Access to Digital Libraries for Persons with Print Disabilities in Japan

ANDO, Kazuhiro of the National Diet Library, Japan (NDL)
Abbreviations

NDL: National Diet Library, Japan

PD: print disabilities
About NDL

• Established in 1948
• Sole national library in Japan
• Provides research and other services for the National Diet (Parliament) of Japan
• Acquisition of library materials is based on a Legal Deposit System
Outline

1. Digital libraries for persons with PD in Japan
2. The Sapie Library
3. NDL services for persons with PD
4. A Summary of Digital libraries for persons with PD in Japan
5. Recent trends: producing machine-readable text for books
6. Conclusion
1 Digital libraries for persons with PD in Japan
Digital libraries for persons with PD in Japan

• Sapie Library (since 2010)
  Operated by the Japan Braille Library & the National Association of Information Services for People with Visual Disabilities

• NDL (since 2014)
2 The Sapie Library
History of the Sapie Library

1988  IBM  Tenyaku Hiroba
1994  Naiive Net
      (from Tenyaku Hiroba)
2004  Biblio Net
2010  Sapie Library
      (=Naiive Net + Biblio Net)
The Sapie Library

• The largest digital library for persons with PD in Japan
• Run by Braille Libraries

Services

• Provides data for persons with PD produced by Braille Libraries in Japan
• Union Catalogue of materials for persons with PD
## Downloadable data of the Sapie

As of May 2016

<table>
<thead>
<tr>
<th>Format</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braille Data</td>
<td>178,327</td>
</tr>
<tr>
<td>Audio-only DAISY</td>
<td>71,746</td>
</tr>
<tr>
<td>Text-only DAISY</td>
<td>2,919</td>
</tr>
<tr>
<td>Multimedia DAISY</td>
<td>110</td>
</tr>
<tr>
<td><strong>In Total</strong></td>
<td>253,102</td>
</tr>
</tbody>
</table>
3 NDL services for persons with PD
Milestones in services for persons with PD

Since 1975
Production of Talking Books of academic literature

Since 1982
National Union Catalog of Braille & Talking Books in Japan
Milestones in services for persons with PD

From 2014

- Acquisition of data for PD
- Data for persons with PD transmission service
Acquisition of data for PD

NDL acquires data from:
- Public Libraries
- University Libraries
- School Libraries
- Other organizations that are allowed to produce materials for persons with PD under exemptions to the Copyright Law of Japan
Acquisition of data for PD

- Braille data
- Audio-only DAISY
- Text-only DAISY (since March 2016)
- Multimedia DAISY (since March 2016)
- Plain text (since March 2016)
Data for persons with PD transmission service

Downloadable data (as of June, 2016)

<table>
<thead>
<tr>
<th>Format</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braille Data</td>
<td>180</td>
</tr>
<tr>
<td>Audio-only DAISY</td>
<td>7,746</td>
</tr>
<tr>
<td>Text-only DAISY</td>
<td>0</td>
</tr>
<tr>
<td>Multimedia DAISY</td>
<td>5</td>
</tr>
<tr>
<td>Plain Text</td>
<td>10</td>
</tr>
<tr>
<td><strong>In total</strong></td>
<td><strong>7,941</strong></td>
</tr>
</tbody>
</table>
Systems coordination with the Sapie Library

The NDL passes data to the Sapie Library.
4 A Summary of Digital libraries for persons with PD in Japan
Digital libraries for persons with PD in Japan

• The Sapie Library is the largest digital library serving persons with PD in Japan.
• The NDL is not yet as large as the Sapie Library
• But the scope of the NDL’s acquisitions is larger than that of the Sapie Library
Digital libraries for persons with PD in Japan

• In combination with the Sapie Library, the NDL acquires data for persons with PD produced under exemptions to the Copyright Law.
5 Recent trends: producing machine-readable text for books
Data for persons with PD

- Braille
- Audio
- Text
Producing machine-readable text for books in Japanese

• Low cost
• Quick Production
• Technical advances in text-to-speech (TTS) in Japanese
• Amendment of the Copyright Law of Japan
Problems in producing text for books

• OCR Accuracy
• Text-to-speech (TTS) in Japanese
• Japanese
Problems with formatting text contents

- Plain text
- ANSI/NISO Z39.86-2005
- EPUB3
6 Conclusion
Tasks for the future

• Maximizing the sharing of data for persons with PD produced under exemptions to the Copyright in combination with the Sapie Library
• Producing machine-readable text for books
A person with PD for every book
A book for every person with PD
Thank you for your attention!

Do you have any questions?