

Accessibility of top 1,000 titles of 2010



Report to RNIB

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Foreword

Access to books, whether for work, study or leisure, is essential for participation in society and is something that many of us in the UK take for granted. However, for blind and partially sighted people access to books is not self-evident. Research carried out by the Library and Information Statistics Unit at Loughborough University (LISU) in 2004 showed that less than five per cent of books in the UK were made available in accessible formats such as unabridged audio, braille or large print. This illustrated that blind and partially sighted people had limited choice, and were excluded from the benefits that reading has to offer.

Royal National Institute of Blind People (RNIB) commissioned new research to check if this situation has significantly improved especially as advances in digital publishing are now making it easier for accessible formats of books to be made available via the mainstream. Digital developments have the potential to increase the overall number of accessible titles available to blind and partially sighted people for two reasons. Firstly, digital audio downloads are reducing the cost associated with unabridged audiobooks, making unabridged audio more affordable. Secondly, eBooks have the potential to provide three accessible formats: synthetic audio (via synthetic speech audio), electronic braille (via a refreshable braille display) and electronic large print (by increasing the font size on a display screen).

Since access to books is so important for blind and partially sighted people, one of the strategic targets for RNIB in the period from 2009 to 2014 is that blind and partially sighted people are able to read the 1,000 most popular books each year in their preferred format eg audio, braille or large print.

To set a benchmark to measure progress against this target, RNIB commissioned independent research report from LISU to check what proportion of the most popular books of 2009 were available in all three formats of audio, braille and large print to provide a baseline against which we could measure progress against our strategic target. Mindful of the potential for more accessible books to become available via the mainstream market through recent digital developments, we

commissioned a repeat of the research from LISU for top 1,000 most popular books of 2010 and this current research report details the trends that LISU identified.

One new trend that I want to highlight here is the increased availability of eBooks and their contribution to the availability of electronic braille, electronic large print and synthetic audio. eBook reading tools, as well as content, need to be accessible for a fully satisfactory experience whereby blind and partially sighted people can download, open and navigate eBooks independently. In 2009, eBooks did therefore not meet RNIB's accessibility criteria on the basis that no eBook reading device or software programme provided this fully accessible experience. However, the situation had changed in 2010, and eBooks for Apple iOS devices such as the iPad and iPhone and in large print on the Kindle were included due to the improved accessibility of these eBook readers. In addition, due to the positive response of publishers to our demand to remove certain technical barriers, there has been a rise in the provision of eBooks that can be automatically listened to as synthetic audio.

Taking into account the RNIB definition of full accessibility for eBooks, the 2010 LISU research report shows that eBooks make a substantial positive difference to accessibility, but there is still some way to go before our Top 1,000 target is met. 17 per cent of the identified top 1,000 books are fully accessible by being available in all three formats of hard copy braille, hard copy large print and human speech audio. The electronic braille, electronic large print and synthetic audio formats generated by eBooks make a substantial difference to accessibility: when accessible eBooks are included this figure, more than half, namely 54 per cent of the top 1,000 books of 2010 are accessible in all three formats for print impaired readers.

Whilst this is an encouraging increase, we recognise that not every print impaired reader is able to utilise the new technologies available. RNIB can only fully achieve our strategic target by working collaboratively with the publishing and related industries. This report recognises the efforts made by publishers to make their titles available in accessible formats, including as accessible eBooks – and we hope it will encourage the publishing industry to continue and to do more. It is also an open

invitation to eBook manufacturers, eBook product and service developers and eBook retailers to make the eBook experience an accessible one for blind and partially sighted people. This way we can come even closer to our target of giving blind and partially sighted people the same access to the top 1000 books as their sighted peers.

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1 Introduction

In 2010, the Royal National Institute of Blind People (RNIB) commissioned LISU to undertake research to identify a baseline for how many of the 1,000 most popular books of 2009 were available in unabridged audio (ie an audio edition of the full work, as opposed to abridged audio, which is a shortened version of the original work), braille and large print. The objective was to provide a baseline against which to measure progress towards their strategic target:

"Blind and partially sighted people are able to read the 1,000 most popular books each year in their preferred format eg audio, braille or large print."

A report was presented to RNIB, who subsequently commissioned a repeat of the research, to investigate progress towards this target by assessing the accessibility of the 1,000 most popular books of 2010. This report presents the results of this second study, and relates them to the baseline figures obtained for 2009.

In each year, RNIB provided a spreadsheet listing the titles to be checked, together with suggestions for sources and access to relevant databases for the duration of the research.

The methodology for selecting the titles is described in more detail in Appendix A. The titles were selected based on their popularity in 2009/2010, using market research from BookMarketing Limited (BML) and sales data from Nielsen BookScan. BML research findings on the preferred genres and categories of sighted people aged 65 and over were used as a proxy for the reading preferences of the blind and partially sighted population. These genres formed the basis for the list, which also includes a small percentage (10 per cent) comprising the most popular children's titles.

The number of books included in each year, on which the percentages in this report are based, are as follows:

- Adult fiction 450
- Adult non-fiction 450
- Children's 100

Adult fiction has been sub-divided into seven genres, and the number of titles included in each is as follows:

- Crime and thriller 200
- General and literary fiction 135
- Historical fiction 30
- Horror 2
- Poetry and plays 8
- Saga and romance 65
- Science fiction and fantasy 10

The methodology for searching was broadly the same in both years, and is described in detail in Appendix A. Books were considered to be accessible only if they were found to be available in all three formats of unabridged audio, braille and large print. Commercial and charitable provision was identified separately, although, as requested by RNIB, priority was given to commercial provision. The aim was to identify one edition of each title in large print, audio and braille formats, where available; in practice the format of the databases used, and their search interfaces, were such that multiple editions were often identified. Where this was the case, all editions identified were recorded. However, the researchers did not undertake a comprehensive search for all possible editions for each accessible format of each title; once one had been found no further sources were searched for that format.

The research on the 2009 title list was undertaken during August and September 2010. The research on the 2010 title list was undertaken during June and July 2011. By this time, technological developments in eBook readers and software had led to improved accessibility, with

Apple iBooks being regarded as fully accessible, while eBooks for the Kindle were included as being accessible in large print. Note also that alternative formats of a title may not be produced at initial publication. As a result, the timing of the data collection stages of the research may have a small impact on the comparison between the results for 2009 and 2010, as a longer time had elapsed between the end of the year in question and the data collection period for the 2009 list than for the 2010 list, giving more opportunity for alternative formats of titles in the 2009 list to be produced.

2 Summary of key results

- In total, 147 (15 per cent) of the 2010 'Top 1,000' titles are available in all three preferred formats of human speech (ie read by human voice) audio, hard copy braille and hard copy large print. This compares to 125 titles (13 per cent) in 2009.
- An additional 397 titles (40 per cent) are available as accessible eBooks, enabling readers to use synthetic speech audio, electronic braille and/or electronic large print, and bringing the total number of accessible titles to 544 (54 per cent).
- Looking at each traditional format individually, 477 titles (48 per cent) are available in unabridged human speech audio, 278 (28 per cent) in hard copy braille, and 406 (41 per cent) in hard copy large print formats. There are overlaps between the titles accessible in each format.
- In electronic formats, 446 titles (45 per cent) are available as fully accessible eBooks (enabling readers to use all three of synthetic speech audio, electronic braille and electronic large print). A further 263 titles (26 per cent) are available in electronic large print only. There are overlaps in the titles available in traditional and electronic formats.
- Overall, 196 titles, (20 per cent) of the total, were not found to be available in any accessible format. This compares to 390 titles (39 per cent) in 2009.

2.1 Braille

- Visually impaired readers were able to access a similar proportion of the top 1,000 titles of 2009 in hard copy braille last year as they can of the top 1,000 titles of 2010.
- 28 per cent of the top 1,000 titles of 2010 were available in one or more hard copy braille formats, similar to the figure of 31 per cent in 2009. Contracted braille (or Grade 2) was the more common format in both years.
- 27 per cent of the top 1,000 titles of 2010 were available for loan via RNIB or ClearVision as hard copy braille, compared to 31 per cent in 2009 (ClearVision is a UK postal lending library of mainstream children's books with added braille).

- 26 per cent of the top 1,000 titles of 2010 were available for purchase via RNIB as hard copy braille, compared to 29 per cent in 2009.
- 39 per cent of Adult fiction titles were available in hard copy braille in 2010 (n=450) compared to 17 per cent of Adult non-fiction (n=450) and 27 per cent of Children's titles (n=100).
- By genre, 53 per cent of General and literary fiction titles were available in hard copy braille in 2010 (n=135), compared to 12 per cent of Saga and romance titles (n=65).
- Accessible eBooks have a significant impact on the availability of titles in braille formats, increasing the total percentage of titles accessible in braille formats to 58 per cent.

2.2 Large print

- Visually impaired readers are able to access more of the top 1,000 titles of 2010 in hard copy large print than they could of the top 1,000 titles of 2009 last year.
- 41 per cent of the top 1,000 titles were available in hard copy large print in 2010. This is significantly more than the figure of 32 per cent available in hard copy large print in 2009.
- Most large print provision is from commercial providers – just 7 per cent of the 406 titles available in hard copy large print were only available from charitable sources in 2010, compared to 9 per cent in 2009 (n=324).
- Almost two-thirds of Adult fiction titles (66 per cent, n=450) were available in hard copy large print editions, compared to 17 per cent of Adult non-fiction titles (n=450), and 35 per cent of Children's titles (n=100) in 2010.
- eBooks which are accessible in large print in 2010 have made a significant impact. Including large print accessible eBooks increases the total percentage of titles available to 76 per cent.

2.3 Audio

- The provision of human speech audio has remained stable, with visually impaired readers able to access the same proportion of the top 1,000 titles of 2009 in human speech unabridged audio formats last year as they can of the top 1,000 titles of 2010.

- 48 per cent of the top 1,000 titles of 2010 were available in one or more unabridged human speech audio formats, unchanged from 2009, with over 75 per cent from commercial providers, a similar proportion to 2009.
- CDs, available for 27 per cent of the top 1,000 titles, were more available than downloadable audio files, available for 13 per cent.
- The proportion of titles available as downloadable audio files in 2010 (13 per cent) has fallen significantly from 2009, when 27 per cent of titles were available in this format.
- DAISY talking books were available for a total of 23 per cent of the top 1,000 titles, unchanged from 2009.
- 24 per cent of unabridged audio titles were available only as DAISY talking books (n=477), compared to 21 per cent (n=480) in 2009.
- 27 per cent of Adult non-fiction titles were available in unabridged human speech audio formats (n=450), compared to 45 per cent of Children's titles (n=100), and 69 per cent of Adult fiction titles (n=450) in 2010.
- Availability varied by genre, with 78 per cent of General and literary fiction titles available in unabridged audio formats (n=135), compared to 43 per cent of Saga and romance (n=65) in 2010.
- Synthetic speech audio, from accessible eBooks, increases the levels of unabridged audio availability in 2010 significantly, to a total of 69 per cent overall.

2.4 Accessible eBooks

To qualify as being accessible for synthetic speech audio and electronic large print users, an eBook must be capable of being read in audio or large print without additional access technology and without sighted assistance. To qualify as being accessible for electronic braille users, an eBook must be capable of being output as electronic braille with the addition of an electronic braille display, but without sighted assistance.

In 2010, Apple iBooks via Apple iOS devices met all these criteria, while Kindle eBooks met the criteria for large print only. No eBooks met any of the criteria in 2009.

- Overall, 45 per cent of the top 1,000 titles of 2010 were available as accessible eBooks.
- A further 26 per cent of titles were available as eBooks accessible in electronic large print.
- 37 per cent of the top 1,000 titles of 2010 were fully accessible only as Apple iBooks – ie they were not available in all three formats of hard copy braille, human speech audio and hard copy large print (although some were available in one or two of those formats).
- 62 per cent of Adult fiction, and 31 per cent of Adult non-fiction titles were available as accessible eBooks in 2010 (n=450). 27 per cent of Children's titles were available as accessible eBooks (n=100).

3 Detailed results

Of 1,000 titles selected as most popular books in 2010, 147 titles, (15 per cent of the total), were available in all three formats of hard copy large print, unabridged human speech audio, and hard copy braille, compared to 125 (13 per cent) in 2009. When accessible eBooks are included, the availability of accessible formats triples through the addition of electronic braille, electronic large print and synthetic speech audio, with 544 of the top 1,000 titles of 2010 found to be accessible, (54 per cent of the total.)

In 2010, 196 titles (20 per cent of the total) could not be found in any accessible format, including accessible eBooks. Again, there is an improvement over the position in 2009, when almost double that figure, ie 390 titles (39 per cent of the total) could not be found in any accessible format. This is caused in part by the availability of accessible eBooks in 2010, and in part by the increased availability of hard copy large print titles. In 2010, 117 titles, 12 per cent of the total, were not available in any traditional alternative format, but were available as accessible eBooks.

Table 3a gives details of the numbers of titles which were found to be available in each combination of braille, unabridged audio and large print for 2010 without eBooks (for comparison with 2009), and including eBooks, showing the effect of accessible electronic formats. 2009 figures are also given.

Table 3a Number of titles available in each combination of formats

| | Excluding eBooks | Including eBooks | 2009 results |
|-------------------------|------------------|------------------|--------------|
| Braille only | 32 | 11 | 38 |
| Audio only | 115 | 24 | 120 |
| Large print only | 91 | 91 | 70 |
| Braille and Audio | 73 | 12 | 128 |
| Braille and Large print | 26 | 11 | 22 |
| Audio and Large print | 142 | 111 | 107 |
| All three formats | 147 | 544 | 125 |
| None | 374 | 196 | 390 |
| Total titles | 1,000 | 1,000 | 1,000 |

Note that the 2009 results do not include eBooks, which were not accessible at the time.

The sections which follow give detailed results for each of the main accessible formats of braille, large print and audio. Accessible eBooks are considered separately, so that the availability of other formats in 2010 can be compared with the results for 2009, when accessible eBooks were not available.

3.1 Hard copy braille editions

All titles were searched on the RNIB catalogue of books in alternative formats available from RNIB for loan or sale. A list of the children's titles not available from RNIB was sent to ClearVision, a UK postal lending library of mainstream children's books with added braille, who checked their catalogue on our behalf. There was considerable overlap, with titles often available in more than one type of braille (such as Grade 1, or uncontracted braille, generally used by those who are new to braille, and Grade 2, or contracted braille, which is more popular) or from more than one source.

Overall 278 titles, 28 per cent of the total, were available in one or more types of hard copy braille in 2010. This compares with 313 titles, 31 per cent of the total, in 2009.

Considering the figures for the various categories individually:

- 64 of the top 1,000 titles of 2010 were available from RNIB for loan (compared to 55 in 2009), and 74 available for sale (compared to 50 in 2009), in uncontracted (Grade 1) braille.
- 263 titles were available for loan from RNIB in contracted (Grade 2) braille (compared to 279 in 2009), with 251 for sale (compared to 299 in 2009).
- A further 9 titles (not available from RNIB) were available from ClearVision for loan, unchanged from 2009.
- Overall, a total of 272 titles were available for loan (compared to 311 in 2009), and 257 titles were available for sale (compared to 287 in 2009).

Table 3.1a shows that, in 2010, 174 Adult fiction books (39 per cent of this genre, n=450) were available in one or more braille editions, compared to 77 Adult non-fiction titles (17 per cent of the genre, n=450) and 27 Children's titles (27 per cent, n=100). In 2009, 200 Adult fiction books (44 per cent of the genre, n=450) were available in one or more braille editions, compared to 87 Adult non-fiction titles (19 per cent of this genre, n=450) and 26 Children's titles (26 per cent, n=100).

Availability of Adult fiction varied by genre. In 2010, this ranged from 57 per cent of Historical fiction titles available in hard copy braille (n=30), compared to just 12 per cent of Saga and romance (n=65). Smaller genres fared rather better, with both Horror titles being available, and 5 out of 8 Poetry and plays. In 2009, the pattern was a little different, with a range of availability from 66 per cent of General and literary fiction (n=135) to just 14 per cent of Saga and romance (n=65). Table 3.1b gives details of the numbers of titles in each genre and their availability in hard copy braille in both years.

Table 3.1a Availability of hard copy braille editions

| Genre | Total titles | 2010 available | | 2009 available | |
|---------------------|--------------|----------------|------------|----------------|------------|
| | | Count | % | Count | % |
| Total Adult fiction | 450 | 174 | 39% | 200 | 44% |
| Adult non-fiction | 450 | 77 | 17% | 87 | 19% |
| Children's | 100 | 27 | 27% | 26 | 26% |
| All | 1,000 | 278 | 28% | 313 | 31% |

Table 3.1b Availability of hard copy braille editions: Adult fiction genres

| Genre | Total titles | 2010 available | | 2009 available | |
|------------------------------|--------------|----------------|------------|----------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 67 | 34% | 82 | 41% |
| General and literary fiction | 135 | 72 | 53% | 89 | 66% |
| Historical fiction | 30 | 17 | 57% | 12 | 40% |
| Horror | 2 | 2 | 100% | 1 | 50% |
| Poetry and plays | 8 | 5 | 63% | 4 | 50% |
| Saga and romance | 65 | 8 | 12% | 9 | 14% |
| Science fiction and fantasy | 10 | 3 | 30% | 3 | 30% |
| All | 450 | 174 | 39% | 200 | 44% |

3.1.1 The impact of eBooks on braille availability

As noted above, eBooks available for Apple iOS devices are accessible in electronic braille. A total of 446 titles (45 per cent of the top 1,000 of 2010) were available in this format, which has a significant impact on the overall availability of braille formats. Overall, the number of titles accessible to braille readers more than doubles, to 578, 58 per cent of the top 1,000.

Table 3.1c shows that the greatest impact is in Adult non-fiction, where electronic braille makes 108 titles accessible which are not available in hard copy braille – almost one quarter of the titles in this genre (24 per cent, n=450).

Table 3.1c Availability of all braille editions, 2010

| Genre | Total titles | Hard copy only | | Including electronic | |
|---------------------|--------------|----------------|------------|----------------------|------------|
| | | Count | % | Count | % |
| Total Adult fiction | 450 | 174 | 39% | 352 | 78% |
| Adult non-fiction | 450 | 77 | 17% | 185 | 41% |
| Children's | 100 | 27 | 27% | 41 | 41% |
| All | 1,000 | 278 | 28% | 578 | 58% |

Table 3.1d provides the breakdown for the detailed Adult fiction genres, and shows that electronic braille has no effect on the availability of Horror, nor Poetry and plays. In all other genres, braille readers can access significantly more titles as a consequence of electronic braille.

Table 3.1d Availability of all braille editions: Adult fiction genres, 2010

| Genre | Total titles | Hard copy only | | Including electronic | |
|------------------------------|--------------|----------------|------------|----------------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 67 | 34% | 153 | 77% |
| General and literary fiction | 135 | 72 | 53% | 111 | 82% |
| Historical fiction | 30 | 17 | 57% | 27 | 90% |
| Horror | 2 | 2 | 100% | 2 | 100% |
| Poetry and plays | 8 | 5 | 63% | 5 | 63% |
| Saga and romance | 65 | 8 | 12% | 44 | 68% |
| Science fiction and fantasy | 10 | 3 | 30% | 10 | 100% |
| All | 450 | 174 | 39% | 352 | 78% |

3.2 Hard copy large print editions

Nielsen BookData was the initial source for identifying commercial hard copy large print editions. This was supplemented by searches of the British National Bibliography (BNB), which added considerably to the total, and, in 2009 only, the Public Lending Right (PLR) LEWIS database. This database contains details of UK public library loans, collected from PLR's sample of libraries, and large print editions can be identified only where they are published by a specialist imprint listed as such. This source only uncovered two titles which had not been found elsewhere in 2009, and was not included in the research for 2010.

Charitable provision was identified through the RNIB catalogue. This was generally indicated as being "Print various sizes at NBCS Custom Eyes Books". These are titles available to purchase from the National Blind Children's Society (NBCS), who customise them as required; both adult and children's titles were available in this format.

There was little duplication between the sources when searching for large print editions, as the process was more hierarchical. Overall, 406 out of the top 1,000 titles were available as hard copy large print from at least one source in 2010, compared to 324 in 2009. This is a significant improvement, and results from an increase in commercial provision.

In total, 376 hard copy large print titles were available from commercial sources in 2010 (294 in 2009), with 223 being found in the Nielsen BookData database (202 in 2009), and a further 153 in the BNB (92 in 2009). Just 41 of the top 1,000 titles of 2010 were available in hard copy large print in the RNIB catalogue (46 in 2009); of these, 30 were not available from commercial sources (28 in 2009).

Table 3.2a shows that there has been a significant increase in the availability of Adult fiction titles in hard copy large print, with readers able to access 296 Adult fiction books (66 per cent, n=450) in large print in 2010, compared to 234 (52 per cent, n=450) in 2009. There has been a smaller increase in the availability of Adult non-fiction titles, from 56 out of 450 titles in 2009 (12 per cent) to 75 out of 450 titles in 2010 (17 per cent). Availability of Children's titles in large print has changed little from 34 in 2009 (34 per cent, n=100) to 35 in 2010 (35 per cent, n=100).

Table 3.2a Availability of hard copy large print editions

| Genre | Total titles | 2010 available | | 2009 available | |
|---------------------|--------------|----------------|------------|----------------|------------|
| | | Count | % | Count | % |
| Total Adult Fiction | 450 | 296 | 66% | 234 | 52% |
| Adult Non-fiction | 450 | 75 | 17% | 56 | 12% |
| Children's | 100 | 35 | 35% | 34 | 34% |
| All | 1,000 | 406 | 41% | 324 | 32% |

Availability for the different Adult fiction genres varied, as detailed in table 3.2b. In all genres, except Horror, which comprises only 2 titles, and Historical fiction, where there was little change, readers could access more of the top titles in large print formats in 2010 than in 2009.

Table 3.2b Availability of hard copy large print editions: Adult fiction genres

| Genre | Total titles | 2010 available | | 2009 available | |
|------------------------------|--------------|----------------|------------|----------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 136 | 68% | 96 | 48% |
| General and literary fiction | 135 | 92 | 68% | 74 | 55% |
| Historical fiction | 30 | 18 | 60% | 20 | 66% |
| Horror | 2 | 0 | 0% | 1 | 50% |
| Poetry and plays | 8 | 2 | 25% | 1 | 13% |
| Saga and romance | 65 | 45 | 69% | 42 | 65% |
| Science fiction and fantasy | 10 | 3 | 30% | 0 | 0% |
| All | 450 | 296 | 66% | 234 | 52% |

3.2.1 The impact of eBooks on large print availability

Electronic large print was available from two sources in 2010, eBooks for the Apple iPad, and those available in the Amazon Kindle book store. All titles not found as accessible eBooks in the Apple iBook store were searched for on the Kindle book store.

A total of 446 titles were available as electronic large print as eBooks in Apple iBook store, with a further 263 titles available as electronic large print as eBooks in the Kindle store, giving a total of 709 electronic large print titles overall (71 per cent of the top 1,000 titles). As for electronic braille discussed above, this has a significant impact on the overall availability of large print formats. Overall, readers can access an additional 35 per cent of the top 1,000 titles of 2010 in electronic large print, with the total number of titles available in large print increasing to 757, 76 per cent of the total.

Table 3.2c shows that, including accessible eBooks, almost all the Adult fiction books in the top 1,000 titles of 2010 are available in large print (437, 97 per cent, n=450). The greatest increase, however, is again in Adult non-fiction, where electronic large print means that readers can access 195 titles which are not available in hard copy large print – 43 per cent of the titles in this genre (n=450).

Table 3.2c Availability of all large print editions, 2010

| Genre | Total titles | Hard copy only | | Including electronic | |
|---------------------|--------------|----------------|------------|----------------------|------------|
| | | Count | % | Count | % |
| Total Adult fiction | 450 | 296 | 66% | 437 | 97% |
| Adult non-fiction | 450 | 75 | 17% | 270 | 60% |
| Children's | 100 | 35 | 35% | 50 | 50% |
| All | 1,000 | 406 | 41% | 757 | 76% |

Table 3.2d provides a detailed breakdown of the Adult fiction genres, and shows that electronic large print has increased the accessibility of all genres in large print. Apart from Poetry and plays, where 38 per cent of titles are available including eBooks, visually impaired readers can access 95 per cent or more of all titles in large print when eBooks are included.

Table 3.2d Availability of all large print editions: Adult fiction genres, 2010

| Genre | Total titles | Hard copy only | | Including electronic | |
|------------------------------|--------------|----------------|------------|----------------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 136 | 68% | 197 | 99% |
| General and literary fiction | 135 | 92 | 68% | 133 | 99% |
| Historical fiction | 30 | 18 | 60% | 30 | 100% |
| Horror | 2 | 0 | 0% | 2 | 100% |
| Poetry and plays | 8 | 2 | 25% | 3 | 38% |
| Saga and romance | 65 | 45 | 69% | 62 | 95% |
| Science fiction and fantasy | 10 | 3 | 30% | 10 | 100% |
| All | 450 | 296 | 66% | 437 | 97% |

3.2.2 Giant print

In the course of the research, we discovered giant print books in 24 pt. bold type, available for loan from the RNIB National Library Service. Owing to the specialist nature of this format in comparison to large print, it has not been included as contributing to the totals for large print, nor, therefore, to the overall accessibility of the top 1,000 titles. However, availability has been noted below.

In total, 229 titles (23 per cent of the top 1,000) were available in giant print in 2010, compared to 178 (18 per cent of the top 1,000) in 2009. 71 of these titles (31 per cent, n=229) were not available in any other enlarged print hard copy format in 2010, compared to 92 in 2009 (52 per cent, n=178). If accessible eBooks are included for 2010, however, the number of titles available in giant print but no other large print format is reduced to 10, just 1 per cent of the top 1,000 titles. Only one title available in giant print was not available in any other accessible format in 2010, compared to 3 in 2009.

Table 3.2e shows that 153 Adult fiction titles (34 per cent, n=450) were available in giant print in 2010, compared to 120 (27 per cent, n=450) in 2009. 47 Adult non-fiction titles (10 per cent, n=450) were available in 2010 compared to 25 (6 per cent, n=450) in 2009, as were 29 Children's titles (29 per cent, n=100) in 2010 compared to 33 (33 per cent, n=100) in 2009.

Table 3.2e Availability of giant print editions

| Genre | Total titles | 2010 available | | 2009 available | |
|---------------------|--------------|----------------|------------|----------------|------------|
| | | Count | % | Count | % |
| Total adult fiction | 450 | 153 | 34% | 120 | 27% |
| Adult non-fiction | 450 | 47 | 10% | 25 | 6% |
| Children's | 100 | 29 | 29% | 33 | 33% |
| All | 1,000 | 229 | 23% | 178 | 18% |

Table 3.2f gives the detailed figures for the seven adult fiction genres. Availability in giant print varies, but all genres show improved availability from 2009 to 2010, except Poetry and plays, where there was no change.

Table 3.2f Availability of giant print editions: Adult fiction genres

| Genre | Total titles | 2010 available | | 2009 available | |
|------------------------------|--------------|----------------|------------|----------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 62 | 31% | 51 | 26% |
| General and literary fiction | 135 | 68 | 50% | 56 | 42% |
| Historical fiction | 30 | 10 | 33% | 5 | 17% |
| Horror | 2 | 2 | 100% | 1 | 50% |
| Poetry and plays | 8 | 2 | 25% | 2 | 25% |
| Saga and romance | 65 | 6 | 9% | 2 | 3% |
| Science fiction and fantasy | 10 | 3 | 30% | 3 | 30% |
| All | 450 | 153 | 34% | 120 | 27% |

3.3 Human speech audio editions

Nielsen BookData and Audible.co.uk were searched for commercially available unabridged audio editions, which were recorded as being available on CD, on cassette or as downloadable files. In 2010, CDs were found available as traditional CDs or with MP3 format files, which take up less disk space, and can be played on a wider variety of players; these were not noted separately. Although downloadable unabridged audio books qualify as accessible formats, it must be noted that the process of downloading audio books may not always be fully accessible to blind and partially sighted people, for example, if the download website is not designed in an accessible way or is inaccessible to assistive technology such as screen readers.

It was not always clear whether or not recordings were unabridged, even when the number of discs or playing time was given. If there was any doubt, the title was not considered 'available' from this source. A total of 89 of the top 1,000 titles of 2010, and 98 of the top 1,000 titles of 2009, were discounted due to insufficient data covering abridgement, of which 37 titles in 2010, and 27 in 2009, were available as DAISY talking books.

In detail, the numbers of the top 1,000 titles found in the various unabridged human speech audio formats were:

- 272 titles available commercially on CD (274 in 2009)
- 128 titles available to download commercially (266 in 2009)
- 151 titles available commercially on cassette (85 in 2009)
- 234 titles available from RNIB as DAISY talking books (243 in 2009)

There was considerable duplication, with many titles being available in more than one format. Overall, 361 titles from the top 1,000 (36 per cent) were available in one or more formats commercially, compared to 381 (38 per cent) in 2009. A further 116 titles (12 per cent) were available from RNIB as DAISY talking books, compared to 99 (10 per cent) in 2009. Overall, 477 of the top 1,000 titles of 2010 (48 per cent) were available as unabridged human speech audio recordings, the same proportion as in 2009 (480 titles, 48 per cent).

Availability again varied by genre, with little change from 2009 in any genre. Table 3.3a shows that, while 69 per cent of adult fiction titles (n=450) were available in human speech audio editions in both years, just 27 per cent of adult non-fiction titles were available in 2010, and 27 per cent in 2009 (n=450).

Table 3.3a Availability of human speech audio editions

| Genre | Total titles | 2010 available | | 2009 available | |
|---------------------|--------------|----------------|------------|----------------|------------|
| | | Count | % | Count | % |
| Total adult fiction | 450 | 309 | 69% | 312 | 69% |
| Adult non-fiction | 450 | 123 | 27% | 132 | 29% |
| Children's | 100 | 45 | 45% | 36 | 36% |
| All | 1,000 | 477 | 48% | 480 | 48% |

Details for the adult fiction genres are shown in table 3.3b. Both of the Horror and nine out of ten Science fiction and fantasy titles were found in audio formats in 2010; in 2009 all titles in both these genres were available. In the larger genres, availability in 2010 ranged from 78 per

cent of General and literary fiction (n=135) to 43 per cent of Saga and romance (n=65).

Table 3.3b Availability of human speech audio editions: Adult fiction genres

| Genre | Total titles | 2010 available | | 2009 available | |
|------------------------------|--------------|----------------|------------|----------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 143 | 72% | 131 | 66% |
| General and literary fiction | 135 | 105 | 78% | 106 | 79% |
| Historical fiction | 30 | 20 | 67% | 24 | 80% |
| Horror | 2 | 2 | 100% | 2 | 100% |
| Poetry and plays | 8 | 2 | 25% | 3 | 38% |
| Saga and romance | 65 | 28 | 43% | 36 | 55% |
| Science fiction and fantasy | 10 | 9 | 90% | 10 | 100% |
| All | 450 | 309 | 69% | 312 | 69% |

3.3.1 The impact of eBooks on audio availability

As noted above, eBooks available for Apple iOS devices are accessible in synthetic speech audio. A total of 446 titles (45 per cent of the total) were available in this format, which has a significant impact on the overall availability of audio formats. Overall, the number of titles which can be accessed by visually impaired readers using audio increases by almost half as many again, to 691, 69 per cent of the total.

Table 3.3c shows that the greatest impact for this format is in adult fiction, where synthetic speech audio makes 112 titles accessible which are not available in human speech audio, and brings the total proportion of the titles in this genre which can be accessed in unabridged audio formats to 94 per cent (n=450).

Table 3.3c Availability of all audio editions, 2010

| Genre | Total titles | Human speech only | | Including synthetic | |
|---------------------|--------------|-------------------|------------|---------------------|------------|
| | | Count | % | Count | % |
| Total adult fiction | 450 | 309 | 69% | 421 | 94% |
| Adult non-fiction | 450 | 123 | 27% | 216 | 48% |
| Children's | 100 | 45 | 45% | 54 | 54% |
| All | 1,000 | 477 | 48% | 691 | 69% |

Table 3.3d provides the breakdown for the detailed adult fiction genres, and shows that synthetic speech audio has no effect on the availability of Horror, but that in all other genres, visually impaired readers can access significantly more titles using synthetic speech audio than using only human speech audio formats.

Table 3.3d Availability of all audio editions: Adult fiction genres, 2010

| Genre | Total titles | Human speech only | | Including synthetic | |
|------------------------------|--------------|-------------------|------------|---------------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 143 | 72% | 190 | 95% |
| General and literary fiction | 135 | 105 | 78% | 130 | 96% |
| Historical fiction | 30 | 20 | 67% | 28 | 93% |
| Horror | 2 | 2 | 100% | 2 | 100% |
| Poetry and plays | 8 | 2 | 25% | 3 | 38% |
| Saga and romance | 65 | 28 | 43% | 58 | 89% |
| Science fiction and fantasy | 10 | 9 | 90% | 10 | 100% |
| All | 450 | 309 | 69% | 421 | 94% |

3.4 Accessible eBooks

An accessible eBook should be something the end user can use without sighted assistance. This means that in order to qualify as being accessible for audio and large print users an eBook must be capable of being read using synthetic speech audio or electronic large print without additional access technology and without any sighted assistance, because both the large print functions and the synthetic speech audio rendering can happen in the eBook reader device. To qualify as being accessible for braille users an eBook must be capable of being output as electronic braille through the addition of an electronic braille display but again without sighted assistance.

In 2010, eBooks available for Apple iOS devices were considered fully accessible, as they could be read in electronic braille or large print, or converted to synthetic speech audio, without sighted assistance. eBooks available via Amazon Kindle were considered accessible for large print only. This was not the case in 2009 when no eBooks were deemed accessible and were therefore not included in the research.

These editions have made a considerable impact on the proportion of the top 1,000 books of 2010 which visually impaired readers can access. Overall, 446 of the top 1,000 titles were available as Apple iBooks, 45 per cent of the total. 370 titles, 37 per cent of the top 1,000 became fully accessible because they were available as Apple iBooks. This illustrates the significant contribution accessible eBooks make to accessible format provision, because out of these 370, none were available in all three traditional accessible formats of human speech audio, hard copy braille or hard copy large print. For 117 of these titles, 12 per cent of the top 1,000, no traditional accessible format editions were found.

In addition to the Apple iBooks, a further 263 titles in total (26 per cent of the top 1,000) were available as eBooks via Amazon Kindle (we did not look for Kindle eBook editions for titles where an Apple iBook had been found). As noted above, Kindle eBooks are accessible only in large print, so that the total number of electronic large print titles available was 709, 71 per cent of the top 1,000 titles of 2010.

Table 3.4a shows that 280 Adult fiction titles (62 per cent, n=450) were available as fully accessible eBooks (Apple iBooks), compared to 139 Adult non-fiction titles (31 per cent, n=450), and 27 Children's titles (27 per cent, n=100). Significantly more adult titles were available in electronic large print, with 92 per cent of Adult fiction and 58 per cent of Adult non-fiction titles available in total (n=450). 34 per cent of Children's titles were found to be available in electronic large print.

Table 3.4a Availability of accessible eBook editions, 2010

| Genre | Total titles | Fully accessible | | Electronic large print | |
|---------------------|--------------|------------------|------------|------------------------|------------|
| | | Count | % | Count | % |
| Total Adult fiction | 450 | 280 | 62% | 415 | 92% |
| Adult non-fiction | 450 | 139 | 31% | 260 | 58% |
| Children's | 100 | 27 | 27% | 34 | 34% |
| All | 1,000 | 446 | 45% | 709 | 71% |

Within the Adult fiction genres, table 3.4b shows that Poetry and plays are not well served by accessible eBooks, with only 1 out of 8 titles (13 per cent) fully accessible, and only 2 (25 per cent) available in electronic large print. In the larger genres, availability of fully accessible titles ranges from 67 per cent of Historical fiction to 59 per cent of General literary fiction. Availability of electronic large print is significantly higher for all genres.

Table 3.4b Availability of accessible eBook editions: Adult fiction genres, 2010

| Genre | Total titles | Fully accessible | | Electronic large print | |
|------------------------------|--------------|------------------|------------|------------------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 127 | 64% | 188 | 94% |
| General and literary fiction | 135 | 80 | 59% | 128 | 95% |
| Historical fiction | 30 | 20 | 67% | 26 | 87% |
| Horror | 2 | 1 | 50% | 2 | 100% |
| Poetry and plays | 8 | 1 | 13% | 2 | 25% |
| Saga and romance | 65 | 42 | 65% | 59 | 91% |
| Science fiction and fantasy | 10 | 9 | 90% | 10 | 100% |
| All | 450 | 280 | 62% | 415 | 92% |

3.5 Accessible titles

Titles were considered to be fully accessible if they were available in all three formats of unabridged audio, braille and large print, from any source, including eBooks. Overall, 147 of the top 1,000 titles of 2010, 15 per cent of the total, were available in the traditional versions of all three formats, human speech audio, hard copy braille and hard copy large print, compared to 125 (13 per cent) in 2009.

When accessible eBooks are included, 544 of the top 1,000 titles of 2010 were found to meet RNIB's criteria for accessibility, 54 per cent of the total, a large increase compared to the 13 per cent found in 2009.

3.5.1 Accessibility by genre

Accessibility in the traditional formats of hard copy braille, human speech audio and hard copy large print by genre is detailed in tables 3.5a and 3.5b. Overall, visually impaired readers can access more of the top 1,000 titles of 2010 in all three formats than they could last year, with the greatest increase in availability being found in Adult fiction.

Table 3.5a Accessible titles in traditional formats

| Genre | Total titles | 2010 accessible | | 2009 accessible | |
|---------------------|--------------|-----------------|------------|-----------------|------------|
| | | Count | % | Count | % |
| Total Adult fiction | 450 | 104 | 23% | 86 | 19% |
| Adult non-fiction | 450 | 23 | 5% | 21 | 5% |
| Children's | 100 | 20 | 20% | 18 | 18% |
| All | 1,000 | 147 | 15% | 125 | 13% |

Table 3.5b Accessible titles in traditional formats: Adult fiction genres

| Genre | Total titles | 2010 accessible | | 2009 accessible | |
|------------------------------|--------------|-----------------|------------|-----------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 44 | 22% | 35 | 18% |
| General and literary fiction | 135 | 44 | 33% | 41 | 30% |
| Historical fiction | 30 | 11 | 37% | 6 | 20% |
| Horror | 2 | 0 | 0% | 0 | 0% |
| Poetry and plays | 8 | 0 | 0% | 0 | 0% |
| Saga and romance | 65 | 4 | 6% | 4 | 6% |
| Science fiction and fantasy | 10 | 1 | 10% | 0 | 0% |
| All | 450 | 104 | 23% | 86 | 19% |

When accessible eBooks are included, the impact is considerable in all genres. Table 3.5c shows that this is most evident in increasing the availability of accessible formats for Adult non-fiction, where the proportion of accessible titles has increased from 5 per cent in traditional formats to 36 per cent including eBooks (n=450). Within the Adult fiction genres, table 3.5d shows that there is a significant increase in accessibility in all genres, although Poetry and plays is still relatively poorly served, with only 1 title (out of 8) accessible, including eBooks.

Table 3.5c Accessible titles, 2010

| Genre | Total titles | Traditional formats | | Including eBooks | |
|---------------------|--------------|---------------------|------------|------------------|------------|
| | | Count | % | Count | % |
| Total Adult fiction | 450 | 104 | 23% | 344 | 76% |
| Adult non-fiction | 450 | 23 | 5% | 164 | 36% |
| Children's | 100 | 20 | 20% | 36 | 36% |
| All | 1,000 | 147 | 15% | 544 | 54% |

Table 3.5d Accessible titles: Adult fiction genres, 2010

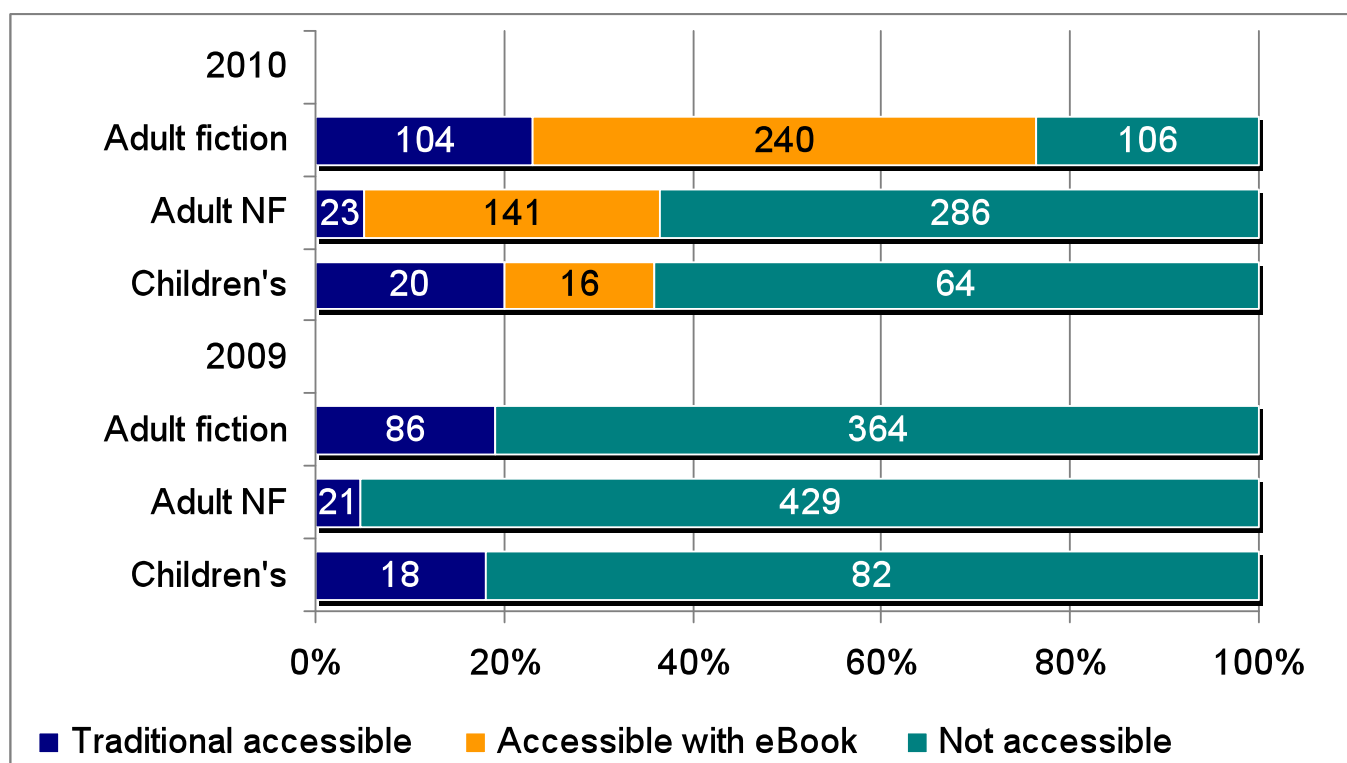
| Genre | Total titles | Traditional formats | | Including eBooks | |
|------------------------------|--------------|---------------------|------------|------------------|------------|
| | | Count | % | Count | % |
| Crime and thriller | 200 | 44 | 22% | 150 | 75% |
| General and literary fiction | 135 | 44 | 33% | 110 | 81% |
| Historical fiction | 30 | 11 | 37% | 27 | 90% |
| Horror | 2 | 0 | 0% | 2 | 100% |
| Poetry and plays | 8 | 0 | 0% | 1 | 13% |
| Saga and romance | 65 | 4 | 6% | 44 | 68% |
| Science fiction and fantasy | 10 | 1 | 10% | 10 | 100% |
| All | 450 | 104 | 23% | 344 | 76% |

Since many of the Adult fiction genres included very small numbers of titles, detailed statistical analysis of accessibility by genre using the Chi-square test was carried out on the three broad categories of Adult fiction, Adult non-fiction and Children's. For 2009, this confirmed that Adult non-fiction was significantly less likely than the other categories to be accessible ($p < 0.001$), with just 5 per cent of titles available in all three formats ($n=450$). Availability of Children's titles, at 18 per cent ($n=100$),

was not significantly different from that for Adult fiction, at 19 per cent (n=450).

Without accessible eBooks, the differences between genres in 2010 are the same as in 2009. However, the inclusion of accessible eBooks for 2010 means that the picture has changed, with Adult fiction significantly more likely than other genres to be accessible ($p < 0.001$), with no difference between Adult non-fiction and Children's. This is illustrated in figure 3.5a, which also gives the numbers of accessible titles in each category.

Figure 3.5a Accessibility by category



3.5.2 Accessibility by year of publication

The availability of accessible titles by year of publication was investigated. Year of publication was included in the data files provided by RNIB; it was not always clear whether the date given was in fact the year of first publication of any version of the text.

In order to have sufficient titles for valid analysis, four broad categories were defined, as detailed in table 3.5e. The data are also illustrated in figure 3.5b. Differences between year groups were investigated using

the Chi-squared test statistic. The hypothesis was that older publications might be more likely to be accessible, as there had been a longer period between publication and the date of the research for traditional alternative formats to be produced, and for demand for such formats to build. However, although there was a statistically significant difference in availability between the four groups in 2009 ($p < 0.05$), the picture was confusing, and the result did not clearly support the hypothesis that older titles were more likely to be accessible.

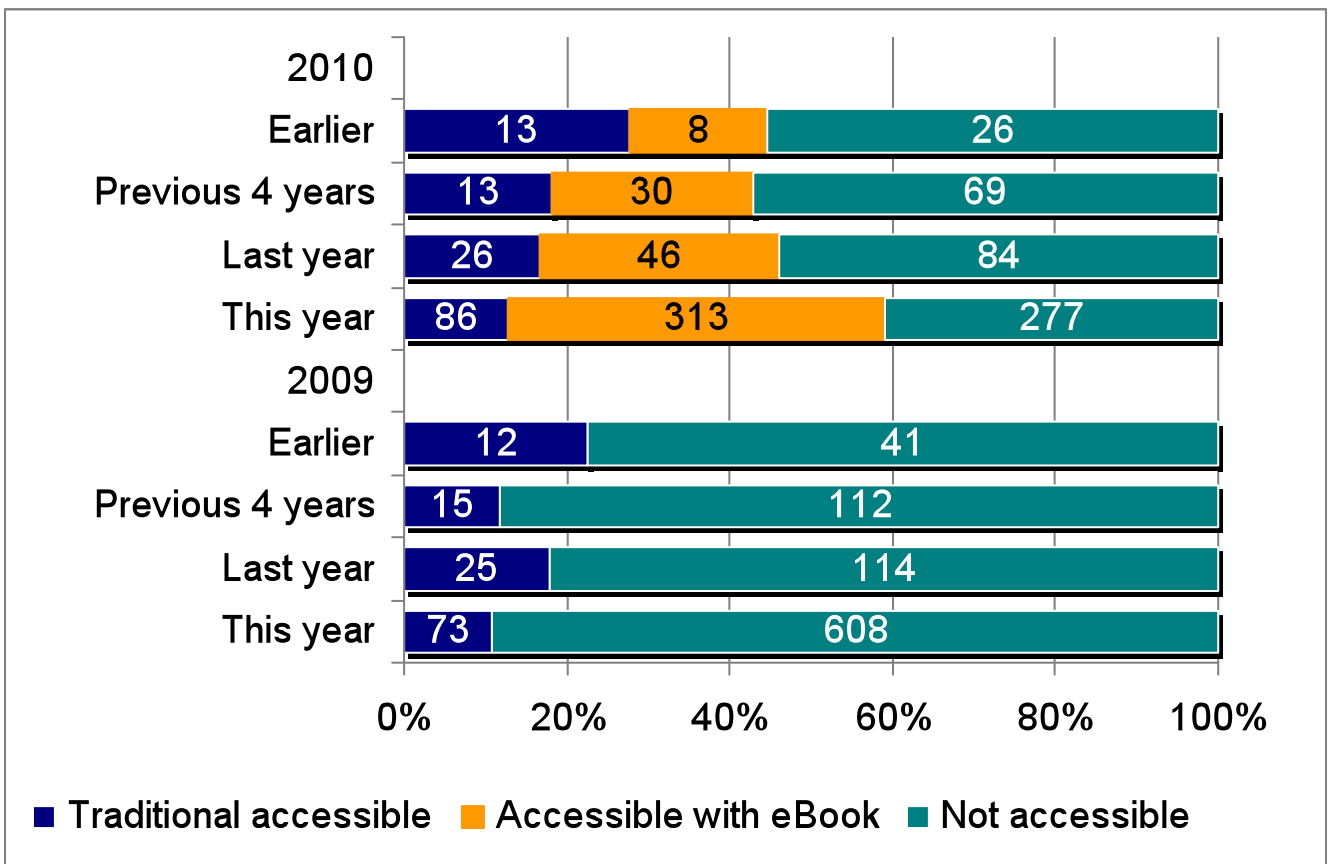
In 2010, the analysis was repeated for accessibility in traditional formats and accessibility including accessible eBooks. In both analyses, the differences between years were statistically significant. When only traditional accessible formats were considered – ie hard copy braille, human speech audio and hard copy large print – this analysis supported the hypothesis that earlier titles are more likely to be accessible than more recent ones ($p < 0.05$). However, the pattern was reversed when accessible eBooks were included, with the most recent titles being more likely to be accessible ($p < 0.001$). This is likely to be a consequence of the recent growth in the wider eBook market, and the appeal of this format to a broad cross-section of the population, whereas the market for the traditional accessible formats is more limited. eBooks are now frequently published concurrently with the first hard copy edition, so it would be expected that the most recently published titles would be more likely to have accessible eBook formats available.

Table 3.5e Accessibility by year of publication

| | Year(s) of publication | Count of titles | Number accessible | % accessible |
|-------------------|------------------------|-----------------|-----------------------------|--------------|
| Top 1,000 of 2010 | | | Including accessible eBooks | |
| Current year | 2010 | 676 | 399 | 59% |
| Previous year | 2009 | 156 | 72 | 46% |
| Previous 4 years | 2005-2008 | 121 | 52 | 43% |
| Earlier | Before 2008 | 47 | 21 | 45% |

| | Year(s) of publication | Count of titles | Number accessible | % accessible |
|-------------------|------------------------|-----------------|-----------------------------|--------------|
| Top 1,000 of 2010 | | | Excluding accessible eBooks | |
| Current year | 2010 | 676 | 86 | 13% |
| Previous year | 2009 | 156 | 26 | 17% |
| Previous 4 years | 2005-2008 | 121 | 22 | 18% |
| Earlier | Before 2008 | 47 | 13 | 28% |
| Top 1,000 of 2009 | | | | |
| Current year | 2009 | 681 | 73 | 11% |
| Previous year | 2008 | 139 | 25 | 18% |
| Previous 4 years | 2004-2007 | 127 | 15 | 12% |
| Earlier | Before 2004 | 53 | 12 | 23% |

Figure 3.5b Accessibility by year of publication



3.5.3 Trends in accessibility

313 of the titles in the top 1,000 of 2010 were also in the top 1,000 of 2009, with a further 30 titles (mostly annual publications) being present in both lists but in different editions. It is therefore of interest to consider how the accessibility of this subset of 343 titles has changed in the period between carrying out the data collection for each list. Details are given below; however it is perhaps not surprising that the percentages of titles available in each of the alternative formats considered has increased between 2009 and 2010.

Braille:

Of the 343 titles included in the top 1,000 titles in both years, 111 (32 per cent) were available in hard copy braille formats in 2009. By 2010, this had risen to 130 (38 per cent). Including electronic braille, 176 titles (51 per cent) were available in 2010.

Two titles (0.6 per cent of the total) found in hard copy braille in 2009 were not found in 2010, although one of them was available in electronic braille.

Large print:

Of the 343 titles, 106 (31 per cent) were available in hard copy large print in 2009. By 2010, this had risen to 137 (40 per cent). Including electronic large print, 223 titles (65 per cent) were available in 2010.

13 titles available in hard copy large print in 2009 were not found in this format in 2010, although 9 of them were available in electronic large print. Hard copy large print formats may, of course, continue to be available to borrow from public libraries for some time after they have gone out of print commercially.

Audio:

There was little change in the overall availability of unabridged human speech audio formats, with 15 titles (4 per cent) becoming unavailable in 2010, while 21 titles (6 per cent) were newly available. Overall, 173 titles (50 per cent of the 343 appearing in both lists) were available in 2009, compared to 179 (52 per cent) in 2010. Including synthetic speech unabridged audio formats, 215 titles (63 per cent, n=343) of those included in both lists were available in 2010. Nine of the 15 no longer

available in human speech audio were available in synthetic speech audio.

Accessible titles:

Of the 343 titles, appearing in both lists, 49 (14 per cent) were available in all three traditional formats of hard copy large print, unabridged human speech audio, and hard copy braille in 2009, compared to 76 (22 per cent) in 2010. Five titles (1 per cent of the total) had lost their accessible status, owing to the unavailability of one or more formats in 2010.

When accessible eBooks are included, however, the number of fully accessible titles in 2010 more than doubles, to 159 (46 per cent of the total). Of the five titles which lost their accessible status in traditional formats, four became accessible when accessible eBooks were included.

3.5.4 Accessibility by popularity

During the research, it became apparent that the more popular books – those nearer the top of the RNIB top 1,000 list – were more likely to have alternative format editions available. This was investigated formally using a t-test to compare the average volume figures included in the data file from RNIB.

The mean volume of accessible titles, including eBooks, in 2010, at 82,000, was significantly higher than that of the titles which were not accessible, at 54,000 ($p < 0.001$). Again, accessible eBooks have made an impact – considering only traditional accessible formats the mean volume of accessible titles was 139,000, compared to a mean of 57,000 for those which were not accessible ($p < 0.001$). In 2009, the difference in mean volume between accessible titles and those which were not accessible was even more marked, with accessible titles having a mean volume of 156,000, compared to 53,000 for titles which were not accessible ($p < 0.001$).

Because there is a very skewed distribution of volume, and an extreme range (from over one million for the most popular title in the list to under 10,000 for the least), a comparison of the distribution of accessibility in

each band of 50 titles was carried out. Details are given in table 3.5f below, illustrated in figure 3.5c following the table.

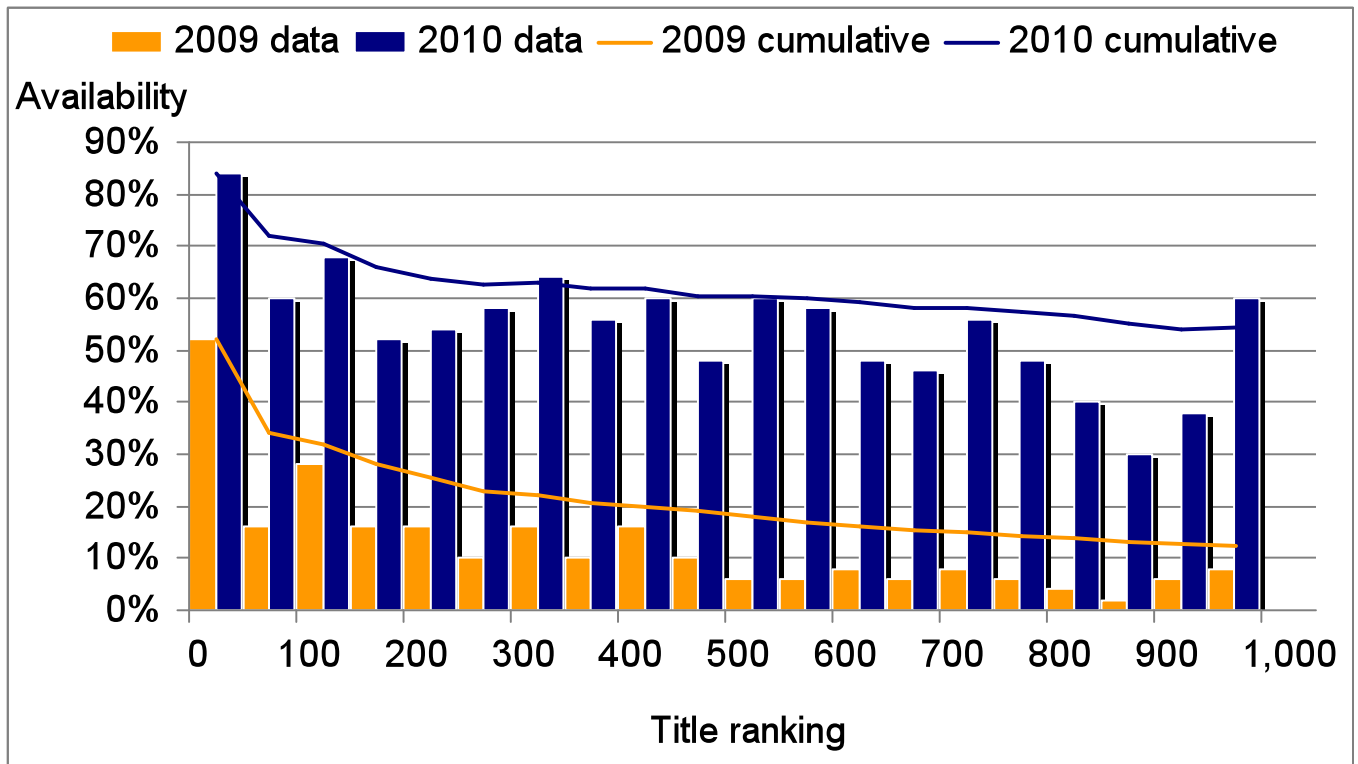
The inclusion of accessible eBooks has affected the picture between 2009 and 2010, in terms of the absolute levels of accessibility, but has had less effect on the broad pattern by volume. In 2009, it was found that 52 per cent of the top 50 titles were available in all three alternative formats, and so met the RNIB criteria for accessibility. 22 per cent of the next hundred were available, and 13 per cent of the remainder of the top 500. On average, just 6 per cent of the bottom 500 titles were available. In 2010, the differences were less marked, with 84 per cent of the top 50 titles being accessible, including accessible eBooks. 64 per cent of the next 100 were accessible, as were 56 per cent of the rest of the top 500. Almost half – 48 per cent – of the bottom 500 titles were accessible.

Table 3.5f Accessibility by popularity

| Title ranks by popularity | 2010 accessible | | | | 2009 accessible | | | |
|---------------------------------|-----------------|-----|-----------------|-----|-----------------|-----|-----------------|-----|
| | Count | % | Cumu -lative | % | Count | % | Cumu -lative | % |
| 1-50 | 42 | 84% | 42 | 84% | 26 | 52% | 26 | 52% |
| 51-100 | 30 | 60% | 72 | 72% | 8 | 16% | 34 | 34% |
| 101-150 | 34 | 68% | 106 | 71% | 14 | 28% | 48 | 32% |
| 151-200 | 26 | 52% | 132 | 66% | 8 | 16% | 56 | 28% |
| 201-250 | 27 | 54% | 159 | 64% | 8 | 16% | 64 | 26% |
| 251-300 | 29 | 58% | 188 | 63% | 5 | 10% | 69 | 23% |
| 301-350 | 32 | 64% | 220 | 63% | 8 | 16% | 77 | 22% |
| 351-400 | 28 | 56% | 248 | 62% | 5 | 10% | 82 | 21% |
| 401-450 | 30 | 60% | 278 | 62% | 8 | 16% | 90 | 20% |
| 451-500 | 24 | 48% | 302 | 60% | 5 | 10% | 95 | 19% |
| 501-550 | 30 | 60% | 332 | 60% | 3 | 6% | 98 | 18% |
| 551-600 | 29 | 58% | 361 | 60% | 3 | 6% | 101 | 17% |
| 601-650 | 24 | 48% | 385 | 59% | 4 | 8% | 105 | 16% |
| 651-700 | 23 | 46% | 408 | 58% | 3 | 6% | 108 | 15% |
| 701-750 | 28 | 56% | 436 | 58% | 4 | 8% | 112 | 15% |
| 751-800 | 24 | 48% | 460 | 58% | 3 | 6% | 115 | 14% |
| 801-850 | 20 | 40% | 480 | 56% | 2 | 4% | 117 | 14% |
| 851-900 | 15 | 30% | 495 | 55% | 1 | 2% | 118 | 13% |
| 901-950 | 19 | 38% | 514 | 54% | 3 | 6% | 121 | 13% |
| 951-1,000 | 30 | 60% | 544 | 54% | 4 | 8% | 125 | 13% |

Note that 2010 figures include accessible eBook formats

Figure 3.5c Accessibility by popularity



Note that 2010 figures include accessible eBook formats

Appendix A: Methodology

Title selection

RNIB supplied lists of 1,000 titles to be included in the research. The titles were selected by RNIB based on their popularity in 2009 / 2010, using market research from BookMarketing Limited (BML) and sales data from Nielsen BookScan.

The preferred genres and categories of sighted people aged 65 and over, as supplied by BML, were used as a proxy for the reading preferences of the blind and partially sighted population because the majority of blind and partially sighted people are known to be over the age of 65¹. This selection of titles dictated which genres to include in the Top 1,000 lists, as well as the amount of titles to be included from each genre. The lists also include a percentage (10 per cent) comprising the most popular children's titles to ensure that the needs of younger age groups of blind and partially sighted people were included.

The Top 1,000 list was composed as follows: Adult non-fiction, 450 titles; Children's, 100 titles; Crime and thriller, 200 titles; General and literary fiction, 135 titles; Historical fiction, 30 titles; Horror, 2 titles; Poetry and plays, 8 titles; Saga and romance, 65 titles; and Science fiction and fantasy, 10 titles.

The most popular titles in each of these categories for 2009 / 2010, according to Nielsen BookScan, were selected and added to the list. If multiple editions of the same title were found, they were counted as one and the next most popular title was included. Information provided to LISU included author, publisher and imprint, volume sold, binding, publication date and genre.

¹ Access Economics (2009) **Future Sight Loss UK 1: Economic Impact of Partial Sight and Blindness in the UK adult population**, London: RNIB. Available at <http://www.rnib.org.uk/aboutus/Research/reports/prevention/Pages/fsluk1.aspx>

It was decided to compile the Top 1,000 list in this way, rather than using a more general list of the 1,000 bestselling titles based on the Total Consumer Market, because:

- The tailored list includes a wide variety and range of genres.
- In comparison, the standard best seller list focuses all age groups in the UK and therefore favours General and literary fiction and Children's titles to the detriment of Adult non-fiction and fiction genres such as Saga and Romance, and Science fiction and fantasy, for example.

Searching

All searching was conducted manually, using the search engines of the various databases referred to below. As requested by RNIB, priority was given to finding whether there was commercial provision of alternative formats. The aim was to identify one edition of each title in hard copy large print, human speech audio and hard copy braille formats, where available; in practice the format of the databases used and their search interfaces was such that multiple editions were often identified. Where this was the case, all editions identified were recorded. However, the researchers did not undertake a comprehensive search for all possible editions for each format of each title; once one had been found no further sources were searched for that format.

In 2010, accessible eBooks were included; in 2009 there were no eBook formats considered to be fully accessible.

Access was provided for LISU staff to Nielsen BookData for the duration of the research, and all titles searched for. Availability in large print, audio (CD, cassette and/or downloadable files) and eBook formats was recorded. In some instances, where the Nielsen database provided ambiguous information as to availability, Amazon.co.uk was consulted. Amazon is also associated with Audible.co.uk, which was searched to identify unabridged download files where audio formats were not found in the Nielsen database.

The RNIB catalogue was searched for all titles, to identify braille editions; availability of large print editions and DAISY talking books was

also noted. The Scottish Braille Press website was consulted in 2009, and found to offer very few books available for sale (11 titles for adults, 5 'Harry Potter' titles for children), although they offer a transcription service. None of their titles added to the total availability. ClearVision provide books for shared reading which incorporate braille texts, but do not have a searchable online catalogue. A list of the children's titles not found in the RNIB catalogue was emailed to ClearVision, who checked their catalogue and provided details of those titles available.

For those titles not identified as being available in large print through Nielsen or Amazon, the British National Bibliography (BNB) was searched. A final search for the remaining titles was conducted in the Public Lending Right LEWIS database in 2009; this only allows identification of large print editions where the publisher field includes this information, and only two such titles were identified. Owing to the low success rate and the time required to search this database, it was not thought worthwhile to include this step in 2010.

In 2010, all titles were searched for in the Apple iBook store, as these are fully accessible using an Apple iOS device with appropriate assistive technology. Titles not found in the iBook store were then searched for on the Amazon Kindle book store, as these can be read in electronic large print by partially sighted readers.

Table A1 below details the databases which were used at each stage of the research, and the formats sought in each. At each stage, only those titles for which relevant editions had not already been found were included in the searches.

Table A1 Databases used

| Stage | Database | Formats sought |
|-------|------------------------------------|-----------------------------|
| 1 | Nielsen BookData | Large print; Audio |
| | RNIB catalogue | Braille; Large print; Audio |
| | Apple iBook store (2010 only) | Accessible eBook |
| 2 | Amazon.co.uk (2009 only) | Large print; Audio |
| | Audible.co.uk | Audio |
| | Amazon Kindle store (2010 only) | Large print |
| | ClearVision catalogue | Braille |
| | Scottish Braille Press (2009 only) | Braille |
| 3 | British National Bibliography | Large print |
| 4 | PLR LEWIS database (2009 only) | Large print |

Analysis

RNIB requested that commercial sources of alternative format material be given priority over charitable provision, although the searching methodology described above found multiple instances of provision of many titles. Table A2 below details the priority given to each source when analysing the data, and indicates the broad type of provision.

Table A2 Priority of sources

| Format | Priority | Source | Type |
|-------------|----------|---------------------------------|------------|
| Large print | 1 | Nielsen BookData | Commercial |
| | 2 | Amazon.co.uk (including Kindle) | Commercial |
| | 3 | British National Bibliography | Commercial |
| | 4 | PLR LEWIS database | Library |
| | 5 | RNIB catalogue | Charitable |
| Braille | 1 | RNIB catalogue | Charitable |
| | =2 | ClearVision catalogue | Charitable |
| | =2 | Scottish Braille Press | Charitable |
| Audio | 1 | Nielsen BookData | Commercial |
| | =2 | Amazon.co.uk | Commercial |
| | =2 | Audible.co.uk | Commercial |
| | 3 | RNIB catalogue | Charitable |
| eBook | 1 | Apple iBook store | Commercial |

Data were recorded initially in a spreadsheet, and the analysis was carried out using the PASW statistical package (formerly SPSS), to summarise the data and undertake limited statistical testing, where appropriate.

Although information on binding was provided, for the purposes of this research, all ISBNs for a particular title were combined, so no analysis by binding has been carried out. Similarly, the number of publishers and imprints was diverse, and may vary between print editions, so no analysis by publisher was undertaken.

Analysis of fully accessible titles was also undertaken by year of publication. For the purpose of this analysis, it was assumed that the date provided by RNIB was the date of first publication of the text, in whatever format, although in the case of a small number of classic texts

(eg **The Odyssey**, by Homer) the date given was more likely to be that of a modern reprint or interpretation.

Issues that arose during the research and how they were resolved by the researchers

Two main issues were identified:

Records of accessible editions

Firstly, in Nielsen BookData, and BNB, some accessible editions were identified as 'forthcoming' or 'pre-publication records'. Instances were noted, but these were not considered to be available formats for the purpose of this research, as members of the public would not be able to obtain them; indeed, there is no guarantee that they would ever be published.

Unabridged audio

Secondly, it was often unclear from the sources used whether titles in audio formats are unabridged. In some cases it seemed likely that human speech audio versions were unabridged, owing to information provided on the cost, number of discs, or playing time. In others, it seems unlikely, for similar reasons. Details were recorded where there was doubt, and a conservative view taken. We did not assume a title was unabridged unless this was clearly stated in the item description or on the cover. It is possible, therefore, that the availability of unabridged audio formats may be under-recorded.

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