, mishandled, destroyed or damaged by one or more of the following: (i) natural causes; (ii) environmental failures; (iii) your failure to take any required actions; (iv) a negligent or willful act or omission by you or use by you other than as specified in the applicable Cisco-supplied documentation; or (v) an act or omission of a third party.
- 4.7 Services or software to resolve Software or Hardware problems resulting from third party product or causes beyond Cisco's control or failure to perform your responsibilities set out in this Data Sheet.
- 4.8 Services for non-Cisco Software installed on any Cisco Product.
- 4.9 Any Hardware or third party product upgrade required to run new or updated Software.
- 4.10 Additional Services are provided at the then-current time and materials rates.
- 4.11 Except as otherwise provided in this Data Sheet, Software entitlement, including media, documentation, binary code, source code or access in electronic or other form is not provided. In addition, except as otherwise provided, no right, use or license to our Software is granted by this Data Sheet and you acknowledge and agree that you obtain no such rights.
- 4.12 Additional onsite visits and standby services beyond the number of visits/Events specified in the Quote, except as otherwise agreed, are provided at Cisco then-current travel and labor rates for such service on a time and material or non-contract service basis.

5.0 LICENSING.

In the event that we provide Software (whether on a Data Collection Tool or otherwise), we grant you a nonexclusive and nontransferable license to use the Software, in object code form only, on the Data Collection Tool on which such Software is provided or, if no Data Collection is provided, on a single Hardware chassis, until the earlier of: (i) the expiration or termination of the Device; or (ii) our request that the Data Collection Tool(s) be returned to us. You have no right and you specifically agree not to: (a) rent, lease, distribute, sell, transfer or sublicense your license rights to any other person, or use the Software on unauthorized or secondhand equipment; (b) make error corrections to or otherwise modify or adapt the Software nor create derivative works based upon the Software, or to permit third parties to do the same; or (c) copy, in whole or in part, any Software or document (except for reasonable backup copies), decompile, decrypt, reverse engineer, disassemble or otherwise reduce all or any portion of the Software to human-readable form. We shall make available any interface information which you are entitled to under applicable law upon written notice request and payment of Cisco's applicable fee.

6.0 LIMITATIONS.

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT YOU ARE SOLELY RESPONSIBLE FOR DETERMINATION AND IMPLEMENTATION OF YOUR NETWORK DESIGN REQUIREMENTS. IN NO EVENT SHALL WE BE LIABLE FOR (A) ANY DISCLOSURE OF THE CONTENTS OR OUTPUT OF PERFORMANCE ANALYSES, NETWORK OR OTHER REPORTS AND/OR DATA COLLECTION TOOLS BY YOUR EMPLOYEE(S) OR THIRD PARTY(S); (B) THE SECURITY OF YOUR NETWORK OR FOR ANY UNAUTHORIZED ACCESS TO SUCH NETWORK BY YOUR EMPLOYEE(S), CONTRACTOR(S), OR THIRD PARTY(S); OR (C) THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED IN ANY DESIGN REPORT.



Advanced Services: Focused Technical Support and Network Optimization Support Data Sheet For Services purchased from Cisco Systems K.K.

Cisco Advanced Services provide responsive, preventative and consultative support of Cisco technologies and are focused on helping to address your specific networking needs. The two programs included within this Data Sheet are Focused Technical Support and Network Optimization Support.

The goal of Focused Technical Support is to build on the core operational Technical Support Services maintenance (SMARTnet, SMARTnet On-Site and Software Application Support Services) and to deliver responsive, rapid problem escalation through personalized attention and special access to engineering resources with specific knowledge of your Network and operational processes.

The goal of Network Optimization Support is to provide advice on capacity planning, configuration management and software migration for Cisco Network infrastructure to help maximize your network return on investment.

The Services set out in this Data Sheet are designed to supplement core operational Technical Support Services and all the Products in your Network need to be supported with a minimum of SMARTnet, SMARTnet On-Site or Software Application Support Services). Your Purchase Order must itemize the specific options that you have actually purchased. Please read this Data Sheet carefully as it contains important terms regarding the Services that you have purchased from us. This Data Sheet is part of the Agreement that we have entered into.

To help you navigate through this Data Sheet we have listed the Services that are available to you and cross referenced the relevant Sections. Sections 4, 5 and 6 will apply to any Service that you purchase from us. If you have purchased:

- a. Focused Technical Support – Operations Management: We will provide you with the Services in Section 2.1. You will need to meet your obligations at Section 3.1
- b. Focused Technical Support – Focused Engineering: We will provide you with the Services in Section 2.2. You will need to meet your obligations in Section 3.2.
- c. Network Infrastructure Design Assistance: We will provide you with the Services in Sections B1 and 2.4. You will need to comply with your obligations in Sections 3.4 and 3.5.
- d. Network Infrastructure Implementation Plan Assistance: We will provide you with the Services in Section B1 and 2.5. You will need to meet your obligations in Sections 3.4 and 3.6.
- e. Network Infrastructure Remote Deployment Support: We will provide you with the Services in Sections B1 and 2.6. You will need to meet your obligations in Sections 3.4 and 3.7.
- f. Cisco Network Infrastructure Software Strategy: then we will provide you with the Services in Section B1 and 2.7. You will need to meet your obligations in Sections 3.4 and 3.8
- g. Network Infrastructure Remote Software Upgrade Support: We will provide you with the Services in Section B1 and 2.8. You will need to meet your obligations in Sections 3.4 and 3.9.
- h. Network Infrastructure Performance Engineering and Optimization: We will provide you with the Services in Section B1 and 2.9. You will need to meet your obligations in Sections 3.4 and 3.10.
- i. Network Infrastructure Knowledge Transfer and Mentoring: We will provide you with the Services in Sections B1 and 2.10. You will need to meet your obligations in Sections 3.4 and 3.11.
- j. Network Infrastructure Performance Audit Option: We will provide you with the Services in Sections B1 and 2.11. You will need to meet your obligations in Sections 3.4 and 3.12.
- k. Network Infrastructure Design Review Option: We will provide you with the Services in Section B1 and 2.12. You will need to meet your obligations in Sections 3.4 and 3.5.
- l. Network Infrastructure Implementation Plan Review Option: We will provide you with the Services in Sections B1 and 2.13. You will need to meet your obligations in Sections 3.4 and 3.6.
- m. Network Infrastructure Software Strategy Review Option: We will provide you with the Services in Sections B1 and 2.14. You will need to meet your obligations in Sections 3.4 and 3.8.

1.0 DEFINITIONS.

- 1.1 **“Additional Services”** means installation of new Hardware, system additions, Hardware upgrades, or non-mandatory engineering changes.
- 1.2 **“Data Collection Tools”** means Hardware or Software tools that support the ability to provide troubleshooting on critical cases, data analysis and report generation capabilities.
- 1.3 **“Event”** means notification by Customer of its performance of a planned Network, Hardware, Software or configuration change.
- 1.4 **“Level 1”** means support which is defined as having the necessary technical staff with the appropriate skills perform installations, remedial Hardware maintenance and basic Hardware and Software configurations on Cisco Product(s).
- 1.5 **“Level 2”** means support that is defined as having the necessary technical staff with the appropriate skills perform isolation, replication and diagnosis of internetworking based problems on Cisco Product(s). You should not report Software bugs to us until you have attempted to identify their source and validated the identification in your Network through appropriate testing. If you cannot duplicate the bug in your Network, we will jointly attempt to replicate and resolve those bugs in either your Network or ours. Whichever Network we agree upon, you will need to work to address the bugs on a best efforts basis to replicate them in your Network and to document your diagnosis and resolution activity before seeking our input.
- 1.6 **“Network”** means a set of interconnected and inter-working Cisco supported Hardware and Software that is implemented, operated, and supported by you from a single Network Operations Center (“NOC”).
- 1.7 **“Network Infrastructure”** means your core transport and aggregation Network technology (i.e., Metro Optical, ATM/FR and IP Core).
- 1.8 **“Technology Application”** means specific technologies, including, but not limited to, Content Networking, Broadband and IP Telephony that do not operate at the Network Infrastructure level.

2.0 OUR SERVICE RESPONSIBILITIES.

- A. **FOCUSED TECHNICAL SUPPORT.** The purchase of Focused Engineering Services is the minimum requirement for you to be able to purchase Operations Management Services. For the term of our Agreement, we will use commercially reasonable efforts to provide you with one or more of the Services set out below depending upon the Service option you have selected. We shall provide a quote for Services (“Quote”) setting out the extent of the Services that we shall provide to you, unless stated otherwise in this Data Sheet, and the period during which such Services shall be provided. You shall issue a Purchase Order that references the Quote agreed between us and that, additionally, acknowledges and agrees to the terms contained therein:
 - 2.1 **Operations Management.** We shall provide the following Services during Standard Business Hours (unless otherwise stated):
 - 2.1.1 Facilitate Hardware and Software problem resolution case management on a reactive basis for technical issues reported to us by you in addition to helping you to determine if appropriate resources are being applied to the technical issues reported.
 - 2.1.2 Perform operational analysis, not to exceed sixteen (16) days per year, on critical issues by identifying your knowledge gaps and operational abnormalities/gaps. We will provide recommendations and identify possible solutions that you may elect to implement to help close those knowledge and system quality gaps.
 - 2.1.3 Conduct regularly scheduled conference calls with you to discuss operational TAC issues, track open cases and report progress on resolution of open cases.
 - 2.1.4 Review of quarterly operational trend analysis reports prepared by us and that address your cases submitted to TAC. The reports will cover, amongst other things, reactive support contract usage, case statistics, quality issues, case trending (by product type, case priority, etc.), Network trending and Return Materials Authorization (“RMA”) trending.
 - 2.1.5 Provide informal instructional sessions on troubleshooting tools and processes during our onsite visits.
 - 2.1.6 Notify TAC, and the engineer familiar with your Network (“Advanced Services Engineer”), if such Focused Engineering Service has been ordered, of any planned Event by pre-opening a case and alerting TAC of relevant information related to the scheduled Event, not to exceed two (2) Events per month.

2.2 **Focused Engineering.** Cisco shall provide the following Services during Standard Business Hours (unless otherwise stated):

- 2.2.1 Designate an Advanced Services Engineer to act as the primary technical support for critical cases at the Network level. Any trouble calls that you place outside of Standard Business Hours will be handled directly by Cisco's TAC.
- 2.2.2 Provide problem resolution of complex and critical cases at the Network level.
- 2.2.3 Provide technical representation in regularly scheduled conference calls.
- 2.2.4 Visit your nominated site location to gather information/changes to your Network. We will review critical cases and review problem root cause analysis with you. A maximum of four (4) visits per year may be conducted.
- 2.2.5 Perform root cause analysis, not to exceed four (4) analyses per year, on technical issues relating to your Network Infrastructure. Performance of root cause analysis is dependant upon us having all available information necessary and required to perform a root cause analysis.
- 2.2.6 Provide Software recommendations to address your documented and communicated Network functionality requirements. Our recommendations (focused on recommending appropriate Updates) shall apply to critical cases in respect of an affected area of your Network.
- 2.2.7 Conduct informal peer-to-peer mentoring and training in the form of a one (1) day training session (not to exceed four (4) per year) between our engineers. The training sessions will address the basics of troubleshooting and provide a general understanding of Products within your Network in additions to addressing Network Infrastructure and specific Product training.

B. NETWORK OPTIMIZATION SUPPORT. The purchase of Focused Engineering Services set out in Part A, together with those components of our Network Optimization Support ("NOS") comprising Cisco Network Infrastructure Software Strategy and Network Infrastructure Remote Software Upgrade Support Services is the minimum requirement for you to be able to purchase the other NOS Services set out in Part B. We will use commercially reasonable efforts to provide these Services for your Network Infrastructure during Standard Business Hours (unless stated otherwise). The following General Support provisions will apply to all Service options that you have selected:

B.1 General Support.

- B.1.1 Designate an engineer ("Advanced Services Engineer") to act as the primary interface with you for your Network Infrastructure.
- B.1.2 Schedule four quarterly visits per year (not to exceed eight (8) days in aggregate) with you to visit your site and review proactive deliverables and activities and help you plan for the next quarter. Any additional visits will be charged at our then-current travel and labor rates.
- B.1.3 Schedule periodic conference calls (usually weekly) to review your Network Infrastructure status, planning and the Services being provided.
- B.1.4 Establish a Customer-specific Cisco email alias to facilitate communication with Cisco Advanced Services Engineers.
- B.1.5 Provide certain Data Collection Tools during the term of the Services. Data Collection Tools may or may not include Hardware or Software. We retain full right, title and interest to the Data Collection Tools. In addition to Cisco provided tools, the Advanced Services Engineer may utilize the data that you have provided to us, scripts or internal tools to assist us in collecting data from your Network.

2.4 **Network Infrastructure Design Assistance.**

- 2.4.1 We will consult with your networking staff in a series of face-to-face and remotely conducted meetings to develop a thorough understanding of your Network Infrastructure design requirements. The focus here will be on concerns around resiliency, self-recovery, scalability and the ability to handle increased traffic demands.
- 2.4.2 Provide a Network Infrastructure design review that may include, amongst other information, the following:
 - Review of your design requirements, priorities, and goals
 - Analysis of impact of new requirements to your existing Network Infrastructure
 - Review of your Network Infrastructure architecture and topology
 - Review of your protocol selection and configuration

- Review of feature selection and configuration
- Report describing design review together with our recommendations

The number of design reviews is limited to two (2) per year.

2.4.3 Provide ongoing, informal Network Infrastructure design and architecture consultation.

2.5 **Network Infrastructure Implementation Plan Assistance.**

2.5.1 We will evaluate and understand your implementation and deployment plan through a series of remotely conducted meetings and interviews with your staff. We will review your deployment plan, identify possible Network disruptions and provide sample configurations that you can leverage to determine if devices in your Network Infrastructure are properly configured to support the services you intend to offer.

2.5.2 Provide a Network Infrastructure implementation plan review that may include, amongst other information, the following:

- Review and analysis of your Network Infrastructure deployment and integration plan
- Review of proposed configuration templates
- Review of turn-up test plan
- Analysis of any changes that Network operations staff should be alerted to
- Report on recommendations.

The number of implementation plan reviews is limited to two (2) per year.

2.5.3 Provide ongoing, informal change impact analyses.

2.6 **Network Infrastructure Remote Deployment Support.** We will provide you with remote resource to help address problems with your Network Infrastructure Hardware and configuration issues during a major deployment into a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes), provided that we have received not less than twenty-one (21) days prior written notice of a request by you for this support. You will need to submit a detailed request and schedule to us before we can provide this support to you. The number of Events shall not exceed two (2) per month and the total aggregate standby time will be limited in any one-month period for all Hardware, configuration, and Software Events combined to sixteen (16) hours per month. (Note: Software Events are covered under Network Infrastructure Remote Software Upgrade Support).

2.7 **Cisco Network Infrastructure Software Strategy.**

2.7.1 Provide Software strategy assessment(s), based on your ongoing functional and technical Network Infrastructure requirements. Each assessment typically includes, amongst other information, the following:

- Review of your feature requirements and performance/availability objectives
- Review of new Software feature releases (for example, Cisco IOS, other Cisco OS Software and Cisco micro-code) with respect to your business goals
- Software strategy report that includes an analysis report outlining the recommended releases of Software for your Network Infrastructure environment and the potential impact that running such releases may have on your Network
- Review of your Software verification test plan and report on recommended changes
- Assist in the preparation and review of your Software migration plan

The number of Software strategy assessments is limited to two (2) per year.

2.7.2 Provide, if required, one (1) informal Software impact analysis, review, and recommendation per month.

2.7.3 Provide periodic, proactive critical bug notification. These notifications will be for three (3) Software releases, specified by you and installed on key Network Infrastructure components.

2.8 **Network Infrastructure Remote Software Upgrade Support.** Provides you with remote resource to help address problems with your Network Infrastructure Software during major upgrades on a live Network. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-day a week standby basis to remotely assist you in major Software upgrades, provided that we receive at least twenty-one (21) days prior written notice from you. You will need to submit a detailed request and schedule to us prior to any such activity. The number of Events shall not exceed two (2) per month and the total aggregate standby time will be limited in any one-month

period for all Hardware and configuration and Software Events combined to sixteen (16) hours per month. (Note – Hardware and configuration Events are covered under Network Infrastructure Remote Deployment Support).

2.9 **Network Infrastructure Performance Engineering and Optimization.**

2.9.1 Provide a performance analysis and stability report on your Network Infrastructure to identify potential performance and optimization issues and review the validity of key device configurations in the context of new traffic patterns or changes in Network size that are planned or have been implemented by you. Such performance analysis typically includes the following:

- Collection of key performance data
- Identification of exception reports
- Analysis of key device configurations
- Analysis of resource utilization
- Assistance to define Network-specific performance criteria
- Report on performance optimization recommendations such as system tuning and protocol optimization changes

The number of performance analyses is limited to two (2) per year.

2.9.2 Perform ongoing, informal performance tuning checks for your Network Infrastructure.

2.10 **Network Infrastructure Knowledge Transfer and Mentoring.** Provide you annually with up to four (4) technical update meetings each with duration of up to four (4) hours. These meetings shall be conducted at your site by Advanced Services Engineer or another senior Cisco engineer with a view to providing a technical update training on a topic that is mutually agreed upon and relevant to the Products and Cisco technologies existing on your Network Infrastructure. These meetings are usually held in conjunction with the four (4) quarterly review meetings per year.

2.11 **Network Infrastructure Performance Audit.** The Network Infrastructure Performance Audit described in this Section is either (a) part of the NOS baseline Service offering; or (b) orderable as a standalone Service offering that does not include the provision of General Support in Section B1 above. We will provide the following Services during Standard Business Hours, unless stated otherwise:

2.11.1 Provide one (1) Network Infrastructure Performance Audit as selected by you out of those currently available and identified by us from time to time. The audit typically includes the following:

- Performance report at node and interface level
- Configuration report: protocol, node and interface
- Software report including conflicts and inconsistencies
- Hardware report including conflicts and inconsistencies: Hardware versions, firmware versions, micro-code versions, board revisions

2.11.2 Provide detailed recommendations, with a view towards helping you to optimize your Network Infrastructure stability.

2.12 **Network Inventory and Device Configuration Report.** Provide an inventory support service using Data Collection Tools to identify the quantity and type of Hardware on your Network and the range of Network Software releases running on your Network. The number of Network inventory and device configuration reports is limited to two (2) per year.

C. NETWORK OPTIMIZATION SUPPORT SERVICE OPTIONS. The following Service options are available only in conjunction with the Services set out in Part B unless otherwise stated. We will use commercially reasonable efforts to provide the Service Option(s) that you have purchased:

2.13 **Network Infrastructure Design Review Option.** You must have **Network Infrastructure Design Assistance** across your Network Infrastructure in order to purchase the Network Infrastructure Design Review described in this section. Under this option, we will perform one (1) additional Network Infrastructure Design Review to those purchased under Section 2.4.2 during Standard Business Hours, unless stated otherwise.

2.14 **Network Infrastructure Implementation Plan Review Option.** You must have **Network Infrastructure Implementation Plan Assistance** across your Network Infrastructure in order to purchase the Network Infrastructure Implementation Plan Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:

2.14.1 Perform one (1) implementation plan review that typically includes the following:

- Review and analysis of your Network Infrastructure deployment and integration plan

- Review of proposed sample configurations
- Review of turn-up test plan
- Analysis of any changes that your Network operations staff should be alerted to
- Report on recommendations.

2.14.2 Provide you with remote deployment support for up to three (3) months from completion of report provided under this option. Cisco will make available, upon receipt of not less than twenty-one (21) days prior written request by you, a designated support contact who can accept trouble calls on a 24-hour 7-day standby basis to remotely assist you in major Network service changes (for example, major Hardware upgrade(s), major site installation(s) and major configuration changes). You agree to submit a detailed request and schedule to us prior to any such activity.

2.15 **Network Infrastructure Software Strategy Review Option.** You must have **Network Infrastructure Software Strategy** across your Network Infrastructure in order to purchase the Network Infrastructure Software Strategy Review described in this section. Under this option, we will provide the following Services during Standard Business Hours, unless stated otherwise:

2.15.1 Provide one (1) Software strategy assessment that typically includes the following:

- Review of feature requirements and performance/availability objectives
- Review of new Software feature releases (for example, Cisco IOS, other Cisco OS Software, and Cisco micro-code) with respect to your business goals
- Report recommending a set of Software releases for your for your Network Infrastructure environment
- Review of your Software test plan and report on recommended changes
- Assist in the preparation and review of Software migration plan.

2.15.2 Provide you with remote deployment support for up to three (3) months from completion of the report provided under this option. We will make available a designated support contact that can accept trouble calls on a 24-hour 7-days a week standby basis to remotely assist you in major Software upgrades provided you give us not less than twenty-one (21) days prior written notice. Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity.

3.0 SERVICE RESPONSIBILITIES OF CUSTOMERS.

To enable us to provide you with the Service that you have selected we need you to do the following:

A. FOCUSED TECHNICAL SUPPORT.

3.1 Operations Management.

- 3.1.1 Designate a representative to act as our primary interface.
- 3.1.2 Coordinate our onsite visits and provide us with not less than thirty (30) days' notice of any visit you reschedule. Rescheduled visits will be subject to additional fees.
- 3.1.3 Attend regularly scheduled conference calls for open case reviews.

3.2 Focused Engineering.

- 3.2.1 Designate one or more person(s) from within your technical support organization to serve as a liaison to our Advanced Services Engineer.
- 3.2.2 Provide your designated person(s) with instructions on process and procedures to initiate cases and access Focused Engineering Support.
- 3.2.3 Advise us of your standard operating procedures as they relate to your business practices, internal operational nomenclature and Network to allow us to effectively communicate and discuss cases with you and your staff in the context of your business environment.
- 3.2.4 Provide all necessary information to enable us to perform root cause analysis.
- 3.2.5 Provide us with reasonable electronic access to your Network.
- 3.2.6 Provide us with a Network topology map, configuration information, and information of new features being implemented as needed.
- 3.2.7 Notify our Advanced Services Engineer of any major technology additions or changes to your Network.
- 3.2.8 Provide all necessary device, platform, feature, and release train requirements that exist in your environment.

- 3.2.9 Agree that we will only support generally available Products and Software releases/versions unless we agree otherwise.
 - 3.2.10 Report problems directly (for example, by telephone) using the number that we provide to you. Response times do not include problems reported via Cisco.com or other electronic means.
- B. NETWORK OPTIMIZATION SUPPORT.** To enable us to provide you with the Service that you have selected we need you to comply with the following General Responsibilities for all Services that you have selected under NOS baseline Service offering:
- 3.4 General Responsibilities**
- 3.4.1 Designate at least two (2) but not more than six (6) technical representatives (who are employees) in your centralized Network support center (“technical assistance center”) or design engineering team, together with one (1) technical representative to act as the primary technical interface for our Advanced Services Engineer.
 - 3.4.2 Within one (1) year from the commencement of your Agreement, you must have at least one (1) Cisco Certified Internetworking Expert (“CCIE”) trained employee or one (1) employee that has achieved, in our sole determination, an equal standard through training and experience as designated contacts .
 - 3.4.3 Your technical assistance center shall maintain centralized network management for your Network capable of providing Level 1 and Level 2 support.
 - 3.4.4 Provide our Advanced Services Engineer with reasonable electronic access to your Network.
 - 3.4.5 Ensure that Data Collection Tools are located in a secure area at your site, within a Network environment protected within a firewall and on a secure LAN, under lock and key and with access restricted to those of your employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the output of the Data Collection Tools. Where Data Collection Tools provided by Cisco represent Software, you will need to make appropriate computers available and download Software as needed
 - 3.4.6 Provide a Network topology map, configuration information, and information of new features being implemented as needed.
 - 3.4.7 Notify our Advanced Services Engineer as soon as possible of any major Network changes (for example topology, configuration, new IOS releases).
 - 3.4.8 Notify us in writing within ten (10) days of any change to the composition of your Network. We may require modifications to the fee payable if the Network composition has increased beyond our original pricing quote for Services.
 - 3.4.9 Create and manage an internal email alias for communication with our Advances Services Engineer.
 - 3.4.10 Retain overall responsibility for any business process impact and any process change implementations.
- 3.5 Network Infrastructure Design Assistance and Network Infrastructure Design Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.5.1 Your Network Infrastructure design.
 - 3.5.2 The business and technical requirements for your new design.
 - 3.5.3 Any constraints faced by you.
 - 3.5.4 Current or future planned applications that will run on the supported Infrastructure.
 - 3.5.5 Current and planned traffic characteristics
- 3.6 Network Infrastructure Implementation Plan Assistance and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities we need you to provide the following:
- 3.6.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
 - 3.6.2 Identify low risk and high risk areas of your Network based on the Network Infrastructure traffic.
 - 3.6.3 Your Implementation plan and deployment schedule.
 - 3.6.4 Maintenance window information and any other constraints.
 - 3.6.5 Your change control process.
- 3.7 Network Infrastructure Remote Deployment Support and Network Infrastructure Implementation Plan Review Option.** In addition to the General Responsibilities, we need you to provide the following:

- 3.7.1 Your Network Infrastructure architecture (which may include remote sites and size of remote sites).
- 3.7.2 Identify low risk and high risk areas of the Network based on the Network Infrastructure traffic.
- 3.7.3 Your Implementation plan and deployment schedule.
- 3.7.4 Maintenance window information and any other constraints.
- 3.7.5 Your change control process.
- 3.7.6 Contact information and details of your escalation process.
- 3.7.7 Review details of planned Network changes with our Advanced Services Engineer.
- 3.8 **Network Infrastructure Software Strategy and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.8.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.8.2 Your business and technical requirements for new Software releases.
 - 3.8.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.8.4 Your certification process and lab testing process.
 - 3.8.5 Your change control process.
- 3.9 **Network Infrastructure Remote Software Upgrade Support and Cisco Network Infrastructure Software Strategy Review Option.** In addition to the General Responsibilities we need you to provide the following:
 - 3.9.1 Current releases running in your Network Infrastructure and current configuration templates.
 - 3.9.2 Your business and technical requirements for new Software releases.
 - 3.9.3 Planned changes – new technology applications or major design changes (short term and long term).
 - 3.9.4 Your certification process and lab testing process.
 - 3.9.5 Your change control process.
 - 3.9.6 Contact information and details of your escalation process.
 - 3.9.7 Review details of planned changes with our Advanced Services Engineer.
- 3.10 **Network Infrastructure Performance Engineering and Optimization.** In addition to the General Responsibilities, we need you to provide the following:
 - 3.10.1 Any service level agreements or Network Infrastructure performance requirements.
 - 3.10.2 Details of critical applications supported by your Network Infrastructure.
 - 3.10.3 Expected Network growth, application mix changes.
 - 3.10.4 Data collection activities as needed to facilitate a specific Cisco analysis.
- 3.11 **Network Infrastructure Knowledge Transfer and Mentoring.** In addition to the General Responsibilities we need you to: (1) provide us with a set of requirements on the topics you want us to cover and background information on the skill sets of your proposed audience; and (2) ensure that facilities and equipment are available to host the Transfer of Information (“TOI”) sessions.
- 3.12 **Network Infrastructure Performance Audit Option.** In addition to the General Responsibilities, Customer shall:
 - 3.12.1 Ensure that your key Networking and operational personnel are available to participate in interview sessions as required in support of the selected audit.
 - 3.12.2 Provide assessments and audit data collection support. You will need to help install the Data Collection Tools into your production, and if applicable, test Network environment. You will need to ensure that we have all relevant device information needed for the audits, including the required device lists.
 - 3.12.3 Provide all information and data that you have gathered from tools used by you for Network data analysis and monitoring. You shall remain responsible for any damage to or loss or theft of the Data Collection Tools while in Customer's custody. You must immediately return Data Collection Tools to us upon the earlier of: (i) expiration or termination of the Exhibit; or (ii) our request to you that Data Collection Tools be returned.

4.0 SERVICES NOT COVERED UNDER THIS EXHIBIT.

Certain services are not covered:

- 4.1 Provision of Services for Technology applications. Technology applications are not covered under the Network Optimization Support, but can be purchased separately for an additional fee.
- 4.2 Any customization of, or labor to install, Software and Hardware (including installation of Updates).
- 4.3 Provision of Software Application Services. For purposes of this Exhibit, "Software Application Services" means services for non-resident/stand alone Software which include but are not limited to Cisco's network management Software, security Software, IP telephony Software, internet appliance Software , Cisco Intelligent Contact Management Software and Cisco IP Contact Center Software.
- 4.4 Furnishing of supplies, accessories or the replacement of expendable parts (e.g., cables, blower assemblies, power cords, and rack mounting kits).
- 4.5 Electrical or site work external to the Products.
- 4.6 Support or replacement of Product that is altered, modified, mishandled, destroyed or damaged by one or more of the following: (i) natural causes; (ii) environmental failures; (iii) your failure to take any required actions; (iv) a negligent or willful act or omission by you or use by you other than as specified in the applicable Cisco-supplied documentation; or (v) an act or omission of a third party.
- 4.7 Services or software to resolve Software or Hardware problems resulting from third party product or causes beyond Cisco's control or failure to perform your responsibilities set out in this Data Sheet.
- 4.8 Services for non-Cisco Software installed on any Cisco Product.
- 4.9 Any Hardware or third party product upgrade required to run new or updated Software.
- 4.10 Additional Services are provided at the then-current time and materials rates.
- 4.11 Except as otherwise provided in this Data Sheet, Software entitlement, including media, documentation, binary code, source code or access in electronic or other form is not provided. In addition, except as otherwise provided, no right, use or license to our Software is granted by this Data Sheet and you acknowledge and agree that you obtain no such rights.
- 4.12 Additional onsite visits and standby services beyond the number of visits/Events specified in the Quote, except as otherwise agreed, are provided at Cisco then-current travel and labor rates for such service on a time and material or non-contract service basis.

5.0 LICENSING.

In the event that we provide Software (whether on a Data Collection Tool or otherwise), we grant you a nonexclusive and nontransferable license to use the Software, in object code form only, on the Data Collection Tool on which such Software is provided or, if no Data Collection is provided, on a single Hardware chassis, until the earlier of: (i) the expiration or termination of the Device; or (ii) our request that the Data Collection Tool(s) be returned to us. You have no right and you specifically agree not to: (a) rent, lease, distribute, sell, transfer or sublicense your license rights to any other person, or use the Software on unauthorized or secondhand equipment; (b) make error corrections to or otherwise modify or adapt the Software nor create derivative works based upon the Software, or to permit third parties to do the same; or (c) copy, in whole or in part, any Software or document (except for reasonable backup copies), decompile, decrypt, reverse engineer, disassemble or otherwise reduce all or any portion of the Software to human-readable form. We shall make available any interface information which you are entitled to under applicable law upon written notice request and payment of Cisco's applicable fee.

6.0 LIMITATIONS.

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT YOU ARE SOLELY RESPONSIBLE FOR DETERMINATION AND IMPLEMENTATION OF YOUR NETWORK DESIGN REQUIREMENTS. IN NO EVENT SHALL WE BE LIABLE FOR (A) ANY DISCLOSURE OF THE CONTENTS OR OUTPUT OF PERFORMANCE ANALYSES, NETWORK OR OTHER REPORTS AND/OR DATA COLLECTION TOOLS BY YOUR EMPLOYEE(S) OR THIRD PARTY(S); (B) THE SECURITY OF YOUR NETWORK OR FOR ANY UNAUTHORIZED ACCESS TO SUCH NETWORK BY YOUR EMPLOYEE(S), CONTRACTOR(S), OR THIRD PARTY(S); OR (C) THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED IN ANY DESIGN REPORT.