



Telecom Decision CRTC 2014-463

Ottawa, 8 September 2014

Route reference: Telecom Decision 2013-659

File number: 8662-B54-201402643

Bell Aliant Regional Communications, Limited Partnership and Bell Canada – Application to review, vary, and stay certain determinations in Telecom Decision 2013-659 related to modem testing requirements and conditions

*The Commission **approves** the applicants' request to vary certain determinations in Telecom Decision 2013-659 related to the modem testing process. The Commission **denies** (i) the applicants' proposal regarding the prioritization of modem testing, and (ii) their request to rescind the requirement to file tariffs. The Commission **directs** the Bell companies to (i) ensure a fair and equitable process for modem testing, and (ii) file tariffs that reflect the determinations in Telecom Decision 2013-659 and in this decision, within **30 days** of the date of this decision. The determinations in this decision will enable competitors to offer more choice to their end-users, thereby stimulating competition.*

Background

1. In Telecom Decision 2013-659,¹ the Commission determined that very-high-bit-rate digital subscriber line (VDSL) modem testing and certification was necessary for Bell Aliant Regional Communications, Limited Partnership in its operating territories of Ontario and Quebec and Bell Canada (the Bell companies). The Commission noted that the Bell companies' network was not fully VDSL compliant and, as a result, testing of VDSL modems was required to ensure compatibility. The Commission considered that having additional VDSL modems certified would enable competitors to offer more choice to their end-users in terms of price and functionality, thereby stimulating competition.
2. The Commission established modem testing guidelines for the Bell companies that matched those of the cable carriers as closely as possible and directed the Bell companies to file proposed tariffs for VDSL modem testing, along with a supporting cost study.

Application

3. On 26 March 2014, the Canadian Network Operators Consortium Inc. (CNOC) and the Bell companies (collectively, the applicants) filed a joint application to review,

¹ Telecom Decision 2013-659, published in December 2013, dealt with various wholesale high-speed access service issues related to interface rates, optional upstream speed rates, and modem testing.

vary, and stay certain determinations of Telecom Decision 2013-659 that pertain to VDSL modem testing requirements and conditions. The applicants also proposed certain modifications to the modem testing conditions set out in that decision.

4. Specifically, the applicants requested that the Commission
 - modify the modem testing conditions set out in Telecom Decision 2013-659 to reflect the modifications included in their proposal;
 - stay, and eventually rescind, the requirement for the Bell companies to file tariffs and a supporting cost study for modem testing; and
 - stay the requirement for the Bell companies to implement the VDSL testing guidelines set out in Telecom Decision 2013-659.
5. The Commission received an intervention regarding the application from Vaxination Informatique (Vaxination). The public record of this proceeding, which closed on 8 May 2014, is available on the Commission's website at www.crtc.gc.ca or by using the file number provided above.
6. In Telecom Information Bulletin 2011-214, the Commission outlined the criteria it would use to assess review and vary applications filed pursuant to section 62 of the *Telecommunications Act* (the Act). Specifically, the Commission stated that applicants must demonstrate that there is substantial doubt as to the correctness of the original decision due to, for example, one or more of the following: (i) an error in law or in fact, (ii) a fundamental change in circumstances or facts since the decision, (iii) a failure to consider a basic principle which had been raised in the original proceeding, or (iv) a new principle which has arisen as a result of the decision.
7. The applicants submitted that a fundamental change in circumstances related to VDSL modem testing and certification requirements has occurred since the Commission issued Telecom Decision 2013-659: they have agreed to alternative VDSL modem testing conditions that, in their view, are mutually beneficial. They further submitted that, as a result, there is substantial doubt that the VDSL modem testing conditions set out in Telecom Decision 2013-659 remain appropriate.

Issues

8. The Commission has identified the following issues to be addressed in its determinations:
 - Modifications to modem testing conditions
 - Should the Commission approve the applicants' proposed modem testing process and prioritization mechanism?
 - Requirement to file tariffs and a cost study

- Should the Bell companies still be required to file tariffs and a supporting cost study for modem testing?
- Implementation of VDSL testing guidelines
 - Should the Bell companies publish the modem testing results?
 - Is the applicants' approach for bundling multiple modems into a single test acceptable?
- Other issues

Should the Commission approve the applicants' proposed modem testing process and prioritization mechanism?

Modem testing process

9. In Telecom Decision 2013-659, the Commission determined that VDSL modem testing by the Bell companies must be completed within six calendar weeks of the date the request for testing is made, and that the request must be made by a wholesale customer of the company. The Commission also determined that the Bell companies are not required to troubleshoot modem problems, but must provide clear and supportable reasons for rejecting a modem within the specified time frame.
10. In addition, the Commission directed the Bell companies to perform one free modem test (with up to two failures) per 12-month period per Internet service provider (ISP), upon receipt of a request for testing. An ISP would be charged \$9,000 for any additional modem test within the same 12-month period. The Commission did not specify any limits on the number of testing requests to be completed in a year.
11. The applicants proposed the following modifications to the modem testing conditions set out in Telecom Decision 2013-659:
 - a maximum of one ISP VDSL modem at a time will be tested;
 - testing will be completed within eight calendar weeks; during the testing period, the equivalent of two weeks of active testing will be provided, including troubleshooting; and
 - a maximum of five ISP VDSL modems will be tested per 12-month period, free of charge.
12. The applicants submitted that the proposal to allow a maximum of one modem test at a time enables testing within the Bell companies' capacity limits without the need for additional equipment or personnel. In addition, the demand for VDSL modem testing is expected to decline over time as more modems are tested and certified. Finally, the proposal to include a maximum of five tests per year allows for maintenance of

testing equipment and takes into account staff vacations, as well as providing enough time for troubleshooting.

Commission's analysis and determinations

13. The proposed testing process was agreed to by CNOC, which represents ISPs that have 75 percent of the competitor end-users with VDSL modems in the Bell companies' territory. No other ISP commented on the proposal.
14. The goals of the Commission's cost-recovery determinations in Telecom Decision 2013-659 were: (i) to reduce testing costs for the ISPs, (ii) to discourage the use of the modem testing process in an anti-competitive manner, and (iii) to keep the number of requests for modem testing within reasonable limits. The Commission considers that the applicants' proposal meets those goals by providing for modem tests to be done free of charge, while also introducing an improved testing approach that includes troubleshooting and limiting the total number of tests to five per 12-month period.
15. The Commission considers that it is cost-effective and efficient to limit VDSL modem testing to one modem at a time. The Commission notes that the applicants have proposed to extend the modem testing period to eight weeks but to include troubleshooting as part of the process. In the Commission's view, the inclusion of troubleshooting activities will result in improved testing with an acceptable increase in the duration of the testing period.
16. With regard to the applicants' proposal to limit modem testing to five tests per year, the Commission notes that no party suggested that such a limitation would fail to meet ISP demand for certification of additional VDSL modems.
17. In light of the above, the Commission finds that there has been a fundamental change in circumstances since Telecom Decision 2013-659 was issued, and therefore there is substantial doubt as to the correctness of that decision with regard to the modem testing process. The Commission finds that the applicants' proposal fulfills the Commission goals outlined above and **approves** the applicants' proposed modem testing process.

Prioritization mechanism

18. In Telecom Decision 2013-659, the Commission did not explicitly set any prioritization mechanism for modem testing requests. Each ISP was to be entitled to one free test per year.
19. The applicants proposed that for each 12-month period, CNOC will prioritize four of the five VDSL modem testing slots on behalf of its ISP members for the first, second, fourth, and fifth slots, and other ISPs will submit testing requests for the third slot on a first-come, first-served basis.

20. Vaxination submitted that no preference should be given to any specific organization for testing slots. Instead, it proposed that priority for modem testing be based on the total number of digital subscriber line end-customers represented by the ISP (or group of ISPs) making a testing request.

Commission's analysis and determinations

21. The Commission considers that reserving a testing slot for non-CNOC ISPs, as per the applicants' proposal, would ensure that these ISPs would have a reasonable chance to submit modems for testing. However, reserving the remaining four out of five slots each year for CNOC members would effectively give those members a preference.
22. Vaxination's proposal provides an opportunity for all ISPs to compete for each testing slot based on size; however, the Commission considers that this proposal would not prevent potential gaming by the large ISPs or groups of ISPs.
23. The Commission considers that the prioritization model proposed by the applicants is not appropriate. The Commission further considers that the Bell companies should provide fair treatment of incoming ISP requests with a view to ensuring that consumers have access to a variety of VDSL modems.
24. In light of the above, the Commission finds that there is not substantial doubt as to the correctness of Telecom Decision 2013-659 with regard to prioritization for modem testing. The Commission **denies** the applicants' proposal to assign specific modem testing slots to CNOC members and **directs** the Bell companies to ensure a fair and equitable process for all ISPs seeking modem testing.

Should the Bell companies still be required to file tariffs and a supporting cost study for modem testing?

25. In Telecom Decision 2013-659, the Commission directed the Bell companies to file proposed tariffs for VDSL modem testing, along with a cost study in support of their proposed rates. The applicants requested that the Commission stay, and eventually rescind, this requirement. They argued that it is more efficient for the Bell companies to provide five VDSL modem tests free of charge to ISPs in one 12-month period than to prepare a cost study, file a tariff, and bill for the service, which would all consume time and resources and force the Bell companies to incur significant expenses.
26. Vaxination supported the applicants' request.

Commission's analysis and determinations

27. Modem testing is a telecommunications service. Under the Act, unless telecommunications services are forborne from regulation, they can be provided only by way of a Commission-approved tariff.² Given that modem testing has not been forborne, the filing of a tariff is legally required.
28. The Commission considers that the filing of modem testing tariffs by the Bell companies will also ensure symmetry with the tariffs of the major cable companies that have been mandated to provide modem testing.
29. As for the requirement for a cost study, in this decision the Commission is approving the Bell companies' proposal to provide modem tests free of charge and therefore finds that there is no need for a cost study to be filed in support of proposed rates.
30. In light of the above, the Commission finds that there has been a fundamental change in circumstances since Telecom Decision 2013-659 was issued, and therefore there is substantial doubt as to the correctness of that decision with regard to the filing of cost studies. The Commission therefore **rescinds** the requirement for the Bell companies to file a cost study. However, since modem testing is a telecommunications service that requires Commission approval before it can be provided, the Commission **denies** the applicants' request to rescind the requirement to file tariffs. The Commission **directs** the Bell companies to file tariffs that reflect the determinations in Telecom Decision 2013-659, as varied by this decision, within **30 days** of the date of this decision.

Should the Bell companies publish the modem testing results?

31. In Telecom Decision 2013-659, the Commission did not issue any directives concerning the publication of modem testing results.
32. The applicants proposed to post the testing results on the Bell companies' ISP web portal, where all the Bell companies' ISP customers would be able to access the following:
 - the test report for each modem that passes the compatibility tests;
 - information on where the measured performance is lower than 20 percent compared to the Bell companies' reference modem; and
 - a schedule of upcoming modems to be tested.
33. Vaxination proposed that the Commission direct the applicants to make the modem testing results public.

² Subsection 25(1) of the Act states: "No Canadian carrier shall provide a telecommunications service except in accordance with a tariff filed with and approved by the Commission that specifies the rate or the maximum or minimum rate, or both, to be charged for the service."

34. The applicants replied that modem testing results are highly technical in nature, are not intended for the public, and would not be much benefit to the public. They submitted that the Bell companies could not make modem testing results available on their website without a release from the modem manufacturer, and manufacturers would likely object to having the results published and accessible to the public.

Commission's analysis and determinations

35. The Commission notes that under the applicants' proposed approach, testing results would be available to all the Bell companies' ISP customers. The available information would allow the ISPs to decide which modems to provide to their end-users.
36. With respect to Vaxination's proposal, the Commission is of the view that modem manufacturers are not likely to agree to release the testing results to the public and that an obligation to provide these results to the public could affect agreements between ISPs and modem manufacturers for testing. If the Bell companies were required to publish the testing results, manufacturers may not be willing to make the necessary modifications to ensure that their modems are compatible with the Bell companies' network. The Commission considers that the benefits of disclosing the testing results to the public do not outweigh the potential harm that their disclosure could cause to all the parties involved by reducing the number of modems available for testing and modification.
37. In light of the above, the Commission **finds** that the applicants' proposal to make the testing results available only to the Bell companies' ISP customers via the web portal is appropriate.

Is the applicants' approach for bundling multiple modems into a single test acceptable?

38. The applicants proposed to bundle multiple modems that have the same chipset and firmware into a single test. Under this proposal, a series of modems by the same manufacturer would be considered in one modem test if the following characteristics apply:
- a maximum of three modems are included in the series;
 - all modems have the same chipset and chipset version;
 - prior to the start of testing, detailed information about the differences between each modem is provided;
 - modems are all received at the same time, with an indication of which modem should be tested first; and

- the first modem will be fully tested, while the tests on the other modems will be limited to what can be accomplished during the testing period and will depend on the differences between the modems.
39. Vaxination proposed a shortened derivative modem³ testing period of four weeks instead of the applicants' proposed eight weeks.
40. The applicants replied that they have reached a compromise which ensures that the modem testing conditions they proposed for a series of modems by the same manufacturer provide an appropriate balance between allowing sufficient time to test modems and performing any troubleshooting with ISPs and manufacturers.

Commission's analysis and determinations

41. The Commission notes that an ISP can test a modem itself by connecting it to the Bell companies' network as an end-user would. If the modem performs satisfactorily, it can be used as is. If it does not perform well, the ISP can request a formal eight-week test from the Bell companies.
42. The Commission considers that the applicants' proposed bundling of multiple modems would cover most situations in a reasonable and efficient manner.
43. The Commission also considers that accepting Vaxination's proposal would disrupt the agreed schedule of five modem tests per year and would impact the process that the applicants proposed.
44. In light of the above, the Commission **finds** that the applicants' proposal for bundling multiple modems into a single test is acceptable.

Other issues

45. Vaxination raised the following issues: the Bell companies should (i) provide a tool that would indicate the type of digital subscriber line access multiplexer (DSLAM) to be used to serve the end-user, and (ii) provide technical sheets for each modem. The Commission **finds** that these issues are out of scope and do not pertain to modem testing.
46. With respect to the applicants' request that the Commission stay certain requirements for the Bell companies while it reviews the application, the Commission **finds** that the request is moot, as it has addressed the application to review and vary Telecom Decision 2013-659 in this decision.

Secretary General

³ A derivative modem has the same chipset and firmware as a previously tested and approved modem.

Related documents

- *Review of outstanding wholesale high-speed access service issues related to interface rates, optional upstream speed rates, and modem certification requirements*, Telecom Decision CRTC 2013-659, 6 December 2013
- *Revised guidelines for review and vary applications*, Telecom Information Bulletin CRTC 2011-214, 25 March 2011