



Telecom Notice of Consultation CRTC 2018-242

PDF version

Ottawa, 13 July 2018

Public record: 1011-NOC2018-0242

Call for comments – Establishment of an appropriate quality of service metric for jitter to define high-quality fixed broadband Internet access service

Deadline for submission of interventions: 13 August 2018

[\[Submit an intervention or view related documents\]](#)

The Commission hereby initiates a proceeding to establish an appropriate threshold for jitter that defines high-quality fixed broadband Internet access service, consistent with the thresholds for latency and packet loss established in Telecom Decision 2018-241.

Background

1. Telecommunications play an important role in the lives of all Canadians. Modern telecommunications enable Canadians to participate in today's digital economy and provide access to services, such as health care, education, government, public safety, and banking services. As the regulator of Canada's communication system, to further the policy objectives set out in the *Telecommunications Act* (the Act), the Commission seeks to ensure that all Canadians have access to a world-class communication system and that they are able to participate in the digital economy.
2. In Telecom Regulatory Policy 2016-496, the Commission established a universal service objective: Canadians, in urban areas as well as in rural and remote areas, have access to voice services and broadband Internet access services, on both fixed and mobile wireless networks. To measure the successful achievement of this objective, the Commission established several criteria, including that Canadian residential and business fixed broadband Internet access service subscribers should be able to access speeds of at least 50 megabits per second (Mbps) download and 10 Mbps upload, and to subscribe to a service offering with an unlimited data allowance.
3. In that decision, the Commission also considered that quality of service (QoS) metrics for latency,¹ jitter,² and packet loss³ needed to be established to define high-quality

¹ Latency refers to the time it takes for data packets to travel from a source to a destination. Latency is usually measured in terms of the round trip, i.e. from a source to a destination and back to the source.

² Jitter refers to the variation in latency that causes data packets that were sent at regular intervals from a source to arrive at a destination at irregular intervals.

fixed broadband Internet access service, and to measure the successful achievement of the broadband portion of the universal service objective. Accordingly, the Commission requested that the CRTC Interconnection Steering Committee (CISC) review and make recommendations on appropriate QoS metrics and measurement methodology.

4. In Telecom Decision 2018-241, the Commission determined, based on a report submitted by the CISC Network Working Group (NTWG), that a fixed broadband Internet access service is defined as a high-quality service if it provides the subscriber with a smooth experience when using real-time QoS critical applications, as described in that decision. Consequently, the Commission determined that a latency of 50 milliseconds and a packet loss of 0.25% are the thresholds that define high-quality fixed broadband Internet access service.
5. In addition, the Commission determined that broadband QoS measurement should apply to the Internet service provider's (ISP) network from the modem at the customer premises to a server located off-net at the Internet exchange point (IXP)⁴ in a Canadian Tier 1 city.⁵ The measurements are to be made during peak times (i.e. from 7 p.m. to 11 p.m. local time on weekdays).
6. The NTWG did not reach consensus on an appropriate threshold for jitter to define high-quality fixed broadband Internet access service, and there was insufficient data on the record for the Commission to make a determination on such a threshold.

Call for comments

7. The Commission hereby initiates a proceeding to establish an appropriate threshold for jitter that defines high-quality fixed broadband Internet access service, consistent with the thresholds for latency and packet loss established in Telecom Decision 2018-241. Parties are invited to comment on such a jitter threshold, with supporting rationale and all evidence on which they rely to formulate their position. The jitter threshold is to be based on measurement, during peak times (i.e. from 7 p.m. to 11 p.m. local time on weekdays), from the modem at the customer premises to an IXP in a Canadian Tier 1 city.
8. The Commission will review the matters raised in this proceeding in light of the policy objectives set out in section 7 of the Act and taking into consideration the

³ Packet loss refers to the number of data packets that are sent from a source that fail to reach their intended destination.

⁴ The IXP is where ISPs interconnect to exchange Internet traffic with other ISPs in Canada and the global Internet.

⁵ These cities are Moncton, Halifax, Toronto, Ottawa, Montréal, Winnipeg, Saskatoon, Edmonton, and Vancouver.

Policy Direction.⁶ Parties should also take these into account and address their relevant aspects, as applicable.

9. All other matters, including the Commission's determinations set out in Telecom Regulatory Policy 2016-496 and Telecom Decision 2018-241, are out of the scope of this proceeding.

Procedure

10. The *Canadian Radio-television and Telecommunications Commission Rules of Practice and Procedure* (the Rules of Procedure) apply to this proceeding. The Rules of Procedure set out, among other things, the rules for the content, format, filing, and service of interventions, answers, replies, and requests for information; the procedure for filing confidential information and requesting its disclosure; and the conduct of public hearings. Accordingly, the procedure set out below must be read in conjunction with the Rules of Procedure and related documents, which can be found on the Commission's website at www.crtc.gc.ca, under "[Statutes and Regulations](#)." The guidelines set out in Broadcasting and Telecom Information Bulletin 2010-959 provide information to help interested persons and parties understand the Rules of Procedure so that they can more effectively participate in Commission proceedings.
11. All ISPs are made parties to this proceeding and may file interventions with the Commission by **13 August 2018**.
12. Interested persons who wish to become parties to this proceeding must file an intervention with the Commission regarding the above-noted issues by **13 August 2018**. The intervention must be filed in accordance with section 26 of the Rules of Procedure.
13. Parties are permitted to coordinate, organize, and file, in a single submission, interventions by other interested persons who share their position. Information on how to file this type of submission, known as a joint supporting intervention, as well as a [template](#) for the accompanying cover letter to be filed by parties, can be found in Telecom Information Bulletin 2011-693.
14. All documents required to be served on parties to the proceeding must be served using the contact information contained in the interventions.
15. All parties may file replies to interventions with the Commission by **27 August 2018**.
16. The Commission encourages interested persons and parties to monitor the record of this proceeding, available on the Commission's website at www.crtc.gc.ca, for additional information that they may find useful when preparing their submissions.

⁶ *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, 14 December 2006

17. Submissions longer than five pages should include a summary. Each paragraph of all submissions should be numbered, and the line *****End of document***** should follow the last paragraph. This will help the Commission verify that the document has not been damaged during electronic transmission.
18. Pursuant to Broadcasting and Telecom Information Bulletin 2015-242, the Commission expects incorporated entities and associations, and encourages all Canadians, to file submissions for Commission proceedings in accessible formats (for example, text-based file formats that enable text to be enlarged or modified, or read by screen readers). To provide assistance in this regard, the Commission has posted on its website [guidelines](#) for preparing documents in accessible formats.
19. Submissions must be filed by sending them to the Secretary General of the Commission using **only one** of the following means:

by completing the
[\[Intervention form\]](#)

or

by mail to
CRTC, Ottawa, Ontario K1A 0N2

or

by fax to
819-994-0218

20. Parties who send documents electronically must ensure that they will be able to prove, upon Commission request, that filing, or where required, service of a particular document was completed. Accordingly, parties must keep proof of the sending and receipt of each document for 180 days after the date on which the document is filed or served. The Commission advises parties who file or serve documents by electronic means to exercise caution when using email for the service of documents, as it may be difficult to establish that service has occurred.
21. In accordance with the Rules of Procedure, a document must be received by the Commission and all relevant parties by 5 p.m. Vancouver time (8 p.m. Ottawa time) on the date it is due. Parties are responsible for ensuring the timely delivery of their submissions and will not be notified if their submissions are received after the deadline. Late submissions, including those due to postal delays, will not be considered by the Commission and will not be made part of the public record.
22. The Commission will not formally acknowledge submissions. It will, however, fully consider all submissions, which will form part of the public record of the proceeding, provided that the procedure for filing set out above has been followed.

23. The Commission expects to publish a decision on the issues raised in this notice within four months of the close of record.

Important notice

24. All information that parties provide as part of this public process, except information designated confidential, whether sent by postal mail, facsimile, email, or through the Commission's website at www.crtc.gc.ca, becomes part of a publicly accessible file and will be posted on the Commission's website. This includes all personal information, such as full names, email addresses, postal/street addresses, and telephone and facsimile numbers.
25. The personal information that parties provide will be used and may be disclosed for the purpose for which the information was obtained or compiled by the Commission, or for a use consistent with that purpose.
26. Documents received electronically or otherwise will be posted on the Commission's website in their entirety exactly as received, including any personal information contained therein, in the official language and format in which they are received. Documents not received electronically will be available in PDF format.
27. The information that parties provide to the Commission as part of this public process is entered into an unsearchable database dedicated to this specific public process. This database is accessible only from the web page of this particular public process. As a result, a general search of the Commission's website with the help of either its search engine or a third-party search engine will not provide access to the information that was provided as part of this public process.

Availability of documents

28. Electronic versions of the interventions and other documents referred to in this notice are available on the Commission's website at www.crtc.gc.ca by using the public record number provided at the beginning of this notice or by visiting the "Have your say!" section then selecting "our open processes." Documents can then be accessed by clicking on the links in the "Subject" and "Related Documents" columns associated with this particular notice.
29. Documents are also available at the following address, upon request, during normal business hours.

Les Terrasses de la Chaudière
Central Building
1 Promenade du Portage
Gatineau, Quebec
J8X 4B1
Tel.: 819-997-2429
Fax: 819-994-0218

Toll-free telephone: 1-877-249-2782
Toll-free TDD: 1-877-909-2782

Secretary General

Related documents

- *CISC Network Working Group – Non-consensus report on quality of service metrics to define high-quality fixed broadband Internet access service*, Telecom Decision CRTC 2018-241, 13 July 2018
- *Modern telecommunications services – The path forward for Canada’s digital economy*, Telecom Regulatory Policy CRTC 2016-496, 21 December 2016
- *Filing submissions for Commission proceedings in accessible formats*, Broadcasting and Telecom Information Bulletin CRTC 2015-242, 8 June 2015
- *Filing of joint supporting interventions*, Telecom Information Bulletin CRTC 2011-693, 8 November 2011
- *Guidelines on the CRTC Rules of Practice and Procedure*, Broadcasting and Telecom Information Bulletin CRTC 2010-959, 23 December 2010