

DEPARTMENT OF CULTURE MEDIA & SPORT REVIEW
OF STATUTORY REQUIREMENTS
FOR THE PROVISION OF SUBTITLING, SIGN LANGUAGE AND
AUDIO DESCRIPTION SERVICES
ON DIGITAL TERRESTRIAL TELEVISION

AN ITV RESPONSE

**ITV Network Ltd
200 Gray's Inn Road
London WC1X 8HF**

September 2000

Summary of Recommendations

Audio Description

The audio description targets should not be raised until the RNIB has ensured that equipment is widely available (it is currently only available to a limited number of triallists).

Signing

The increase in the sign language target from 1% to 2% (currently due in November 2001) should be deferred until closed technology is available.

The target of 5% over the lifetime of the DTT licence is achievable, but the interim targets should be revised and back-weighted until this time.

Signing and Audio Description

Prior to any increase in the targets, the ITC should carry out research to provide evidence on the rate of take-up, and the intentions of potential users to acquire the equipment to receive ancillary services.

There should be another review in 1-2 years' time.

Subtitling

It would not be reasonable effectively to double the ten-year target by bringing forward to five years the requirement to subtitle 50% of programmes on DTT channels, as proposed by the RNID.

The current subtitling level could be raised by encouraging DTT channels, where practicable, to purchase the subtitles available with repeats of previously subtitled programmes.

It will not be practicable to expect general entertainment channels to subtitle 100% of their programmes in the future.

Flexibility in the application of the targets

The ITC should allow some flexibility in the application of the targets to channels, depending on their genre and level of development.

The weekly targets required by the 1996 Act impose scheduling constraints and should be modified or brought in line with the 1990 Act.

Exemptions should be permitted by the ITC on a case by case basis, but they should be few and far between.

It would not reasonable to expect secondary channels of established

broadcasters to meet higher targets as a legal requirement, because they have their own programme budgets which are independent from and much less sizeable than the established channel's programme budget.

ITV accepts that its public service remit places an increased responsibility to meet the needs of people with sensory impairments. However, as audience share fragments, targets across channels should become more equitable.

More research into improving production technology is needed so that ancillary services (eg subtitling) can be provided in a more cost-effective way.

Cable and Satellite

In addition to DTT, there should be some ancillary services provision for viewers on the cable and satellite platforms, and it should be legally required.

The current subtitling level could be raised by encouraging cable and satellite channels to purchase, where practicable, the subtitles available with repeats of previously subtitled programmes.

Digital satellite and cable set-top boxes (Telewest, not NTL) cannot carry the DVB-compliant ancillary services of public service broadcasters without reversioning, and this is not required by the 'must carry' requirements of the 1996 Act. ITV believes this should be addressed and that all digital platforms should be therefore required to meet DVB standards by making their receivers comply with the ITC's Community Digital Standards for the delivery of ancillary and data services using the DSM-CC object carousel.

1. Introduction

We welcome this opportunity to respond to the DCMS consultation on the review of the statutory targets for the provision of subtitling, sign language and audio description services on digital terrestrial television. This response is on behalf of ITV and ITV2.

As a public service broadcasting channel with a remit to provide a universally-available service, ITV fully supports the need for the widest possible access. We recognise that this review is about the DTT targets rather than the subtitling targets on analogue ITV and its digital simulcast service. However, the fact that ITV has exceeded its annual targets for subtitling on its analogue and digital simulcast service, a trend repeated again this year to date¹, indicates our commitment to increasing access.

ITV2 is a new service, launched on DTT in 1998 and now also carried on all the major cable networks. In Scotland and Northern Ireland, there are regional versions called S2 and TV-You respectively. ITV2 is a commercial channel with no public service requirements. It is still in its start-up phase and has a very small programme budget in contrast to ITV. The cost of providing ancillary services is therefore disproportionately heavy. Nonetheless, due to synergies with ITV, ITV2 subtitled 31% of its programmes in its first year of launch and in the first half of this year it has subtitled 40%, thus well exceeding the DTT subtitling target.

ITV supports the extension of access to the blind and partially-sighted through audio description, as well as the extension of access to deaf people who rely on signing as their first language. We are proud of the fact that DTT in the UK leads Europe, and probably the world, in the provision of all three ancillary services, providing unprecedented access to digital television services by the deaf and hard-of-hearing and the blind and partially-sighted. However, in order to find a balance between the wider audience and those with sensory disabilities, it is vital to develop equipment for the delivery of signing and audio description so that only those viewers who wish to use the service can opt into it, like subtitling.

¹ From January to the end of August 2000, ITV has subtitled 64% of its total programme output, or 92 hours per week. The ITC target for this year is 61% or 88 hours per week. In addition to the networked material, the ITV companies subtitle varying amounts of regional programming.

2. Review of the Statutory Targets for DTT

2.1. Should the targets be changed or are they about right?

ITV has been actively involved through The Digital Network (TDN) in the development of equipment for audio description and in plans to develop the technology and equipment for closed signing. These services involve cutting-edge technology and despite considerable investment, effort and planning by all the broadcasters and multiplex operators in TDN, both have faced delays and other obstacles in development.

As regards audio description, TDN developed the specification for the audio description module with full backing from the RNIB. TDN has voluntarily resourced the development of the module and delivery of prototypes and is now devoting significant resource to supporting the current field trials. It is now for the RNIB to place the orders for the modules with a manufacturer and to enter into arrangements to support their distribution. Although development of the module is well underway, the RNIB has not yet placed a production order because, it appears, it is having difficulty locating a sufficient number of people who would be interested in buying such equipment. It has also found it difficult to find a substantial number of people to participate in the trials which are currently taking place. This raises questions as to the level of demand for the service and underlines the need for some attitudinal research (see section 2.2. below).

As regards sign language, there is no agreed technical standard or equipment commercially available to provide signing interpretation in closed format, despite various attempts to develop suitable technology. This means that broadcasters have had to start the service in open format, for all viewers to see. To avoid widespread complaints from viewers who do not need sign language access, ITV and ITV2 are, like the BBC, scheduling signed repeats of programmes during night hours. We do not plan to change this policy until closed signing technology becomes available.

However, when the sign language target rises to 2% in November 2001 it will become increasingly difficult to schedule open-signed repeats. Ideally, to deliver an improved service, broadcasters would like closed signing equipment to be available by then. However, the only way this could be achievable is by using an MPEG2² second video stream, which would use a minimum of 300-350 kBits/S to deliver a usable picture of a sign language interpreter. This would require the acquisition by the viewer of an additional box and picture-in-picture inserter. ITV and Channel 4 have been co-operating in the development of this option.

However, the number of deaf people using sign language as their primary means of communication is only 50,000³, of which the number of digital

² MPEG2 digital compression is a current technology which would enable the delivery of closed signing via a second video service

³ From RNIB website

subscribers is likely to be a very small proportion of this⁴. There is, therefore, a real concern amongst DTT broadcasters that 300-350 kBits per channel is an inappropriately large amount of capacity to use to deliver a service to such a limited audience on a highly capacity-constrained platform.

A decision to seek a more capacity-efficient technology (eg MPEG4⁵ or a virtual signing solution⁶) will undoubtedly delay the emergence of a closed technology because both are still in development. Equally, if closed signing (and audio description) are ultimately to be delivered on all platforms (not just DTT), the need for consultation with other platform owners will also delay the agreement on and development of a closed signing technology beyond November 2001.

The ITC has received 26 written complaints and 13 telephone complaints about open signing during the period 22 May to 21 July. Whilst this is not a great number, reflecting the fact that many signed programmes have been scheduled in night-time hours, it nevertheless confirms our view that there is an impact for our wider audience that needs to be taken into account. We feel it inevitable that complaints will grow substantially if the number of programmes carrying open signing were to increase.

Broadcasters already face an increase in the targets for signing and audio description in November 2001. **We do not believe that the targets should be raised still further until audio description equipment is widely available, and until closed signing technology has been developed.**

For signing, where there is a high probability that no closed technology will be available by 2001, we would argue that **the rise from a 1% to a 2% target should be deferred until closed technology is available. While we accept a 5% target over the lifetime of the DTT licence, we believe the interim targets should be revised and back-weighted until this time.**

2.2. If the targets remain unchanged should there be a further review and, if so, when?

We suggest that **there should be another review of the signing and audio description targets for DTT in 1-2 years' time.** This might coincide with the next Act. By then, it might be clearer when we can expect the audio description equipment to be widely available. We should also be in a better position for TDN members and perhaps other platform owners to come to an agreement as to the best way forward to develop closed signing technology which could be available at reasonable cost.

In the interim period, it would be useful **if the ITC could carry out some**

⁴ No figures available

⁵ MPEG4 is a more advanced compression technology which would enable the delivery of closed signing using a lower bit rate. However, the necessary commercial chipsets enabling the delivery of closed signing may not be available for up to 5 years.

⁶ The ITC is currently working on such a solution through a European collaborative project called VISICAST

detailed research on the rate of take-up of DTT by the deaf and hard-of-hearing and blind and partially-sighted. Any increase in the targets and the resulting investment which needs to be made by broadcasters should be supported by evidence that a substantial number of viewers with sensory disabilities intend to acquire the equipment to receive the services.

2.3. What are the costs of delivering and receiving the services?

2.3.1 *Subtitling*

Subtitling varies between approximately £500 per hour for recorded programmes to about £1,000 per hour for live material. It takes about 15-20 hours for a subtitler to subtitle a 1 hour long recorded programme. There are additional costs incurred by LNN and by the companies in the transmission of subtitles.

The regional structure of ITV means that it incurs additional costs not incurred by other television networks. Although the ITV companies pool the cost of subtitling networked programmes, they also subtitle their own regional news and other regional programmes. During regional programmes, this means the costs are duplicated across 15 regions and up to 27 sub-regions. As we are subtitling virtually all network programmes already, the only way the targets can be extended is via the ITV companies subtitling an increasing amount of regional programming.

The cost for subtitling ITV's networked programmes at present (i.e. excluding regional) is in the order of £2.5 million per annum.

The cost of subtitling is also accelerating as the targets rise, because the incremental programmes which are being subtitled are harder to do and cost more as a result (e.g. live and late-delivered programmes, sport, etc).

Clearly the cost of receiving the service is free, as long as the viewer has a television set with teletext. This is very common now, but was not when subtitling was first introduced.

1.1.2 *Signing and Audio Description*

The cost of preparing signed and audio described programmes is about the same at £600-£900 per hour. However, in addition, broadcasters must pay repeat fees to Equity for any extra repeats e.g. for open signing purposes, the cost of which varies according to the programme and time at which it is scheduled.

Any editing of a signed or audio described programme (e.g. for repeat use) would incur additional costs which are likely to be higher than the cost of editing subtitles because the same voice or the same signer (wearing the same clothes) would have to be re-used.

It should be noted that a number of the ITV companies do some open sign language interpretation in their regional programming. This is in addition to the DTT quota target which is met from fully networked programmes.

The cost of the picture-in-picture inserter which has been under development by ITV and Channel 4 which would deliver closed signing using MPEG2 technology would cost in the region of £100 per viewer. An additional set-top box would also be required.

In terms of receiving audio description, a module for use in an ONdigital box or an idTV would also cost in the region of £100.

2.4. Would the quality of subtitling be affected if targets were increased?

The quality of subtitling need not be affected if DTT targets are increased, as long as there are enough subtitlers to do the work. However, for any PSB mixed genre general entertainment channel, it will be very difficult to subtitle 100% of output, as there will always be some programmes which are extremely difficult to subtitle (e.g. because of very late delivery of the programme), or where there is no good case for subtitling (e.g. pure music programmes).

Over the next few years, as the targets for analogue subtitling on ITV increase to 83%, it will become more difficult to guarantee quality. This is because all the pre-recorded programming - where quality can best be guaranteed - is already subtitled, and, in order to meet the rising targets, we are having increasingly to subtitle live programmes and new genres such as sport (e.g. Formula One) which by their nature are difficult.

The real issue for this consultation, however, is whether it is reasonable to increase the targets on new digital channels which are still in their launch phase and have low audiences and revenue. It would not be reasonable effectively to double the targets, by bringing the ten year target down to five years, as proposed by the RNID. However, it may be reasonable to encourage these new channels where practicable⁷ to subtitle repeats of previously subtitled programmes. (Subtitles are usually available with repeats, at a small additional price, but are currently not always purchased). This would help boost the level of subtitling above the current 5% requirement.

3. Other Issues Relating to the Provision of Subtitling, Signing and Audio Description on Television

⁷ Sometimes a programme may need to be edited, and the subtitles will also need to be edited. This can be a simple job, but in some cases it may require the whole programme to be re-subtitled, which would substantially increase the cost and may not be practicable.

Paragraph 15 raises the issue of the provision of ancillary services on other platforms (i.e. including cable, satellite and analogue terrestrial). We address the issue of cable and satellite below in answer to paragraphs 21 and 22 of the consultation paper.

As regards analogue terrestrial, ITV is already subject to binding targets for subtitling on its analogue service which are rising annually and are to reach 83% by 2004.

For technical reasons⁸, ITV – unlike other commercially-funded public service broadcasters - is having to meet its digital targets for signing on both the analogue and digital simulcast service. However, once closed signing for digital television services is available, we do not plan to continue providing open signing on the analogue ITV service.

In view of the desire of the Government to switch the entire population over to digital in the next few years, we believe that it makes sense to require the provision of these additional ancillary services only on digital, as one of the ways to incentivise take-up. However, people who have low incomes or no income at all may need financial help from the Government in order to make the switch to digital.

1.1. The possibility of different targets for different broadcasters
(paragraphs 17-18)

- 3.1.1 Should there be different targets for different broadcasters, perhaps based on audience share of channels?
- 3.1.2 Should new channels be exempt from targets or have lower targets at first?
- 3.1.3 Should broadcasters who broadcast several channels be able to bundle their subtitle output between channels in order to meet an overall target?
- 3.1.4 Which programmes or channels should be priority for subtitling, signing and audio description?

It is important to recognize in statutory requirements the fact that channels are at different levels of development, and that there is a fundamental difference between established channels and new channels. This is rightly reflected in the ancillary services targets.

There are clearly some channels which are not well suited to one or more of the ancillary services, and this should be taken into account. For example, it would be difficult to audio describe a news service, or a music channel. The

⁸ ITV's digital stream is derived from the analogue stream at each of the 15 Regional Playout Centres (RPOCs), whereas with national broadcasters the two are created centrally and distributed over separate networks. Therefore, to send the open signing for ITV only to the digital stream would require extensive technical changes at each RPOC at a cost of around £1 million or more. However, closed signing could be applied only to ITV's digital service with a much reduced cost to implementation.

legislation should therefore allow the ITC to be more flexible in its approach.

A further important way in which greater flexibility can be achieved is **to amend the requirement on DTT broadcasters to meet “weekly” targets**. At the moment, DTT broadcasters must meet the targets for subtitling, signing and audio description each week on each service. This reduces scheduling flexibility because it means that broadcasters will tend to choose a long-running series with the same length of programme week in and week out, to ensure that they meet the targets. This also has the effect of reducing consumer choice. The weekly targets for DTT which were set in the 1996 Act contrast with the analogue subtitling targets set in the 1990 Act, which we are required to meet on a yearly basis. Greater flexibility would be achieved if the DTT targets were to be achieved over a year, like the analogue targets, or at least over a month or a few months.

As regards new channels, it seems reasonable for the ITC to take decisions about whether to exempt new channels from the targets, or to lower them at first, or to allow bundling between channels. Such channels (even those associated with established broadcasters, such as ITV2), have very small budgets in comparison to existing channels, and should not be deterred from launching on DTT.

However, ITV feels that the cases when a channel should be exempt completely should be few and far between. There are many channels which will always have a very low audience share because they are very specialist in their content, but they have the potential to satisfy a specialist interest regardless of sensory disability. To exempt such channels in the longer-term would considerably reduce viewers’ freedom of choice.

Some have suggested that it would be reasonable to expect the secondary channels of established broadcasters, such as ITV2, to meet higher targets than other DTT channels as a legal requirement. This might be fair as regards subtitling, to reflect the situation in cases when the secondary channel is running a substantial number of repeats which are already subtitled. But it is not reasonable to expect them to meet bigger targets per se, because they will have their own programme budget which will be independent from and far less sizeable than the established channel’s programme budget. In any event, many of the “independent” channels which are not associated with a terrestrial PSB are part of a big media group, and so to all intents and purposes their financial backing is similar to (or greater than) channels such as ITV2.

It is clear that, if there were different targets based on audience share, the biggest burden at present would fall on ITV and the other qualifying services. We accept that our public service remit places increased responsibility on us to meet the needs of people with sensory impairments. However, ITV can only fund the cost of meeting substantial targets for ancillary services while it has sizeable audience share.

As audience share fragments, it will be appropriate to share the ancillary

services targets more equitably across channels. Secondly, the targets should not be disproportionate. For example, we do not accept that the targets for qualifying services as regards signing and audio description should be brought forward from 10 to 5 years. Neither do we believe that general entertainment channels such as ITV should be expected in the future to provide 100% subtitled programming, for the reasons outlined in 2.4 paragraph 1 above.

Going forward, there will need to be more research into improving production technology so that ancillary services such as subtitling can be provided in a more cost-effective way. Currently, they are very labour-intensive. If such research was successful in reducing costs and increasing efficiency, those with sensory disabilities could benefit from greater choice as the investment in ancillary services could be spread across more programmes.

3.2. Costs (paragraphs 19-20)

1.1.1. How should equipment costs to the consumer best be met?

The need to acquire extra equipment only arises as regards the intended method of receiving audio description (through plug-in modules), and closed signing (the equipment for which is still in development). Clearly, if there has to be a cost for such equipment, it must be affordable so as not to discriminate against viewers with sensory disabilities.

DTT broadcasters are required as part of their licences to transmit subtitling, signing and audio description services. Future set top boxes and idTVs may contain the technology to receive these services; however, the free set top box give-aways have kept boxes as basic as possible, retarding the development of more sophisticated boxes. Even when they become available, it might still be the case that the cost of set top boxes with integrated receiving equipment remains high, which will inevitably mean that viewers with sensory disabilities continue to pay more.

3.2.1.1 Audio Description Equipment

In order to kick-start the market, TDN members, including ITV, took the initiative to develop and pay for the tooling costs for the audio description module, which is costing around \$1 million. It will be the responsibility of the RNIB, following the development of the prototype, to place the order for the production, distribution and installation of the modules. We hope that RNIB will be able to place the orders to enable the module to be in the market by Spring 2001. In the meantime, broadcasters are meeting their transmission requirements and supporting field trials, but the services are only being received by the small number of triallists.

3.2.1.2 Closed Signing Equipment

There is a fundamental problem here. Broadcasters want to provide

closed signing at the earliest possible opportunity (preferably by the time the targets increase to 2%). However, solutions which would be available in the near future (such as MPEG2) might become out of date a few years later, which would necessitate existing consumer equipment being replaced. The burden of this may or may not be very great, depending on the level of take-up.

ITV and Channel 4 have recently been seeking to develop a solution based on current MPEG2 technology. This could be developed in a year and could become marketable in the next couple of years. From the viewer's point of view, it is a simpler and cheaper solution than the expensive 'Simon the Signer' technology which the ITC was developing, but which was rejected by the deaf signing community⁹. The MPEG2 technology would also allow the use of real signers.

However there is a real concern from broadcasters that, at 300-350 kBits/S, the MPEG2 technology uses too much bit-rate. ITV agrees that capacity within DTT multiplexes is sorely stretched and that even 300-350 kBits/S is difficult to accommodate. Secondly, broadcasters would probably have to share capacity within each multiplex for sign language purposes, which would ultimately constrain the quantity of signing possible on each channel.

It may eventually be possible to use the more advanced MPEG4 technology, which could reduce the bandwidth required for closed signing. However, this is still in development, and it is as yet unclear what it can deliver in terms of bandwidth-efficiency.

The ITC is currently leading a European collaborative project called VISICAST which is making progress in developing a graphical signing system, with a Humanoid or Virtual Signer, for use in post offices and other retail outlets. If this could eventually be applied to television signing in a way acceptable to the deaf community, it would be the most promising long-term option.

If such a solution could be found in the next few years and easily accommodated into set-top boxes (as now seems possible), it could provide a breakthrough in terms of bandwidth efficiency, since it only uses about 30 kBits/S. This would provide the potential for a much greater number of programmes eventually to be sign-language interpreted.

The fact that the BDA and the RNID are involved with the project should mean that the concerns of deaf users are properly taken into account.

3.2.2 If the targets are increased, what will be the financial impact on

⁹ The deaf community at the time wanted real people to do the signing, instead of a virtual reality figure. An additional problem was that Simon had not been developed sufficiently to do BSL. Finally, it would have required computer equipment to receive the service.

broadcasters' programming?

The current methods for providing ancillary services rely on intensive human involvement. Therefore, the costs are escalating proportionately as the targets increase. It will remain the case, particularly for new and loss making channels, that there is a real trade-off at the margin between investment in content and ancillary services costs.

However, the main issue from ITV's perspective is not the cost of providing the ancillary services – substantial though this may become. Our primary concern is the reaction of the wider audience if we are required to provide a substantial number of hours of sign language interpretation in open format.

3.2.3 What are the opportunity costs to broadcasters in terms of alternative possible uses of spectrum in providing subtitling, signing and audio description services?

DTT is the platform with the most obligations, but the least capacity to provide a significant choice of services. ITV is not arguing that the ancillary services should not be provided on DTT. However, at present, DTT is hard pressed to manage existing requirements such as the ancillary services and conditional access. It needs more capacity to do this and to enhance the range of text, interactive and video services.

3.3. Provision of services on digital cable and satellite

3.3.1 Should cable and satellite channels be required to provide these services?

If so, should requirements apply to all cable and satellite services or, for example, only to those with a large audience share or over a certain income threshold?

ITV recognises that free-to-air public service broadcasters should have more responsibility to meet the needs of viewers with sensory disabilities than commercial broadcasters with no PSB obligations. However, we believe that there should be some provision for such viewers on the cable and satellite platforms, and this should be legally required. This would extend consumer choice to disadvantaged sectors of the population across all platforms, achieving the coveted goal of interoperability.

It also makes no sense in terms of competition to impose ancillary services targets on new DTT channels but not on digital cable and digital satellite, when all three are new platforms which carry big players as well as new start-up services.

Cable and satellite have far more (and cheaper) capacity than DTT. The ancillary services could more easily be accommodated on cable and satellite than on DTT, where there is already insufficient capacity to enhance existing

services for all viewers. We are not arguing that the obligations be lifted from DTT; rather that they be applied in a more even-handed way to other platforms as well.

At the very least, channels could be expected where practicable to purchase the subtitles which are usually available with repeats. This would be an easy and relatively cheap way to increase the availability of subtitling.

We recognise that this situation can only be addressed with primary legislation, and we believe it should be an issue for the Communications Bill.

3.3.2 Carriage of DVB-compliant ancillary services on cable and satellite receivers

We view the fact that digital cable and satellite receivers cannot carry the DVB-compliant ancillary services of public service broadcasters as a very important issue for the next Communications Bill.

The subtitling, signing and audio description services on ITV (as on DTT services as a whole) are being produced to DVB standards. Although the digital terrestrial service can carry them, digital satellite and cable boxes (Telewest, not NTL) cannot do so without the ancillary services being expensively reversioned. This seems illogical, particularly for public service broadcasters for whom the provision of such services is viewed as being an essential part of their remit.

The 'must carry' requirements in the 1996 Broadcasting Act do not make it clear that the ancillary services, as an integral part of the PSB remit, should be carried on digital cable networks. We believe this should be rectified. If ITV were to be carried on digital satellite, there are no legal obligations at all on the platform to carry ITV's subtitling, signing and audio description. Indeed, there would be no legal obligation on ITV either to provide such services under the digital satellite programme services licence the ITV companies would have to acquire. However, we believe this would be contrary to viewers' expectations.

We therefore suggest that all digital platforms should be required to meet DVB standards by making their receivers comply with the ITC's Community Digital Standards for the delivery of ancillary and data services using the DSM-CC object carousel.

3.4. Shortage of skilled subtitlers, signers and audio describers

3.4.1 Is there a need to train more subtitlers, signers and audio describers in the future; will technological developments help combat the skills shortage?

This is a question better left to the facilities houses such as the ITFC and we understand that they will be addressing this in their response. However, there is clearly a particularly serious situation as regards signers, with a very limited

number who have sufficient skills and speed to sign for television programmes. There needs to be a concerted and co-ordinated drive to train more people.