Federal Agencies
Digital Guidelines Initiative

Definitions for Key Accessibility Features for Digital Audiovisual Collections Content

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The FADGI Audio-Visual Working Group
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Comments or questions, email FADGI: feddigitization@loc.gov

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What is this document?

This document aims to provide technical information, definitions and resources for accessibility features for born digital or digitized audiovisual collections content and their online delivery in US federal agencies which follow rules and guidelines set out by the US Code of Federal Regulations (CFR), Federal Communications Commission (FCC), Web Content Accessibility Guidelines (WCAG) and US Access Board Section 508. Where possible, links to these resources are provided.

These accessibility features enable screen readers and provide support for users who are blind, have low vision or cannot see the video adequately, who are deaf or hard of hearing, who prefer to read transcripts and subtitles, who prefer to communicate in sign language.

Digital audiovisual collections content, in this context, is defined as acquired through collection development scope and policies and specifically EXCLUDES purpose-built audiovisual content created by the agency such as public events programming, recorded concerts, author talks, and the like.

This document is organized into two main informative sections.

- **Summary of chart of accessibility features for audiovisual content:** highlights (where applicable) a brief definition of the accessibility term, if the data is embedded into the file or held in an external sidecar file, a list a common file formats for sidecar files, the accessibility rule/law/mandate/guideline (i.e., CFR, WCAG, Section508, etc.), and the standard or specification that supports the file format or accessibility demand. Each of these is further explained in the second section, Definitions.
- **Definitions:** details (as appropriate) the accessibility term including background information, associations with related accessibility features, pros and cons of implementation strategies and more.

These informative sections are followed by additional sections with brief explanations of **common subtitle and caption file formats, caption and subtitle support in common media players** and finally, **resources and references**. The media player support section is especially flexible as application support frequently changes so always refer to the application itself for the most up-to-date information.

A companion document is the 2022 report on the **Current State of AV Accessibility for Federal Agencies Digital Guidelines Initiative (FADGI) Institutions** which is available from the FADGI website. This report is a ‘point-in-time’ snapshot of how five large US federal institutions are implementing accessibility features for their audiovisual collections content. US federal agencies have different requirements to follow accessibility rules and guidelines set out by the CFR, FCC, WCAG and Section 508 depending on a variety of factors including branch of government; type, source, age and topic of content; access and delivery platform; and, other variables.

NOTE: The terms ‘caption’ and ‘subtitle’ are defined in this document according to their use in US Federal Communications Commission (FCC) rules and the US Code of Federal Regulation (CFR). Other locales may use these terms interchangeably or even in the reverse.

Summary chart of accessibility features for audiovisual content

Accessibility Feature	**Goal/Summary**	**Embedded or Sidecar**	**Common Formats for Sidecar Files**	**Accessibility rule/law/mandate/guideline (i.e., CFR, WCAG, Section508, etc.)**	**Technical Standard/ Specification**
Audio description	Description of visual information provided via audio	Embedded or sidecar	Text based: ● WebVTT ● TXT ● DOC/DOCX Audio: ● MP4 ● MP3 ● OGG ● WAVE	**CFR Rule:** 47 CFR § 79.3: § 79.3 Audio description of video programming. **FCC Disability Rights Office:** Twenty-First Century Communications and Video Accessibility Act of 2010: Public Law 111–260 111th Congress An Act Section 202 Video description and closed captioning **WCAG:** Required to fulfill WCAG 2.0, Level AA accessibility success criterion 1.2.5. **Section508:** Create Accessible Synchronized Media Content | Section508.gov: Audio Description	Text based: ● WebVTT: WebVTT: The Web Video Text Tracks Format ● TXT: No spec ● DOC: [MS-DOC]: Word (.doc) Binary File Format | Microsoft Docs ● DOCX: ECMA-376 Office Open XML file formats Audio: ● MPEG 4: ISO/IEC 14496-3:2019 - Information technology — Coding of audio-visual objects — Part 3 ● MP3: ISO/IEC 11172-3:1993 - Information technology — Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s and ISO/IEC 13818-3:1998 - Information technology — Generic coding of moving pictures and associated audio information

Accessibility Feature	Goal/Summary	Embedded or Sidecar	Common Formats for Sidecar Files	Accessibility rule/law/mandate/guideline (i.e., CFR, WCAG, Section508, etc.)	Technical Standard/ Specification
					• OGG: RFC 3533 - The Ogg Encapsulation Format Version 0 • WAVE: Multimedia Programming Interface and Data Specifications 1.0
Closed captions	Timed text information intended for display over a timeline, in synchronization with image and sound essence; depending on media player support, can be turned on or off.	Embedded or sidecar	WebVTT TTML SMIL	**CRF Rule**: 47 CFR § 79 Accessibility of Video Programming **FCC Disability Rights Office:** Twenty-First Century Communications and Video Accessibility Act of 2010: Public Law 111–260 111th Congress An Act Section 202 Video description and closed captioning **WCAG:** For prerecorded content: Closed or open captions required to fulfill WCAG 2.0, Level A success criterion 1.2.2 For live content: Closed or open captions required to fulfill WCAG 2.0, Level AA success criterion 1.2.4 **Section508:** Create Accessible Synchronized Media Content | Section508.gov: Captions	Analog NTSC: • ANSI/CTA-608-E (CEA-608): Line 21 Data Services (ANSI/CTA-608-E S-2019) Digital video: • ATSC 1: CTA-708: Digital Television (DTV) Closed Captioning (ANSI/CTA-708-E R-2018) – Consumer Technology Association® • ATSC 3.0: W3C TTML: Timed Text Markup Language 1 (TTML1) (Third Edition) • DVB-T & T2: EBU TTML: EBU-TT Part 1 - Subtitle format definition Captions: • WebVTT: WebVTT: The Web Video Text Tracks Format • W3C TTML: Timed Text

Accessibility Feature	Goal/Summary	Embedded or Sidecar	Common Formats for Sidecar Files	Accessibility rule/law/mandate/guideline (i.e., CFR, WCAG, Section508, etc.)	Technical Standard/ Specification
				.	Markup Language 1 (TTML1) (Third Edition) ● SMIL: Synchronized Multimedia Integration Language (SMIL 3.0)
Open captions	Non-XML timed-text intended for display over a timeline, in synchronization with image and sound essence, usually written in the same language as the sound essence and permanently embedded or integrated into the video stream.	Embedded	n/a	**CRF Rule:** 47 CFR § 79 Accessibility of Video Programming **WCAG:** For pre-recorded content: Closed or open captions required to fulfill WCAG 2.0, Level A success criterion 1.2.2 For live content: Closed or open captions required to fulfill WCAG 2.0, Level AA success criterion 1.2.4 **Section508:** Create Accessible Synchronized Media Content | Section508.gov: Captions	
Sign Language Interpretation	Inclusion of a sign language interpreter embedded in main content or through synchronized video of the sign language	Embedded or sidecar	SMIL	**No CFR Rule** **WCAG:** For pre-recorded content: Sign language interpretation required to fulfill WCAG 2.0, Level AAA success criterion 1.2.6	SMIL: Synchronized Multimedia Integration Language (SMIL 3.0)

Accessibility Feature	Goal/Summary	Embedded or Sidecar	Common Formats for Sidecar Files	Accessibility rule/law/mandate/guideline (i.e., CFR, WCAG, Section508, etc.)	Technical Standard/ Specification
	interpreter that can be displayed in a different viewport or overlaid on the image by the player. For users who cannot hear, read caption text rapidly or who prefer to communicate in sign language.			**Section508:** 412.7 Video Communication. Where ICT provides real-time video functionality, the quality of the video shall be sufficient to support communication using sign language.	
Subtitles	Timed text of video dialog for a hearing audience that is usually written in a language other than the language of the sound essence. Subtitles can be delivered as closed or open captions.	Embedded or sidecar	If delivered as CC, then: WebVTT TTML	**No CFR rule** **Section508**: No rule except statement that subtitles are not an acceptable method for conforming with the synchronized media standards. **WCAG:** subtitles in other languages are not directly an accessibility accommodation See Captions/Subtitles | Web Accessibility Initiative (WAI) | W3C	Closed captions WebVTT: WebVTT: The Web Video Text Tracks Format ● W3C TTML: Timed Text Markup Language 1 (TTML1) (Third Edition)
Transcripts	Provides text-based information needed to understand the content to people who cannot get it	Sidecar	Many options including: ● HTML ● TXT ● DOC/DOCX ● PDF	**No CFR rule** **WCAG:** Audio only (i.e., podcast): ● pre-recorded: transcript required to fulfill WCAG 2.0, Level A	● HTML: HTML "living specification" maintained by WHATWG ● TXT: No spec ● DOC: [MS-DOC]: Word (.doc) Binary File Format |

Accessibility Feature	Goal/Summary	Embedded or Sidecar	Common Formats for Sidecar Files	Accessibility rule/law/mandate/guideline (i.e., CFR, WCAG, Section508, etc.)	Technical Standard/ Specification
	from the audio and/or video. Can be either descriptive (preferred) or basic.		● JSON	success criterion 1.2.1 ● live: transcript required to fulfill WCAG 2.0, Level AAA success criterion 1.2.9 Video only (no audio): ● pre-recorded: Descriptive transcript or audio description is required at WCAG 2.0 Level A. success criterion 1.2.1 ● Live: not required Video with audio: ● re-recorded: transcript is required at WCAG 2.0 Level AAA success criterion 1.2.8 ● Live: not required	Microsoft Docs ● DOCX: ECMA-376 Office Open XML file formats ● PDF: ISO 32000-1:2008 and ISO 32000-2:2020 - Document management — Portable document format — Part 2: PDF 2.0 ● JSON: RFC 4627 on JSON

Definitions

Definitions are listed in alphabetical order.

Audio Description

Audio description, also known as **video description** in Federal Communications Commission (FCC) rules, provides access to visual information by means of audio-narrated description of key visual elements in a video program for audience members who are blind or have a visual impairment.

Best practices for audio description from the FCC's Disability Advisory Committee (DAC) state that "audio description often cannot convey all of the visual information included in each scene of a video program; therefore, content creators and audio describers necessarily make choices to prioritize the information ultimately included in the description. Those choices seek to convey the intent of the program's creator with the goal of providing audiences with a description that illustrates the visual elements of a story in a manner that provides a comparable experience to that of sighted viewers." The development of audio description for media involves three areas of production: writing, voicing, and audio editing

W3C also has resources for audio description/video description: W3C: Description of Visual Information. See also the FCC Audio Description resources.

Audio descriptions can be inserted into natural pauses in the program's dialogue but also can be extended. Extended audio description temporarily pauses the audio and video to allow critical information to be delivered when pauses in dialogue are insufficient for adequate description. Extended audio description is not preferred but it is implemented for a variety of reasons including technical experience, resources or just the complexity of the content.

Methods for providing audio description include:

> **Integrated:** Can work well for some types of new videos if the speakers can describe the relevant visual information as the video is recorded.
>
> **Media player support** (or plug in) for a timed text file such as WebVTT in which the audio description information is read aloud and linked to the essence timeline. Some players also support other text-based formats such as plain text (.txt) and Microsoft Office word processing formats (.doc, .docx).
>
> **Separate audio file:** Recording a separate audio track with the description information and combining the description information with the original content in a new file. If a separate file is created, typical file formats are WAVE, MP3, MP4, OGG and more depending upon the supporting player and the specifications of the network and/or distributor. The FCC's Disability Advisory Committee (DAC details technical factors for the audio description track software capability, audio levels, and timing.
>
> **Separate video file**: Recording a separate video track with the description information and combining the description information with the original content in a new file. If a separate file is

created, file formats depend upon the supporting player and the specifications of the network and/or distributor.

Among other details, the audio description can provide support for identifying the language or languages of the content or captions via the track element in a timed text file such as WebVTT. See Using the track element to provide audio descriptions for details and sample data.

Closed Captions (CC)

Timed text information intended for display over a timeline, in synchronization with image and sound essence. Closed captions, unlike open captions, can be turned on or off in a media viewer (if the viewer supports this functionality). Closed captions offer limited font, color and position choices, and are aligned to a fixed grid.

When present, the captions in NTSC video governed by the Consumer Electronics Association standard ANSI/CTA-608-E (CEA-608) are generally encoded into line 21, which exists at the cusp between VBI and active picture. Many authorities state that this line is part of the vertical blanking interval, while others note that it is also the first line of NTSC active video. The caption data appears as lines and dashes in the black area above the picture. The lines and dashes are not viewable on consumer TVs, but can be seen with an underscan display, video scope or broadcast measurement equipment. ANSI/CTA-708-E (CEA-708) is the standard for closed captioning for ATSC digital television (DTV) streams in the United States and Canada. ANSI/CTA-708-E (formerly known as CEA-708) captions consist of binary-format textual data but this data is not carried on line 21 and will be pre-rendered by the receiver. For backwards compatibility for set top boxes and receivers that output analog video signals the CTA-708 captions contain the CEA-608 captions as a portion of the data, and only enhancements beyond basic text are carried in the CTA-708 extension data.

In the analog NTSC standard, the closed captions are carried in line 21. In uncompressed digital video they are carried in the SMPTE ST436 defined closed caption space in the video frame header. In lossy compressed video it is carried (if captions are permitted by the compression scheme: some early compression types did not allow closed captions to be carried) in the video user bits in the header of the compressed video frames.

Closed caption data stored as ANSI/CTA-608-E (CEA-608) and ANSI/CTA-708-E can be extracted and stored as a sidecar Timed Text file such as SMPTE Timed Text or EBU Timed Text.

External sidecar closed captions can be formatted as plain text (such as WebVTT/.vtt and SubRip/.srt) or as XML (such as Timed Text Markup Language or TTML). However, external sidecar files are dependent on media player support.

Benefits of Closed Captions

- Closed captions can be turned on or off by the user (if supported by media viewer)
- Because they are stored in a separate file (sometimes called a “sidecar”) and not embedded into the video stream like open captions, they are easily editable.
- Closed captions can be created in a range of file formats (such as WebVTT/.vtt and SubRip/.srt) so have flexibility for different media players.

Potential Drawbacks of Closed Captions

- Closed captions are not compatible with some media players and streaming platforms. They will only work if the platform supports closed caption files.
- Closed captions have limited font, color and position choices, and are aligned to a fixed grid.
- Closed captions place the technological responsibility on the viewer to understand how to turn the captions on and off which may be challenging for some audiences.

For more information about WCAG compliance for captions, see Captions/Subtitles | Web Accessibility Initiative (WAI) | W3C. WCAG does not have separate success criteria for closed captions, open captions and subtitles.

EBU STL

An early binary subtitle format standardized in EBU TECH. 3264-E. In 2013, the European Broadcast Union began to push its members away from the currently widely used binary EBU STL (subtitling) format, standardized in EBU Tech 3264 (1991). The replacement standard is called EBU-TT or EBU Timed Text, an XML-based subtitling format. In 2012, version 1.0 of EBU-TT part 1 was published as EBU Tech 3350. Like the similar SMPTE TT standard, this specification builds on the W3C Timed Text Markup Language (TTML) 1.0 standard. To support the conversion process, EBU has drafted EBU-TT part 2 (EBU Tech 3360), a guide on how to map EBU STL files to EBU-TT. EBU Tech 3360 was published in June 2013 as a v0.9 for comments.

Open Captions

Non-XML timed text intended for display over a timeline, in synchronization with image and sound essence, usually written in the same language as the sound essence and permanently embedded or integrated into the video stream. They cannot be delivered in a sidecar file. Like closed captions, open captions are designed for viewers who are unable to hear or who have difficulty hearing the audio in a video. They are always on view and cannot be turned off. Open captions allow flexibility in selection of font family, size and color, along with free positioning over the video image.

Benefits of Open Captions:

- No special functionality for media players or streaming platforms needed to be able to display the captions so it is a good option if using a platform that doesn't have closed captioning functionality.
- Open captioning is a good option when there are physical restraints to turning captions on and off, like in various exhibition scenarios.
- Flexible font style and positioning before embedding into video.

Potential drawbacks of Open Captions:

- Open captions are embedded directly into the video stream and cannot be turned off which can be challenging for viewers if they don't want them.
- Because the captions are embedded into the video stream, they are not easily editable.
- The quality of open captions is also tied to the quality of the video or stream. If the video or stream is blurry or low-quality, the captions can also be blurry and may be difficult to read.

For more information about WCAG compliance for captions, see Captions/Subtitles | Web Accessibility Initiative (WAI) | W3C. WCAG does not have separate success criteria for closed captions, open captions and subtitles.

Sign Language Interpretation and Translation

There's a distinction between sign language interpretation and translation. An interpreter converts information from one spoken language into another— or, in the case of sign language interpreters, between spoken language and sign language. A translator works from a written text to sign language. In the context of this document, sign language translation would be used if the signer were working from a written transcript of the content instead of simultaneous or consecutive interpretation in which the interpreter begins to convey a sentence in the target language while listening or watching the message being delivered in the source language.

Sign language interpretation is helpful for users who cannot hear, read caption text rapidly or who prefer to communicate in sign language. This can be achieved in two ways:

- Integration: including a sign language interpreter in view with the primary content during the original capture of the video stream (such as during a live press conference) although this can be problematic if the video stream is too small, making the sign language interpreter indiscernible.
- Synchronization: embedding a synchronized video of the sign language interpreter that can be displayed in a different viewport or overlaid on the image by the player. The SMIL (Synchronized Multimedia Integration Language) format, for example, allows for separate regions to be defined for the video content and the sign language interpretation which are then synchronized, with the content video displayed in one region of the screen, while the corresponding sign-language interpretation video is displayed in another region. See WCAG 2.0: Providing sign language interpretation through synchronized video streams in SMIL 2.0 for more information.

There are many different international and regional versions of sign language so a decision must be made about which sign language to include for translation. Usually this is the sign language of the primary audience. If intended for multiple audiences, multiple sign languages may be used. Most common in the US is American Sign Language or ASL. ASL is not equivalent to English but rather a completely separate language with its own unique rules of grammar and syntax. The National Association of the Deaf defines (ASL) as "a visual language. With signing, the brain processes linguistic information through the eyes. The shape, placement, and movement of the hands, as well as facial expressions and body movements, all play important parts in conveying information."

Subtitles

Timed text of video dialog that is usually written in a language other than the language of the sound essence. Subtitles are designed for hearing viewers who do not understand the language being spoken in the video and do not indicate audio information important to understanding the program. Subtitles rarely identify speakers or nonverbal sounds such as music and sound effects. From a technical perspective, subtitles can be delivered as closed or open captions.

Important for accessibility purposes is that according to Section508, subtitles are not an acceptable method for conforming with the synchronized media standards. For more information, see Create Accessible Synchronized Media Content | Section508.gov.

For more information about WCAG compliance for subtitles, see Captions/Subtitles | Web Accessibility Initiative (WAI) | W3C. WCAG does not have separate success criteria for closed captions, open captions and subtitles.

Teletext

Teletext is the text-only analog closed captioning system in European analog PAL transmissions. Teletext is carried on line 21 in the vertical blanking interval.

Timed Text

XML-based format for closed captions and subtitles carried as an external sidecar file.

> *TTML (Timed Text Markup Language)* is standardized by the W3C Timed Text Markup Language (TTML) standard and, in the U.S., part of the Web dissemination rulemaking promulgated by the Federal Communication Commission (FCC).

There are two main profiles of Timed Text developed by SMPTE and EBU which build on W3C's TTML:

- **SMPTE Timed Text (SMPTE TT)** is standardized in SMPTE ST 2052-1:2013
- **EBU Timed Text (EBU TT)** standardized in EBU Tech 3350. Used mostly in Europe including for PAL recordings

Transcription/Transcripts

The main purpose of a transcript is to provide text-based information needed to understand the content to people who cannot get it from the audio and/or video. Transcripts can also help deaf/blind users interact with content using refreshable Braille devices. According to W3C, there are two types of transcripts:

- *Basic* transcripts are a text version of the speech and non-speech audio information needed to understand the content.
- *Descriptive* transcripts also include text description of the visual information needed to understand the content such as speaker identification, scene description, language of content and text embedded in the video. Descriptive transcripts are preferred over basic transcripts.

Transcripts can be created from an existing closed caption or audio description sidecar file, by transcribing/typing out the audio to text and machine generation/auto data extraction. If using captions to generate the transcripts, more detailed visual information will likely need to be added to create descriptive transcripts.

In addition, they can be 'static' or stationary elements in the display page, or can be 'interactive' (via WebVTT for example), allowing for synched scrolling, and enabling the user to navigate video playback via a text item of interest.

Transcripts can be in a number of text-based file formats depending on the media player with HTML being the most common but also plain text (.txt), common word processing formats such as MS Word (.doc, .docx), PDF and even JSON.
Transcripts are often autogenerated from audio or video tracks but would typically only result in a basic transcript and not descriptive one. For example, the popular open source speech recognition application Kaldi creates a plain text file from WAVE file inputs while Google Cloud's Speech-to-Text has a JSON output from a variety of audio inputs including FLAC, WAVE, Mu-Law and OGG Opus (see Optimize audio files for Speech-to-Text for full details). Amazon AWS Transcribe supports several inputs but with a

preference for Linear PCM in WAVE or FLAC and defaults to a JSON output (see Data input and output - Amazon Transcribe for full details).

NOTE: Autogenerated transcriptions may not accurately capture content including personal or brand names, locations, acronyms, technical words, and jargon. Quality checks are essential and may require the implementation of custom vocabularies and language models as well as human reviewers. Autogenerated transcripts should be clearly labeled as such.

For more information about WCAG compliance for transcripts, see Transcripts | Web Accessibility Initiative (WAI) | W3C.

Video Description

See Audio Description.
As described in Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA) also known as 47 CFR Part 79, “although the CVAA uses the term “video description” in this context, the Commission has long considered the terms “video description” and “audio description” to be synonymous.”

Moreover, 47 CFR Part 79 states that “throughout the remainder of this document, we will use the term ‘‘audio description’’ instead of ‘‘video description.’’

Common subtitle and caption file formats

- SBV (SubViewer file format): https://web.archive.org/web/20050209005304/http://divxstation.com/article.asp?aId=27 (unofficial)
- SCC (Scenarist Closed Caption): http://www.theneitherworld.com/mcpoodle/SCC_TOOLS/DOCS/SCC_FORMAT.HTML (unofficial specification). YouTube preferred caption format: https://support.google.com/youtube/answer/2734698?hl=en#zippy=
- SMIL 3.0 (Synchronized Multimedia Integration Language): https://www.w3.org/TR/SMIL3/
- SRT (SubRip file format): https://www.matroska.org/technical/subtitles.html#srt-subtitles
- SAMI (Synchronized Accessible Media Interchange; .smi, .sami): Microsoft/Windows Media Player: https://web.archive.org/web/20220111170455/https://docs.microsoft.com/en-us/previous-versions/windows/desktop/dnacc/understanding-sami-1.0 (link through Wayback Machine)
- TTML (Timed Text Markup Language): https://www.w3.org/TR/ttml2/
- USF (Universal Subtitle Format): http://www.titlevision.dk/usf.htm
- WebVTT (Web Video Text Tracks format): https://www.w3.org/TR/webvtt1/

Caption and subtitle support in common media players:

Disclaimer

This list of applications is not an endorsement and does not imply any preference by FADGI or any of its member institutions or partners for services or applications. In addition, this list is not intended to be an exhaustive list but rather a high level overview of widely known no/low cost players for informational purposes only. Note also that this information is valid as of the last updated date in the page footer. For the most accurate information, confirm on the media player website.

For more information on accessibility in media players, see W3C Media Players

Stand-alone applications

- Aviary: https://www.aviaryplatform.com/
  - Supported formats: OHMS XML, WebVTT for Indexes and Transcripts, and additionally plain text files, and .doc and .docx files can be used for Transcripts
  - Accessibility in Aviary
- YouTube: https://www.youtube.com/
  - Supported formats: Many supported formats including SubRIP (.srt), WebVTT, DFXP/TTML, EBU STL
  - Scenarist Closed Caption (.scc) is YouTube's preferred caption format.
- VLC: https://www.videolan.org/
  - Supported formats: SubRIP (.srt), SubViewer (.sub), Universal Subtitle Format (USF), WebVTT, 608, 708
- Vimeo: https://vimeo.com/
  - Supported formats: SubRIP (.srt), WebVTT, DFXP/TTML, Scenarist Closed Caption (.scc), and SAMI files; recommend using WebVTT whenever possible
- Windows Media Player: https://support.microsoft.com/en-us/windows/windows-media-player-d10303a5-896c-2ce2-53d4-5bd5b9fd888b
  - Supports closed captions and subtitles in SAMI
- QuickTime Player: https://support.apple.com/downloads/quicktime
  - Support for Closed Caption CTA-608 native.

HTML5 compatible embedded players

- Accessible HTML5 Media Players & Resources: List from DIGITAL A11Y: https://www.digitala11y.com/accessible-jquery-html5-media-players/
- Able player: https://ableplayer.github.io/ableplayer/
  - Supports audio description, closed captions and subtitles in WebVTT
- VideoJS: https://videojs.com/
  - Supports WebVTT

Resources and references

- Code of Federal Regulations (CFR): Accessibility of Video Programming
    - eCFR :: 47 CFR Part 79 Subpart A -- Video Programming Owners, Providers, and Distributors (interactive)
    - eCFR :: 47 CFR Part 79 Subpart A -- Video Programming Owners, Providers, and Distributors (PDF)
- Federal Communications Commission (FCC): Closed Captioning of Video Programming on Television | Federal Communications Commission
- W3C: Making Audio and Video Media Accessible | Web Accessibility Initiative (WAI) | W3C
- US Access Board Section 508: https://www.section508.gov/; https://www.access-board.gov/ict/; https://www.access-board.gov/ict/ict-final-rule.pdf (as PDF)