

## A10. Emergency video relay services

This annex relates to Section 10, Emergency video relay.

Part (a) contains the draft Ofcom approval criteria and part (b) further details on the estimation of the benefits of emergency video relay.

### Part (a): Draft Ofcom approval criteria

#### Approval of an Emergency Video Relay Service

- A10.1 In order for an Emergency Video Relay Service to be approved by Ofcom, the service must satisfy all the approval criteria (“Approval Criteria”) set out below.
- A10.2 A provider seeking approval must submit evidence to Ofcom that it can satisfy the Approval Criteria on an ongoing basis.
- A10.3 Ofcom may, at any time, by notification in writing to the service provider, withdraw its approval where Ofcom considers that the provider no longer meets the Approval Criteria.

#### Approval criteria

##### General compliance

- A10.4 The service must be an Emergency Video Relay Service as defined in General Condition C5.11 and must be capable of satisfying all the requirements set out in General Condition C5.12.

##### Accountability and reporting

- A10.5 The provider must monitor and report to Ofcom, every quarter, on its operation. The report must be in a form specified by Ofcom and must include the following information:
  - a) Number of app downloads;
  - b) Number of emergency communications;
  - c) Average speed of answering, measured in 15-minute intervals; and
  - d) Number of complaints and information about their nature (without publication of details that could identify any complainant).

The provider must also publish an annual report covering compliance with these approval criteria and any related issues as directed by Ofcom.

##### Access

- A10.6 The provider of the approved service must do the following:
  - a) Make provision for End-Users to access the Emergency Video Relay Service via a dedicated app and a dedicated website, free of charge.

## **Fair treatment and easier switching for broadband and mobile customers**

- b) Provide clear and user-friendly instructions on how to use the Emergency Video Relay Service are made available in both British Sign Language (BSL) and English on the app and the website.
- c) Ensure the incident location information is automatically obtained from the device being used by the End-User in an efficient and timely way e.g. automatically via the app or website. The validity of the incident location information must always be verified with the End-User in BSL.
- d) Maintain a system whereby telephone numbers and/or other contact information from the End-User are obtained to enable call-backs to be made. The retention period for this information must be in line with the retention period used for other emergency relay services.

## **Operational matters**

A10.7 All persons acting as interpreters for the Emergency Video Relay Service must:

- a) Be on the National Registers of Communication Professionals working with Deaf and Deafblind People (NRCPD) register for qualified interpreters;
- b) Have at least 2 years' post-qualification experience acting as a BSL interpreter in a range of settings;
- c) Have had a clear Disclosure and Barring Service (DBS) check within the last two years.

A10.8 The Emergency Video Relay Service must have a dedicated, well-lit and soundproofed video interpreting room. There should be restricted access to the room.

A10.9 The interpreter should be equipped with a suitable microphone and headset.

## **Quality of Service**

A10.10 Emergency communications must be answered within 5 seconds 95% of the time, measured in 15-minute intervals.

A10.11 Emergency communications should not be subject to a handover from one interpreter to another unless they continue for more than 30 minutes.

A10.12 Regular bi-monthly quality of service checks of communications must be carried out by senior interpreters retained by the Emergency Video Relay Service.

A10.13 Video conversations must be recorded. Retention of any recording should be in line with the retention periods for emergency voice calls and recordings must be stored safely, securely and accurately, in line with standards for voice calls.

## **Adequate resources**

A10.14 The Emergency Video Relay Service provider must be able to demonstrate that:

- a) it has sufficient funds, facilities and staff to provide the Emergency Video Relay Service and enable it to perform properly the administrative, technical and professional work associated with the tasks for which it has been appointed.

- b) the systems have sufficient technical resilience and resources to provide an uninterrupted service to the same extent as the voice telephony networks to which it is interconnected, so far as is technically feasible;
- c) it and the Emergency Video Relay Service it provides can satisfy on an ongoing basis the required KPIs, including that it is adequately staffed at all times;
- d) it has appropriate provision for complaints handling.

## Part (b): Further details on the estimation of the benefits of emergency video relay

A10.15 Our provisional conclusion is that the minimum level of benefits from saved lives would be around £4m per year and, in all likelihood, would be considerably larger. This is based on a judgement about the likely number of prevented fatalities as a result of the emergency video relay services, and the value of a single prevented fatality being around £2 million. We explain this below with the following steps:

- We describe the available evidence on the number of deaf BSL users in the UK;
- We consider the literacy of these deaf BSL users, and conservatively estimate how many people may have difficulty using the existing text relay and emergency SMS systems for emergency calls;
- We estimate the possible use made of an emergency video relay service, based on information on the frequency of emergency calls by the general population. We judge that it is likely that at least two fatalities per year could be avoided as a result of the video relay service and might be much higher than this; and
- For the value of a single prevented fatality, we assume a figure of £2 million, based on the figure generally used in government assessments. This implies the benefits are likely to be at least £4m per year.

### Number of deaf BSL users in the UK

A10.16 Estimates of the number of deaf BSL users in the UK vary. In the 2011 census, 22,000 people in England and Wales declared that sign language was their main language, with 15,500 of them declaring that this was specifically BSL. However, we note that the British Deaf Association considers that the census almost certainly undercounted people for whom BSL is a first language.

A10.17 Scotland and Northern Ireland used different census questions in 2011 from those used in England and Wales, so the data are not directly comparable. We have below used a figure of 17,400 BSL users for the UK, which is based on the census figure for England and Wales, uplifted to reflect the population of the UK, bearing in mind that this may be an understatement.

### Literacy of deaf BSL users

A10.18 Many people whose preferred language is BSL use text-based communications when necessary. However, people who have been deaf from birth can have problems with written English, and this can lead to misunderstandings. People who are in distress are likely to find

working in a second language more difficult or at risk of errors. Video relay for 999 would allow BSL users to use their first language to call for help and to receive advice in emergency situations. This would be likely to make emergency communications faster and more accurate.

- A10.19 ONS data from the 2011 census suggests that around 65% of people for whom BSL is a main language reported significant difficulty with spoken English and that 40% of them have no qualifications.<sup>1</sup> Although there wasn't an England and Wales Census question about written (as opposed to spoken) English, we understand that many of these deaf BSL users also have problems with reading and writing.
- A10.20 This is supported by other data sources. According to a 2012 article in the journal *Cognition*, the average reading age for the adult deaf population in the UK and the USA is believed to be around 8 or 9 years.<sup>2</sup> At primary level the percentage of deaf children achieving Key Stage 2 English is 52% as opposed to around 93% for the general school population. This shortfall continues throughout the school years and is also shown by the gap between deaf children achieving 5 or more GCSEs and other children, which is 30%.<sup>3</sup>
- A10.21 Assuming that 65% of those who use BSL as their main language will have difficulty using the existing text relay system for 999 calls implies that of the estimated 17,400 BSL users in the UK (based on uplifting to a UK figure from England and Wales census data), around 11,200 individuals will have difficulty using the existing text relay system for 999 calls. These people will stand to gain the most from the provision of video relay for 999.
- A10.22 There are other deaf BSL users who do not have significant difficulty with written English but prefer to use BSL when it is available. These people will also benefit from the provision of video relay from 999 in the form of faster and/or more accurate emergency communications.
- A10.23 In some situations, users may be able to prop up the connected device they are using rather than hold it, leaving their hands freer to do things like check for a pulse or administer first aid than if they were typing.
- A10.24 Deaf BSL users who have used video relay to access NHS 111 report that they have benefited from clearer communication about health matters, and also greater dignity and privacy from not having to get a friend or relative to help with the call. We consider that similar benefits would accrue from video relay access to 999 but have not quantified these benefits.

### **Likely use made of emergency video service based on emergency calls among the general population**

- A10.25 We have used the number of emergency calls per person from the general population to inform the potential use of an emergency video relay service. In 2018, there were 31.5

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<sup>1</sup> In the 2011 census data, of the 15,475 people in England and Wales who used BSL as their main language at home, 9,986 cannot speak English well or very well. Of the BSL users who were aged over 16 at the time of the census, around 40% had no qualifications in England and Wales.

<sup>2</sup> [www.ncbi.nlm.nih.gov/pmc/articles/PMC3657148](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3657148)

<sup>3</sup> Source: National Deaf Children's Society

million 999 calls, of which 20.5 million were connected to the emergency services. Of these 20.5 million, 10.1 million were to the police, 9.5 million to the ambulance service, 892,000 to the fire brigade and 14,800 to the coastguard.<sup>4</sup>

- A10.26 We have focussed on calls to ambulance services, as data on the seriousness of the situation is readily available for the ambulance service. The categorisation of calls and associated response targets varies slightly between the nations within the UK. When ambulance incidents are classified in England, the most serious are called Category 1. These relate to when an ambulance is dispatched to incidents involving “people with life-threatening illnesses or injuries” such as cardiac or respiratory arrest and where there is a need for an immediate response. These have a target average response time of 7 minutes, as the speed of response for these incidents can make the difference between life and death
- A10.27 There were 680,000 Category 1 incidents in England in 2018.<sup>5</sup> Within the Category 1 incidents, there is a subset called Category 1T incidents, which are those Category 1 incidents involving any patients being transported by an ambulance service emergency vehicle. Category 1T excludes those incidents where an ambulance clinician on scene determines that no conveyance is necessary, or incidents with non-emergency conveyance. There were around 460,000 Category 1T incidents in England in 2018, which represents around 0.008 incidents per person per year for the general population.<sup>6</sup>
- A10.28 If we were to assume this same ratio of Category 1T incidents per person were to apply to those BSL users in the UK who would have difficulty using the existing text relay system for emergency calls, it would imply around 90 Category 1T incidents per year through the video relay service.<sup>7</sup>
- A10.29 But video relay would not be expected to make a difference to the number of lives saved for all of these 90 Category 1T incidents. Firstly, in some of these cases the person needing assistance would anyway not survive, and other incidents may be categorised incorrectly and not actually be life-threatening.<sup>8</sup> Secondly, in some of these situations, there may be a hearing person present as well as the deaf BSL user, and if there were no video relay service, the hearing person could make the emergency ambulance call. Nevertheless, of these potential 90 Category 1T incidents, there are likely to be some situations where only a deaf BSL user is present or they are best placed to call the emergency services, and where there might be a considerable delay if they were not able to do so, and where access to a video relay service could make the difference between life and death.

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<sup>4</sup> Source: 999 Liaison Committee

<sup>5</sup> <https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/08/AmbSYS-time-series-until-20190731.xlsx>

<sup>6</sup> This 0.008 incidents per person is calculated as the 460,000 Category 1T incidents in England divided by the 56 million population of England. [www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates](http://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates)

<sup>7</sup> This is calculated as 0.008 multiplied by our conservative estimate of around 11,200 BSL users who will have difficulty using the existing text relay system for 999 calls.

<sup>8</sup> There is information on the survival rate for those who were treated by the ambulance services in England for a cardiac arrest out of hospital. Only around 10% of those affected were ultimately discharged alive from hospital in 2018. However, such incidents will make up a small part of the total number of Category 1T incidents. There were 460,000 Category 1T incidents in England in total in 2018, but only around 30,000 people were treated by the ambulance services for a cardiac arrest out of hospital. We are not aware of information on survival rates more generally for Category 1T incidents. The information on cardiac arrests is here, [www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/10/AmbCO-time-series-to-20190531.xlsx](https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/10/AmbCO-time-series-to-20190531.xlsx)

- A10.30 While not assessed as being as time-critical as Category 1 ambulance incidents, Category 2 incidents involve potentially serious conditions that may require rapid assessment and urgent on-scene intervention and/or urgent transport.<sup>9</sup> They can include serious conditions, such as stroke, difficulty breathing or chest pain. The urgency is reflected in an average response time target of 18 minutes in England. Such incidents are far more numerous than the Category 1 incidents. There were over 4.3 million Category 2 incidents in England in 2018 compared to 680,000 Category 1 incidents.<sup>10</sup> If the proportion of calls using video relay for those BSL users who would have difficulty using the existing text relay system for emergency calls were to be the same as the ratio of Category 2 ambulance calls for the general population, this would imply around 870 Category 2 incidents from video relay calls per year in the UK.<sup>11</sup> Some of these incidents could become life threatening, especially if there were a substantial delay in an ambulance being called. Even if these Category 2 incidents were not to become life threatening, failure to obtain emergency treatment could nevertheless lead to more serious harm for the casualties in question.
- A10.31 There may also be life-threatening situations where only a deaf BSL user is available to call the police or fire service, and from the general population there are more calls to the police and fire services (combined) than to the ambulance service.
- A10.32 Considering specifically the likely volume of Category 1T ambulance incidents, our judgment is that at least two fatalities could be avoided per year because of the existence of the video relay service, and the number of fatalities avoided might be much higher than this.

### **We assume preventing one fatality would provide a benefit of around £2 million**

- A10.33 The HM Treasury Green Book on appraisal and evaluation describes how it can be appropriate to use the value of a statistically prevented fatality when assessing options that involve changes in the risk to life.<sup>12</sup> The average monetary value of a prevented fatality produced by the Department for Transport is around £2m.<sup>13</sup> If at least two fatalities were avoided per year through the video relay service, there would be quantified benefits of at least £4m. In addition, there would be benefits in terms of quicker help for non-life-threatening situations, and the wider benefits (such as peace of mind and dignity for those reliant on BSL) discussed in Section 10.

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<sup>9</sup> The categorisation of incidents described here is that used in England. There are slight variations in other parts of the UK. The categorisation and targets used in England are described here <https://nhsproviders.org/the-ambulance-service-understanding-the-new-standards>

<sup>10</sup> [www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/08/AmbSYS-time-series-until-20190731.xlsx](http://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/08/AmbSYS-time-series-until-20190731.xlsx)

<sup>11</sup> Calculated as around 11,200 BSL users will have difficulty using the existing text relay system for 999 calls multiplied by 4.36 million Category 2 incidents in England per year / 56 million population of England.

<sup>12</sup> See paragraphs 6.36-6.78,

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/685903/The\\_Green\\_Book.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/The_Green_Book.pdf)

<sup>13</sup> See the 2018 tab in this spreadsheet,

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/833800/ras60001.ods](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833800/ras60001.ods)  
The average value of a prevented fatality in 2018 is £1,958,303, and will be higher in later years.