



# Broadcasting Regulatory Policy CRTC 2011-741

PDF version

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Additional references: 2011-489-1 and 2011-489-2

Ottawa, 1 December 2011

## Quality standards for French-language closed captioning

*The Commission **approves** the mandatory standards for French-language closed captioning set out in the appendix to this regulatory policy. The Commission further directs the French-language Closed Captioning Working Group (FL-CCWG) to submit an updated version of the standards by 7 January 2012 to reflect the changes identified in this policy, as well as to ensure that the mandatory standards are clearly identified as such.*

*The Commission will address the issues of enforcement, monitoring compliance and whether the mandate of the FL-CCWG should be extended at a later date.*

### Introduction

1. In Broadcasting Notice of Consultation 2011-489, the Commission called for comments on the quality standards for French-language closed captioning proposed by the French-language Closed Captioning Working Group (FL-CCWG)<sup>1</sup> further to the Commission's direction in Broadcasting and Telecom Regulatory Policy 2009-430 (the Accessibility Policy).
2. The Commission received comments from a number of parties and one reply. The public record for this proceeding is available on the Commission's website at [www.crtc.gc.ca](http://www.crtc.gc.ca) under "Public Proceedings."
3. The Commission recognizes that the report submitted by the FL-CCWG was a consensus report. As such, the Commission has generally accepted the proposed standards. Specifically, the Commission accepts the FL-CCWG's proposed mandatory standards for the positioning of captions on the screen, the speed of captions and the use of hyphens and chevrons, as set out in the appendix to this policy. However, after examining the public record for this proceeding, the Commission considers that it must address the following issues:
  - Should there be a distinction between mandatory standards and best practices?

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<sup>1</sup> The FL-CCWG is a group comprised of representatives from private and public television broadcasters, distributors, captioning providers and consumer and advocacy groups representing persons who are deaf or hearing impaired.

- What is an appropriate lag time for captioning?
  - What is an appropriate accuracy rate?
  - What is an appropriate timeframe within which to expect the correction of errors in live programs prior to rebroadcast?
  - Should there be a mandatory standard for the captioning of emergency alerts?
4. In this regulatory policy, the Commission will not be addressing how the mandatory standards will be enforced, how monitoring should take place, who should be responsible for monitoring and whether the mandate of the FL-CCWG should be extended. Rather, the Commission will address these issues at a later date.

**Should there be a distinction between mandatory standards and best practices?**

5. The FL-CCWG identified the following areas where it considered mandatory standards could be imposed on broadcasters:
- lag time;
  - positioning of captions on screen;
  - accuracy rate, including correcting errors in the rebroadcast of live programs;
  - speed of captions, including in children’s programming;
  - emergency alerts; and
  - hyphens and chevrons (speaker identification).
6. The working group also categorized a large number of standards as guidelines or best practices.<sup>2</sup> The best practices as submitted by the FL-CCWG can be found on the Commission’s website.

*Positions of parties*

7. The Aboriginal Peoples Television Network (APTN), the Canadian Broadcasting Corporation (CBC) and Pelmorex Media Inc. (Pelmorex) supported a distinction between best practices and mandatory standards. The Canadian Union of Public Employees (CUPE), the Syndicat des communications de Radio-Canada (SCRC) and SOVO Technologies Inc. (SOVO), a provider of closed captioning, submitted that all

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<sup>2</sup> Examples would include the way captioned text should be subdivided so that words stay with the audio they describe or words they modify, as well as how to clearly label and organize closed captioned videotapes, data files and backup disks to ensure their proper handling.

of the proposed standards and best practices should be considered mandatory, with the exception for CUPE with regard to the proposed mandatory standards and best practices relating to emergency alerts, which are discussed later in this policy. The Centre québécois de la déficience auditive (CQDA) submitted that all of the standards should be considered mandatory, but that broadcasters should be provided a level of flexibility during the first half of the new licence term. V Interactions Inc. (V Interactions), however, submitted that all of the standards should be applied as best practices. No parties suggested that any individual best practice would be more appropriately categorized as a mandatory standard.

#### **Commission's analysis and decision**

8. The Commission considers that mandatory standards, by their very nature, should be achievable, measurable and enforceable and that the mandatory standards proposed by the FL-CCWG meet this criterion, as well as address the main areas of concern of the user-group communities, such as accuracy rate, speed of captions and captions that block other on-screen information. By contrast, best practices are more qualitative. In the Commission's view, the remaining standards categorized by the working group as best practices deal with more stylistic issues. Accordingly, the Commission finds it appropriate to make a distinction between mandatory standards and best practices, as proposed by the FL-CCWG.

#### **What is an appropriate lag time for captioning?**

9. Lag time is the term used to identify the delay that occurs between the time a word is heard and the corresponding caption appears on screen. When the lag time is too great, captions are no longer in sync with what is happening on screen, making it extremely difficult to follow the story, identify the speaker or remain engaged in the program. The FL-CCWG proposed the following mandatory standard [translation]:

For live programming, the lag time between the audio and the captions must not exceed five seconds, averaged over the program.

#### *Positions of parties*

10. The CQDA supported the proposed mandatory standard for lag time. SOVO also supported the proposed mandatory standard, stating that the five-second lag time could even be shortened for live scripted programming since the script is provided ahead of time. SOVO further submitted that there should be a maximum eight-second lag time for all live programming. Pelmorex, however, submitted that the proposed mandatory standard should apply only to live scripted programming. It argued that a maximum lag time for live unscripted programming, such as interviews from remote locations or fast-paced live reports during severe weather events, should be considered a best practice.
11. Bell Canada (Bell) submitted that if the Commission were to impose a mandatory standard, an exception should be made for live sports programming. Specifically, it

argued that a standard lag time should be a best practice for live sports programming given the nature of such programming, with its rapid commentaries, the fact that there are several conversations happening at the same time, the volume of foreign proper names and surnames and the different terminologies used for different sports.

12. APTN submitted that ensuring a lag time of five seconds or less would be challenging for many broadcasters.

#### **Commission's analysis and decision**

13. The Commission notes that although Bell and Pelmorex raised concerns with respect to the proposed standard lag time, neither party proposed a different standard for Commission consideration. The Commission further notes that SOVO indicated that the five-second standard is reasonable for live unscripted programming and that this is arguably the most difficult type of programming to caption. The Commission also notes that SOVO is a key provider of voice recognition captioning in Quebec and that Bell stated in its submission that SOVO is the company it has engaged to caption live sports on its specialty service Le Réseau des sports.
14. It is the Commission's view that Pelmorex and Bell have not provided sufficient evidence for the Commission to deviate from the FL-CCWG recommendation. The Commission considers that the averaging of lag time over the length of the entire program provides sufficient flexibility to account for instances where the lag time may be longer due to the nature of the audio being captioned. Further, with respect to SOVO's suggestion to shorten the proposed lag time for scripted programming and establish a maximum eight-second lag time for all live programming in combination with a five-second average for unscripted programming, it is the Commission's view that such an approach is overly complicated. The Commission considers that the working group's proposed single standard for all live programming is clearer.
15. In light of the above, the Commission approves the mandatory standard proposed by the FL-CCWG. A mandatory standard to this effect is included in the appendix to this policy.

#### **What is an appropriate accuracy rate?**

16. The purpose of an accuracy rate is to establish a realistic and achievable level of high quality captioning. The FL-CCWG proposed two mandatory standards for pre-recorded programming and one for live programming, as follows [translation]:

##### **Pre-recorded programming**

Pre-recorded content must target an accuracy rate of 100%.

##### **Pre-recorded programming – spelling**

The quality of French in the captioning of pre-recorded programs must be as close to perfect as possible.

## **Live programming**

With respect to live programming, broadcasters must reach an accuracy rate of at least 85% averaged over the program, as measured by the following calculation method:

$$\% \text{ of accuracy} = \frac{N - \text{Sup} - \text{Sub} - \text{I}}{N} \times 100$$

N: number of words in the audio.

Sup: number of suppressed words (words present in the audio but absent from the captions).

Sub: number of substituted words (words in the audio replaced with others words in the captions).

I: number of inserted words (words present in the captions but absent from the audio).

### *Positions of parties*

17. The CQDA agreed with the proposed method of calculating accuracy. However, SOVO submitted that the 85% accuracy rate should only apply to live unscripted programming. For live scripted programming, it submitted that an accuracy rate closer to 100% should be required. SOVO also favoured a mandatory standard that takes into account technological advancements and proposed that the accuracy rate for live programming should be increased by 1% per year for five years, such that it would increase to 90% in year five.
18. V Interactions opposed the immediate use of the proposed method of calculation as a mandatory standard for live programming because in its view the calculation contradicts some of the proposed best practices. For instance, V Interactions noted that one of the best practices states that expressions such as “chus,” “ben,” “pis” and “tsé” should be replaced by expressions more easily understood, such as “j’ suis,” “bien,” “puis” and “t’ sais,” but that this would count as a substitution and therefore would be considered an error. V Interactions also questioned why spelling was not included in the calculation of the accuracy rate for live programming.
19. For its part, although Pelmorex supported the method of calculation, it was of the view that the 85% accuracy rate should apply only to live scripted programming. Pelmorex argued that an 85% accuracy rate for live unscripted programming was currently unachievable using voice recognition software, as the software is less accurate when captioning the vocal rhythms of those who have not worked or trained with it. Pelmorex noted that it had not yet attained the minimum 85% threshold, even with its best presenters. Pelmorex further submitted that the accuracy rate should be a best practice, not a mandatory standard, and that an accuracy rate for live programming (scripted and unscripted) should only be established following an evaluation period of two years.

20. APTN expressed concerns regarding the costs and resources associated with measuring the accuracy rate for a small broadcaster such as itself, given that only some of its programming is in the French language.

**Commission's analysis and decision**

21. Based on the record of this proceeding and given that pre-recorded programming is captioned before broadcast, the Commission considers that there is no reason why the captioning of pre-recorded programs should not accurately reflect the audio. The Commission notes that the working group proposed two separate mandatory standards related to the quality of pre-recorded programming that closely resemble themselves. Noting that the working group did not give any reason for separating error rate and spelling for pre-recorded programming, in the interest of regulatory simplicity, the Commission has set out in the appendix to this policy a single mandatory standard for pre-recorded programming that includes spelling, as follows:

Captioning for pre-recorded programs must target an accuracy rate of 100%, including spelling.

22. The Commission recognizes the challenges associated with captioning live unscripted programming. However, the Commission is of the view that the 85% accuracy rate proposed by the FL-CCWG provides broadcasters with an appropriate amount of flexibility. This standard translates into a 15% margin of error averaged over the length of the program. In the Commission's view, the proposed accuracy rate will ensure an adequate and reasonable level of captioning quality based on the technology available today, while providing sufficient flexibility to broadcasters. In addition, the Commission considers that the concern raised by V Interactions with respect to potential inconsistency between this standard and some of the proposed best practices will be addressed by the 15% error rate margin.
23. With respect to whether spelling should be considered an error for live programming, the Commission notes that during FL-CCWG meetings the user-groups were primarily concerned with the intelligibility of the captions and identified spelling errors as being a secondary concern. In light of the above, the Commission considers that the proposed calculation method for live programming is appropriate at this time.
24. With regard to SOVO's suggestion that the accuracy rate be gradually increased, the Commission is of the view that due to the uncertainty of the pace of technological advancements in the provision of captioning, it would be inappropriate at this time to prescribe such an increase. However, the Commission encourages broadcasters to monitor and adopt technological advancements to increase their level of accuracy.
25. Accordingly, the Commission approves the following mandatory standard for live programming, as proposed by the FL-CCWG and set out in the appendix to this policy:

Broadcasters must reach an accuracy rate of at least 85% averaged over the program, as measured by the following calculation method:

$$\% \text{ of accuracy} = \frac{N - \text{Sup} - \text{Sub} - \text{I}}{N} \times 100$$

N: number of words in the audio.

Sup: number of suppressed words (words present in the audio but absent from the captions).

Sub: number of substituted words (words in the audio replaced with others words in the captions).

I: number of inserted words (words present in the captions but absent from the audio).

### **What is an appropriate timeframe within which to expect the correction of errors in live programs prior to rebroadcast?**

26. In the Accessibility Policy, the Commission expressed its view that captioning errors in live programming should be corrected before such programming is rebroadcast. The FL-CCWG proposed the following mandatory standard to this effect [translation]:

When a broadcaster rebroadcasts a program that was initially aired live, it must correct the captions if:

- the content is rebroadcast as is, i.e. subsequent broadcasts are recordings of the original broadcast; and
- it has at least two times the total duration of the program available to it between the end of the original broadcast and the time of rebroadcast.

#### *Positions of parties*

27. Astral Media inc. and Quebecor Media Inc. on behalf of itself, TVA Group Inc. and Videotron G.P. (collectively Astral and Quebecor), which are members of the FL-CCWG, filed a joint submission in which they asserted that based on practice tests conducted by their respective engineering staff after the submission of the consensus report, correcting errors for programming like live sports and galas in the timeframes proposed is currently technically impossible. Astral and Quebecor proposed to limit the mandatory standard to news and reporting programming only and recommended that this issue be reassigned to the FL-CCWG for further discussion, given the results of their practice tests. The CBC, also a member of the FL-CCWG, supported this position.

28. V Interactions submitted that broadcasters should have at least 12 hours to correct errors in programs 60 minutes or less in duration and at least 24 hours for programs longer than 60 minutes. Pelmorex proposed that the correction of errors in live unscripted programming be considered a best practice and that the Commission re-evaluate in two years whether it should be a mandatory standard. Bell argued that

the correction of errors should be applied as a best practice for live sports programming, given the unique nature of such programming, notably the short time between the airing of the original event and the rebroadcast, as well as its short shelf-life.

29. While APTN does not air live French-language programming at this time, it submitted that the correction of errors prior to rebroadcast should be a best practice and that it should be phased in for smaller broadcasters or for those who have a unique mandate, such as itself.
30. SOVO submitted that it would be appropriate to require corrected captions for live programs that are rebroadcast more than 24 hours after the original broadcast.
31. The CQDA, also a member of the FL-CCWG, rejected the change to the mandatory standard proposed by Astral and Quebecor, stating that they were active members of the working group and never raised this issue with the group. The CQDA submitted that testing of the proposed standard should have taken place while the FL-CCWG was actively examining the issue and prior to the submission of the final report.

#### **Commission's analysis and decision**

32. The Commission recognizes that there are technical impediments to meeting the proposed standard for certain types of programming. Based on the record of this proceeding, the Commission is of the view that it is appropriate to maintain a mandatory standard for Category 1 (News) and Category 3 (Reporting and Actualities) programs. However, the Commission is concerned that the available technologies may make the same standard inappropriate for other types of live programming at this time. The Commission considers that a different mandatory standard for other types of live programming that takes into account the timeframes proposed by SOVO and V Interactions would address the needs of the users of captioning and the concerns of broadcasters.
33. Accordingly, the Commission has set out the following mandatory standard in the appendix to this policy:

When a broadcaster rebroadcasts a program that was initially aired live, it must correct errors in the captioning if:

- the content is rebroadcast as is, i.e., subsequent broadcasts are recordings of the original broadcast;
- in the case of Category 1 (News) and Category 3 (Reporting and Actualities) programs, the time between the end of the original broadcast and the rebroadcast is equal to at least two times the total duration of the program; and

- in the case of all other live programs, the program is rebroadcast more than 24 hours after the end of the original broadcast.

### **Should there be a mandatory standard for the captioning of emergency alerts?**

34. In the proceeding that led to the issuance of the Accessibility Policy, the FL-CCWG proposed, as a best practice, that a sign-language message be broadcast during emergency programming. In addition, in the context of this proceeding, the FL-CCWG proposed a mandatory standard related to the closed captioning of emergency alerts. Specifically, the FL-CCWG proposed the following [translation]:

#### **Best practice – sign language**

In the event of a community emergency, broadcasters must ensure that a sign-language message is broadcast as soon as possible within their programming.

#### **Mandatory standard – closed captioning**

In the event of a community emergency, broadcasters are required to provide all relevant information in both vocal and written formats and must insert captions in their programming as soon as possible, using the method described in the Universal Standards.<sup>3</sup>

#### *Positions of parties*

35. The CQDA submitted that the provision of sign language during an emergency alert should be a mandatory standard given that sign language is the native language of many persons who are deaf and that it is imperative that persons who are deaf be able to receive the information about life-threatening situations in their first language.
36. Pelmorex submitted that alerts should not be included in the mandatory standards because it had already invested considerable efforts in the provision of real-time emergency alerts and implemented the National Alert Aggregation and Dissemination (NAAD) system, which operates as a component of the Canadian national public alerting system. According to Pelmorex, it has agreements with authorized government users of the NAAD system to disseminate emergency alerts exactly in the format received, whether it be text, audio, a combination of the two or video. In this respect, Pelmorex explained that the NAAD system is based upon industry standards to allow for the immediate and uninterrupted dissemination of emergency messages without the need for human intervention by Pelmorex or broadcasters, the implication being that alerts may be broadcast without any advance notice to the broadcaster and long before any action could be taken to caption the alert. Pelmorex also submitted that since the Commission has determined that the broadcasting of alerts is voluntary, any proposal to require transcription of audio-only alerts or signing of alert messages

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<sup>3</sup> The Universal Standards refers to the final report provided by the FL-CCWG, dated March 2011.

would act as a disincentive for broadcasters to participate in the public alerting system. Finally, Pelmorex was of the view that a requirement for the provision of a sign-language message would cause delays and possibly inaccuracies, adding risk to the general population.

37. CUPE was of the view that alerts should not be included in the mandatory standards due to the cost involved.

#### **Commission's analysis and decision**

38. The Commission notes that NAAD emergency alerts distributed by Pelmorex are inherently text-based and are therefore generally accessible for persons who are deaf or hearing impaired. However, the Commission notes that emergency alerts that are not distributed as part of the NAAD system may not necessarily be text-based and considers that these messages should be captioned as soon as possible to provide notice of emergencies to persons who are deaf or hearing impaired at the earliest possible time. While it raised concerns regarding the costs of such a policy, CUPE did not provide any details to establish that resources were not available to caption non-NAAD emergency alerts. Accordingly, the Commission has set out the following mandatory standard in the appendix to this policy:

With the exception of emergency alerts issued by the National Alert Aggregation and Dissemination system, in the event of a community emergency, broadcasters are required to provide all relevant information in both vocal and written formats and must insert the captions in their programming as soon as possible, using the method described in the Universal Standards.

39. The Commission recognizes the concerns raised by the CQDA regarding the provision of sign-language interpretation of emergency alerts. However, the Commission also recognizes that the unpredictability of emergency situations could make the provision of timely sign-language interpretation impossible in many instances. In addition, the Commission considers that requiring sign-language interpretation during emergency alerts may result in delayed access to alert messages. Accordingly, the Commission is of the view that it would be inappropriate to impose such a mandatory standard at this time. Rather, the Commission finds that it should be maintained as a best practice as proposed by the FL-CCWG. However, the Commission encourages broadcasters to seek alternative ways of providing sign-language interpretation of emergency alerts, such as developing partnerships with sign-language providers.

#### **Conclusion**

40. The Commission is satisfied that the mandatory standards outlined throughout this regulatory policy are appropriate and address the central concerns of the user-group communities. Accordingly, the Commission **approves** the mandatory standards as set out in the appendix to this regulatory policy. The Commission will address the issues

of enforcement, monitoring compliance and whether the mandate of the FL-CCWG should be extended at a later date.

41. The Commission directs the FL-CCWG to submit an updated version of the standards by 7 January 2012 to reflect the changes identified in this regulatory policy. The FL-CCWG should ensure that mandatory standards are clearly identified as such.

Secretary General

# Appendix to Broadcasting Regulatory Policy 2011-741

## French-language Closed Captioning Mandatory Quality Standards

### 1) Lag time

For live programming, the lag time between the audio and the captions must not exceed five seconds, averaged over the program.

### 2) Accuracy rate for pre-recorded programming

Captioning for pre-recorded programs must target an accuracy rate of 100%, including spelling.

### 3) Accuracy rate for live programming

Broadcasters must reach an accuracy rate of at least 85% averaged over the program, as measured by the following calculation method:

$$\% \text{ of accuracy} = \frac{N - \text{Sup} - \text{Sub} - \text{I}}{N} \times 100$$

N: number of words in the audio.

Sup: number of suppressed words (words present in the audio but absent from the captions).

Sub: number of substituted words (words in the audio replaced with others words in the captions).

I: number of inserted words (words present in the captions but absent from the audio).

### 4) Rebroadcast of programs initially aired live

When a broadcaster rebroadcasts a program that was initially aired live, it must correct errors in the captioning if:

- the content is rebroadcast as is, i.e. subsequent broadcasts are recordings of the original broadcast;
- in the case of Category 1 (News) or Category 3 (Reporting and Actualities) programs, the time between the end of the original broadcast and the rebroadcast is equal to at least two times the total duration of the program; and
- in the case of all other live programs, the program is rebroadcast more than 24 hours after the end of the original broadcast.

### 5) On-screen information

**Positioning:** For both live and pre-recorded captioning, captions must be positioned to avoid covering action, visual elements or any information required to understand the message.

**Conflict between captions and on-screen information:** If despite the broadcaster's efforts, it is impossible to present captions without obstructing other graphic elements on screen (e.g. sports scores, weather data, breaking news), captions take precedence.

## **6) Speed**

Captions must be verbatim representations of the audio, regardless of the age of the target audience.

Speech must only be edited as a last resort, when technical limitations or time and space restrictions will not accommodate all of the spoken words at an appropriate presentation rate.

## **7) Closed captioning of emergency alerts**

With the exception of emergency alerts issued by the National Alert Aggregation and Dissemination system, in the event of a community emergency, broadcasters are required to provide all relevant information in both vocal and written formats and must insert the captions in their programming as soon as possible, using the method described in the Universal Standards.

## **8) Hyphens / Chevrons**

Systematically use hyphens or chevrons to indicate that a different person is speaking, even when the captions are positioned.