



Compliance and Enforcement and Telecom Notice of Consultation CRTC 2017-405

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Call for comments

Implementation of universal blocking of calls with blatantly illegitimate caller identification

Deadline for submission of interventions: 18 December 2017

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Parties are invited to comment on the Commission's proposal to require that all Canadian telecommunications service providers implement universal call blocking within nine months following the imposition of such requirements.

Introduction

1. In Compliance and Enforcement and Telecom Regulatory Policy 2016-442, the Commission set out its findings on technical solutions that Canadians could use to protect themselves from unwanted unsolicited and illegitimate telecommunications.
2. In that decision, the Commission identified universal blocking as a solution to ensure that Canadians benefit from a minimum level of protection against nuisance calls. Consequently, the Commission requested the CRTC Interconnection Steering Committee (CISC)¹ to develop practices to universally block calls with blatantly illegitimate caller identification (caller ID) information at the network level and to provide a report of its findings to the Commission.
3. The Commission further stated that it considers universal blocking of blatantly illegitimate calls to be consistent with the established Unsolicited Telecommunications Rules (UTRs), which require, among other things, that telemarketers and those initiating calls using Automatic Dialing-Announcing Devices (ADADs)² provide a telecommunications number where the originator can

¹ CISC is an industry working group with a mandate to undertake tasks related to technical, administrative, and operational issues on matters assigned by the Commission or originated by the public, that fall within the Commission's jurisdiction.

² "ADAD" refers to any automatic equipment incorporating the capability of storing or producing telecommunications numbers, used alone or in conjunction with other equipment, to convey a pre-recorded or synthesized voice message to a telecommunications number. Calls made by ADADs are sometimes referred to as "robocalls."

be reached. In addition, the Commission stated that it is prepared to take further action if it becomes clear that the industry is not taking sufficient measures to protect Canadians against unwanted calls.

Background

4. Caller ID information includes the telephone number and name of the calling party, and is generally included in the network signalling information for voice calls. With the introduction in recent years of voice over Internet Protocol (VoIP) services provided over the Internet, it has become relatively easy to modify the caller ID information associated with a given line or call. While there are sometimes legitimate reasons to modify caller ID information, caller ID spoofing³ can also occur when illegitimate telemarketers or fraudulent callers conceal or misrepresent their true identity by displaying inaccurate, false, or misleading caller ID information to induce Canadians to respond to their calls.
5. Examples of caller ID spoofing include calls that purport to originate from telephone numbers that are malformed or do not conform to established numbering plans,⁴ or calls where the calling number is the same as the called number.
6. The Commission notes that these types of unwanted nuisance calls also occur in other parts of the world and that some regulatory bodies and telecommunications companies in other countries have taken steps to help combat unwanted unsolicited and illegitimate calls for their citizens.
7. For instance, in December 2016, the United Kingdom Information Commissioner's Office (ICO) and the Office of Communications (Ofcom) reported⁵ on progress by an industry working group towards the reduction of nuisance calls to consumers. With the co-operation of members of the working group on the development and implementation of technical measures, one provider reported successfully blocking 425,000 nuisance calls during a one-day test period.
8. Also, in April 2017, the Federal Communications Commission (FCC) received an industry report titled [Industry Robocall Strike Force Report](#), which concluded that blocking certain numbers (i.e. numbers that are not designed to make outgoing calls) can be an effective mechanism in mitigating certain illegitimate calls.

³ A spoofed number can appear as a string of digits, such as 000-000-0000, a random number, or the number of a company, person, or government entity. Telemarketers who make sales calls to customers in Canada have an obligation to identify themselves. Callers who use technology to spoof their caller ID information with inaccurate, false, or misleading information violate this requirement. Spoofed calls are not necessarily illegitimate under the UTRs.

⁴ The North American Numbering Plan (NANP) defines the number of digits and format for telephone numbers in World Zone One and it is in conformance with the international public telecommunication numbering plan defined by the standardization sector of ITU [International Telecommunication Union] in the ITU-T E.164 numbering standard that defines the worldwide numbering system for use in public switched telephone networks (PSTNs).

⁵ [Tackling nuisance calls and messages: Update on the ICO and Ofcom Joint Action Plan \(December 2016\)](#)

Commission considerations

9. In Compliance and Enforcement and Telecom Regulatory Policy 2016-442, the Commission concluded that
 - universal blocking is the most effective and efficient solution to manage nuisance calls in cases where it is possible to accurately identify blatantly illegitimate caller ID spoofing; and
 - the use of universal blocking would ensure that Canadians benefit from a minimum level of protection against nuisance calls by fully addressing those that contain caller ID information that is blatantly illegitimate.
10. Further, the Commission stated that it expected telecommunications service providers (TSPs) to implement universal blocking of blatantly illegitimate calls on their networks following the receipt and consideration of the CISC report referenced in paragraph 2 of this decision.⁶ The Commission requested that the report to be prepared by CISC include the following:
 - a list of attributes of calls that indicate blatantly illegitimate caller ID information and that can be universally blocked;
 - identification of potential unintended consequences of universally blocking calls based on the proposed list of attributes;
 - redress mechanisms to prevent and remediate unintended consequences when universal blocking is deployed; and
 - approaches for monitoring the effectiveness of universal blocking.
11. On 8 March 2017, the CISC Network Working Group submitted industry consensus report [*Universal Blocking at the Network Level of Blatantly Illegitimate Calls*](#) (NTRE056) for Commission approval.
12. The Commission has carefully reviewed the consensus report submitted by CISC. The Commission remains of the view that universal blocking applied at the network level for some forms of blatantly illegitimate caller ID would be an effective mechanism to reduce unwanted illegitimate calls from reaching telephone subscribers and should be implemented in Canadian TSPs' networks. Further, the Commission is prepared to take further regulatory measures if TSPs do not take adequate steps so that Canadians are protected from receiving blatantly illegitimate calls.
13. In Compliance and Enforcement and Telecom Regulatory Policy 2016-442, the Commission identified three potential types of blatantly illegitimate calls that purport to originate from telephone numbers that

⁶ See paragraph 87 of Compliance and Enforcement and Telecom Regulatory Policy 2016-442.

- match the telephone number of the person being called;
- are spoofed with a number that is local to the person being called, in the case of an incoming long distance call; and
- do not conform to the North American Numbering Plan (NANP), i.e., are non-dialable telephone numbers (e.g. 000-000-0000).⁷

14. It is the Commission's view that a universal call blocking solution that prevents blatantly illegitimate calls from reaching the recipient requires a high level of certainty with regards to the illegitimacy of the call, in order not to inadvertently block legitimate calls.
15. With regard to the blocking of calls that originate from a telephone number that matches the number of the called party, the Commission recognizes that there may be scenarios where such calls are for legitimate purposes (e.g. some voice mail access methods); however, the Commission considers that the inadvertent blocking of legitimate calls may be mitigated effectively (e.g. alternate methods to access voice mail such as dialing a pre-programmed voice mail service number) by the service provider. Accordingly, the Commission considers that there are reliable mechanisms to distinguish between illegitimate and legitimate calls in order to prevent inadvertent blocking of legitimate calls.
16. Similarly, the Commission recognizes that there may be some legitimate calls that do not conform to the NANP and the ITU-T E.164 numbering plan,⁸ as it is possible for non-dialable numbers to populate the caller ID (e.g. improperly configured private branch exchange (PBX) systems and over-the-top (OTT) VoIP services). However, the Commission is of the view that these types of issues may be resolved by the systems administrators in order to conform to the industry established numbering plan (i.e. NANP, ITU-T E.164). Further, in the case of other types of legitimate calls that can traverse the network with non-conforming telephone numbers (e.g. 9-1-1 calls from unregistered mobile devices), these types of network generated numbers may be distinguishable from illegitimate non-conforming numbers within the telephone network that incorporates universal blocking.
17. In the case of the category of spoofed calls with numbers that are local to the person being called, however, the Commission considers that the mechanisms for distinguishing between a legitimate and non-legitimate spoofed number are not sufficiently reliable to protect against the inadvertent blocking of legitimate calls. Accordingly, the Commission does not consider a universal blocking solution to encompass this type of spoofed call.

⁷ See paragraph 49 of Compliance and Enforcement and Telecom Regulatory Policy 2016-442.

⁸ The international public telecommunication numbering plan E.164, as defined by the ITU-T, specifies, in part, the geographic country code format.

18. With regard to the category of spoofed calls that have no calling number information, the Commission notes that there can be legitimate reasons for omitting caller ID information, for example, to protect the calling party (e.g. calls originating from crisis centres), or as a result of technological limitations (e.g. originating telephone switches that are not compatible with caller ID). Since a reliable methodology may not exist to differentiate between illegitimate and legitimate calls with no caller ID information, it would be inappropriate to include this scenario as part of a universal blocking solution.
19. Finally, the Commission notes that additional options exist to enhance a universal blocking solution. For example, some illegitimate calls may contain caller ID information of phone numbers that appear to be legitimate but are known to not make outgoing calls. These can include phone numbers from (i) unassigned or inactive number ranges, and (ii) phone numbers of legitimate owners who have requested that outgoing calls with its telephone number should be blocked (i.e. the number is used exclusively to receive calls and not make any outgoing calls).
20. While phone numbers that are unassigned, inactive, or are not designed to make outgoing calls should not be expected to originate calls, it is the view of the Commission that the implementation of a solution to block these types of calls could require additional mechanisms and coordination to establish a so-called “Do Not Originate” (DNO) database between all TSPs.
21. While requirement for the implementation of a DNO system is not part of this proceeding, the Commission may consider such a requirement, along with other yet to be determined requirements, in the future to ensure that Canadians continue to benefit from protection against nuisance calls.
22. In light of the above, the Commission proposes to require, as a condition of offering and providing telecommunications services, that all Canadian TSPs providing retail voice services implement universal call blocking at the network level for the types of calls where the caller ID (i) purports to originate from telephone numbers that do not conform to established numbering plans (i.e. NANP, ITU-T E.164), and (ii) matches the telephone number of the person being called.
23. Further, the Commission proposes that TSPs be required to implement this type of mechanism within a nine-month period from a decision to implement universal blocking for the two scenarios noted above, including the testing and validation by TSPs, PBX administrators, and OTT VoIP service providers, as well as the establishment of processes, as defined in Compliance and Enforcement and Telecom Regulatory Policy 2016-442.⁹

⁹ See paragraphs 54 and 55 of Compliance and Enforcement and Telecom Regulatory Policy 2016-442.

Call for comments

24. The Commission hereby invites parties to comment on its proposal to require that, as a condition of offering and providing retail voice telecommunications services, all Canadian TSPs implement universal call blocking at the network level for all calls with caller ID information that include telephone numbers that do not conform to the NANP or the ITU-T E.164 numbering plan or where the calling number is the same as the called telephone number.
25. The Commission also requests, with specific evidence, facts and information, that parties to this proceeding provide detailed comments on
 - mitigation measures that will ensure that any unintended consequences are appropriately managed;
 - notification measures that could include such things as (i) notification to customers of the pending implementation of call blocking so that they can take steps to ensure their calls are not inadvertently blocked, (ii) notifications to callers that their calls have been blocked at a network level, and (iii) other notification requirements;
 - disclosure measures that could include informing called parties that callers to them have been blocked at a network level and the information that will be provided to them via the disclosure or other notification requirements;
 - redress mechanisms to prevent and remediate unintended consequences when universal blocking is deployed; and
 - approaches and methodologies to be used for monitoring the effectiveness of universal blocking and the effectiveness of measures to mitigate the potential impact on legitimate callers.
26. In addition, the Commission invites comments on its proposal to allow TSPs a nine-month period from a decision to implement universal blocking.
27. The Commission notes that, as a result of this proceeding, it could impose obligations on some or all TSPs, pursuant to sections 24 and 24.1 of the *Telecommunications Act*, whether or not they choose to become parties to this proceeding.

Procedure

28. 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.

29. Interested persons who wish to become parties to this proceeding must file an intervention with the Commission regarding the above-noted issues by **18 December 2017**. The intervention must be filed in accordance with section 26 of the Rules of Procedure.
30. 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.
31. All parties who filed interventions pursuant to paragraph 29 above may file replies to other interventions with the Commission by **22 January 2018**.
32. 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.
33. 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.
34. 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.
35. 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

36. Parties who send documents electronically must ensure that they will be able to prove, upon Commission request, that filing 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. The Commission advises parties who file and 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.
37. 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.
38. 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.

Important notice

39. 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.
40. 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.
41. 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.
42. 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

43. 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 file number provided at the beginning of this notice or by visiting the "Participate" section of the Commission's website, selecting "Submit Ideas and Comments," 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.
44. 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

- *Empowering Canadians to protect themselves from unwanted unsolicited and illegitimate telecommunications*, Compliance and Enforcement and Telecom CRTC 2016-442, 7 November 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