



Ottawa, 23 February 2012

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BY E-MAIL

TO: Distribution list

**Re: CNOC Part I Application requesting expedited relief to address
implementation of the capacity model approved in Telecom Regulatory
Policy CRTC 2011-703 – Requests for information and revision of process**

Dear Madam, Sirs:

On 4 January 2012, the Canadian Network Operators Consortium Inc. (CNOC) filed a Part 1 application requesting that the Commission address their issues associated with the implementation of the model approved by the Commission in Telecom Regulatory Policy CRTC 2011-703.

To assist the Commission in its determinations on CNOC's application, the following parties are to respond to the requests for information addressed to them in the attachment to this letter: Bell Aliant Regional Communications, Limited Partnership and Bell Canada in Ontario and Quebec (the Bell companies), Cogeco Cable Inc. (Cogeco), Rogers Communications Partnership (RCP), Videotron Ltd. (Videotron), MTS Allstream Inc. (MTS Allstream) and CNOC.

The process for CNOC's application is revised as follows:

1. Parties are to respond to the questions addressed to them by **8 March 2012**;
2. All parties may submit reply comments on all issues to the Commission by **16 March 2012**.

Parties are to file their responses to the questions and their reply comments with the Commission, serving copies on all other parties. These responses are to be received, and not merely sent, by the specified dates.

Yours sincerely,

Original signed by

Yvan Davidson
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Requests for information from the Bell companies, Cogeco, RCP, Videotron, and MTS Allstream

1. Describe in detail how the company distributes the end-user traffic of an independent ISP that uses the company's wholesale high-speed access service when the independent ISP is connected to the company's network over multiple interfaces with reserved capacity:
 - a) For a specific end user, describe the steps to set up the path between the end-user and the interfaces to the independent ISP. The response should describe how the company chooses a particular interface for a specific end-user session when an end-user initiates the session.
 - b) After an end-user session has been established, does all traffic for an active end-user session follow one path, i.e. go through one specific interface for the whole session? Can the independent ISP redirect traffic to different interfaces or does its traffic have to use the path established by the company for the end-user session?
 - c) When there is a failure in an interconnection link that is carrying traffic between the independent ISP network and the company's network:
 - i. describe how the company's network recognizes the failure of the interconnection link,
 - ii. describe how the failure of the interconnection link affects the set up of a new end-user session following the failure, and
 - iii. describe what happens to an existing user session that is being carried on an interconnection link that fails during the session.
2. Assume the company has implemented the approved capacity model and an independent ISP has established four separate gigabit Ethernet (GigE) interfaces at a given location to interconnect with the company.
 - a) If the independent ISP requests 2000 megabits per second (mbps) of capacity identify, with supporting rationale, whether the independent ISP is responsible for specifying the amount of capacity to be allocated for each interface, or whether the company would decide how the requested capacity would be distributed over the four interfaces. If the company decides, identify the amount of capacity allocated to each of the interfaces. For the scenario that applies to this capacity request, specify the associated service charge for adding the capacity over the four interfaces.
 - b) Assume that the independent ISP subsequently requests an additional 200 mbps of capacity. If the company decides how the additional capacity is allocated to the four GigE interfaces, identify, with supporting rationale, the amount of capacity allocated to each of the interfaces along with the associated service charge. If the independent ISP is responsible for specifying the amount of additional capacity to be allocated for each interface, specify whether the 200 mbps of capacity could be equally distributed over the four interfaces (i.e. 50 mbps capacity allocated to each interface). Further, specify the service charge for adding the capacity that would apply in this example.

- c) If the company or the independent ISP (whoever is responsible) has chosen to allocate the capacity so that some of the interfaces are allocated more capacity than other interfaces, discuss whether the company's load balancing mechanism can distribute the independent ISP's traffic over the interfaces in a proportionate way. Further, indicate whether the independent ISP can control how its traffic is distributed to the interfaces.
3. In paragraph 24 of its comments on CNOC's Part 1 application, MTS Allstream indicated that the time required to add capacity after an independent ISP had made a request depended on the nature of the change required in its network (e.g. adding capacity to an existing interface) to support the capacity. In addition, several companies specified an upper limit for the time required to add capacity in their tariff applications for the associated service charge. Identify the minimum and average time that the company requires to process a capacity change order, with supporting rationale.

Requests for information from Cogeco, RCP, Videotron, and MTS Allstream

4. In paragraph 41 of their comments on CNOC's Part 1 application, the Bell companies submitted that trying to manage capacity in an aggregated fashion as suggested by CNOC (i.e. dynamic allocation of capacity) would require link aggregation functionality. The Bell companies outlined several issues in making this capability work. Provide the company's view, with supporting rationale, on the viability of using link aggregation functionality for dynamic allocation of capacity to multiple interfaces. In addition, provide the company's views on other potential approaches for dynamic allocation of capacity for the approved capacity model.

Requests for information from CNOC

1. In its application CNOC submitted that independent ISPs already pay to obtain redundancy and load balancing capabilities by purchasing multiple interfaces. To provide the Commission with further understanding of CNOC members' redundancy and load balancing requirements, at least three CNOC members (companies to be identified by CNOC and to include, as a minimum, a small, medium and large independent ISP) are each to provide the following information regarding its interconnection arrangements
 - a) Describe the company's access arrangements for interconnecting its own network to the network of its wholesale high-speed access service provider (or providers, as appropriate).
 - b) Describe the company's approach for implementing redundancy when interconnecting its own network to the network of its wholesale high-speed access service provider (or service providers). Indicate which network elements are subject to failure and provide the company's information on the frequency and duration of failures. Further, describe any changes in the company's approach for provisioning for redundancy in light of the introduction of the capacity model approved in Telecom Regulatory Policy 2011-703.
 - c) Describe the company's provisioning practices for determining when it has to add additional interconnecting links and interfaces and any other equipment to support the traffic carried by its end users of the wholesale high-speed access service. Further, describe any changes in the company's approach in light of the introduction of the capacity model approved in Telecom Regulatory Policy 2011-703.
 - d) Provide the following information for a company selected month in 2011 (company to specify the date) prior to the introduction of the approved capacity model:
 - i. the number and type of interfaces (e.g. AHHSPI for the Bell companies) and interconnection links to the service provider (e.g. gigabit Ethernet access links)
 - ii. the total monthly peak traffic in megabits per second of the company's end-users and the number of end users generating this traffic

Identify any changes to the number and type of interfaces if the company was supporting the user demand and traffic specified above after the introduction of the approved capacity model.
2. To provide the Commission with further understanding of the traffic impacts of services, at least three CNOC members that are customers of the Bell companies' business and residential wholesale high-speed access services (companies to be identified by CNOC and to include, as a minimum, a small, medium and large independent ISP) are each to provide its estimate of the percentage of its overall traffic peak that is caused by residential traffic and the percentage of the overall traffic peak caused by business traffic. CNOC is to explain whether the provided information is representative of the traffic characteristics of the majority of its members.
3. Provide CNOC's views on how dynamic allocation of capacity for the approved capacity model can be implemented by the ILECs and cable carriers.