

PSM ACCESS SERVICES SURVEY 2019

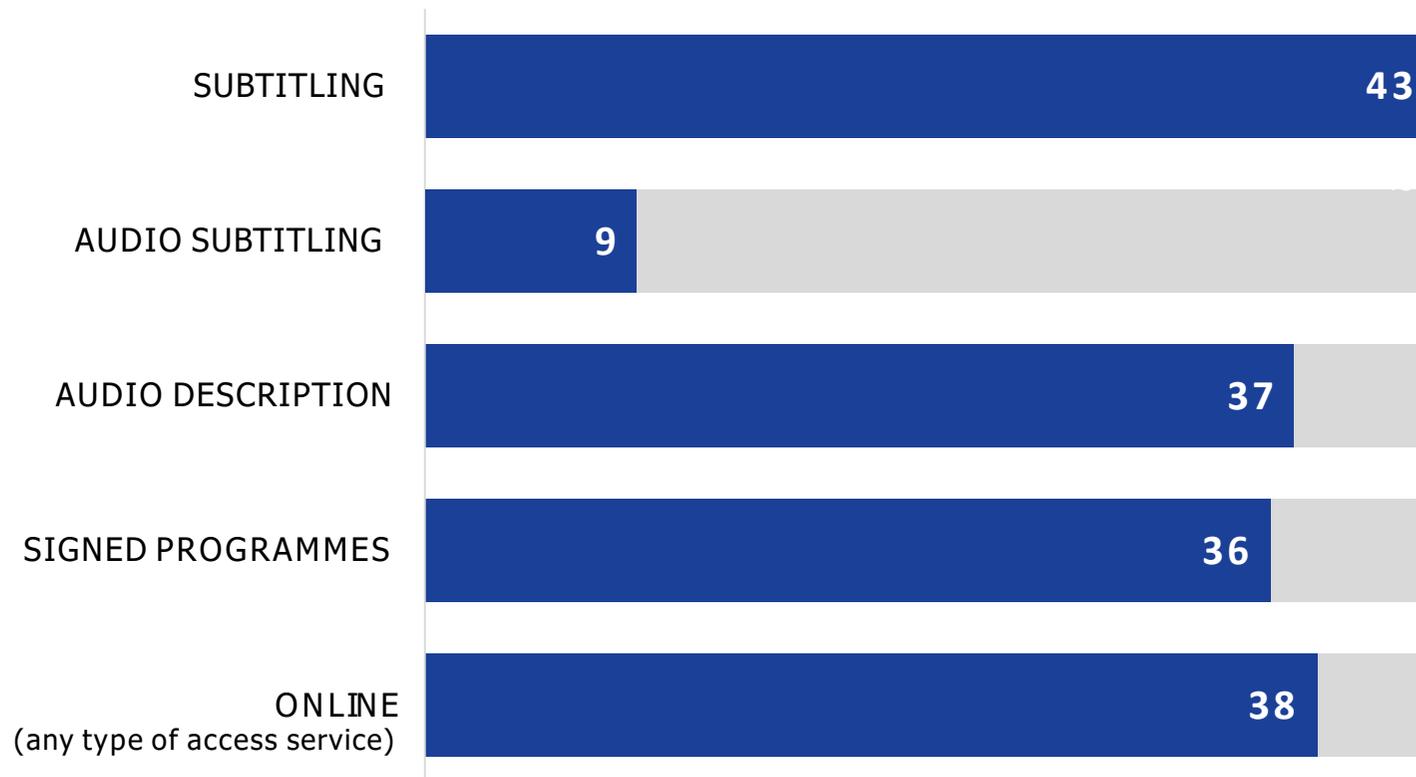
MEDIA DEPARTMENT & MEDIA INTELLIGENCE SERVICE
OCTOBER 2019



VARIETY OF ACCESS SERVICES PROVIDED

72% (31 OUT OF 43) ORGANIZATIONS PROVIDE ALL THREE KEY ACCESS SERVICES: SUBTITLING, AUDIO DESCRIPTION AND SIGNED PROGRAMS

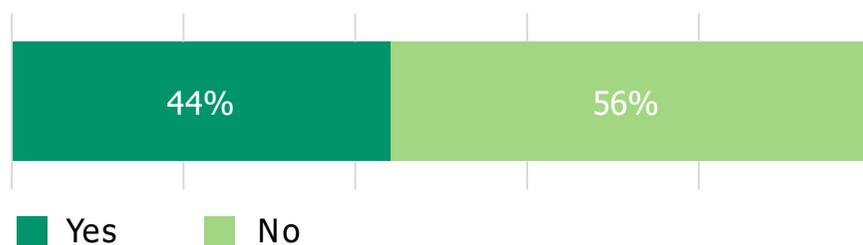
Chart X.
Access services provided by type
(2019, number of organizations)



Based on 43 organizations.

ACCESS SERVICES IN EMERGENCY SITUATIONS

Chart X.
Defined rules and recommendations for dealing with emergency situations (2019, %of organizations)

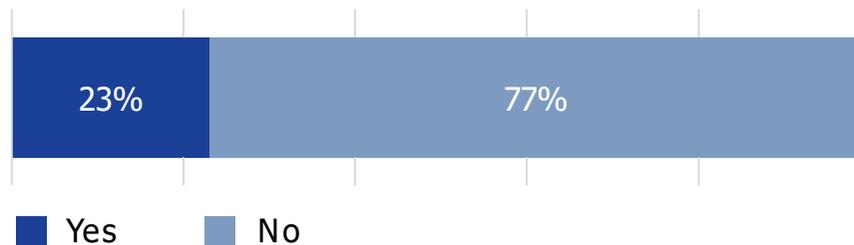


Based on 43 organizations.

44% (19 out of 43) organizations have in place official rules and recommendations for providing accessible information in situations of national emergency such as bomb threats, flooding or other natural disasters.

For example, most organization ensure all special news bulletins have (live) subtitles and in some organizations, bulletins may be signed.

Chart X.
Complaints from people with sensory disabilities about the way emergency information is shared (2019, %of organizations)



Based on 43 organizations.

Just 23% (10 out of 43) organizations received complaints regarding the way accessible information is shared during emergency situations.

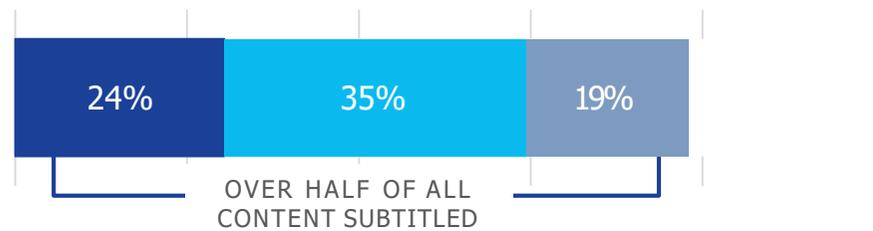
In almost all cases complaints are from deaf communities, in many cases subtitles was the only access service provided by public broadcaster, but for deaf people sign language interpretation of emergency bulletins is essential.

ON AVERAGE 70% OF PSM BROADCAST CONTENT IS SUBTITLED

9 PSM ORGANIZATIONS TAKING PART IN THIS SURVEY SUBTITLE ALL THEIR BROADCAST CONTENT

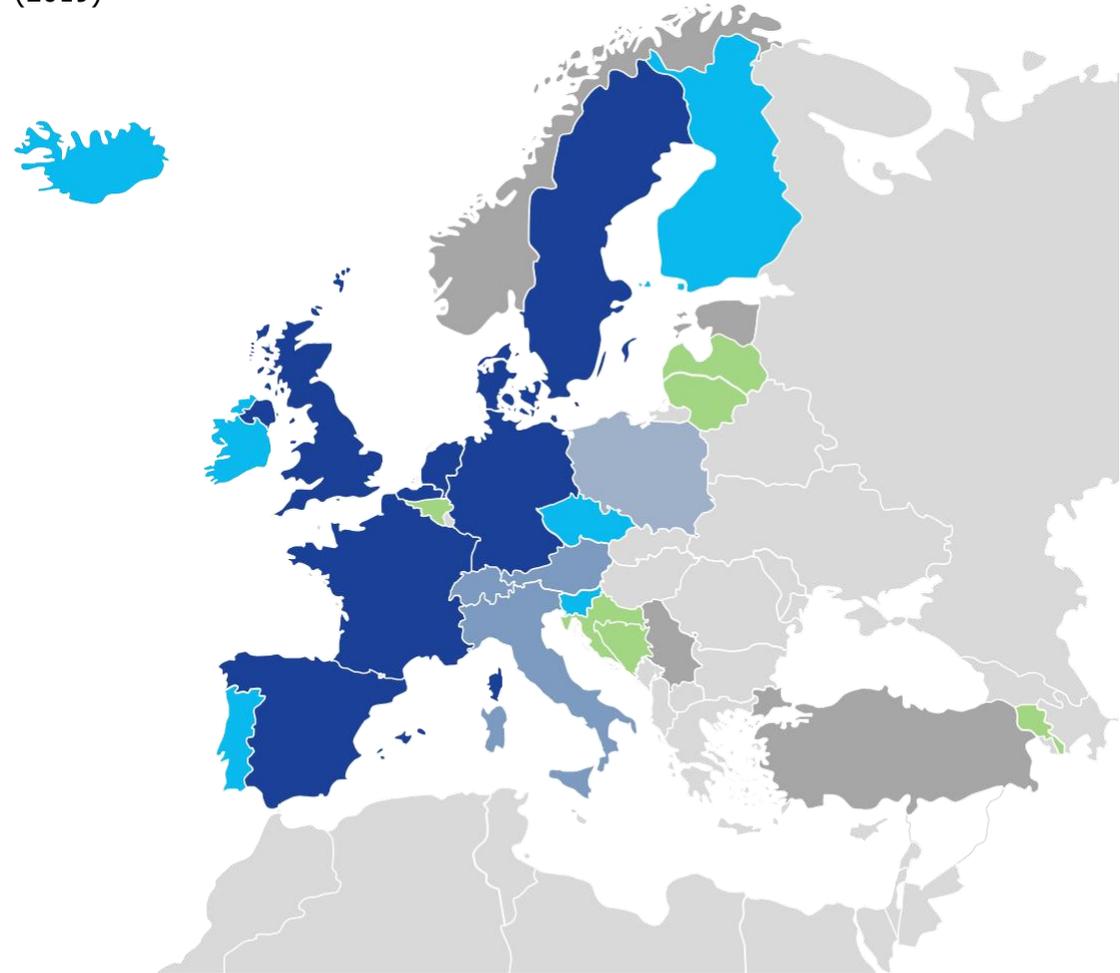
- 95% - 100%
- 70% - 94%
- 50% - 69%
- < 50%
- Data not available

Chart X.
Organizations by percentage of programmes subtitled
(2019, %of organizations)



Based on 37 organizations with available data.

Map x.
Percentage of programmes subtitled
(2019)



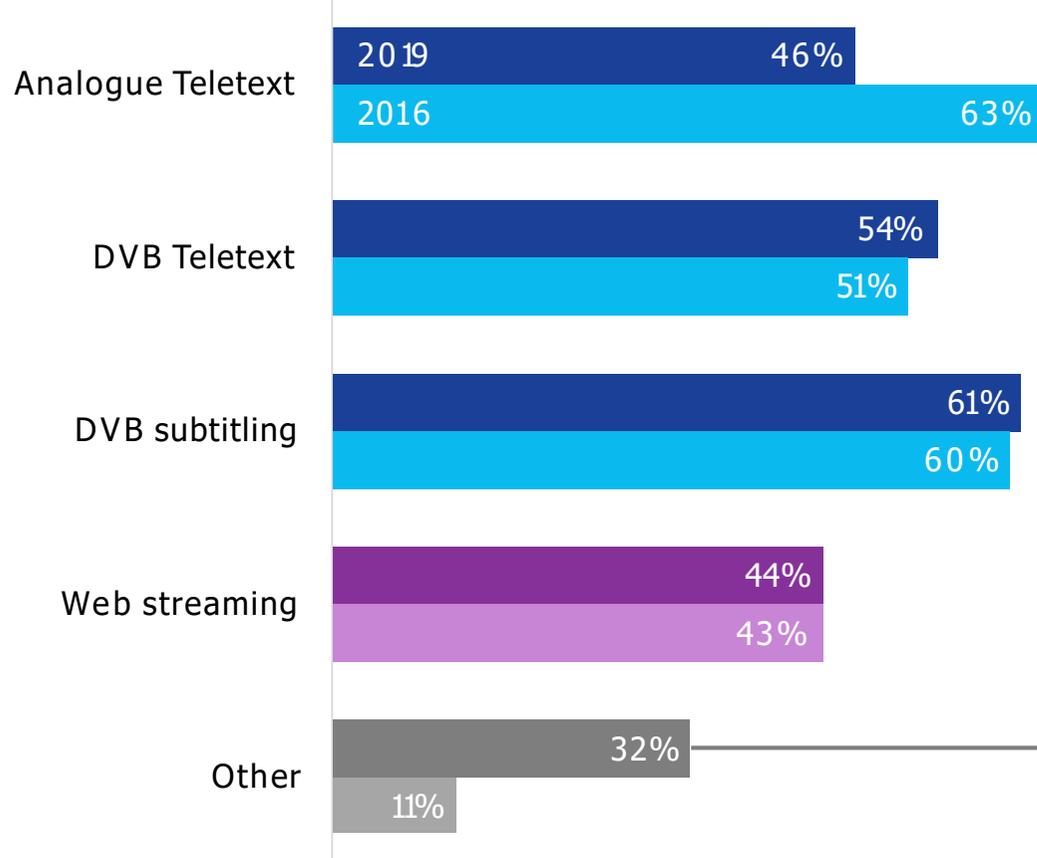
Based on 28 markets, presenting the top percentage in each market.

PRE-PREPARED SUBTITLING

WIDE VARIETY OF SUBTITLING TECHNOLOGY USED

HALF OF THE ORGANIZATIONS SURVEYED USE MORE THAN ONE TECHNOLOGY TO DELIVER BROADCAST SUBTITLES IN 2019

Chart x.
Technology used for delivering subtitles
(2019 and 2016, %of organizations)



Mentioned several times:

- HbbTV
- Burnt in Subtitles

Mentioned once:

- VTT files for online subtitling
- Rendered with file as open subtitle
- Graphically generated by inhouse developed system

Based on 41 organizations in 2019 and 35 organizations in 2016.

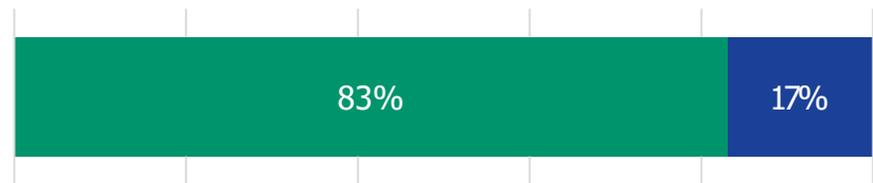
83% OF ORGANIZATIONS PROVIDE LIVE SUBTITLES

35 PSM ORGANIZATIONS TAKING PART IN THE SURVEY PROVIDE LIVE SUBTITLES

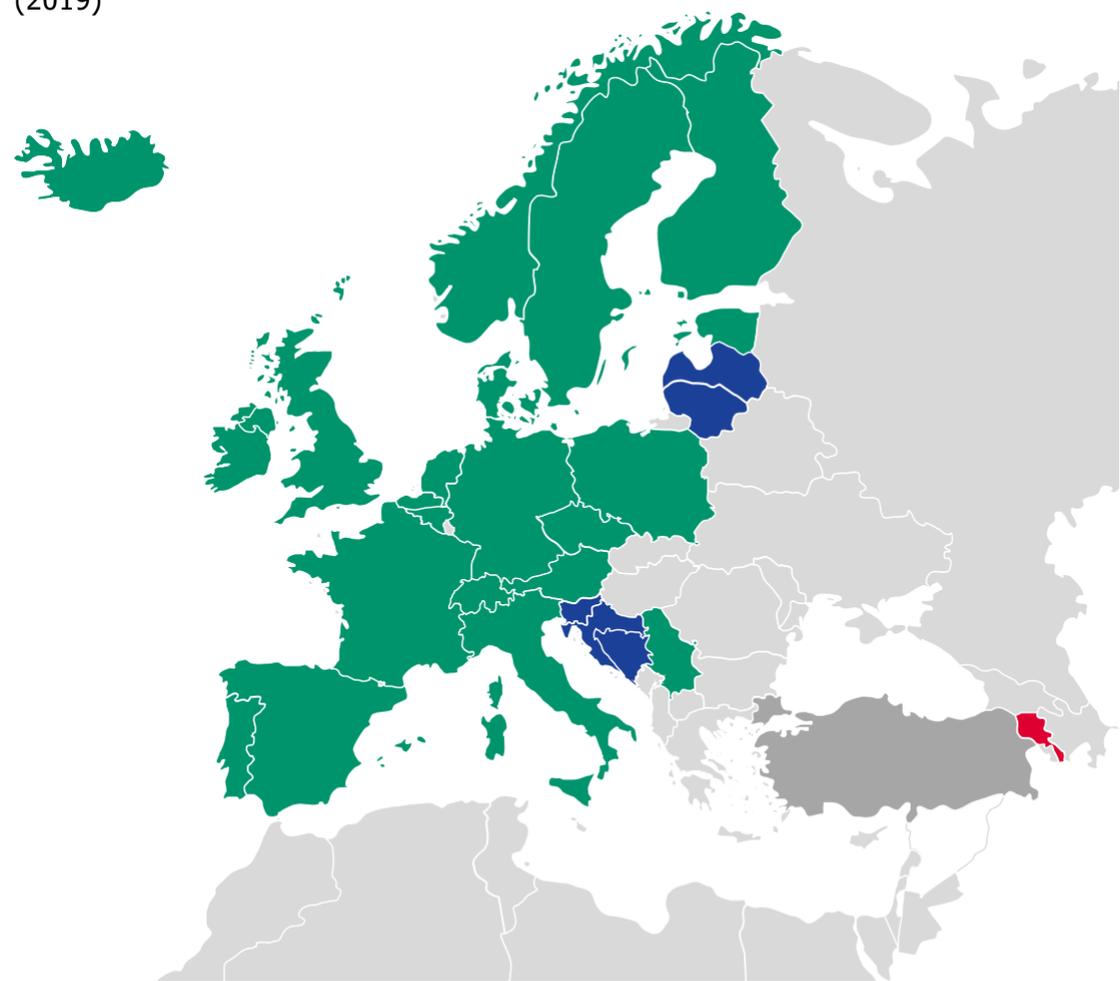
Map x.
Live subtitling provided (2019)

- Yes
- No
- Data not available

Chart X.
Organizations by availability of live subtitling (2019, %of organizations)



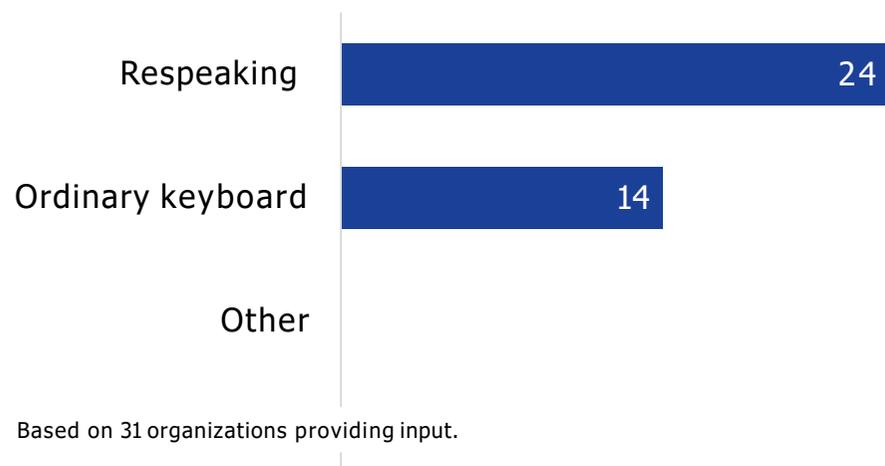
Based on 42 organizations with available data.



Based on 28 markets.

LIVE SUBTITLING CREATION AND DELIVERY OF LIVE SUBTITLES

Chart X.
Types of production of live subtitles
(2019, number of organizations)

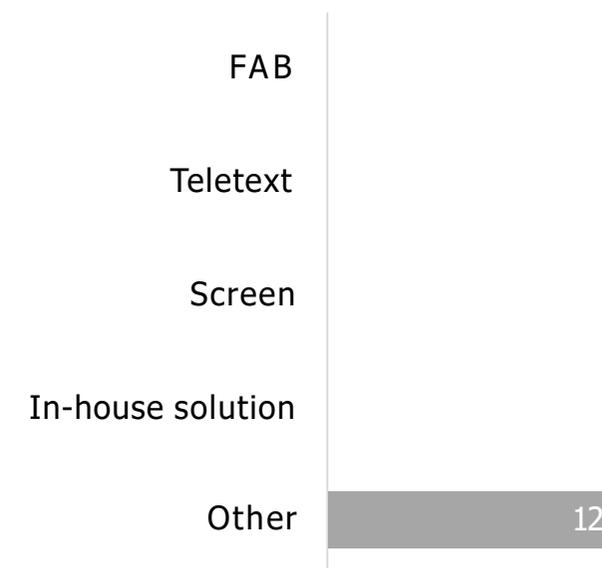


Based on 31 organizations providing input.

Respeaking emerges as the most used solution for creation of live subtitling among the organizations taking part in this survey. With 69% (24 out of 35) of organizations delivering live subtitling using this solution. Respeaking, carried out by a respeaker, is the process of repeating what is heard into voice recognition software, which is trained to that specific individual's voice and pronunciation. The software converts audio input from the respeaker into caption text.

Other production solutions include automated speech recognition, automatic word completion, stenotype and fast keyboard.

Chart X.
Types of delivery of live subtitles
(2019, number of organizations)



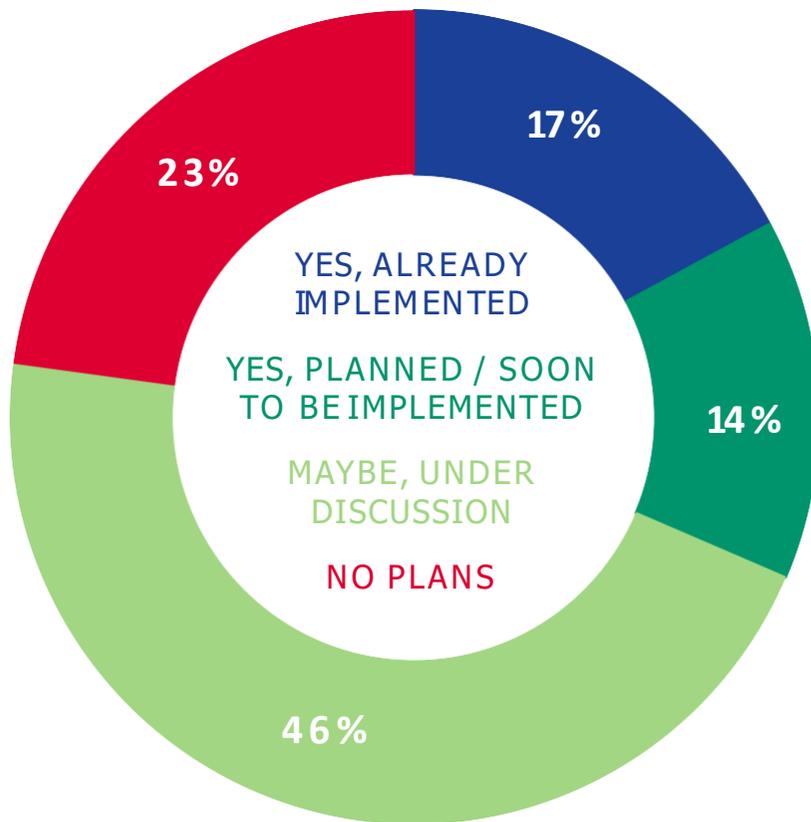
Based on 27 organizations providing input.

There is a large variety of solutions used to deliver live subtitles across the organizations taking part in this survey. The most common was FAB, this solution was mentioned as the main delivery method by 7 organizations.

Other delivery methods include many different provider solutions such as Cavena, AVECO and Dragon.

CREATING LIVE SUBTITLES WITH ARTIFICIAL INTELLIGENCE

Chart X.
Use of AI tools in live subtitling workflow
(2019, %of organizations)



Based on 35 organizations with live subtitling.

6 PSM ORGANIZATIONS TAKING PART IN THE SURVEY ARE ALREADY USING AI IN THEIR LIVE SUBTITLING WORKFLOW

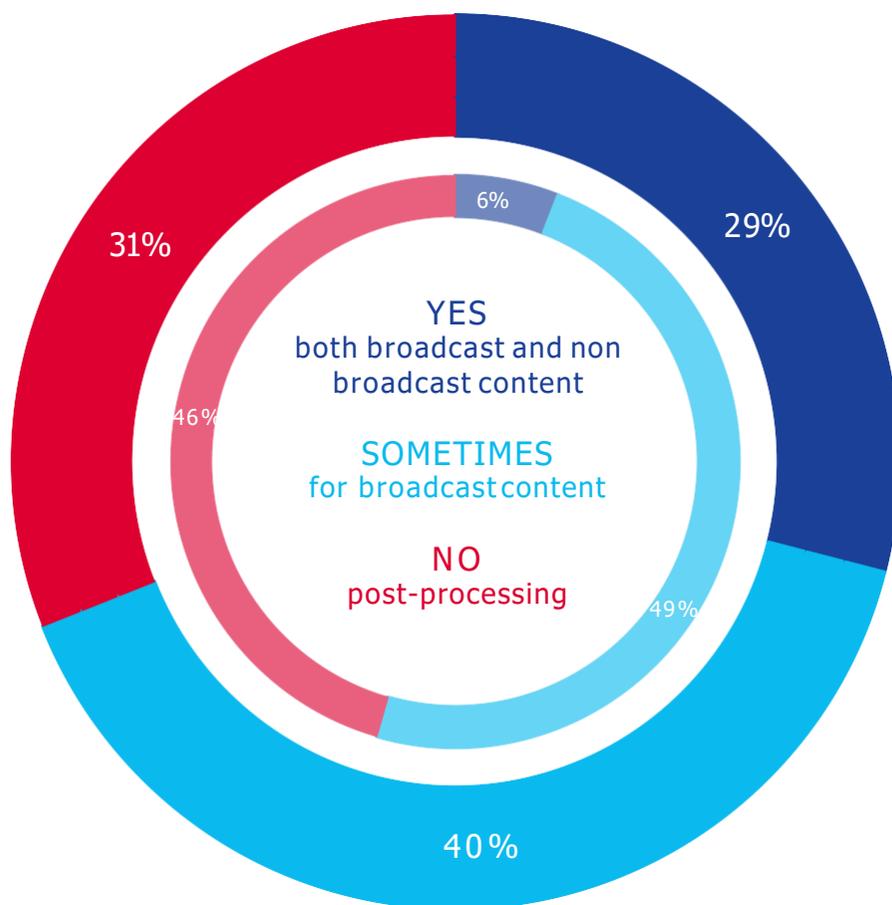
The six organizations that have already implemented artificial intelligence tools into their workflow are CT Czech Republic, NPO Netherlands, TVP Poland, RTP Portugal, ITV and BBC United Kingdom. These organizations are successfully using automatic speech recognition, although some mentioned that there is still some level of manual checks required. The AI solutions in place are mostly created in-house or in collaboration with local market partners. For example RTP's solution was developed in collaboration with the Portuguese technological institution.

A further 60% (21) organizations are actively implementing, testing or in discussion to integrate artificial intelligence, such as automatic speech recognition, into automated workflows for live subtitling.

Among the organizations that indicated that they have already tested automated speech recognition solutions, some caution that the results of their trials have not been fully successful. Consequently, they continue to search and work on developing a solution which meets the required standard.

ADDITIONAL EDITING OF SUBTITLES TO PREPARE CONTENT FOR ONLINE DELIVERY

Chart X.
Is post-processing performed on online subtitles
(2019 outside circle, 2016 inside circle, % of organizations)



Based on 42 organizations in 2019 and 35 organizations in 2016.

ONLY ONE THIRD OF ORGANIZATIONS DO NOT PERFORM POST-PROCESSING OF SUBTITLES TO PREPARE THEM FOR ONLINE DELIVERY

The most notable change compared to 2016 is the increase of organizations not only post-processing subtitles for online delivery but also subtitling non-broadcast content. This increased from just 6% (2 organizations) in 2016 to 29% (12 organizations) in 2019.

Question: Additional editing of subtitles to prepare content for online delivery: Do you perform any post-processing (e.g. editorial changes) on your online subtitles?

YES and we also subtitle online content that is not broadcast

We SOMETIMES edit / correct them before putting them online

NO, we put them online as they were broadcast

19% OF ORGANIZATIONS PROVIDE AUDIO SUBTITLES

8 PSM ORGANIZATIONS PROVIDE AUDIO SUBTITLING LEVEL WITH THE NUMBER OF ORGANIZATIONS IN 2016

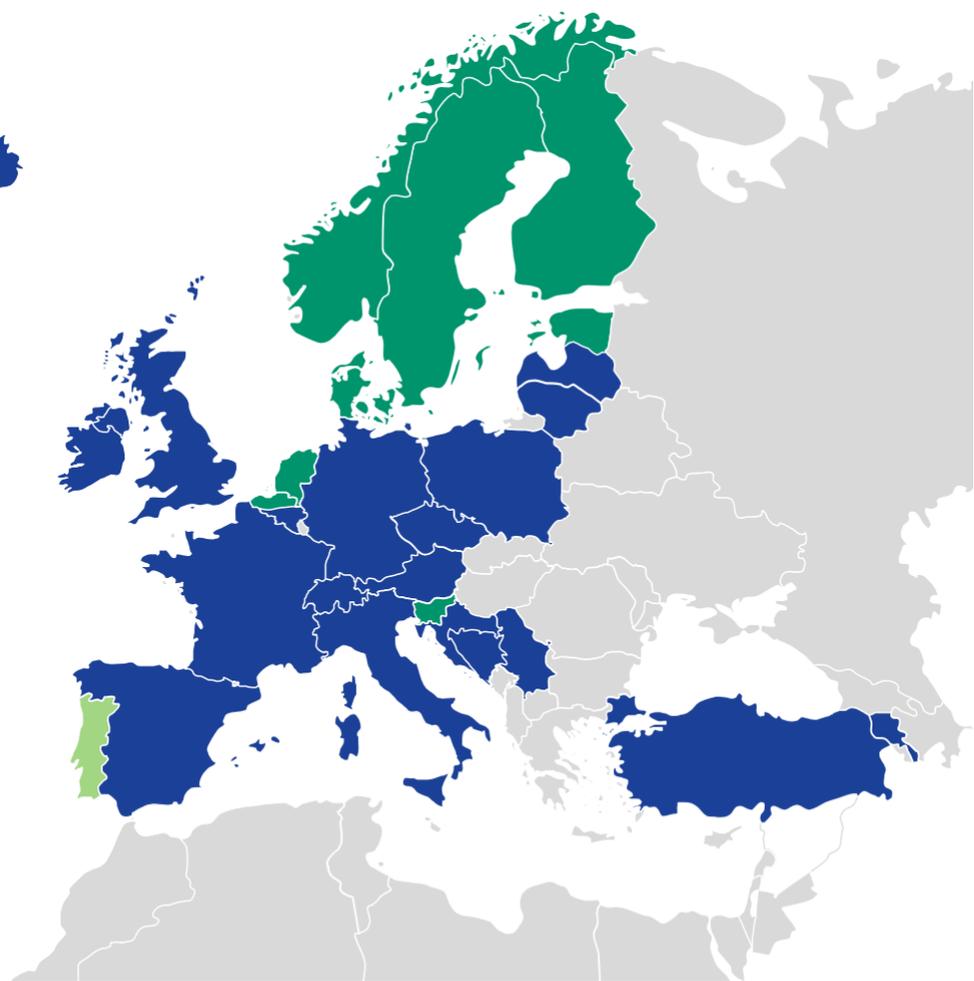
Map x.
Audio subtitling provided
(2019)

- Yes, audio subtitling is provided
- Intend to provide audio subtitling soon
- No, no plans to provide audio subtitling

Chart X.
Organizations by availability of audio subtitling
(2019, %of organizations)



Based on 43 organizations.



Based on 28 markets.

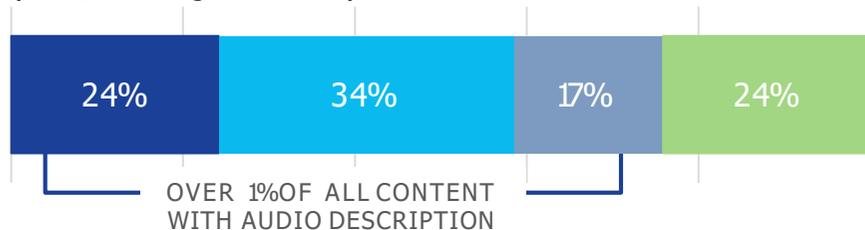
ON AVERAGE

11% OF PSM BROADCAST CONTENT IS AUDIO DESCRIBED

VAST DIFFERENCE IN LEVELS OF AUDIO DESCRIPTION. ONE IN FOUR ORGANIZATIONS COVER LESS THAN 1% OF CONTENT VERSUS HIGHEST LEVELS AT OVER 20%.

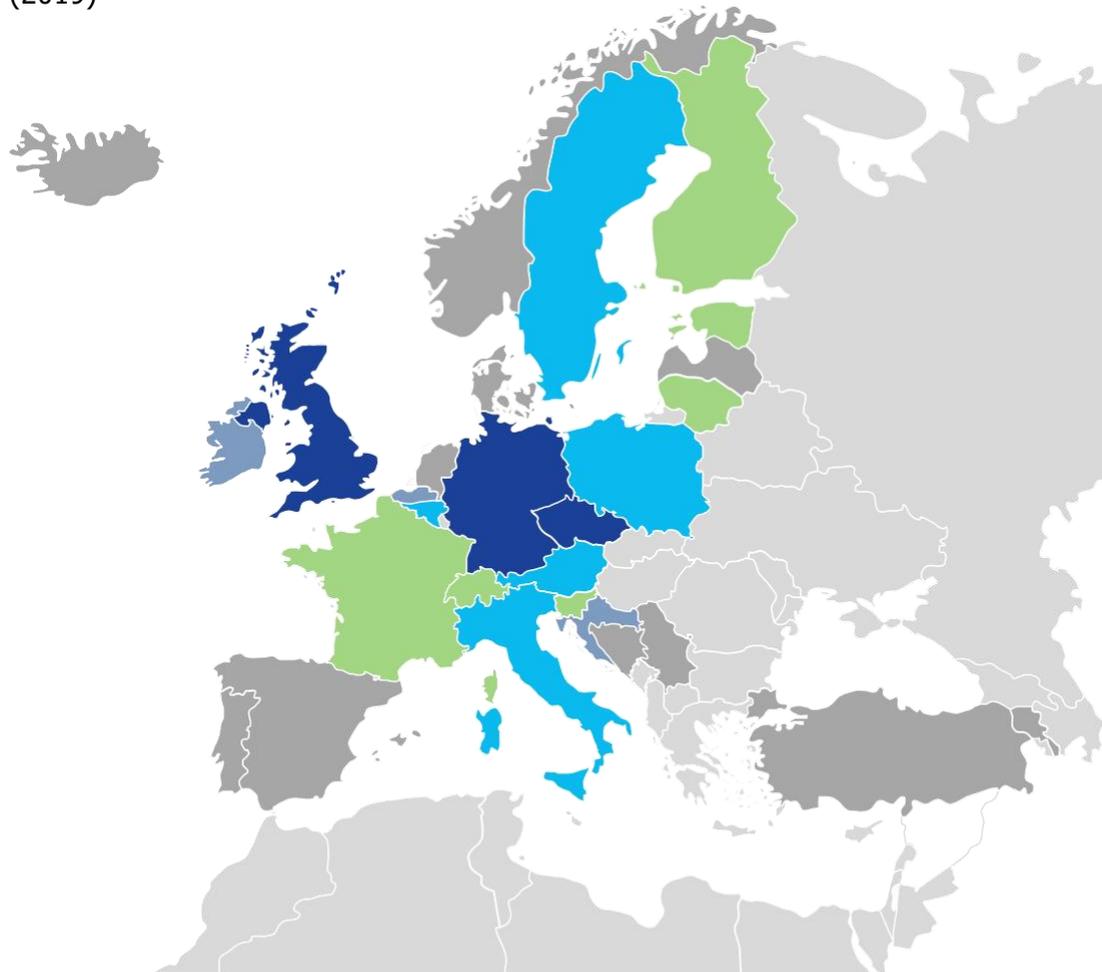
- > 10%
- 5% - 9%
- 1%- 4%
- < 1%
- No audio description / data not available

Chart X.
Organizations by percentage of programmes with audio description
(2019, % of organizations)



Based on 29 organizations with available data.

Map x.
Percentage of programmes with audio description
(2019)



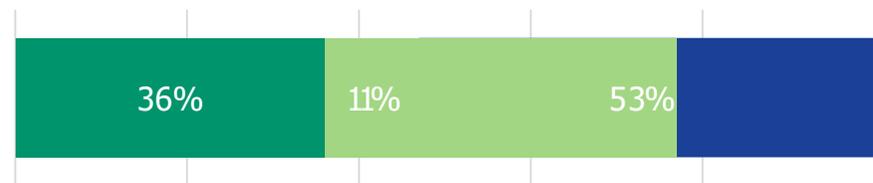
Based on 28 markets, presenting the top percentage in each market.

36% OF ORGANIZATIONS PROVIDE LIVE AUDIO DESCRIPTION

13 PSM ORGANIZATIONS PROVIDE LIVE AUDIO DESCRIPTION ON SOME PROGRAMMES

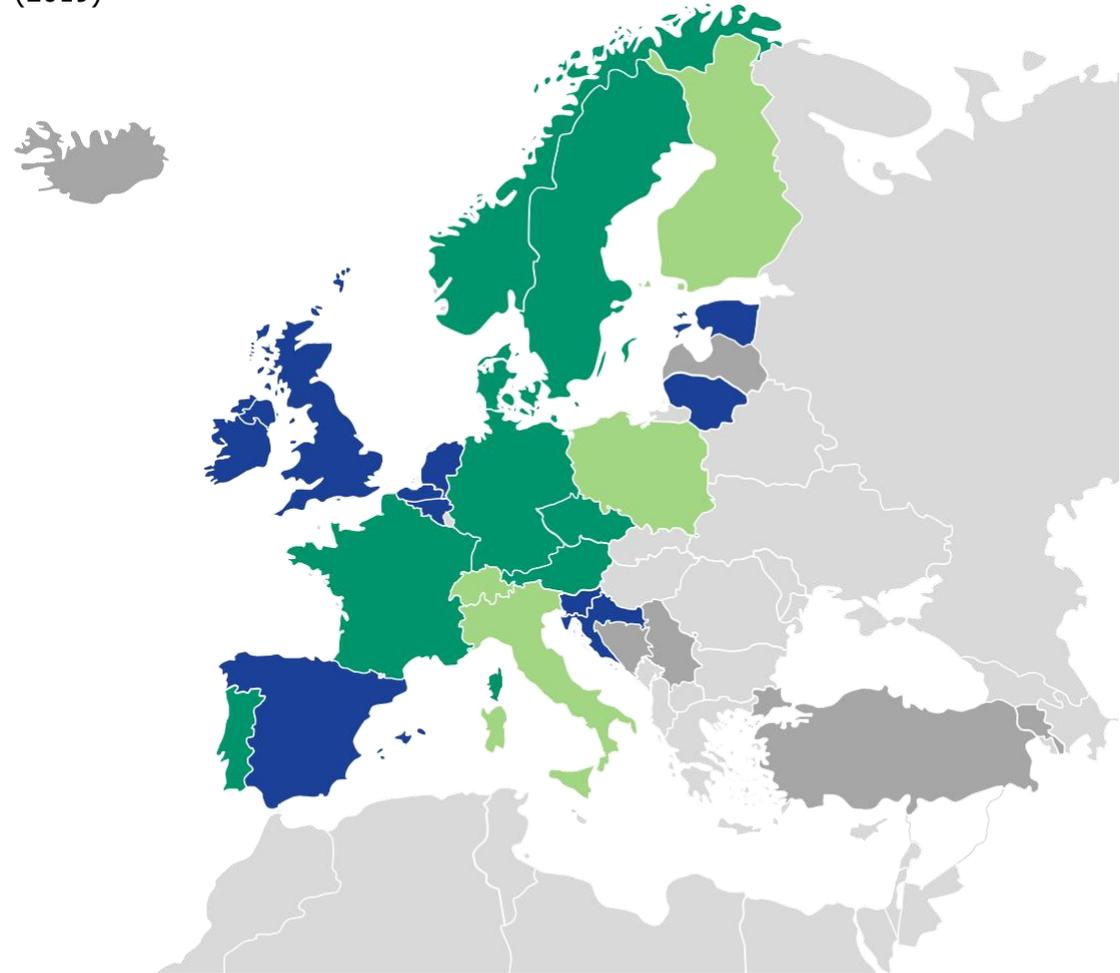
- Yes, live audio description is provided
- Intend to provide live audio description soon
- No, no plans to provide live audio description
- No audio description / data not available

Chart X. Organizations by availability of live audio description (2019, %of organizations)



Based on 36 organizations with available data.

Map x. Live audio description provided (2019)



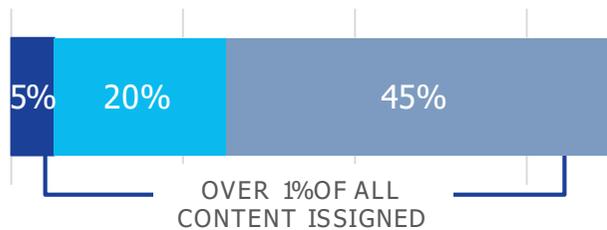
Based on 28 markets.

ON AVERAGE 7% OF PSM BROADCAST CONTENT IS SIGNED

75% OF PSM ORGANIZATIONS PRODUCING SIGNED PROGRAMMES COVER LESS THAN 5% OF ALL CONTENT

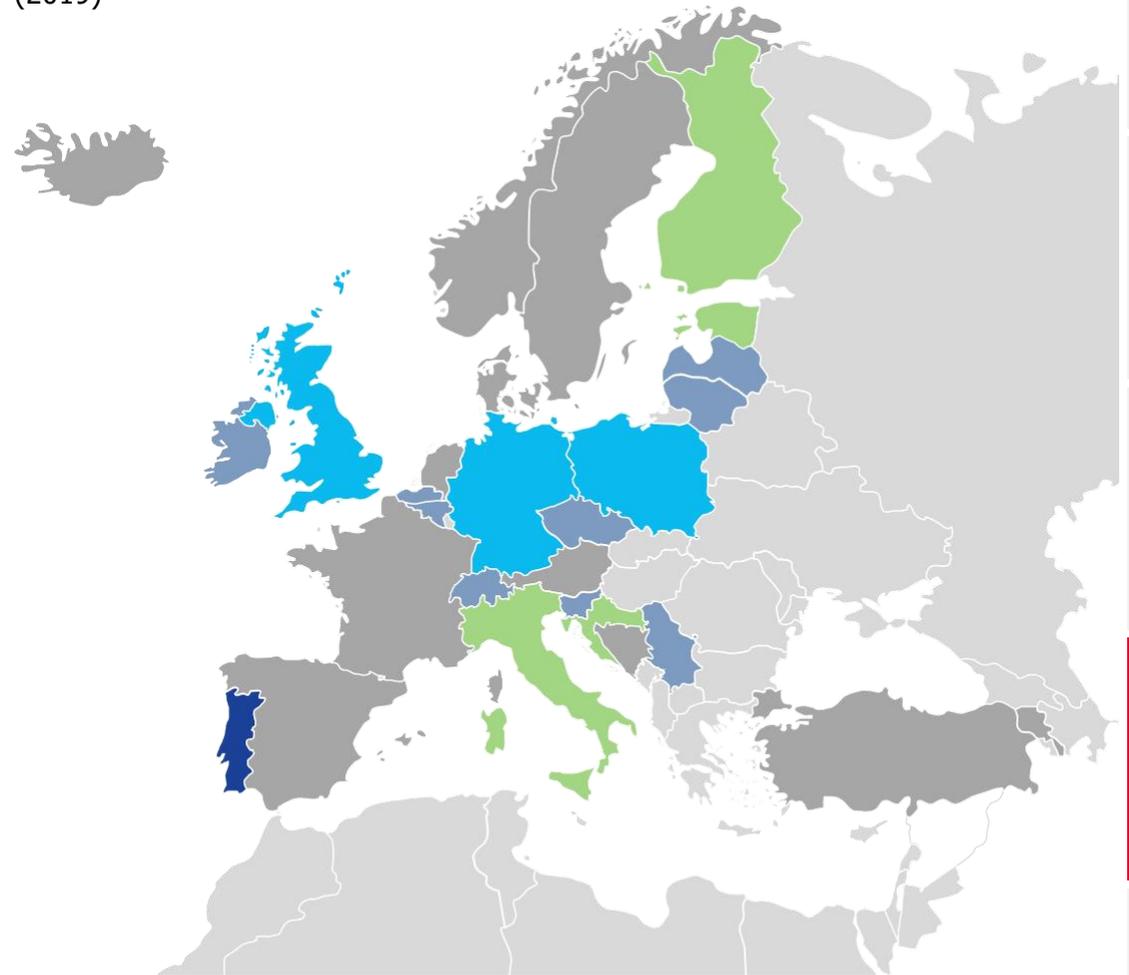


Chart X.
Organizations by percentage of signed programmes (2019, %of organizations)



Based on 20 organizations with available data.

Map x.
Percentage of signed programmes (2019)

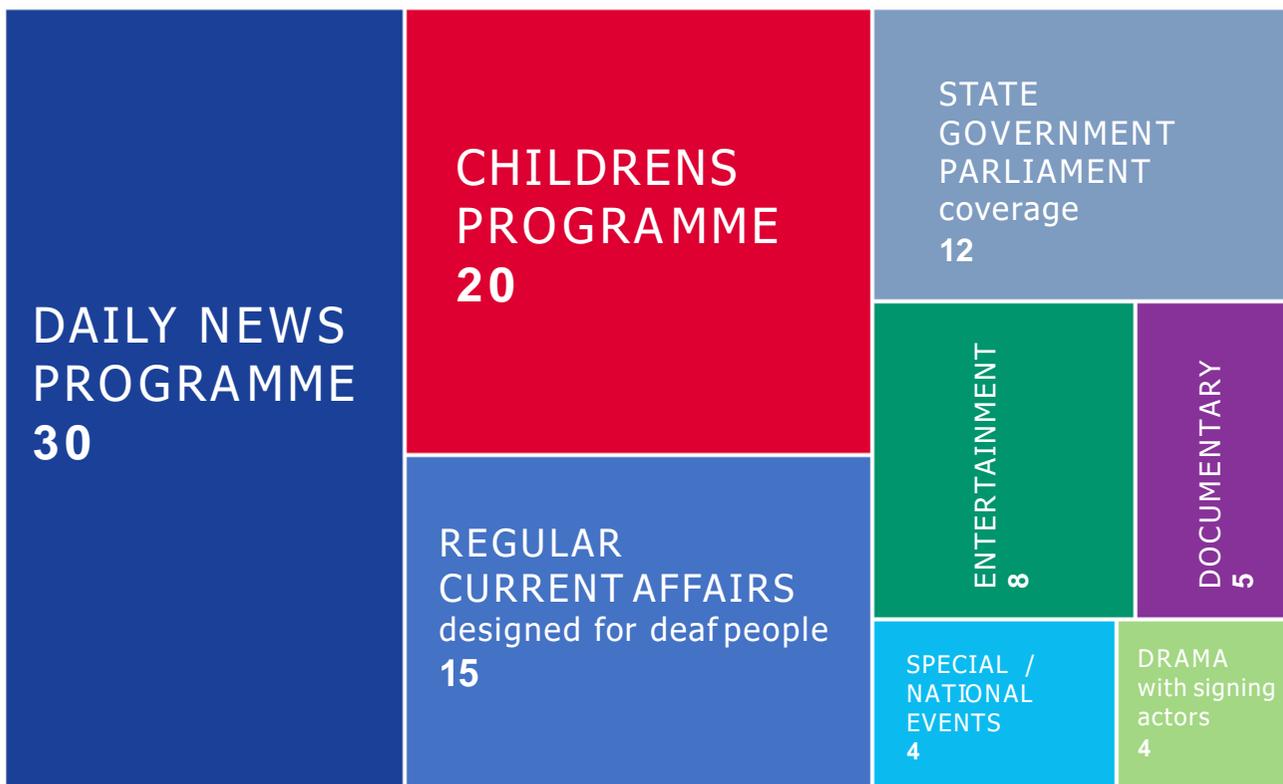


Based on 28 markets, presenting the top percentage in each market.

KEEPING DEAF CITIZENS INFORMED IS TOP PRIORITY

DAILY NEWS PROGRAMME IS THE MOST COMMONLY SIGNED PROGRAMME

Chart X.
Types of signed television programmes
(2019, number of organizations)



Signed programmes for daily news, current affairs specially designed for deaf people and coverage of state, government or parliamentary talks are all top of the genre list for signed programmes.

Children's programmes is the next genre on which PSM organizations are focusing sign language resources.

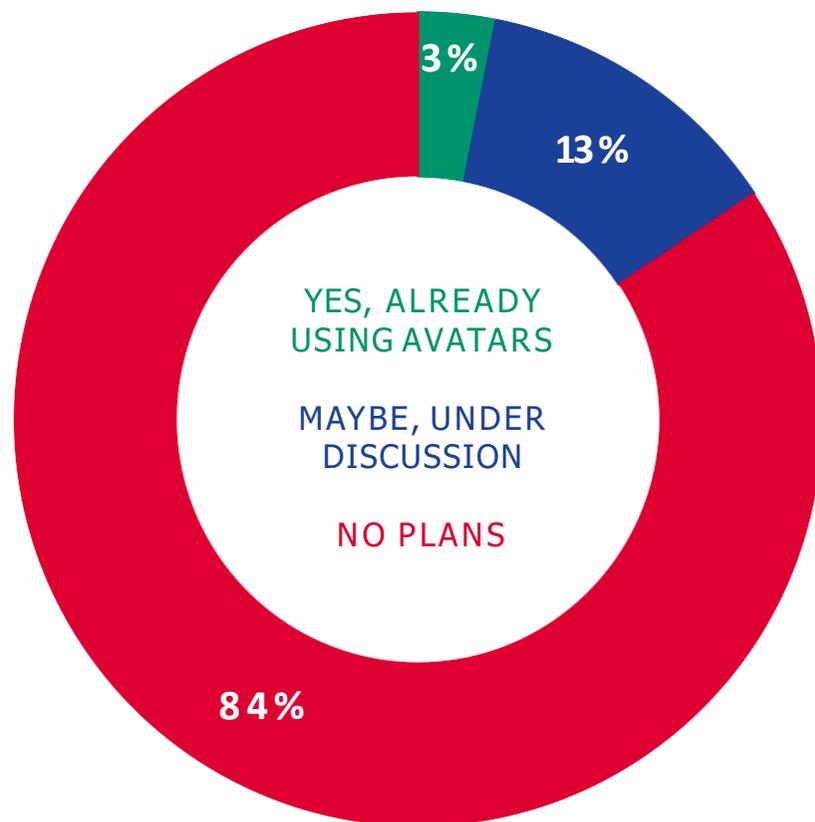
Entertainment and documentaries were selected in less than fifth of organizations.

In addition to these core genres some organizations mentioned signing special national events such as the Kings annual speech and the arrival of Santa Claus in the Netherlands, and big sports events like the Paralympic games in Latvia.

Based on 36 organizations with signed programmes.

LIMITED USE OF AVATARS FOR SIGNING

Chart X.
Use of avatars for signed programmes
(2019, %of organizations)



Based on 32 organizations providing input.

ESTONIA ERR IS THE ONLY ORGANIZATION ALREADY USING AVATARS FOR SIGNING PROGRAMMES

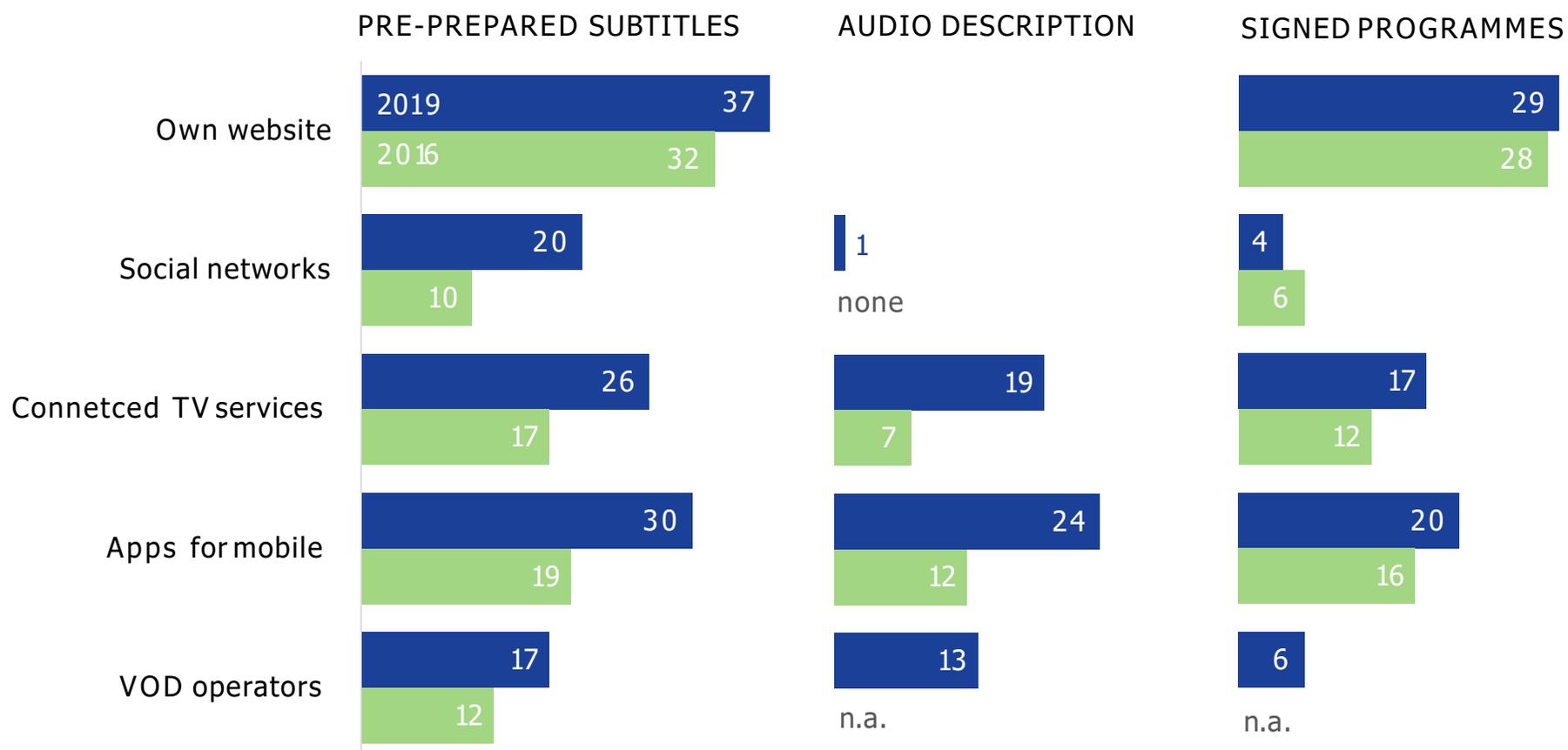
Four other organizations (13%) indicated they are currently considering using avatars; Finland Yle, Netherlands NPO, Poland TVP and Switzerland SRG SSR.

In Finland the focus on testing is whether it is possible to capture all the elements (signs, facial expressions etc.) so that no language information is lost. They hope if trials are successful it could be used to create animated programs for children with all characters communicating in signlanguage.

That said, most organizations 84% (27) have no plans to use avatars in the near future, as many developments are still needed for this solution to be universally operational.

AVAILABILITY OF ACCESS SERVICES BY PLATFORM

Chart x.
Online availability of the three main access services by platform
(2019 and 2016, number of organizations)



Based on 43 organizations.

KEY FINDINGS



PROVISION OF ACCESS SERVICES BY PSM ORGANIZATIONS

All PSM organizations provide at least subtitling and two thirds provide all three main access services of subtitling, audio description and sign language on at least some content.

PROVIDING ACCESS SERVICES ONLINE

Despite limited regulation to provide access services online most organizations are providing subtitling on their online services and two thirds are providing audio description and signed programmes online.

INNOVATIONS IN ACCESS SERVICES

Several organizations are already using artificial intelligence in live subtitling in the form of automated speech recognition. And although not yet fully operational some organizations are actively experimenting and developing avatar technology for signed programmes.

CHALLENGES OF ACCESS SERVICES

Despite an indication of increasing budgets for access services since the last survey in 2016, cost of access services and availability of necessary budget and resources to deliver all required access services across all platforms remains the main concern.