# Ensuring the quality of TV and on-demand access services

BT Group Response to Ofcom's consultation

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## BT Group

# Executive Summary

Providing access services (subtitles, signing, audio-description) for on-demand programmes is the right thing to do for consumers; viewers who have a hearing/sight impairment or additional access needs should not be left behind. We welcome Ofcom's consultation on this matter and support the proposal to widen the scope of its best practice guidelines to include VoD providers. This approach will ensure consistency of viewer experience and reflects current viewing trends which are shifting towards on-demand services.

In recent years, BT has made steady progress on the BT TV platform in providing accessible content to consumers, without a mandated requirement to do so. 60% of content on the BT TV platform is already available with subtitles. In addition, we offer filtering and content categories which make accessible programmes easy to find. Furthermore, when a customer receives their BT TV Box, the accompanying user guide provides information on how to set up accessibility tools. [1]

There are of course financial and technical challenges of implementing access services and we highlight some specific challenges in our response to Ofcom's questions below. Whilst challenges should not be seen as a deterrent, business costs constraints need to be considered carefully to avoid any unintended consequences. The cost of providing access serviced content is not insignificant, and we are concerned that platform providers may be forced to reduce their content catalogue to balance the cost of creating access services.

For clarity, BT is responding to this request as a TV "platform" only (i.e. BT TV). BT does not produce its own content but aggregates third party content and content services via its pay TV platform which it makes available to its BT TV customers. BT TV currently offers a variety of content including:

- Free-to-air channels: BBC One, BBC Two, ITV, Channel 4, Channel 5 etc.
- Premium pay channels: TNT Sports (formally BT Sport), Sky Sports, Sky Cinema, Sky Atlantic, Sky Max etc. SVoD services: third party applications on the platform such as Netflix, Amazon Prime Video, NOW and Discovery+
- VoD: a large library of feature films and television series available to digitally rent (TVoD) and/or buy (EST) and other on-demand content such as catch-up VOD from a small number of third party pay channels

The scope of our response does not include, amongst other things, the TNT Sport channels, TNT Sport VoD content, or the BT Sport app following the Joint Venture between BT and Warner Bros Discovery, or third party channels or content provider apps (e.g. Netflix) which are accessible via the BTTV platform.

[✂]

We note that the term "VoD Providers" is broad and can incorporate a variety of on-demand services. For example, some TV platforms provide channels as well as on-demand content through apps. Other platforms produce their own content as well as surfacing others' content. The broad scope of VoD providers may create a challenge to define best practice guidelines which are appropriate for all VoD providers. We ask that Ofcom provides clarity by laying out a description of the services in scope of the guidelines and its expectations of those services given the variety of options available.

There has been lots of debate around whether responsibility for creating access services should reside with the platform or the content provider, or if responsibility should be shared. As a platform, we see it as our responsibility to build the capability to surface access services. This means we can take the metadata files for access services, process them, and enable them for customers to switch on/off at their discretion. Content providers should be responsible for creating subtitles and audio-description for their own content, and for providing the metadata on that content. In fact, some content providers are already going further and

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[1] https://www.bt.com/content/dam/bt/help/user-guides/5463-BTTV-Box-Pro-UG-v3.pdf

investing in innovative accessibility services for their customers. We see this division of responsibility as crucial to avoid duplication across platforms creating access services for the same asset.

Industry should collaborate to identify opportunities for consistency and removal of duplication, and we ask that Ofcom supports collaboration in a convening role. In particular:

- It would be prudent to have a standardised technical format for access services to avoid duplication and unnecessary costs. This is particularly for the case of subtitles. We're reliant on the studios/content providers for subtitling; where they have subtitles, they should make it available to us. It is possible for platform providers to implement facilities to convert subtitle formats suitable for their platform. This solution is widely available and low cost.
- There is a finite amount of resource available for BSL sign language. We are concerned that duplication of content created with BSL could detract from services within the community. Industry should work together to identify opportunities to share the cost of signed content and avoid duplication of resource.

Finally, we support Ofcom's principles-based approach to its best practice guidelines. This approach allows flexibility for innovation and consideration of current and future technological developments in the industry. This is particularly important considering sign-interpreted/presented content, as well as certain kinds of programmes such as news or live sport. We think Ofcom could go further in its principles-based approach and provide further details in our response below.

# Consultation Questions

## Q1: Do you have any comments on our proposed approach to making these changes?

BT is broadly supportive of Ofcom's approach to making these changes. We agree that the focus should be on key outcomes rather than one size fits all and that quality is as important as availability. We agree that Ofcom's guidelines should include people with disabilities other than sight/hearing loss, to facilitate a fulfilling experience for all audience groups and ensure no one is left behind.

Whilst we agree that Ofcom's best practice guidelines should be expanded to provide advice for providers of VoD services, we note that there is a broad range of services which could fall in the scope of this definition. We ask that Ofcom provides clarity by laying out a definition of "VoD providers", describing the services in scope of the guidelines and its expectations on those services given the variety of options available.

## Q2: Do you have any comments on our proposed additions to the TV Access Services Code?

We do not have any substantive comments on Ofcom's proposed additions to the TV Access Services Code.

## Q3: Do you have any comments on any of the proposed changes/additions to the overarching best practice guidelines? Please provide any additional evidence you think we should take into account.

We are broadly supportive of the proposed changes/additions to the overarching best practice guidelines. We think Ofcom is right to focus on outcomes and keep flexibility for how providers deliver those outcomes to account for new technological developments. We also agree that there are broader benefits of access services for all viewers so people with disabilities other than sight and hearing loss should be considered.

We agree that VoD providers should be in scope of the guidelines for simplicity and consistency of viewer experience. BT TV already offers some of the features suggested without a mandate to do so, such as filtering and content categories which make accessible programmes easy to find.

Whilst we agree that providers should take steps to increase access service provision, this needs to be balanced against business cost constraints. The cost of providing access serviced content is not insignificant, and we are concerned that providers may be forced to take other cost reduction steps such as reducing their content catalogue if requirements to provide access services are too costly.

BT is responding to this request as a TV platform only, and we note following the guidance without collaboration with other industry parties could be challenging. In particular:

- We agree that access service files should be provided as part of acquiring/selling content, and as a platform which aggregates content we take steps to arrange this with content providers by including a contractual obligation to provide access services wherever possible. However, this is not always without cost, and can be operationally complex without standardisation, especially with international content. We ask that Ofcom's best practice guidelines include a recommendation for industry collaboration on standardisation.
- Where content is not provided with access services, there may be a delay in the provision of access services as well as an additional cost if we must add the access services ourselves. In some cases, this cannot be done prior to release due to confidentiality or piracy concerns (e.g. blockbuster movies or premium TV episodes).

- The requirements regarding production are not relevant to BT TV as a UK TV platform which aggregates content. We are not in a position to influence global content producers at the production level.

## Q4: Do you have any views on how developments in technology may inform the production of access services in the coming years.

We agree that developments in technology are allowing for more personalisation and customisation of access services, which creates the opportunity to drive positive outcomes for customers. But this should be balanced against complexity and provider costs; too much customisation could make it difficult to use the access services or impact variety of content.

We note that there is potential for developments in technology to inform the production of sign language services. For example, we are aware of research into avatar generated signers using robotics, object-based broadcasting techniques and alpha compositing which may enable more personalisation and innovation in sign language services.

## Q5 What do you think about the proposed list of external sources/guidelines in annex 3? Are there any additional sources which Ofcom should refer to?

We note that Ofcom's proposed list is reasonably exhaustive, but in its consultation, Ofcom observes that research into expectations among different disability groups across different services and delivery platforms is limited. Therefore, any additional consumer research which can be added on this topic would be valuable.

We also refer to annex 1 of our response which provides a consolidated view of external sources for research on sign-language on TV.

## 6: Do you have any comments on the following suggested changes relating to subtitling?

We do not have any specific comments on the suggested changes related to subtitling but support the shift to consumer outcomes and away from prescriptive guidance.

## 7: Do you have any comments about the other proposed changes to the subtitling guidelines, as summarised in Table 1 (Annex 1)?

We do not have any comments on the other proposed changes.

## 8: Is there anything additional that you think should be added to the revised guidelines on subtitling?

We think the guidelines should also encourage content providers to consider a standardised technical format for the case of subtitles. It is possible for platform providers to implement facilities to convert subtitle formats suitable for their platform. This solution is widely available and low cost.

## 9: Do you have any comments on the following suggested changes relating to audio description? Please provide any additional evidence that you think we should take into account.

We do not have any specific comments on the suggested changes related to audio description but support the shift to consumer outcomes and away from prescriptive guidance.

We agree that an outcomes focus allows providers to consider different approaches or styles of audio description, but we note that offering variety needs to be balanced carefully with quality, simplicity, and business cost constraints.

## 10: Do you have any comments about the other proposed changes to the audio description guidelines, as summarised in Table 2 (Annex 1)?

We do not have any comments on the other proposed changes.

## 11: Is there anything additional that you think should be added to the revised guidelines on audio description

We do not have any comments on anything additional that could be added to the revised guidelines.

## 12: Do you have any comments on the following suggested changes relating to signing?

We agree that BSL should be a default language to meet signing targets but highlight the challenge this creates with international content. This may not readily be available in BSL, especially where the content comes from a US content provider who may not have easy access to quality BSL interpretation or may have a different version of sign-language (e.g. ASL) available.

There is a finite amount of resource available for BSL sign language. We are concerned that duplication of content created with BSL could detract from sign-language services within the community. Industry should work together to identify opportunities to share the cost of signed content and avoid duplication of resource in terms of available signing services. Ofcom can support this by outlining its expectations in the best practice guidance and play a convening role.

We note that Ofcom is expecting to consult on an on-demand accessibility code setting out how signing arrangements will work in practice. As a TV platform, we continue to support having the flexibility to choose sign-interpretation, sign-presentation or funding an approved provider of sign-presented programming.

## 13: Do you have any comments about the other proposed changes to the signing guidelines, as summarised in Table 3 (Annex 1)?

We support Ofcom's outcomes focussed approach to the best practice guidelines and as a result suggest that Ofcom could go further and remove the prescriptive requirement for the signer to generally appear on the right-hand side of the screen. We think the proposed addition of the principle that signers should be clearly visible and large enough for their facial expressions and hand gestures to be easy to understand is sufficient. What is more, research has shown there is benefit to having flexibility in where the signer is positioned on the screen.[2]

Ofcom should ensure that the best practice guidelines remain flexible to account for new technologies which improve experience for access service users. New technologies may allow for more customisation of sign language services such as allowing the user to select the location of the signer on the screen, or "closed

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[2] Bosch-Baliarda et al found that optimum information recall was found for a signer on the left-hand side (2020).
Woll received feedback suggesting that the positioning of the signer should be related to the content and where the action is on the screen (1991).
The HBB4ALL project evaluated sport, news and documentary and found that bottom right was the preference for all content, but the second most favoured position for news and documentary was top left (Universidad Politécnica de Madrid, 2016)
Further details can be found in annex 1 of our response.

signing" where the user can select whether to turn the signer on or off. In addition, for some content it might be more appropriate to use two signers (one on the left and one on the right) for interpreting dialogue-based content.[3] We therefore don't believe the location of the signer needs to be prescribed.

Finally, we note that there is limited research into users' experience of a signer on a mobile device, although many people watch content on their phone now.

## 14: Is there anything additional that you think should be added to the revised guidelines on signing?

We do not have any additional comments.

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[3] A presentation was given by the Swedish public service television company, SVT describing how they have been using two signers (one on the left and one on the right) for interpreting dialogue-based content (2021).

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# Signing on TV
## Summary of research

# Different access methods

- Sign language programmes can be sign interpreted, or sign presented.

- In sign interpreted programmes the spoken English within the programme is interpreted into sign language by an interpreter, who is overlaid onto the video, typically on the right-hand side.

- In sign presented programmes the actors/presenters are themselves using sign language.

- Research has shown that audiences have a preference for watching sign presented content (Woll 1991, Kyle 2007, Ofcom 2023).

- There is however evidence of a desire to make particular types of mainstream programming accessible via sign-interpretation, in particular news and current affairs (Woll 1991, Ofcom 2023).

# Different access methods

- Typically sign interpreted programmes have subtitles available, enabling a deaf TV audience to choose one access method over another, or to use a mix of both signing and subtitles.

- Evidence suggests that audiences do use multiple access methods in support of each other (Woll 1991, Kyle 2007), and that they have a preference for both signing and subtitles to be available.

- Jennifer Wehrmeyer (2013) investigated viewing behaviour via eye-gaze tracking in studying comprehension of interpreted TV news. She established that deaf audiences don't successfully split their attention between the interpreter and other visual sources and so inadequately access information from these sources. This is of importance when considering the types of content that may be more readily consumable through sign interpretation.

# Demand for personalisation

- There is a desire for end-user configurability for features like interpreter size and location. This has been evident from feedback to Ofcom consultations (Advisory Committee on Older and Disabled People, 2006; PhoneAbility, 2006; RNID, 2006; TAG, 2006).

- Bosch-Balliarda et al (2020) discusses a survey by Redón (2014) in which **speed, size** and **colour** had a significant impact on on-screen legibility. Factors that had less importance were gender, age, appearance and position of interpreter.

# Size & Layout (1)

- In Bosch-Balliarda et al's (2020) discussion of Redón's (2014) survey it is mentioned that size is the most important on-screen parameter to grant accessibility.

- Interpreters composited to the side of the video are preferred to those presented in 'eggs' (oval shapes containing the interpreter composited on top of the video). In the latter format the screen real-estate consumed by the signer is much less and the interpreter is less effective in interacting with the video (Woll 1991).

- Current Ofcom guidelines for signer size are one sixth of the screen (Ofcom, 2021), although some channels provide a considerably larger signer (e.g. BBC)

- Respondents to an Ofcom consultation document (Office of Communications, 2006b) indicated that the current guidelines were appropriate. Many highlighted that whilst a larger image of the signer might make it easier to follow, it might impact the ability to consume information from the video, and hence may compromise the overall viewing experience (Advisory Committee on Older and Disabled People, 2006; NDCS, 2006; RNID, 2006; TAG, 2006), this has also been highlighted by Woll (1991) and Bosch-Balliarda et al (2020) where it is mentioned that Redón's (2014) survey found that a larger signer may be appropriate for news but might not be appropriate for films, interviews or documentaries owing to the desire for a larger area for the video content.

# Size & Layout (2)

- In contrast however there is a report produced by the Sign / Community Channel Working Group (Office of Communications, 2007) concluding from a review of research documents that the "overwhelming" (pp35) majority of Deaf people are not satisfied with the small size of the interpreter on the screen chosen by most broadcasters, a view also supported by (Becoming Visible, 2007).

- The Hybrid Broadcast Broadband for All (HBB4ALL) project (Universitat Autònoma de Barcelona, 2016) established that people preferred the 'very large' size, with the next most popular being the 'large'. Although there is no size stated in the report, measured ratios from screenshots displayed suggest that 'very large' and 'large' are circa 70% and 60% of the screen height respectively which are both likely to be larger than the Ofcom guidelines (Ofcom, 2021). In the HBB4ALL research the sizes were evaluated across three different genres and this did not affect the preference for the larger size.

- Bosch-Balliarda et al (2020) identified that 1/4 of the screen width was preferred.

# Size & Layout (3)

Interpreter overlapping the video:

- The HBB4ALL project failed to find any consensus on the interpreter overlapping the video, however there seemed to be a general preference for this for sport and documentary content, and a preference for the signer **not** to overlap for news (Universidad Politécnica de Madrid, 2016).

Split-screens:

- Soler Vilageliu et al (2018) looked at split-screen experiences, in which the interpreter is presented within a separate rectangle (sub-screen) to the video content. They found that the position and size of the interpreter's sub-screen did not seem to be important for sign language users information recall.

# Position of the signer on the screen (conventional TV viewing)

- Various studies identify a preference for the interpreter to be on the righthand side of the screen (Woll 1991, DTV4All, no date, and Universitat Autònoma de Barcelona, 2016). That said Bosch-Baliarda et al (2020) mention the potential for viewers to have become accustomed to what they have been presented with in their country.

- It should be noted that the optimum information recall was found for a signer on the left hand side of the content (Bosch-Baliarda et al 2020)

- Woll (1991) received feedback suggesting that the positioning of the signer should be related to the content and where the action is on the screen, but there were no further suggestions about which programme characteristics would be significant in the decision to change the position of the signer.

- The HBB4ALL project evaluated sport, news and documentary and found that bottom right was the preference for all content, but the second most favoured position for news and documentary was top left (Universidad Politécnica de Madrid, 2016).

- A presentation was given by the Swedish public service television company, SVT (2021) describing how they have been using two signers (one on the left and one on the right) for interpreting dialogue-based content. It has not been possible to obtain any published research on the appeal to audience or the comprehensibility of this content when compared to content interpreted with a single signer.

# Position of the signer on the screen (Augmented Reality)

- Vinayagamoorthy et al (2019) investigated the use of AR to display a signer in the space alongside the TV screen. They compared a traditional TV experience with a full and half-body AR signing experience that projected the signer outside of the frame of the TV.

- In Germany half the participants preferred the AR interpreter with only 1 preferring the full-body. In the UK there was an equal split.

- Not all participants were however fluent in BSL and not all had an uncorrected hearing loss, there was no interpreter present in the study sessions in Germany. This may have influenced results. The sample sizes were 11(UK) and 12(Germany).

# Genre (1)

- There have been various different studies that have included some aspect related to the genre that a signing audience watches, and whether or not they prefer to consume different genres via different access methods (Woll 1991, Kyle 2007, Ofcom 2023)

- It is difficult however to establish conclusive findings owing to a number of challenges. E.g.

  - The different definitions for genres.

  - The different questions that have been asked (such as watched, liked, important to be signed etc.)

  - The fact that the amount of signed content for each genre varies, and this can affect what people watch, which in turn may affect what they consider that they like.

- There are some salient trends however:

  - News, Films and Comedy seem to be liked/watched (Woll 1991, Kyle 2007, Ofcom 2023).

  - Soaps, Sports and Current Affairs seem to be less watched/liked (Kyle 2007, Ofcom 2023).

  - News and Educational programmes are considered important to be signed (Woll 1991, Kyle 2007).

  - Though there is an audience preference to have content sign presented rather than sign interpreted, if there is sign-interpreted content this is preferred for News and Current Affairs programmes, over Children's programmes and Drama (Ofcom 2023).

# Genre (2)

- Ofcom found that drama showed much higher levels of dissatisfaction for users of sign language than for users of subtitles, and that though the demand for subtitling on drama was high the demand for signing was low (Office of Communications, 2006a). In a later survey (Ofcom 2023) Drama was clearly highlighted as preferred as sign presented content (rather than sign interpreted).

- McDonald (2018) investigated the challenges of interpreting drama and highlighted some potential difficulties including:
  - Topographical space rendered by signer not consistently matching the spatial arrangement within the drama and not being itself consistent
  - Interpreter text being delayed in comparison to the visual image

- Padden (2021) also highlighted the importance of synchronising movements, and positioning, with the on-screen visuals.

- The challenges of providing a truly accessible interpretation should be considered when selecting which genres to make sign accessible, and whether these should be sign interpreted or sign presented.

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