RETURN BIDS TO :

Shared Services Canada / Services partagés Canada

C/O Andrew Nimmo (Contracting Authority)

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REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

Proposal To: Shared Services Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out thereof.

Proposition aux: Services partagés Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexées, au(x) prix indiqué(s**)**

Comments - Commentaires

This document contains a Security

Requirement

Title – Sujet		
Carling Campus Wired Intra-Building Network		

Solicitation No. – N° de l'invitation	Amendment No. – N° de modif.
2015119/A	0**06**

Client Reference No. – N° référence du client	Date
2015119/A	**2015-12-08**

File No. – N° de dossier

019eo-2015119/A

Solicitation Closes – L'invitation prend fin **at – à 02 :00 PM** **on – le 2015-12-10**	**Time Zone** **Fuseau horaire** Eastern daylight standard time EDST Heure normale de l'Est HNE

F.O.B. - F.A.B.

Plant-Usine: ☐   **Destination:** ☑   **Other-Autre:** ☐

Address Inquiries to : - Adresser toutes questions à: Nimmo, Andrew	Buyer Id – Id de l'acheteur 019eo

Telephone No. – N° de téléphone : 613-668-5697	FAX No. – N° de FAX Not applicable

Delivery required - Livraison exigée See Herein	Delivered Offered – **Livraison proposée**

Destination – of Goods, Services, and Construction:

Destination – des biens, services et construction :

See Herein

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
2015119/A	006	

Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No/ N° VME

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AMENDMENT # 005

This amendment is raised to:

1) Respond to the questions from bidders relating to the content of the RFP, as set out in Appendix 001;

2) Amend the Request for Proposal (RFP), as set out in Appendix 002

Under Article 2.3 of the Request for Proposal, the deadline for submitting questions or enquiries will be December 6, 2015. Canada makes no commitment to provide answers to questions submitted after December 6, 2015.

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Appendix 001

Question 120
In the event that the a proposed solution would use a Core switch plus a router for the purpose to Off load the IPSec functionality at the core, would the crown remove the requirement for MACSec Connectivity between the core switch and the router providing the IPSec offload

Answer 120
The MACsec requirement as stated in annex A is to remain. An alternative solution providing the IPSec offload would have to reside in the same rack and provide the same level of security, resiliency and redundancy as described would be considered.

Question 121
The schematic in Figure 3-2 illustrates the existence of a North-end Telecommunications Room (TR) and of a South-end Telecommunications Room (TR) per floor in Building 6 & Building 7. The label for this figure is "Building 6,7,8,9 Logical architecture". Please confirm that it is SSC intention to use both North TR and South TR to service connectivity requirements PER FLOOR.

Answer 121

This was a miscalculation, updated number to account for North/South in Appendix B

Question 122:

Please confirm that the total port count of users per building floor is actually 24+264+48 = 336 user ports per floor. Please confirm.

·   Note: The prior count of 344 includes the 8 ports of 10G for interconnection trunk ports.

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Answer 122

336 end device ports

Question 123:

Assuming that 336 user ports is the actual correct port count, should we be designing for half that amount in each North and South TR per floor?

- In other words, 168 user ports would be provisioned in the North TR and 168 ports would be provisioned in the South TR
- Also, 4x 10G interconnects to aggregation layer would be provisioned in the North TR and another 4x 10G interconnects to aggregation layer would be provisioned in the South TR

Answer 123

No, revised appendix B

Question 124

Annex B identifies 12x SFP 1G ports per aggregation switch. This means that an additional 48 SFP ports are required for the overall solution. Please confirm that the total number of ports for the Carling Campus LAN project is 4032+48 = 4080 ports.

Answer 124

Correct; additional 48 SFP have been added, please recalculate as we have updated appendix B.

Question 125

In the response to question number 103, it was mentioned that the access switches should be designed for a 30G virtual chassis interconnect. Can SSC provide the virtual chassis interconnect design criteria to meet interconnect at the Aggregation-layer and Core-layer?:

- What are SSC inter-connection requirements between Aggregation-Layer switches? No inter-connection is possible with the current port requirements specified with Annex B. See below, updated Appendix B
- What are SSC inter-connection requirements between Core-Layer switches? No inter-connection is possible with the current port requirements specified with Annex B.

Answer 125

Miscalculated – 12 TR at 2 connection for redundancy should calculate to 24 10GB interface per Agg switch + 4 core 10GB connection and 4 10 GB cross connect interface (at a minimum) Updated Appendix B to reflect. Updated port counts to 32 10Gb per Agg switch.

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Question 126

What are SSC connection requirements from Core-Layer switches to SSC WAN? No WAN connection is possible with the current port requirements specified with Annex B.

Answer 126

Core switch connects to WAN edge at 10G (2 per Core device), updated appendix B.

Question 127

Can SSC articulate its over-subscription design requirements vis-à-vis its bandwidth expectations for the Carling Campus LAN project? For example, we are attempting to calculate the target over-subscription ratio for the Carling Campus LAN design. If we assume that the access switch layer is provisioned with 336 ports of up to 1GE connections via a dual-homed design of 4x10G trunk ports connected to two(2) diverse aggregation switches, our calculation would show that this layer is over-subscribed by a ratio of 8.4 : 1 (i.e. 336G divided by 40G) in a failure scenario. Or does SSC consider the Campus LAN design to be "active-active" by design, and thus, calculate the over-subscription ratio using 336G divided by 80G in a steady-state scenario, which would yield an over-subscription ratio of 4.2 : 1. Please confirm which method SSC would implement to realize bandwidth expectations for the Carling Campus LAN project.

Answer 127

As per scenario 1: 4 X 10GB in active-active as aggregation switch are to be virtual chassis.

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Appendix 002

AMENDMENT TO THE REQUEST FOR PROPOSAL (RFP)

1.0   **DELETE**   Annex A – Technical Requirements (Revised December 4, 2015)

       INSERT   Annex A - Technical Requirements (Revised December 8, 2015)