Live Event Accessibility: Captioning or CART?

This document is designed to help Minnesota state agency employees understand their options when faced with the need to make a live event accessible for deaf or hard of hearing participants/attendees. We recommend agencies have a well-defined policy defining when to make a live event – such as a webinar, live video stream, or presentation – accessible. In following that policy, if accessibility is required, this document helps guide the agency through the process of identifying the type of service needed and how to procure it. This document focuses only on text-based, or transcription, services. Services using American Sign language (ASL) follow a separate process.

Live Transcription Service Options

When obtaining a service for a vendor to provide a live transcript, the type of option you choose depends on the type of event. There are two types of live transcription services, captioning and CART (communication access real-time translation)

- If the event involves video or an online collaboration platform such as WebEx, then you need **realtime captioning services** (as opposed to offline captioning services for recorded media).
- If the event has all the attendees physically in the same room, then you need **CART services**. Depending on the situation, remote CART may be an option.
- If the event is a conference call using standard conferencing services, then you need **remote CART services**.

Providers

Live transcription providers use one of two methodologies, leveraging either a **stenotyping** or **stenomasking** (often termed "voicewriting") system to transcribe the event's audio.

*Figure 1: Stenotype machine*  *Figure 2: Stenomask and operator*

Both methods serve to generate a live transcript at a much higher speed than generally possible typing on a standard QWERTY keyboard. For example, a qualified stenotypist should be able to operate at or around 225 words per minute with an accuracy at or better than 96%.

This document will not present the merits or disadvantages of either approach. However, agencies need to know that if providing an accommodation requested by a consumer, the consumer may have valid reasons for preferring one type of provider over another.
CART (computer-assisted real-time transcription)

What it is

A trained operator uses one of several techniques to provide a live transcript of an event. Depending on the setup, consumers view the live transcript either on the provider’s laptop, on a screen via projector connected to the laptop, or on a separate computer or wireless device. Unlike captioning, the transcript is not tied to any video or other display; it is usually a simple terminal screen designed to display text. The screen is often configurable to modify text size and color and background color.

Figure 3: Sample CART remote terminal screen

How it works

If the provider is at the event, the provider connects the transcription system (stenotype or stenomask) to a display, usually a laptop. The provider’s software converts the typing/speech to a text stream for display. The consumer views the text in a variety of ways:

- On the provider’s display screen (common when only one consumer at the event)
- On a wall or projector screen via projector connected to the provider’s laptop (so all attendees can view transcript).
- Wireless tablet or netbook tethered to provider’s system via Bluetooth or wifi transmission.

If the provider is remote, the consumer will either view the transcript within the webinar platform or via a separate link to a remote terminal screen. When a separate link, the provider may be able to use a standard computer or mobile device such as tablet or smartphone to view the terminal screen. This functionality may depend on the provider’s capabilities.

Some circumstances may enable the agency to choose between onsite and remote CART. The advantage of onsite CART is that the provider can hear all the audible information provided to the other participants, such as audience questions. Remote CART requires greater attention to audio engineering to ensure that the remote provider has sufficient information to generate an accurate, timely transcript.
How do you contract for it

The Minnesota Department of Administration (ADM) is in the process of setting up a master contract for this type of service. They are in the RFP stage now. Once the master contract is set up, this document will provide details on how to use that contract.

Until then, agencies will have to go through their standard Req/PO process for a vendor’s services.

When requesting CART services, how the vendor will price and provision the service depends on whether it will be delivered on site or remotely.

On site service

When contracting for on site service, setup depends on how many people will view the CART:

- If one or two individuals, then the provider should provide access to a laptop at no extra cost.
- If more than two viewers, then either you will provide a monitor or projector hookup or the vendor will provide such a hookup or a specified number of additional viewing screens at an additional charge.

You will also need to ensure that the provider has access to an electrical socket with enough power to support a laptop and stenotype as well as a possible monitor. (And that any necessary extension cords are properly taped down.)

In all cases:

- Determine whether the service has a minimum number of hours for billing purposes. For example, if the provider has a two hour minimum, then a one-hour session will be billed as a two hour session.
- If an unedited transcript is desired, request it upfront and determine the cost. Most providers have a small fixed rate for unedited transcripts.

Remote services

When contracting for remote services, arrangements depend on the type of situation. There are two common scenarios for remote CART:

- Support for a conference call when relay services are not desired or appropriate.
- Support for on-site class, presentation, or meeting in which onsite CART is not possible or desired (such as when meeting in a rural area or a room with limited free space).

If for an in-person event such as a conference or class, then ensure that all major participants in the event are well miked, such as panelists, speakers, and, if possible, audience members. If it is not possible to mic the audience, then request that the speaker repeat the question or comment. In addition, if CART is being delivered to participants via their own devices, then all users may need access to wifi service in order to view the terminal on their device.

In all cases:

- Determine whether the service has a minimum number of hours for billing purposes.
- Confirm what types of devices can access the terminal (e.g., iPad), and when the vendor will provide a link to the terminal to distribute to attendees.
- If an unedited transcript is desired, request it upfront and determine the cost.
Captioning

What it is

A trained operator provides a live transcript of an event in such a way that that transcript either overlays or interfaces with a video or webinar interface. The primary difference between a CART provider and a captioning provider is that the captioning provider has the skills and knowledge to work with a variety of video display or streaming data formats. Broadcast television has its own set of standards and practices. This document focuses on events using web technology in which services are streamed to either a browser or app interface.

How it works

As in CART, the operator may use either stenotype or stenomask technology. The operator always works from their office. The video or webinar producer must provide the captioner with:

- Appropriate call-in information. Sometimes this is as simple as a conference call number and log-in.
- Player interface information. Each player (WebEx, Adobe Connect Pro, or other webinar or video player) has its own method for supporting live captioning.

Figure 4: In live captioning, the captioner sends the encoded captions in a separate stream to user's multimedia device, which combines the caption data with the video feed.

In the instance that the player does not support live captions, then the captioner may be able to offer a CART-style workaround, in which the captions display via a third-party terminal software as an overlay onto the webinar screen or as a link option in addition to the webinar access link. This is not an ideal option, as it requires the consumer to simultaneously view multiple screens. However, it may be the necessary option for some environments.

How do you contract for it

You can request captioning services (for both live and recorded video) via the Access-IT master contract.

When contracting with a captioning vendor, the agency must have information on the following:

- Event call-in or login information.
• The type of software used to deliver the video or webinar.
• Date, time, and duration of event.

The agency must also:
• Determine whether the service has a minimum number of hours for billing purposes.
• If an unedited transcript is desired, request it upfront and determine the cost.

If no one on the production end is familiar with captions in the display environment, it is advisable to run at least one test. Potential factors to test:
• Ability to provide proper amplification to all speakers.
• Ability to view captions and the presentation screen
• Ability to view captions on alternate devices such as iPads.

General Notes:

Relay Service

Many deaf and hard of hearing individuals use a relay service to make telephone calls. Relay services are free to the user and the employer. Relay service technology is an option whenever a meeting or event is conducted over the phone. However, it is up to the individual whether she or he would prefer to use the relay service or captioning/CART to participate.

Relay services cannot be an option for in-person activities. They are funded through the FCC and therefore only apply when telecommunications equipment is involved.

Ethics

CART and captioning services providers are neutral facilitators. The only time a CART or captioning provider may interject is when something prevents the provider from performing effectively. For example, if participants are speaking without a microphone or in some other way not allowing the provider to hear what’s being said, the provider may request the speaker to repeat.