

### Recommended Actions to Solve Interpreters' Health and Safety Concerns

Submitted to: The House of Commons Board of Internal Economy

Meetings on "Translation Bureau – Resources Utilization for

Simultaneous Interpretation"

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#### Contacts

Greg Phillips
National President, CAPE
gphillips@acep-cape.ca

Dina Epale Senior Advocacy and Public Affairs Advisor, CAPE depale@acep-cape.ca

#### **Preamble**

In response to the 2020 COVID-19 pandemic, Parliament pivoted with remarkable agility to online meetings. As part of this process, however, a sizeable number of interpreters have been injured on the job. Since the House began using Zoom, the number of Hazard Reports submitted in a given *sitting month* has hovered between 4 and 18, compared to between 4 and 23 *per year* before the pandemic — with no perceivable downward trend.

Staff interpreters are members of the Canadian Association of Professional Employees (CAPE). Since May 2020, CAPE has raised interpreters' health and safety concerns repeatedly with the Translation Bureau, the Procedure and House Affairs Committee, the Official Languages Committee, and MPs from all political parties.

While some practices and equipment have improved, major sound system issues remain, and interpreters' hearing health is arguably at its worst yet. Urgent *preventative* measures are required, rather than the current reliance on *reactive* measures after the damage to interpreters' hearing has already occurred. CAPE urges the Board of Internal Economy, and the House Administration, to address the core health and safety concerns facing federal interpreters. This will ensure fewer interruptions and better serve the needs of all MPs and Canadians who rely on interpretation in Canada's official languages.

#### **CAPE's Key Recommendations**

- 1. Ensure that the parliamentary audiovisual system is urgently made compliant with ISO standards for interpretation.
- 2. Enforce the proper use of ISO-compliant microphones by participants.
- 3. Ensure that participants join from a computer, over a cabled internet connection whenever possible, or from a Public Services and Procurement Canada (PSPC) studio.
- 4. Ensure that technicians perform sound tests with all participants, balance volume between participants, and check for both proper equipment and proper use of that equipment, *before* interpretation starts.
- 5. Ensure testing of various video conferencing platforms with the parliamentary audiovisual system, and, eventually, choose one that will provide optimal sound to interpreters and participants.

National Research Council Audio Comparison Clips: Booth vs. ParlVU (July 2020)
(If you wish to listen to a comparison between good and bad audio, please click on the above link, then on Download, top left.)

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#### **About CAPE**

CAPE is the third-largest federal public sector union in Canada, with over 21,000 members in the Economics and Social Science Services (EC) and Translation (TR) groups of the core federal public service, as well as employees of the Library of Parliament, the Office of the Parliamentary Budget Officer, and civilian members of the RCMP.

Among these members are the interpreters at the Translation Bureau, including those who provide interpretation services to Parliament: 65 for Official Languages, and 10 for Multilingual Interpretation and Accessible Communications.

#### I. Recap of Health and Safety Concerns

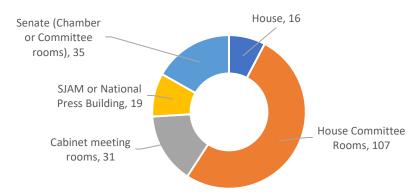
#### A. Number of Hazard Reports filed

The overall switch to online or hybrid meetings has caused a massive surge in injuries among interpreters, directly illustrated by the number of PSPC Form 874 Hazardous Occurrence Investigation Reports (Hazard Reports) filed over the pandemic:

2019 (pre- COVID and virtual sittings)		2020 (from March 30)	2021	2022 (to February 17)	TOTAL
23	Total Hazard Reports	121	100	27	248
	with incapacitating injuries	36	35	4	75
21	in Parliament	110	75	23	208

While there are many sound issues in assignments off the Hill, these are largely staffed by freelancers, who are not in a position to submit a PSPC Hazard Report. On the Hill, Hazard Reports have been submitted for the entire range of interpreted parliamentary meetings, as seen below.

# \*\*HAZARD REPORTS\*\* PSPC Form 874, at Parliament, Jan. 1, 2020 – Feb. 17, 2022 (208 total)



#### B. Types of symptoms experienced by interpreters

Hazard Reports filed between March 30, 2020, and February 17, 2022, reported the following symptoms:

- Ear pain, including ear pressure, hissing, buzzing, and hypersensitivity (in approximately 65% of reports)
- Headaches (in approximately 55% of reports)
- Excessive physical and mental fatigue (in approximately 38% of reports)
- Tinnitus (in approximately 37% of reports)
- Insomnia, nausea, and hyperacusis (diagnosed hypersensitivity to sounds), less commonly

Unsurprisingly, due to these injuries interpreters have taken a substantial amount of medical leave related to poor sound quality. Between March 2020 and October 2021, 24 interpreters — roughly one-third of the staff of permanent interpreters — had to take at least one day of medical leave due to injuries caused by poor sound quality. Those 24 interpreters took a total of 280 days of sick leave tied to these issues, or an average of nearly 12 days per interpreter over 20 months.

Further information on symptoms was provided in surveys of Translation Bureau interpreters by both the International Association of Conference Interpreters – Canada Region (AIIC Canada) and CAPE.

According to the AIIC Canada survey, conducted in January 2021, with 51 interpreters responding:<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> International Association of Conference Interpreters, *Distance interpreting during the pandemic: A survey of official language interpreters employed by the federal Translation Bureau*, January 18, 2021.

- 70% of respondents had experienced auditory injuries and, among those, 88% needed to take time off work to recover
- 43% reported that their injuries had brought about persistent symptoms
- 73% of interpreters had filed health and safety incident reports by January 2021, and 38% had opened a workers' compensation file

In the CAPE survey conducted in May 2021, with 45 interpreters responding:<sup>2</sup>

- 79% of respondents reported being in a situation they perceived as dangerous
- 72% reported being hurt or injured due to poor sound quality

#### C. Evolution of interpreters' symptoms

CAPE interpreter representatives indicate that tinnitus is now widespread, affecting almost all interpreters who worked through the pandemic. It generally goes under-reported. The same can be said of commonly experienced headaches and fatigue after assignments with inadequate sound. Representatives also note a worrying trend towards more actual pain, ear pain being mentioned in:

- 45% of Hazard Reports in 2020
- 77% of Hazard Reports in 2021
- 93% of Hazard Reports in 2022 (up to February 17)

Experience shows that interpreters who have had to take time off because of a hearing injury are most vulnerable to being injured again, often shortly after they get back into the booth. It is a major source of anxiety, largely due to the fact that no tangible improvement has been made over the last year.

The main danger for an interpreter's hearing used to be acoustic shocks, triggered by feedback loops or any other sudden sound surges — grievous injuries now mostly prevented by consoles with built-in limiter/compressors, thanks to a major upgrade in Parliament and the implementation of mandatory standards for all Translation Bureau audiovisual providers. However, the cumulative effects of poor quality and inadequate sound seem to be causing symptoms very similar to those of acoustic shock.

#### D. Availability and retention of interpreters

The Board of Internal Economy has heard about a shortage of interpreters to provide the level of service expected by Parliament, as well as about the challenges in recruiting new interpreters — both intensified by the health and safety concerns mentioned above.

As interpreters continue to suffer injuries due to poor sound quality, 10 or so staff interpreters (out of roughly 60 deployed on the Hill) are either unavailable or less available to interpret at any given time, as indicated by Lucie Séguin (Chief Executive Officer,

<sup>&</sup>lt;sup>2</sup> Canadian Association of Professional Employees, *Interpreter Survey Report*, May 27, 2021.

Translation Bureau of Canada) in her answers to Board members. This is a considerable drain on available resources.

Unless the sound from virtual participants is improved, things are likely to continue to get worse as more committees hit their stride and scarce interpreters are called upon to staff more hybrid assignments. As well, AIIC Canada will no doubt confirm that fewer freelancers now choose to work for Parliament, as they also fear ear injuries.

As had been theorized by some MPs, a return to in-person meetings would both reduce injuries and allow interpreters to go back to their pre-pandemic workload. However, CAPE anticipates that hybrid interpretation will remain a feature in Parliament for some time, so the issues associated with it must be addressed.

Given the current state of affairs, some interpreters currently assigned to written translation in order to heal their hearing may well choose to leave the field of interpretation altogether. CAPE's discussions with interpreters suggest that a significant number are considering leaving the Translation Bureau or the profession itself. Those who can, may take early retirement. A few are considering retraining.

Given the challenges that the Translation Bureau faces in finding new interpreters, ensuring the health and safety of current interpreters is essential for Parliament to continue to operate effectively in both official languages.

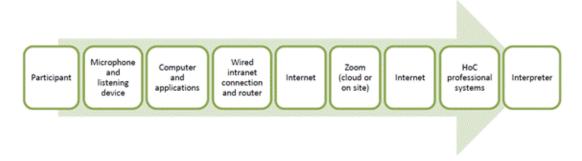
#### II. Contributing factors to poor sound quality when interpreting remote speakers

A report<sup>3</sup> published in May 2021 by the Standing Committee on Official Languages included a telling diagram. First, the interpretation sound chain during a typical, in-chamber meeting:



<sup>&</sup>lt;sup>3</sup> House of Commons, *Conference Interpreters: The Cornerstone of Bilingualism in Parliament*, Report of the Standing Committee on Official Languages, 43<sup>rd</sup> Parl., 2<sup>nd</sup> Sess. (May 2021) - <a href="https://www.ourcommons.ca/DocumentViewer/en/43-2/LANG/report-4/">https://www.ourcommons.ca/DocumentViewer/en/43-2/LANG/report-4/</a>.

Second, the highly complex sound chain during a remote or hybrid meeting:



As is apparent, remote interpretation during a hybrid meeting introduces many more points at which the quality of sound can deteriorate. The following will be discussed in turn:

- A. Not using an ISO-compliant microphone
- B. Not using a stable, wired internet connection
- C. Shortcomings of video conferencing platforms
- D. Issues due to the parliamentary audiovisual system

#### A. Not using an ISO-compliant microphone

Microphones can be the first weak link in the chain. As the Board has heard, microphones used by active participants must be ISO-compliant to ensure good sound quality. Indeed, the Translation Bureau's *Quality Framework for Official Languages Interpretation* clearly indicates that, for simultaneous interpretation, "[t]he microphones and the headphones must correctly reproduce audio-frequencies between 125 Hz and 15 kHz  $\pm$  10 dB"<sup>4</sup> — a recommendation also made in the LANG report.<sup>5</sup>

The House and Senate were diligent in providing parliamentarians and witnesses with external microphones, as a first step, and eventually with proper ISO-compliant microphones as soon as supply chains allowed. IT ambassadors, clerks, and interpreters work together to help remedy faulty use of equipment, such as improper device selection on computers and improper microphone position.

The main issue now is that participants are still NOT using the equipment provided, as noted by Bloc MPs and by interpreters in their Hazard Reports.

Interpreters note that while MPs and most witnesses at televised committees and in the House almost systematically use ISO-compliant microphones, regrettably they often fail to

<sup>&</sup>lt;sup>4</sup> Translation Bureau, *Quality Framework for Official Languages Interpretation*, p. 23.

<sup>&</sup>lt;sup>5</sup> House of Commons, *Conference Interpreters: The Cornerstone of Bilingualism in Parliament*, Report of the Standing Committee on Official Languages, 43<sup>rd</sup> Parl., 2<sup>nd</sup> Sess. (May 2021) - https://www.ourcommons.ca/DocumentViewer/en/43-2/LANG/report-4/.

do so when participating in in-camera meetings (caucus, cabinet...), press conferences, or events off Parliament Hill.

#### B. Not using a stable, wired internet connection

The speed and stability of a speaker's internet connection is a second key component in the quality of the sound received by all participants, and by interpreters. This is unsurprising, as video conferencing applications are designed to further compress the video and audio signals when faced with weaker connections. The LANG committee report noted, based on testimony heard: "Wired connections are faster, more stable and less subject to interference than wireless connections. The connection is better, and sound transmission is better as well."

However, Hazard Reports filed by interpreters indicate that:

- Participants often join informal meetings with a wireless connection, using a tablet or a phone, on occasion from a car or an outdoor location.
- Some parliamentarians joining from remote regions have weak or choppy internet connections, further degrading sound.
- On occasion, video may be turned off to allow more bandwidth for sound, depriving interpreters of important visual cues.

#### C. Shortcomings of video conferencing platforms

Another weak link in the sound chain is the video conferencing platform itself (Zoom, in the case of Parliament), which intentionally compresses the audio signal to allow for easier transmission over the internet: a likely contributor to "Zoom fatigue," no doubt a familiar phenomenon for parliamentarians.

The Official Languages Committee heard evidence from Mr. Christoph Stoll, Senior Lecturer and Research Fellow with the University of Heidelberg's Conference Interpreting Programme in Germany, who explained how these programs transmit only a portion of the sound frequencies produced by participants. The LANG report noted that the loss of audio frequencies, causing distorted speech and reduced intelligibility, made it especially difficult for interpreters to listen and speak at the same time, so that, according to Mr. Stoll, "interpreters tend to increase the volume, which tires the *stapedius* and *tensor tympani* muscles, which mechanically soften sound's impact on the cochlea and the cilia of the inner ear."

<sup>&</sup>lt;sup>6</sup> House of Commons, *Conference Interpreters: The Cornerstone of Bilingualism in Parliament*, Report of the Standing Committee on Official Languages, 43<sup>rd</sup> Parl., 2<sup>nd</sup> Sess. (May 2021) - https://www.ourcommons.ca/DocumentViewer/en/43-2/LANG/report-4/.

<sup>&</sup>lt;sup>7</sup> House of Commons, *Conference Interpreters: The Cornerstone of Bilingualism in Parliament*, Report of the Standing Committee on Official Languages, 43<sup>rd</sup> Parl., 2<sup>nd</sup> Sess. (May 2021) - https://www.ourcommons.ca/DocumentViewer/en/43-2/LANG/report-4/.

However, while Zoom can be a contributor to lower sound quality, subsequent research by the National Research Council, discussed below, suggests that it is **not** the main factor affecting sound quality in parliamentary booths.

#### D. Issues due to the parliamentary audiovisual system

A faulty interaction between Zoom and the parliamentary audiovisual system has made issues inherent to remote interpretation considerably worse for interpreters on the Hill. The problem, first flagged to parliamentary Multimedia Services as early as 2020 and then confirmed by NRC measurements in May 2021, has yet to be remedied.

ISO standards require that interpretation systems faithfully relay a specific number of hertz. The Translation Bureau's *Quality Framework for Official Languages Interpretation* states:<sup>8</sup>

The interpreting system must correctly reproduce audio-frequencies between at least 125 Hz and 15 kHz ± 3 dB.

...

The system must be free of perceptible distortion, noise and hum, and the volume of each channel should be adjusted to minimize the volume difference between audio channels (ex: Floor channel, English channel, French channel, other language channels).

As the Board has heard, the Translation Bureau and the House have taken steps to investigate the issues around sound quality by commissioning an independent report by 6 scientists from the Aeroacoustics and Structural Dynamics group in the Flight Research Laboratory at the National Research Council (NRC). The group took readings from various points in the House of Commons and in Room 425 of the Wellington Building. They also tested the audio signals coming directly from the Zoom platform and from headsets, in order to isolate the cause of the problem.

Their findings, first communicated to parliamentary Multimedia Services in May 2021 and officially presented in October 2021, are clear and very concerning:

 A significant limitation in the range of audio frequencies reproduced by the interpretation system in Parliament: while ISO standards require a range from 125 Hz to 15 kHz, the parliamentary interpretation system produced sharp frequency cut-offs at 6 to 7 kHz.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> Translation Bureau, Quality Framework for Official Languages Interpretation, p. 23.

<sup>&</sup>lt;sup>9</sup> S. Ghinet, E. Chen, C. Legare, J. Kellaway, A. Grewal and V. Wickramasinghe, *Evaluation of the Sound Quality in the House of Commons and Committee Rooms Interpretation Booths*, 20 October 2021.

• "Notches" in the audio signal in the House of Commons: there are points in the audio signal where the volume suddenly drops "by as much as 13 dB." Note that the decibel scale is logarithmic, so a difference of 13 dB is approximately the difference between normal conversation and a vacuum cleaner. (Interpreters in the booth find they fail to grasp a syllable or a whole word in the booth, then hear it clearly when listening to ParlVU.)

According to the NRC group, the tests "clearly demonstrated" that the audio-video system at the House of Commons and in Committee rooms "was responsible for the audio signal degradation and not the Zoom platform."<sup>11</sup> The NRC concluded, months ago now, that the problems needed "to be addressed as soon as possible."<sup>12</sup>

A recording is worth a thousand words. We suggest members of the Board of Internal Economy review this: NRC Audio Comparison Clips: Booth vs ParlVU (July 2020)

Extracted from the NRC's November 2020 report, that single slide presents two clips contrasting the audio quality fed to the interpretation booth (on the right) with the official video recording as heard by MPs and the public (on the left). Some would argue that there is simply not a single platform that is completely ISO-compliant at this time. While this statement is factually correct, it does omit important information, as confirmed by the NRC researchers:

- Zoom *is* able to transmit the 125 to 15,000 Hz range needed to ensure good sound quality for participants and interpreters (other factors make it non-ISO-compliant).
- However, this range is being cut off at the 6,000 to 7,000 Hz level by the House of Commons audiovisual system.

Also, while all international organizations conducting their meetings using interpreter services and online platforms have been facing sound issues related to compressed sound coming from online meeting platforms, to our knowledge none has an audiovisual system cutting off the sound at 7,000 Hz.

#### III. Protecting interpreters and ensuring better sound for all participants

In January 2022, AIIC published a *Declaration on Auditory Health*, which noted that further research on the precise nature of problems caused by remote interpretation was required. In the interim, AIIC called for:

<sup>&</sup>lt;sup>10</sup> S. Ghinet, E. Chen, C. Legare, J. Kellaway, A. Grewal and V. Wickramasinghe, *Evaluation of the Sound Quality in the House of Commons and Committee Rooms Interpretation Booths*, 20 October 2021, slide 55.

<sup>&</sup>lt;sup>11</sup> S. Ghinet, E. Chen, C. Legare, J. Kellaway, A. Grewal and V. Wickramasinghe, *Evaluation of the Sound Quality in the House of Commons and Committee Rooms Interpretation Booths*, 20 October 2021, slides 55-57, 59
<sup>12</sup> S. Ghinet, E. Chen, C. Legare, J. Kellaway, A. Grewal and V. Wickramasinghe, *Evaluation of the Sound Quality in the House of Commons and Committee Rooms Interpretation Booths*, 20 October 2021, slide 64.

- A. "The application of the precautionary principle by employers of interpreters in ensuring shorter periods of exposure and much longer breaks between such exposures in order to allow for the ear to recover before being re-exposed."
- B. "The use, throughout the entire sound chain and especially by remote speakers, of microphones and other technical equipment required for audio transmission capable of reproducing the full ISO frequency response (125–15,000 Hz) and which do not manipulate the audio signal in any way." 13

#### A. Employers protecting interpreters

Early in the pandemic, the Translation Bureau reduced the hours worked by interpreters assigned to hybrid or remote meetings by one-third. Back in 2020, it also allocated more interpreters to any given assignment, to allow for breaks, as Lucie Séguin indicated to the Board of Internal Economy. That is no longer the case, as has since been confirmed by Translation Bureau management. Lately, given the scarcity of interpreters fit to work, and the increased number of parliamentary meetings, interpreters' schedules have been growing heavier.

Another prong of the Translation Bureau's effort to protect interpreters' health and safety has been to repeatedly urge interpreters to interrupt service any time the sound is a danger to their health or just inadequate for quality interpretation. While MPs may feel that there have been many interruptions, the truth is that there have not been *nearly* enough, as shown by the number of injuries suffered. There are several reasons why:

- Interpreters are trained to hang on when clients speak quickly or when the subject matter is complex. When struggling because of poor sound, they tend to just try harder often realizing only later, when the harm is already done (tinnitus, ear pain), that they should have interrupted.
- They are also dedicated professionals, intent on relaying the message in the other official language, and on not letting their clients down. This is particularly true in Parliament, where a long-awaited witness or a fraught meeting may be suspended for lack of interpretation a fact Lucie Séguin acknowledged in her testimony to the Board, stating that interpreters "want to provide interpretation at all costs, even though it may expose them to problems with health and safety."<sup>14</sup>
- Also, since management is not on site, it is interpreters who bear the brunt of a
  decision to stop interpretation. This is especially stressful when clients are elected
  officials or ministers, and when interacting with technicians who are also eager to
  give good service to important clients.

In the survey CAPE conducted in May 2021:

<sup>&</sup>lt;sup>13</sup> International Association of Conference Interpreters, *Declaration on Auditory Health*, January 2022.

<sup>&</sup>lt;sup>14</sup> Testimony of Lucie Séguin to BOIE, February 17, 2022, p. 10.

- 75% of interpreters reported having received negative feedback from participants or technicians after a service interruption
- When asked why they were not using their right to refuse dangerous work, 55% of interpreters responded that they felt pressured to continue<sup>15</sup>
- Only 18% reported that they would always interrupt service when faced with sound quality issues, while 80% would "sometimes" interrupt service. When service had been interrupted, 43% of interpreters noted that they would resume service, even if the problem persisted.<sup>16</sup>

Simply put, relying on interpreters' interrupting service to protect their own hearing and prevent auditory injury has proven unrealistic.

Given the fact that interpreters, while in the employ of the Translation Bureau, diligently serve Parliament first, parliamentarians actually hold interpreters' health in their hands and could improve it through actions detailed below.

#### B. What Parliamentarians can do to improve video conferences for all

## 1. Ensure that the parliamentary audiovisual system is urgently made compliant with ISO standards for interpretation

The evidence is clear: the sound fed to the interpretation booths by the parliamentary audiovisual system does not allow for interpreting safely, nor with full accuracy. The Board has been told that further research is needed to determine the nature of the problem and its impact on interpreters.

CAPE firmly disagrees with this suggestion. The research conducted by the NRC group is thorough and extremely concerning, particularly when tied to the large number of injuries suffered by interpreters in Parliament. It is imperative that:

- The issues with the parliamentary audiovisual system be urgently addressed.
- The National Research Council be invited to ensure all issues have indeed been remedied when the time comes.

Until then, even if parliamentarians dutifully follow all recommended practices, interpreters' injuries are likely to continue, as are service interruptions.

#### 2. Enforce the proper use of ISO-compliant microphones by participants

On February 17, 2022, the Translation Bureau implemented a directive requiring that Government of Canada departments and agencies use proper microphones *as a condition* of receiving interpretation services.<sup>17</sup>

<sup>&</sup>lt;sup>15</sup> Canadian Association of Professional Employees, *Interpreter Survey Report*, May 27, 2021.

<sup>&</sup>lt;sup>16</sup> Canadian Association of Professional Employees, *Interpreter Survey Report*, May 27, 2021.

<sup>&</sup>lt;sup>17</sup> Testimony of Lucie Séguin to BOIE, February 17, 2022, p. 6.

However, this directive does not apply in Parliament, as the Translation Bureau has chosen to keep collaborating with the House Administration and parliamentary Multimedia Services, trusting that it would bring about faster improvements to sound quality.

The May 2021 Official Languages Committee report recognized that compliance was an issue, and stated:

- a) that, during virtual or hybrid meetings, members of Parliament must wear a superior quality headset with a microphone that meets ISO standards or the equivalent, to be provided by the House of Commons Administration, in order to be recognized to speak in the House of Commons and in committee; and
- b) that witnesses called to appear before parliamentary committees must wear such a headset during virtual or hybrid meetings, <u>failing which their appearance will be postponed or cancelled</u>."<sup>18</sup>

[Emphasis added]

Over the last two years, masks have been mandated to protect the health and safety of Canadians. It is not unreasonable to mandate the use of ISO-compliant equipment for all participants joining parliamentary meetings remotely. This would ensure clear sound for meeting participants and preserve the health and safety of interpreters.

## 3. Ensure that participants join from a computer, over a cabled internet connection whenever possible, or from a Public Services and Procurement Canada (PSPC) studio

Likewise, if repeated nudges to encourage the practice prove insufficient, the House should consider mandating the use of a cabled internet connection when joining a meeting. This would ensure that witnesses and MPs are heard properly by fellow participants, interpreters, and Canadians, instead of sound periodically cutting out or being distorted, as is commonly the case. Participants who do not have access to stable, cabled internet connections could be asked to join from Public Services and Procurement Canada (PSPC) studios, with ISO-compliant equipment.

4. Ensure that technicians perform sound tests with all participants, balance volume between participants, and check for both proper equipment and proper use of that equipment *before* interpretation starts.

Mandatory ISO-compliant microphones and cabled internet connections would no doubt speed up the sound tests diligently carried out on the Hill.

<sup>&</sup>lt;sup>18</sup> House of Commons, *Conference Interpreters: The Cornerstone of Bilingualism in Parliament*, Report of the Standing Committee on Official Languages, 43<sup>rd</sup> Parl., 2<sup>nd</sup> Sess. (May 2021), Recommendation 3, online: <a href="https://www.ourcommons.ca/DocumentViewer/en/43-2/LANG/report-4/">https://www.ourcommons.ca/DocumentViewer/en/43-2/LANG/report-4/</a>.

More effort from technicians to equalize in-person and remote participants' volume levels would also contribute to a more congenial meeting experience for participants, and *considerably* less strain on interpreters' hearing.

Note that making these adjustments *before* interpretation starts, during proper sound tests, ensures better meeting flow and allows interpreters to concentrate on their job: faithfully relaying the message in the other official language.

# 5. Ensure testing of various video conferencing platforms with the parliamentary audiovisual system, and, eventually, choose one that will provide optimal sound to interpreters and participants

The Official Languages Committee heard testimony to the effect that the video conferencing software itself can be the source of some degradation in sound quality, as it compresses the sound for transmission over the internet. While most online platforms at this time do alter sound to some extent, some have improved, and offer settings that allow participants and interpreters to get better sound quality. The market is fast evolving and, once the problem with the House Administration is resolved, the use of a proper online meeting platform should allow for much better sound quality.

Therefore, the House Administration should be encouraged to pursue its research into video conferencing platforms, to determine the one best suited to providing good sound to all participants and interpreters.

This is important; the pandemic will eventually end, but video conferencing has proven too convenient to ever be wholly discarded.

#### Conclusion

Over the course of the pandemic, Parliament has had to adapt quickly to continue its important work to serve Canadians, turning to remote and hybrid meetings. Unfortunately, this has led to unprecedented levels of injuries among interpreters and reduced available working hours.

Some improvements made over time have had a positive impact, such as the increased use of external microphones, as well as new ISO-compliant consoles being installed. Yet interpreters serving Parliament continue to get injured on the job, day after day, trying to serve Parliament and Canadians.

Problems with the House Administration audiovisual system, as identified in the National Research Council report, urgently need to be solved in order to preserve a pool of dedicated professionals that is growing smaller due to hearing injuries.