



Telecom Decision CRTC 2020-355

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Canadian Network Operators Consortium Inc. – Application for relief regarding conduct relating to Technicolor cable modems by Bragg Communications Incorporated, carrying on business as Eastlink

*In response to an application from the Canadian Network Operators Consortium Inc. (now Competitive Network Operators of Canada [CNO]), the Commission finds that Eastlink's requirement for its third-party Internet access (TPIA) customers to remove from its network, due to defects, a model of Technicolor cable modem (the Technicolor modem) produced in two specific batches constitutes a disadvantage towards its TPIA customers but that it is not undue. However, Eastlink's requirement is inconsistent with its TPIA General Tariff. Accordingly, the Commission **directs** Eastlink to rescind its notice to remove the Technicolor modem from its list of approved TPIA modems. In addition, the Commission **denies** CNO's request for orders directing Eastlink to (i) allow for the immediate reintroduction of Technicolor modem units that were manufactured in the same two batches as the defective units but that have not been confirmed to be defective, and (ii) allow its TPIA customers to reintroduce defective units that have been recalibrated by Technicolor.*

Background

The Commission's cable modem framework

1. In Order 2000-789, the Commission considered that cable carriers should not be required to permit the use of cable modem models that endanger the integrity and security of their networks. However, the Commission also considered that the cable carriers' proposal in the associated proceeding to approve specific models effectively represented an additional certification procedure and was overly broad. The Commission therefore considered that each carrier's tariff should provide Internet service providers with a list of compatible models.
2. In Telecom Decision 2004-37, the Commission confirmed that third-party Internet access (TPIA)¹ cable modem models should, at a minimum, satisfy the following 10 requirements (the 10 requirements):
 - i. it operates at the technical service levels specified by the cable carrier;

¹ TPIA is also referred to as wholesale high-speed access.

- ii. it does not cause physical damage to the cable carrier's facilities or physical injury to persons operating, maintaining, or using those facilities;
 - iii. it does not cause either the cable carrier's facilities or the facilities of other persons connected to the cable carrier's network to malfunction;
 - iv. it properly implements the functions used by the cable carrier to monitor its network for operational and/or billing purposes;
 - v. it does not enable an end-user to circumvent cable carrier mechanisms intended to protect the security or integrity of the network;
 - vi. it properly implements the functions used by the cable carrier to maintain the privacy and security of transmissions over the cable carrier's facilities and does not otherwise operate in a manner which would compromise privacy or security;
 - vii. it properly implements the functions used by the cable carrier to maintain the quality of its services at the level it considers appropriate;
 - viii. it properly implements the functions used by the cable carrier to ensure that all end-users receive fair and proportionate use of the cable carrier's facilities;
 - ix. it does not cause degradation of service to persons other than the end-user of the modem; and
 - x. it does not interfere with the normal functioning of the cable carrier's facilities or the provision of services, either broadcasting or telecommunications, by the cable carrier.
3. The Commission also considered that the cable carriers should provide clear and supportable reasons for rejecting a cable modem model, but also that they are not required to troubleshoot modem problems and provide an analysis of the problems encountered.

Technicolor cable modems

4. On 24 September 2019, Bragg Communications Incorporated, carrying on business as Eastlink (Eastlink), sent a notice to its TPIA customers, informing them that
- two manufacturing batches of one specific model of Technicolor-brand cable modem, bearing model number TC4350 (hereafter, the Technicolor modem), had been identified as containing defective units;
 - Eastlink would require all of the Technicolor modem units produced in those two batches that had been deployed on Eastlink's network to be removed within 30 days; and

- pursuant to Eastlink's TPIA General Tariff (the tariff), the Technicolor modem would be removed from Eastlink's approved TPIA modem list (the approved list), effective 24 March 2020.²
5. The Canadian Network Operators Consortium Inc. (CNOC)³ indicated that its members subsequently contacted Technicolor for more information concerning the defects that were referenced in the notice and that, in response, Technicolor presented CNOC's members with a copy of a *Product Technical Notification* bulletin (the bulletin) dated 21 May 2019.
 6. According to the bulletin, "a very small quantity" of the Technicolor modems manufactured during weeks 35 and 37 of 2018 were reporting incorrect downstream radio frequency (RF) levels, ranging from +7 to +13 decibels too high;⁴ however, upstream RF levels appeared to be correct. The bulletin also stated that the core functionality of the units was not affected, and that the malfunction was a reporting issue only, despite Technicolor being unable to find a root cause for the anomaly. The bulletin further stated that it would not be possible to correct the problem using network-downloadable software (i.e. recalibration could not be conducted by Eastlink's TPIA customers), and that the affected units must instead be recalibrated in a controlled environment with special test equipment (i.e. recalibration must be performed by Technicolor).
 7. On 13 November 2019, CNOC sent a letter to Eastlink in which it requested that the company revise the notice to (i) specify that only the units that were confirmed as exhibiting the reporting issue described in the bulletin would be removed; and (ii) confirm that Eastlink would allow for redeployment of all the defective units, once Technicolor had recalibrated them.
 8. On 26 November 2019, Eastlink sent a letter to CNOC, defending its decision to remove the Technicolor modem from the approved list. It stated that it was unwilling to take on the additional risk of its customers deploying the Technicolor modem onto its network. However, in order to minimize the impact on its TPIA customers, Eastlink nonetheless agreed to grandfather units that were already deployed on its network at the time it issued its notice, and that were not produced in the two batches identified by Technicolor, or otherwise demonstrated to be defective.
 9. Eastlink considered this approach to be reasonable, because it requires that all units from the defective batches be removed immediately and gives six months' notice for the removal of the Technicolor modem from the approved list, while grandfathering

² Pursuant to the tariff, Eastlink must give six months' notice of the removal of a cable modem model from the approved list.

³ The organization is now known as Competitive Network Operators of Canada.

⁴ The bulletin did not state how many units produced in the two batches in question were exhibiting the defect, nor did it state how many units in total (i.e. defective plus potentially non-defective units) were produced in the two batches.

properly-functioning units that were not produced in the two defective batches. Eastlink also indicated that it retains the right to require the immediate removal of any grandfathered units that are subsequently discovered to be causing network issues.

Application

10. The Commission received an application from CNOC, dated 20 January 2020, in which it requested expedited relief from Eastlink's decisions regarding the Technicolor modem. Specifically, CNOC indicated that its members were being deprived of their preferred choice of cable modem. CNOC argued that Eastlink's conduct therefore not only subjects its TPIA customers to an undue and unreasonable disadvantage, which is contrary to subsection 27(2) of the *Telecommunications Act* (the Act), but it is also not consistent with an interpretation of the tariff that is reasonable.
11. CNOC submitted that only units that have exhibited the defect described in the bulletin should be considered defective (as opposed to all units produced in the two affected batches, as suggested by Eastlink) and therefore removed from Eastlink's network until they have been recalibrated by Technicolor. As such, CNOC requested that the Commission issue an order directing Eastlink to
 - rescind its removal of the Technicolor modem from the approved list;
 - allow for units that have not been confirmed to be defective to be immediately reintroduced onto its network; and
 - allow for defective units that have been recalibrated to be reintroduced onto its network.
12. In a letter dated 30 January 2020, Commission staff set out an expedited process for the review of CNOC's application, following a request from CNOC highlighting the timeline that Eastlink had set for making changes to the approved list (i.e. 24 March 2020).
13. On 18 March 2020, CNOC informed Commission staff that a few weeks after receiving Commission staff's 30 January 2020 letter, its members received final notices from Eastlink, in which the company confirmed that the Technicolor modem would be removed from its approved list effective 24 March 2020. Following intervention by Commission staff, Eastlink agreed to postpone the 24 March 2020 deadline until the Commission issues a decision regarding the dispute. Eastlink also stated that it was not threatening to remove any non-defective Technicolor modems from its network, since the company had agreed to grandfather such units. Eastlink also clarified that removing the Technicolor modem from the approved list merely meant that no additional Technicolor modems could be added to its network after the model in question was removed from the list.
14. The Commission received an intervention regarding CNOC's application from Eastlink.

Issues

15. The Commission has identified the following issues to be addressed in this decision:

- Should the Commission require Eastlink to rescind its removal of the Technicolor modem from the approved list? More specifically,
 - Is Eastlink's conduct consistent with a reasonable interpretation of its tariff?
 - Is Eastlink's conduct subjecting its TPIA customers to an undue and unreasonable disadvantage, contrary to subsection 27(2) of the Act?⁵
- Should the Commission require Eastlink to allow for immediate reintroduction onto its network Technicolor modems produced in the batches containing defective units, but not confirmed to be defective?
- Should the Commission require Eastlink to allow its TPIA customers to reintroduce onto its network defective Technicolor modems that have been recalibrated?

Should the Commission require Eastlink to rescind its removal of the Technicolor modem from the approved list?

Is Eastlink's conduct consistent with a reasonable interpretation of the tariff?

Positions of parties

16. CNOC submitted that Eastlink was incorrect in claiming that its conduct has a basis in the tariff. CNOC did not dispute that the tariff is broadly worded with regard to cable modems and the approved list, but urged the Commission to interpret the wording in light of the Commission's broader yet more stringent framework for cable modem certification, as prescribed in [Telecom Decision 2004-37](#). The rules set out in that decision provide that a cable carrier must provide clear and supportable reasons should it wish to reject a model within the context of the modem certification process. CNOC submitted that by extension, a TPIA provider seeking to remove a model from its approved list (in effect rejecting that model) should also be accountable for providing clear and supportable reasons, which Eastlink failed to do.

17. CNOC added that if Eastlink's conduct is left unchecked, it could establish a dangerous precedent whereby TPIA providers increasingly opt to remove cable modems from their approved lists as a response to minor and commonplace equipment issues that have straightforward solutions, as in the case described in its application. Such a trend would be severely harmful to competitive

⁵ Subsection 27(2) of the Act states the following: No Canadian carrier shall, in relation to the provision of a telecommunications service or the charging of a rate for it, unjustly discriminate or give an undue or unreasonable preference toward any person, including itself, or subject any person to an undue or unreasonable disadvantage.

telecommunications service providers (TSPs) and their end-users, and to competition in the provision of retail broadband services as a whole.

18. Eastlink argued that it has the right to decide to remove the Technicolor modem from the approved list, and its decision to do so is consistent with the tariff. Eastlink submitted that it has expended significant resources to address known defects with the Technicolor modem, and has the right to determine whether to add units of this model to its network. In particular, Eastlink noted that the faulty RF levels measured by certain cable modems from the affected batches on its network created alerts on its network, which resulted in significant investigations, including truck rolls.
19. Eastlink indicated that it does not deploy equipment on its network that it cannot trust to be reliable 100% of the time, and that replacing cable modems when they are defective or are no longer working is simply the cost of doing business. As a network owner, it has the right to make appropriate decisions regarding the equipment that is used on its network, and it should be entitled to remove models from the approved list when it determines that ongoing efforts to manage those models are not appropriate. Eastlink added that CNOC and its members need to understand that there are costs of running any business, and if a product or equipment or other issue requires a change, it may result in costs. Eastlink submitted that its costs to operate and maintain its network are far more substantial than the per-modem costs cited by CNOC in its application.
20. Eastlink also submitted that the approved list includes a number of cable modem models that are permitted to be used. Eastlink's TPIA customers are not exclusively using one model; they are using various approved models. Therefore, the decision to stop adding new Technicolor modem units to its network is in no way prejudicial. Denying TPIA customers their preferred choice of model by no means equates to an undue disadvantage; it is important that Eastlink, as the owner and operator of its network, be entitled to make such decisions, and CNOC members must be subject to Eastlink's reasonable decisions to manage its network appropriately.
21. CNOC further submitted that the 10 requirements ensure cable modem compatibility with cable carriers' networks. The Technicolor modem has met these requirements, and the entire certification process would be rendered meaningless if Eastlink were allowed to rely on its current interpretation of the tariff to unilaterally remove models from the approved list without compelling justification. This overly broad control over the models used by Eastlink's TPIA customers circumvents the intent that underpins the cable modem certification framework reflected in Order 2000-789.

Commission's analysis and determinations

22. The tariff sets out the rates, terms, and conditions upon which Eastlink's TPIA service is made available. Section 9.2 of the tariff states the following:

The TPIA service is provided only in connection with cable modems that are connected to and compatible with Eastlink's access and distribution network and systems. Eastlink will maintain a list of cable modem models that are

connected to and compatible with Eastlink's access and distribution network and systems by location. Eastlink may change this list at any time with written prior notice **when Eastlink makes the decision to proceed with the change that results in a cable modem model no longer being connected to and compatible with Eastlink's access and distribution network and systems.** In all cases, a minimum of 6 months written notice is required. [emphasis added]

23. The Commission is of the view that the wording used in section 9.2 of the tariff is ambiguous, because the provision can be reasonably interpreted in more than one way. One interpretation is that the tariff grants Eastlink discretion to make a change to the approved list at any time, with the only requirement being that Eastlink provide its customers with a minimum of six months' prior written notice.
24. The other interpretation is that the tariff does not enable Eastlink to amend the approved list without Eastlink making changes to its access and distribution network and systems that render a cable modem incompatible with or no longer able to connect to its network.
25. The tariff should be interpreted broadly in accordance with the Commission's framework for cable modem certification, as prescribed in Telecom Decision 2004-37 and described above. The Commission is of the view that the more accurate interpretation is that Eastlink would need to make a change to its network that renders the Technicolor modem incompatible with or no longer able to connect to its network in order to remove it from the approved list.
26. In addition, by extension and as submitted by CNOC, a TPIA provider seeking to remove a model from its approved list should also provide clear and supportable reasons.
27. While a number of units have proven to be defective, the Technicolor modem was previously certified to operate on Eastlink's network. Additionally, Eastlink had grandfathered units already deployed on its network that were not defective, and were not produced in the two batches containing the defective units. This suggests that the Technicolor modem continues to be compatible with, and is able to be connected to, Eastlink's network.
28. The Commission considers that the Technicolor modem units are, for the most part, non-defective, especially since the units containing the defect in question were confined to two specific batches. Furthermore, the tariff does not contain a provision that specifically requires TPIA customers to remove units from the network in the circumstance in which only some units of a given modem model are not compatible with or cannot connect to Eastlink's network. As such, the tariff does not permit the company to remove the Technicolor modem from the approved list.

29. In light of the above, the Commission finds that Eastlink's conduct is not consistent with a reasonable interpretation of the tariff. Therefore, Eastlink may not rely on the tariff to support its decision to remove the Technicolor modem from the approved list.

Is Eastlink's conduct subjecting its TPIA customers to an undue and unreasonable disadvantage, contrary to subsection 27(2) of the Act?

Positions of parties

30. CNOC submitted that Eastlink's conduct subjects its TPIA customers to an undue and unreasonable disadvantage, contrary to subsection 27(2) of the Act, which they experience in three different ways:

- Eastlink's decision to no longer support the addition of new Technicolor modem units arbitrarily deprives TPIA customers of their preferred choice of model. Lists of approved TPIA cable modem models are limited and the process for certifying additional models is lengthy. The fact that TPIA customers sought certification of the Technicolor modem and have deployed an extensive number of them is proof that there is strong demand for use of this model in conjunction with Eastlink's TPIA service. This demand should not be extinguished by Eastlink's arbitrary conduct.
- Eastlink's requirement that its TPIA customers remove the Technicolor modem from its network prevents them from making economic use of their significant investments in perfectly serviceable equipment. Backed by threat of disconnection, Eastlink's notice had already resulted in the removal of thousands of modems.
- Eastlink's conduct has caused its TPIA customers to obtain a redundant supply of alternative model units to replace the Technicolor modem, in order to service their existing end-users.

31. In CNOC's view, these consequences are widespread and threaten to undermine the levels of competition in Eastlink's serving territory.

32. Eastlink submitted that CNOC has no insight or knowledge of the significant efforts and costs that resulted from the company investigating and responding to service calls from faulty cable modems. While CNOC's members' only concern may be whether the modems work, Eastlink has to be concerned about the impact on its network, as well as the resources and costs associated with managing defective units, which creates more work and burden than is appropriate, particularly in light of the many other complex network management practices that the company must deploy daily.

33. Eastlink argued that it went above and beyond the requirements under the tariff so that it could fully understand what was causing the problem before making a decision to remove Technicolor modem units from its network. In January 2019, Eastlink discovered that some units were measuring false RF levels, which resulted in

Eastlink's monitoring and troubleshooting systems detecting problems in the network, although they did not actually exist.

34. Eastlink added that it took steps to ensure that no more resources were wasted investigating service issues at any location that deployed the Technicolor modem. It modified its standard network management practices to remove defective units from its reporting, since the effort to manage them was so significant that it was diverting attention away from other important network issues.
35. In Eastlink's view, no network owner should be in a position where substantial work and time are wasted investigating false signals issued by defective equipment, nor should it be reasonably expected to modify its network management practices to stop monitoring faulty equipment.
36. While the steps that Eastlink was forced to take were acceptable interim measures, they were not a reasonable long-term solution, since they can result in other network vulnerabilities. Eastlink determined that the continued addition of the Technicolor modem units to Eastlink's network exposed it to vulnerabilities, which posed an unacceptable risk. Eastlink then provided its TPIA customers with the six months' notice required under the tariff for the removal from the approved list, effective 24 March 2020.
37. Eastlink submitted that, contrary to CNOC's assertion that its members have made significant efforts to comply with Eastlink's requirement to remove the faulty Technicolor modems, as of the end of January 2020, a number of defective units were still provisioned on its network.⁶ Not only have CNOC's members failed to remove all of the defective units, they have ignored Eastlink's instructions and have added new, problematic units to the network. Eastlink submitted that it consequently cannot trust that its TPIA customers will comply with its request, and should not be required to permit the Technicolor modems to remain on its network.
38. Eastlink argued that its decision has not subjected CNOC members to costs that equate to an unreasonable disadvantage. The approved list includes a number of cable modem models that are permitted. Moreover, its TPIA customers are not exclusively using one model but instead are using various approved types; therefore, the decision to stop adding new Technicolor modem units to the network is in no way prejudicial.
39. CNOC replied that Eastlink is not entitled to act arbitrarily and disproportionately in connection with the Technicolor modem on the basis that there are other approved modems. CNOC's members establish their supply of modems based on a myriad of considerations, including technical capability and unit price, and Eastlink's conduct unnecessarily interferes with these important decisions.
40. CNOC submitted that its members accept reasonably incurred costs of doing business, such as those associated with recalibrating units that are confirmed as

⁶ Eastlink filed the precise number of units in confidence.

defective; however, its members do not accept costs that go beyond a reasonable and proportionate response to the problem. CNOC argued that such costs are directly attributable to Eastlink's arbitrary and disproportionate conduct and are therefore not costs of doing business.

41. CNOC considered that there is no substance to Eastlink's claim that a new request to certify the Technicolor modem would not meet the 10 requirements, since the Technicolor modem has already met these requirements. CNOC reiterated that only a small number of defective units might raise concerns, and all such concerns would be fully addressed by recalibrating the modems.

Commission's analysis and determinations

42. The Commission's analysis of an allegation of undue preference or unreasonable disadvantage under subsection 27(2) of the Act is conducted in two phases. First, the Commission must determine whether the conduct in question constitutes a preference or subjects a person to a disadvantage. If it so determines, it must then decide whether the preference or disadvantage is undue or unreasonable. Pursuant to subsection 27(4) of the Act, the burden is on the respondent to demonstrate that the preference or disadvantage is not undue or unreasonable.⁷ In order to assess CNOC's claim of Eastlink imposing unreasonable disadvantage towards its TPIA customers, the Commission must first determine whether there is a disadvantage.
43. Eastlink's decision to remove the Technicolor modem from the approved list would result in its affected TPIA customers incurring a financial cost to replace all non-grandfathered units (i.e. the cost of purchasing units of another model for future deployment on Eastlink's network). Moreover, the removal of the Technicolor modem from the approved list would deprive Eastlink's TPIA customers of what CNOC described as a "preferred choice" of cable modems for use in conjunction with Eastlink's TPIA services.
44. However, Eastlink has also incurred costs as a result of the problems caused to its network by the defective units. In addition to the labour costs associated with responding to the network difficulties encountered, Eastlink has also had to monitor the units from the defective batches to prevent non-grandfathered units from continuing to be introduced onto its network.
45. The record of this proceeding does not enable the Commission to assess with any degree of certainty which party (i.e. Eastlink or its TPIA customers) has experienced or will experience a greater financial or reputational cost associated with the problems caused by the defective units and Eastlink's plan to remove the Technicolor modem from the approved list.

⁷ Subsection 27(4) of the Act states the following: The burden of establishing before the Commission that any discrimination is not unjust or that any preference or disadvantage is not undue or unreasonable is on the Canadian carrier that discriminates, gives the preference or subjects the person to the disadvantage.

46. CNOC did not elaborate with respect to its assertion that the costs that Eastlink's affected TPIA customers would incur would undermine the levels of competition in Eastlink's serving territory. However, the Commission considers it unlikely that the action of removing this particular cable modem model from the approved list would have a profound and long-lasting impact on competition in Eastlink's serving territory, since affected TPIA customers could use other models on the approved list to continue to serve their end-users. Additionally, Eastlink agreed to grandfather non-defective units of the Technicolor modem that were already deployed onto its network, even after the withdrawal of the Technicolor modem from the approved list.
47. The Commission therefore considers that Eastlink's decision will not undermine the level of competition in the company's serving territory, either in the short term or long term, because the decision will not result in its TPIA customers being unable to access the company's network in order to serve their end-users.
48. The Commission considers that Eastlink has met the burden of proof, as set out in subsection 27(4) of the Act, that its decision to remove the Technicolor modem from the approved list was borne out of an intention to protect the integrity of its network and service to its end-users and those of its TPIA customers, rather than to impose an undue disadvantage upon its TPIA customers.
49. Accordingly, the Commission finds that while Eastlink's decision to remove the Technicolor modem from the approved list is subjecting the company's TPIA customers who use that modem to a disadvantage, it is not undue.

Conclusion

50. In light of all the above, the Commission concludes that while Eastlink's proposal to remove the Technicolor modem from the approved list does not constitute an undue disadvantage with respect to the company's TPIA customers, it is nonetheless inconsistent with the tariff. Eastlink should not be permitted to remove the Technicolor modem from the approved list such that it would deprive its TPIA customers of their preferred cable modem choice, given that the batches identified as containing potentially defective units are limited to two, and that these batches themselves have produced a limited number of defective units.
51. The Commission therefore **directs** Eastlink to rescind its notice for the removal of the Technicolor modem from the approved list.

Should the Commission require Eastlink to allow for immediate reintroduction onto its network Technicolor modem units produced in the batches containing defective units, but not confirmed to be defective?

Positions of parties

52. CNOC submitted that only Technicolor modems that have exhibited the defect described in the bulletin should be considered defective and therefore withheld from end-users until recalibration is complete; all other units that are functioning normally

should be eligible for immediate redeployment. Dealing with defective cable modems in this targeted manner is just and proportionate for the TPIA provider and for its end-users, and prevents end-user inconvenience resulting from unnecessary cable modem removal and replacement.

53. Eastlink submitted that it is not required to maintain cable modems on its network that have proven to be defective. Given the large number of units produced in the defective batches, combined with the TPIA customers' practice of reintroducing units from those same batches onto its network, it is more than reasonable for Eastlink to have the right to remove the Technicolor modem from the approved list. This will ensure not only the integrity of the network, but will also minimize network management issues associated with models known to require additional unnecessary time and resources.
54. Eastlink submitted that maintaining Technicolor modems on its network would cause the company to continue monitoring these units and waste additional resources or remove them from daily reporting and expose its network to vulnerabilities. Eastlink does not believe it should have to monitor the units within the defective batches to make sure that TPIA customers do not continue to use the defective units. Eastlink is merely requiring that units from the defective batches be removed, and going forward, CNOC members can use other cable modems from the approved list.

Commission's analysis and determinations

55. As discussed above, in Order 2000-789, the Commission considered that cable carriers should not be required to permit the use of cable modem models that endanger the integrity and security of their networks. The Commission considers that Eastlink's detailed account of the difficulties caused to its network by the defective units, as well as the time and effort expended to identify the problem and mitigate its effects, supports Eastlink's position that none of the units in the identified batches should be reintroduced.
56. Specifically, the Commission considers that Eastlink should not have to expend resources to monitor potentially defective units from the two batches that have been reintroduced onto its network, nor should it have to remove those units from ongoing monitoring and expose its network to vulnerabilities of the kind that it had experienced with the defective units. Moreover, Eastlink should not have to expend time and resources to monitor its network to ensure that its TPIA customers do not continue to deploy or redeploy potentially defective units from the two batches onto its network.
57. Unlike its decision to remove the Technicolor modem from the approved list, Eastlink's decision to prohibit all units from the two batches containing defective units from being reintroduced onto its network, regardless of whether or not the units are actually defective is consistent with the tariff. Eastlink's decision affects only the non-grandfathered units, which represent only a portion of the total number of Technicolor modems units owned by its TPIA customers.

58. Moreover, Eastlink's refusal to allow the reintroduction of potentially defective Technicolor modems from the two batches does not subject its TPIA customers to an undue disadvantage. Specifically, the Commission considers that Eastlink's decision is borne out of an intention to protect the integrity of its network and service to its end-users and those of its TPIA customers, as opposed to imposing an undue disadvantage upon them. As a result of Eastlink's decision, the company's TPIA customers would not be prevented from accessing Eastlink's network; as well, they would continue to be able to use the cable modem model of their choice (i.e. the Technicolor modem) to provide service via Eastlink's network.
59. In light of the above, the Commission **denies** CNOC's request for an order directing Eastlink to allow for immediate reintroduction of Technicolor modems that were manufactured in the same two batches as the defective units but that have not been confirmed to be defective.

Should the Commission require Eastlink to allow its TPIA customers to reintroduce onto its network defective Technicolor modem units that have been recalibrated?

Positions of parties

60. CNOC submitted that Eastlink's refusal to allow its TPIA customers to redeploy recalibrated Technicolor modems onto its network is unreasonable, because functioning units meet the 10 requirements, and replacing those units unnecessarily imposes costs upon the customers.
61. Eastlink argued that it should be entitled to make the decisions regarding whether to add Technicolor modems to its network going forward and that such decisions would include recalibrated units. Eastlink noted that it does not have a relationship with Technicolor.
62. CNOC replied that defective equipment issues that are limited in scope warrant targeted and proportionate solutions, adding that defective Technicolor modems can be easily recalibrated by the manufacturer in a controlled environment, thereby correcting the defect and allowing for redeployment. CNOC submitted that this presents the opportunity for a simple, straightforward, and proportionate response to the issue.
63. CNOC submitted that Eastlink did not even attempt to provide reasons why recalibrated Technicolor modems could not be redeployed onto its network, adding that Eastlink did not describe or qualify the risks that it ostensibly foresees with recalibrated units. CNOC submitted that in its view, this critical omission from Eastlink's response is not surprising, given that no risks exist.

Commission's analysis and determinations

64. CNOC did not provide any evidence or guarantee in its submissions that defective units that have been recalibrated by Technicolor will not, upon redeployment onto Eastlink's network, pose a risk of re-exhibiting the same RF reporting error that

necessitated their removal in the first place. As mentioned above, the bulletin indicated that the company had yet to identify the source of the issue, there is no downloadable software fix for the issue, and the affected units must be recalibrated in a controlled environment with special test equipment. However, the bulletin did not go into more detail that would speak to, for example, the reliability of a recalibrated unit once it is reintroduced onto a network. Therefore, the Commission considers that, given the reporting errors and other issues that Eastlink claimed were caused by the deployment of the defective units, the company should not be required to accept for reintroduction defective units that have been recalibrated by the manufacturer, particularly since Eastlink indicated that it does not have a relationship with Technicolor.

65. In light of the above, the Commission **denies** CNOC's request for an order directing Eastlink to allow its TPIA customers to reintroduce onto its network defective Technicolor modem units that have been recalibrated.

Policy Directions

66. The 2019 Policy Direction⁸ states that the Commission, in exercising its powers and performing its duties under the Act, must implement the Canadian telecommunications policy objectives set out in section 7 of the Act (the policy objectives), in accordance with paragraphs 1(a) and (b) of the 2019 Policy Direction.
67. The Commission considers that its determinations in this decision will advance the policy objective set out in paragraph 7(c) of the Act. Specifically, the Commission's decision to issue an order requiring Eastlink to rescind its removal of the Technicolor modem from the approved list means that Eastlink's TPIA customers will not have to forfeit their investments in functioning units of the Technicolor modem, which could otherwise potentially place these TSPs, as well as those that have not purchased the Technicolor modem, at a disadvantage to Eastlink. Therefore, the Commission considers that its order to Eastlink to keep the Technicolor model on the approved list will enhance efficiency and competitiveness at the national level of Canadian telecommunications, by enabling Eastlink's TPIA customers to continue to use functioning Technicolor modem units on its network and, in turn, enabling them to compete fairly in Eastlink's serving territory, whether with Eastlink or with other TSPs.
68. The Commission is of the view that, in accordance with subparagraphs 1(a)(i), 1(a)(ii), and 1(a)(v) of the 2019 Policy Direction, its determination that Eastlink rescind its removal of the Technicolor modem from the approved list fosters affordability and lower prices, and reduces barriers to competition for TSPs that are smaller than the incumbent national service providers. Specifically, through the requirement to continue to support the Technicolor modem, Eastlink's TPIA

⁸ *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives to Promote Competition, Affordability, Consumer Interests and Innovation*, SOR/2019-227, 17 June 2019

customers are more likely to continue to access Eastlink's network in order to serve their end-users, which contributes to a competitive marketplace in Eastlink's serving territory. This continued level of competition also facilitates affordability and lower prices for broadband Internet services for end-users, via the promotion of end-user choice of TSPs.

69. The Commission is also of the view that its determinations in this decision are consistent with subparagraph 1(a)(ii) of the 2006 Policy Direction,⁹ i.e. that when relying on regulation, the Commission uses measures that are efficient and proportionate to their purpose and that interfere with the operation of competitive market forces to the minimum extent necessary to meet the policy objectives.
70. Specifically, Eastlink's affected TPIA customers will have to replace only a portion of their total number of Technicolor modems, whereas the remainder can be deployed onto Eastlink's network. Therefore, Eastlink's affected TPIA customers will still be able to access Eastlink's network in order to provide service to their end-users; this will enable the TPIA customers to continue to be able to compete with Eastlink and with TPIA customers or other TSPs that were not affected by the notice.
71. At the same time, permitting Eastlink to prohibit all other Technicolor modem units produced in the two batches (i.e. those that are potentially defective, as well as defective units that have been recalibrated) from being reintroduced onto its network enables Eastlink to avoid experiencing ongoing network issues which may otherwise impede its ability to compete with other cable carriers or adequately serve its customers and end-users.

Secretary General

Related documents

- *Cable Modems for third-party Internet access*, Telecom Decision CRTC 2004-37, 4 June 2004
- *Terms and rates approved for large cable carriers' higher speed access service*, Order CRTC 2000-789, 21 August 2000

⁹ *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, SOR/2006-355, 14 December 2006