USA
THE LIBRARY OF CONGRESS

Approved by the Director, NLS/BPH

Date _November 19, 2007_

Specification:	# 1205
Title:	**Protected Digital Talking Book**
Date:	November 1, 2007

Technical Certification

Raouf Amin	_Raouf Amin_	11/13/07
Engineering		Date
Bob Norton		11-1-07
Quality Assurance		Date
John Bryant	_John Bryant_	11-7-07
Production Control		Date
Michael Katzmann	_M Katzmann_	Nov 13/07
Chief, MDD		Date

Background

The National Library Service for the Blind and Physically Handicapped (NLS), Library of Congress, administers a free library service to eligible residents of the United States and American citizens living abroad who cannot hold, handle, or read standard print media because of a temporary or permanent visual or physical limitation.

Using federal funds, NLS annually publishes approximately two thousand books and seventy magazines in audio and braille formats. Titles are selected to appeal to a wide variety of interests. Books and magazines are narrated and duplicated to a high professional standard. The number of copies produced of any title is dependent on anticipated reader demand.

Playback machines and their accessories are designed to facilitate convenient use by blind and physically handicapped people, provide maximum reliability under environmental conditions that are sometimes harsh, and survive handling that may be technically unsophisticated or inadvertently abusive. The equipment plays program materials in a special format compatible with NLS machines. All materials and equipment in the program can be sent to users and returned to libraries postage free.

A cooperating network of fifty-seven regional libraries and seventy-five subregional libraries circulates recorded and braille materials to a readership of some seven hundred thousand adults and children out of a potential eligible population of three million. Magazine subscriptions are provided on a direct-mail basis from the producers. Users must generally deal with service centers in distant cities and communicate by mail, e-mail, or phone with little or no personal contact. All materials come and go through a mail-order system. Fifty percent of the users are more than sixty-four years old and depend on the NLS program for their major source of entertainment and their connection with the print world; ninety-five percent read recorded materials, five per cent read braille.

Users are informed about new books, magazines, and services through two bimonthly publications, annual catalogs, web-based catalogs, and subject bibliographies produced by NLS, as well as various publications produced and circulated by the regional and subregional libraries.

User Materials

Contractors who consider submission of a bid to produce books, equipment, or other program products should be cognizant of the consumer-responsive nature of the program, and that the specifications for these products have been developed to meet the special need of readers in the program. Materials are produced with those needs foremost in mind and improved through constant monitoring and consumer input. Contractors are expected to familiarize themselves with the equipment-handling practices of blind and physically handicapped clientele and ensure that the equipment they produce will stand up under this type of use. A high degree of quality workmanship and product reliability is mandated by the product specification.

NLS
Specification #1205: November 2007

Table of Contents

NLS
Specification #1205: November 2007

1.   Scope

        This document describes the requirements for the set of files that comprise a complete
        Protected Digital Talking Book (PDTB) compliant with the DAISY Protected Digital
        Talking Book Specification, version 2.0, and the requirements for delivery to NLS
        thereof.

        NLS specification 1202 defines the requirements for book master WAV files,
        specification 1203 defines requirements for creating an unprotected DTB, and
        specification 1204 defines the requirements for creating an unprotected magazine in the
        DTB format. Before one can create a PDTB an unprotected DTB must be created
        utilizing master audio WAV files. It is therefore essential that a producer reference this
        specification and specifications 1202, 1203, or 1204 in the creation of a PDTB book or
        magazine that meets NLS requirements..

2.   Reference Documents

        The versions of the following documents in effect on the date a contract is awarded shall
        form a part of this specification. In the event of conflict between the publications
        referenced herein and the content of this specification, this specification shall be
        considered a superseding requirement.

        2.1   American National Standards Institute (ANSI)

                        ANSI/NISO Z39.86-2002
                        Specifications for the Digital Talking Book

                        The document cited above is available from:
                        American National Standards Institute, Inc.
                        11 West 42nd Street
                        New York, NY 10036

                        Or from:

                        http://www.niso.org/standards/resources/Z39-86-2002.html

2.2   National Library Service for the Blind and Physically Handicapped

NLS Specification 300
Book Mastering

NLS Specification 1202
Requirements for Distribution Source Files, Review Copies, and Blank
Recordable Compact Disc

NLS Specification 1203
Construction of Digital Talking Books

NLS Specification 1204
Construction of Audio Magazines in Digital Talking Book Format

The documents cited above are available from:
National Library Service for the Blind & Physically Handicapped
Library of Congress
1291 Taylor St. NW
Washington, DC 20542

Or from:
http://www.loc.gov/nls/specs/

2.3   Internet Engineering Task Force Network Working Group

The MD5 Message-Digest Algorithm (RFC 1321, April 1992)
http://www.ietf.org/rfc/rfc1321.txt

2.4   DAISY Consortium

DAISY Protected Digital Talking Book Specification, Version 2.0
http://www.daisy.org/projects/pdtb/

2.5   ISO 8601 Numeric Representation of Date and Time

http://www.iso.org/iso/en/prods-services/popstds/datesandtime.html

3.   Requirements

This document specifies the acceptable use of the Protected Digital Talking Book (PDTB) specification by which Protected Digital Talking Books are submitted to NLS.

3.1   Delivery Medium

3.1.1   Delivery on CD-R

3.1.1.1   Conformance with Specification 1202

The physical characteristics of the CD-R(s) on which a PDTB is delivered shall conform to all applicable requirements of NLS Specification 1202.

3.1.1.2   Multiple CD-Rs

A PDTB whose size exceeds 500 million bytes shall be delivered on multiple CD-Rs that conform to the requirements of sections 7.4.4, 8.4.2, and 11.2 of ANSI/NISO Z39.86-2002.

3.2   Origin

All PDTBs to be delivered to NLS shall be derived directly from DTBs that conform to NLS specification #1203 or #1204. No DTB content shall be changed between DTB and PDTB other than that which is affected by the application of protection.

3.3   General

This section defines the format of a Protected Digital Talking Book (PDTB).

3.3.1   Protection

All PDTBs shall be protected according to the Protected Digital Talking Book Specification, Version 2 (see section 2.4 of this document for reference).

3.3.2   Production Tools

3.3.1.1   Parser

The parser used to validate the PPF, PNCX, SMIL, distInfo, resource, and textual content files shall be a validating XML parser compliant with the applicable standard referenced by ANSI/NISO Z39.86-2002.

3.3.1.2 Encryption Tools

The tool used to encrypt the files for the DTB shall be fully compliant with the Protected Digital Talking Book Specification, version 2.0 and this specification.

3.3.3   Filenames

PDTB filenames shall conform to section 3.2.1.1 of specification #1203 or section 3.2.1.2 of specification #1204, as appropriate, except where otherwise specified in this document.

3.3.3.1   Encrypted Audio File Names

Filenames for encrypted audio files shall be identical to those of the corresponding unencrypted file, and shall conform to section 3.2.1.1 of specification #1203 or section 3.2.1.2 of specification #1204, except where otherwise specified in this document.

3.3.3.2   Encrypted SMIL Files

File names for encrypted SMIL files shall be identical to those of the corresponding unencrypted file.

3.3.3.3 Other Encrypted XML Files

3.3.3.3.1   Protected Book Package file (PPF)

i.   Protected Book Package File Name

For books, the protected package file shall have the name

nnnnn.ppf, where nnnnn is the five-digit book number.

For magazines, the protected package file shall have the name *base_filename*.ppf, where *base_filename* is the magazine's base filename as described in section 3.2.1.2b of specification #1204.

ii.   Protected Book Package File Validity

The PPF file shall be well-formed and valid to the Open eBook Forum (OEBF) Publication Structure 1.0.1 package DTD referenced by section 3 of ANSI/NISO Z39.86-2002

iii.   Protected Book Package File Metadata

PDTB metadata shall include specification version element "pdtb2:specVersion" with value "2005-1" as mandated by the Protected Digital Talking Book specification.

iv.   The Protected Book File Manifest

The PPF manifest shall conform to the normative requirements of section 3.3 of ANSI/NISO Z39.86-2002.

v.   The Protected Book File Spine

The PPF spine shall conform to the normative requirements of section 3.4 of ANSI/NISO Z39.86-2002.

3.3.3.3.2   Protected Book NCX file (PNCX)

a. For books

The protected NCX (PNCX) file shall have the name *nnnnn*.pncx, where *nnnnn* is the five-digit book number.

b. For magazines

The protected NCX (PNCX) file shall have the name
base_filename`.pncx`, where *base_filename* is
the magazine's base filename as described in section
3.2.1.2b of specification #1204.

3.3.4   Files Comprising The Façade Book

3.3.4.1 Navigation Control File

a. For books

The unencrypted façade book NCX file shall have the name
`nnnnn.ncx`, where `nnnnn` is the five-digit book number.

b. For magazines

The unencrypted façade book NCX file shall have the name
base_filename`.ncx`, where *base_filename* is the
magazine's base filename as described in section 3.2.1.2b of
specification #1204.

3.3.4.2 Façade Book SMIL Presentation File

a. Filename

The unencrypted façade book SMIL presentation file shall have the
name `pdtb_protected.smil`.

b. Façade Book Presentation

The façade SMIL presentation shall present only the
announcement defined in section 3.3.4.3b.

3.3.4.3 Façade Book Audio File

  a.   Filename

  The unencrypted audio message played by the façade SMIL
  presentation shall have the name `protected.mp3`.

  b.   Audio File Content

  The façade book announcement shall be supplied by NLS.

3.3.4.4 Package File

   The OPF book spine for the façade book shall reference
  unprotected SMIL files only.

3.4   Media Types For Encrypted Audio Files

The media type for encrypted .3gp files shall be "`application/x-pdtb3gpp`".

3.5   DTB Ancestry Check Metadata

3.5.1   Protected Book Package File Metadata

A metadata item shall be added to the <x-metadata> section of the
protected book package (.ppf) file containing a message digest of the
entire contents of the DTB.

Example:

<meta name="nls:sourceMD5"
content="663d1b9c1b4e6354db1169ece18839131" type= "MD5" />

3.5.1.1 Name

  The metadata item shall be called "nls:sourceMD5"

3.5.1.2 Algorithm

The digest shall be computed using the MD5 algorithm (see section 2.3 for reference document).

3.5.1.3 Included Files

All the files and only the files listed in the DTB manifest shall be used in calculating the MD5 value.

3.5.1.4 File Ordering

The MD5 sum shall be calculated by ordering the source DTB files in the order in which they appear in the source DTB manifest.

3.5.1.5 Creation

The MD5 value shall be calculated and inserted by the same tool that applies the content protection to the PDTB. This MD5 value shall not be created or altered by any other means.

3.6   Authorization Object

3.6.1   Filename

The authorization file shall have the name `uid.ao`, where *uid* is the book or magazine's UID. The UID is specified in section 3.2.1.2 of specification #1203 or section 3.2.1.3 of specification #1204, as appropriate.

3.6.2   Issuer Element

The dc metadata for the <issuer> element shall read:

<issuer uid="DAISY.us-nls">

National Library Service for the Blind and Physically Handicapped, Library of Congress

</issuer>

3.6.3 Content Keys

The authorization file shall contain exactly two content keys.

One content key shall have a media attribute with the value "text," i.e.

<ContentKey media = "text">

One content key shall have a media attribute with the value "audio", i.e.

<ContentKey media = "audio">

The use of <ContentKey media = "all "> is prohibited.

3.6.4 Rights Expression

The XML encoding in ODRL for the rights expression shall be:

```
<odrl-ex:rights>
     <odrl-ex:agreement>
          <odrl-ex:asset>
               <odrl-ex:context>
                    <odrl-dd:uid>uid</odrl-dd:uid>
               </odrl-ex:context>
          </odrl-ex:asset>
          <odrl-ex:permission>
               <odrl-dd:play/>
          </odrl-ex:permission>
     </odrl-ex:agreement>
</odrl-ex:rights>
```

where

uid is the book or magazine's UID
`odrl-dd` is the namespace prefix for http://odrl.net/1.1/ODRL-DD

and

`odrl-ex` is the namespace prefix for http://odrl.net/1.1/ODRL-EX

3.7 Example File Lists

3.7.1 Example PDTB Book File List

File	Function	Encryption
56789ann.3gp	Announcement file	Encrypted
56789hdgs.3gp	Headings file	Unencrypted
56789-0001.3gp 56789-0002.3gp 56789-0003.3gp 56789-0004.3gp etc.	Audio side files	Encrypted
56789.opf	Façade package file	Unencrypted
56789.pncx	Book NCX file	Partially Encrypted, using XML Encryption
56789.ppf	Book package file	Partially Encrypted, using XML Encryption
56789.smil	Book SMIL presentation	Partially Encrypted, using XML Encryption
56789.ncx	Façade book NCX file	Unencrypted
pdtb_protected.smil	Façade book SMIL presentation	Unencrypted
protected.mp3	Façade book announcement	Unencrypted
us-nls-db56789.ao	Authorization object	Partially Encrypted, using XML Encryption
dtbsmill110.dtd ncx110.dtd oeb1.ent oebpkg101.dtd	DTD and entity files	Unencrypted
56789pdtb.md5	Checksum file	Unencrypted

3.7.2   Example PDTB Magazine File List

File	Function	Encryption
consumer-reports_2006-09ann.3gp	Announcement file	Encrypted
consumer-reports_2006-09hdgs.3gp	Headings file	Unencrypted
consumer-reports_2006-09-0001.3gp consumer-reports_2006-09-0002.3gp consumer-reports_2006-09-0003.3gp consumer-reports_2006-09-0004.3gp etc.	Audio side files	Encrypted
consumer-reports_2006-09.opf	Façade package file	Unencrypted
consumer-reports_2006-09.pncx	Book NCX file	Partially Encrypted, using XML Encryption
consumer-reports_2006-09.ppf	Book package file	Partially Encrypted, using XML Encryption
consumer-reports_2006-09.smil	Book SMIL presentation	Partially Encrypted, using XML Encryption
consumer-reports_2006-09.ncx	Façade book NCX file	Unencrypted
pdtb_protected.smil	Façade book SMIL presentation	Unencrypted
protected.mp3	Façade book announcement	Unencrypted
us-nls-dm-consumer-reports_2006-09.ao	Authorization object	Partially Encrypted, using XML Encryption
dtbsmill110.dtd ncx110.dtd oeb1.ent oebpkg101.dtd	DTD and entity files	Unencrypted
consumer-reports_2006-09pdtb.md5	Checksum file	Unencrypted

3.8   Encryption Options

3.8.1   Public Key

The key name used in all books shall be of the form DAISY.us-nls.*xxx*, corresponding to the NLS public collection key; where *xxx* is a unique character string depending on the key in use.

The exact key name and the file holding the key shall be provided by NLS.

3.8.2   Audio Encryption

All audio files shall be encrypted except the DTB audio headings file and those that are a part of the façade book.

3.8.3   XML Encryption

3.8.3.1 Protected NCX (PNCX)

The PNCX file shall be encrypted at the <navPoint> and <navTarget> level.

3.8.3.2 SMIL files

All encrypted SMIL files shall be encrypted at the <audio> media element level.

3.9   Checksum File

This XML file shall contain a checksum for each file on the CD-R with the exception of the checksum file itself. All the files listed in the checksum file shall be present on the CD-R. The checksum shall be calculated using the MD5 algorithm as described in the reference cited in section 2.3 and shall be in the form of thirty-two hexadecimal digits. The checksums shall be generated from the source files prior to their transfer to the CD-R(s). This checksum file does not form part of the DTB and thus shall not be listed in the book manifest. The checksums contained in the checksum file must be identical to the checksums calculated from the source files and to those calculated from the corresponding files stored on the CD-R.

The format of the XML file is described by the following DTD, which shall be placed at the beginning of each checksum file.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE diskcheck [
<!ELEMENT diskcheck (book, file+)>
<!ATTLIST diskcheck
version CDATA #FIXED "1.0"
>
<!ELEMENT book (#PCDATA)>
<!ELEMENT file (filename, checksum)>
<!ATTLIST file
type CDATA #IMPLIED
content CDATA #IMPLIED
>
<!ELEMENT filename (#PCDATA)>
<!ELEMENT checksum (#PCDATA)>
<!ATTLIST checksum
type CDATA #REQUIRED
>
]>
```

The <book> element shall contain the UID for the DTB, as defined in section 3.2.1.2. of specification #1203 or 3.2.1.3 of specification #1204.

The <filename> element shall contain the name of the file for which the checksum is calculated.

The "type" attribute on the <checksum> element shall contain the value "MD5."

3.9.1 Checksum Filename

The name of the file containing MD5 checksums shall be the five digit book number or magazine base filename concatenated with the suffix "pdtb.md5".

3.10   Files to Include On Each PDTB CD-R

All document type definitions (DTDs) and entity files referenced by any PDTB files or by any DTDs shall be included on each CD-R of the PDTB and shall be listed in both the Protected Package File manifest (PPF) and the Façade Book Package File manifest (OPF).

An XML checksum file is to be generated in accordance with section 3.9 of this specification and included with the PDTB.

4.   Quality Assurance Provisions

   4.1   Classification of Inspections

            The inspection requirements specified herein are classified as follows:

            a. Qualification Inspection -- see section 4.3

            b. Incoming Inspection -- see section 4.4

            c. Contractor's Acceptance Inspection -- see section 4.5.1

            d. NLS Acceptance Inspection -- see section 4.5.2

   4.2   Responsibility for Inspections

            The contractor is responsible for the performance of the inspection requirements
            defined by sections 4.3, 4.4, and 4.5.1. NLS reserves the right to perform any of
            the inspections set forth in this specification when deemed necessary to ensure
            that products conform to the prescribed requirements.

      4.2.1   Responsibility for Compliance

                 All items must meet all requirements of sections 3 and 5. The inspections
                 set forth in this specification shall become a part of the contractor's overall
                 inspection system or quality program. The absence of any inspection
                 requirements in this specification shall not relieve the contractor of the
                 responsibility of assuring that all products or supplies submitted to NLS
                 for acceptance comply with all requirements of the contract. Sampling in
                 quality conformance does not authorize the submission of known
                 defective material, either indicated or actual, nor does it commit NLS to
                 acceptance of defective material. Should NLS determine that a fault or
                 faults are found in production units within the warranty period, then
                 correction of the fault or faults and production inspections or controls for
                 prevention of future occurrences shall be instituted on request by NLS
                 without additional charge to NLS.

4.2.2 Test Records

The contractor shall maintain complete records of all inspection results for the duration of the contract.

4.3 Qualification Inspection

Qualification inspection shall be performed by the contractor and by NLS on new products and on previously qualified products that have undergone any changes in materials, manufacturing process, or software version. All proposed changes shall be reported to the NLS contracting officer in writing, with a statement by the contractor describing the changes and the impact of the changes on the delivered product. NLS reserves the right to require six weeks for the evaluation of qualification samples prior to delivery of products incorporating the changes. The foregoing requirement does not relieve the contractor of any other requirements of this specification or the contract.

4.3.1 Qualification Samples

4.3.1.1 CD-R

Qualification samples are detailed in section 4.4.1 of NLS Specification 1202.

4.3.1.2 Complete Protected Digital Talking Book (PDTB)

One complete Protected Digital Talking Book (PDTB) shall be submitted along with its source Digital Talking Book by the contractor.

4.3.1.3 Encryption Tools

Samples shall consist of a set of encrypted files submitted as part of the complete PDTB required by section 4.3.1.2. All encryption tools to be used and their versions shall be identified; if requested, copies shall be submitted.

4.3.2   Inspections

Qualification inspection shall consist of the inspections listed in Table I.

Table I - Qualification Inspection

Requirement	Section	Test Method
CD-R delivery medium	All applicable requirements of spec 1202	4.4.2.1 (spec 1202)
Multiple CD-Rs	3.1.1.2, and 3.10	4.6.2
Production tools	3.3.2	4.6.4
PPF Metadata - Specification version	3.3.3.3.1iii	4.6.5.1.3
Files to include on each PDTB CD-R	3.10	4.6.11.2
Labeling	5.1	NLS review
Paper Label	5.1.2	NLS review
Label Information	5.1.3	NLS review
Packaging	5.2	NLS review

4.3.3   Quality Procedures

The contractor shall submit a document describing the quality assurance procedures used to achieve the requirements of this specification. Quality procedures shall contain provisions for configuration management of all software used in the production and validation of PDTBs. NLS reserves the right to require the contractor to improve quality procedures.

4.4 Incoming Inspection

Incoming inspection shall be performed by the contractor on CD-Rs and on source materials provided by NLS.

4.4.1   Inspections

Incoming inspection shall consist of the inspections listed in Table II.

Table II - Incoming Inspection

Requirement	Section	Test Method
CD-R delivery medium	All applicable requirements of spec 1202	4.4.2.1 (spec 1202)
Multiple CD-Rs	3.1.1.2, and 3.10	4.6.2
Façade book presentation	3.3.4.2b	4.6.6.2
Façade book announcement	3.3.4.3	4.6.6.3
Package File	3.3.4.4	4.6.6.4
Public key	3.8.1	4.6.10.1

4.5 Acceptance Inspection

    4.5.1   Contractor's Acceptance Inspection

        Acceptance inspection shall be performed by the contractor on 100% of every PDTB and shall consist of the inspections listed in Table III.

    4.5.2   NLS Acceptance Inspection

        Acceptance inspection will be performed by NLS on every PDTB and will consist of the inspections listed in Table III. The checksums calculated from all files on the PDTB CD-R(s) will be compared to the corresponding checksums in the checksum file of the disk.

Table III - Acceptance Inspection

Requirement	Section	Test Method
Multiple CD-Rs	3.1.1.2, 3.10	4.6.2
Filenames	3.3.3	4.6.3
Encrypted audio file names	3.3.3.1	4.6.3
Encrypted SMIL files	3.3.3.2	4.6.3
Production Tools	3.3.2	4.6.4
Other Encrypted XML Files		
Protected book package file (PPF) name	3.3.3.3.1i	4.6.5.1.1
Protected book NCX file (PNCX) name	3.3.3.3.2	4.6.5.2.1
Files comprising the façade book	3.3.4	4.6.6
Navigation control file (NCX) file name	3.3.4.1	4.6.6.1
Façade Book SMIL Presentation File	3.3.4.2	4.6.6.2
Façade Book File Name	3.3.4.3a	4.6.6.3
Façade Book presentation announcement	3.3.4.3b	4.6.6.3
Package file (OPF)	3.3.4.4	4.6.6.4
Media types for encrypted audio files	3.4	4.6.7
Metadata		
DTB Ancestry Check Metadata	3.5.1	4.6.8
Authorization Object		
Filename	3.6.1	4.6.9.1
Issuer element	3.6.2	4.6.9.2
Content keys	3.6.3	4.6.9.3
Rights expression	3.6.4	4.6.9.4
Public key	3.8.1	4.6.10.1
Unencrypted headings files	3.8.2	4.6.10.2
Encryption of audio files	3.8.2	4.6.10.3
Protected NCX (PNCX)	3.8.3.1	4.6.10.4
SMIL file	3.8.3.2	4.6.10.5
Checksum file	3.9	4.8
Files to Include on each PDTB CD-R	3.10	4.6.11
Labeling and Packaging		
Labeling	5.1	NLS review
Label Information	5.1.3	NLS review
Packaging	5.2	NLS review

4.6 Methods of Inspection

4.6.1 Delivery Medium

Each CD-R shall be tested for compliance with all applicable requirements of NLS Specification 1202.

4.6.2 Multiple CD-Rs

A PDTB that requires multiple discs shall be examined for compliance with the requirements of section 3.1.1.2, and shall have a distInfo file compliant with the requirements of section 3.2.6 of specification 1203 or 1204, a set of media-change message files compliant with the requirements of section 3.2.1.1e of specification 1203, and the Files to Include on each PDTB CD-R described in section 3.10 of this specification.

4.6.3 Filenames

Filenames shall be examined for compliance with the requirements of section 3.3.3.1 for encrypted audio files, and 3.3.3.2 for encrypted SMIL files, and 3.3.3.3 for other encrypted XML files.

4.6.4 Production Tools

Production tools shall be examined for compliance with the requirements of section 3.3.2.

4.6.5 Other Encrypted XML Files

4.6.5.1 Protected Book Package File (PPF)

4.6.5.1.1 Protected Book Package File Name

The PPF name shall be examined for compliance with the requirements of section 3.3.3.3.1i

4.6.5.1.2 Validity

The OPF file shall be well-formed and valid to the Open eBook Forum (OEBF) Publication Structure 1.0.1 package DTD referenced by section 3 of ANSI/NISO Z39.86-2002.

4.6.5.1.3 PPF Metadata

The PPF metadata shall be examined for compliance with the requirements of section 3.3.3.3.1 of this specification and of section 3.2.5.2 of NLS specification 1203 or 1204.

4.6.5.1.4 PPF Manifest

The PPF manifest shall be examined for compliance with the requirements of section 3.3.3.3.1 of this specification and of section 3.2.5.3 of NLS specification 1203 or 1204.

4.6.5.1.5 PPF Spine

The PPF spine shall be examined for compliance with the requirements of section 3.3.3.3.1 of this specification and of section 3.2.5.4 of NLS specification 1203 or 1204.

4.6.5.2 Protected book NCX file (PNCX)

4.6.5.2.1 Filename

The PNCX filename shall be examined for compliance with the requirements of section 3.3.3.3.2.

4.6.6 Files Comprising The Façade Book

4.6.6.1 Navigation Control File

The façade book NCX shall be examined for compliance with the requirements of section 3.3.4.1.

4.6.6.2 SMIL Presentation

The façade book SMIL presentation shall be examined for compliance with the requirements of section 3.3.4.2.

4.6.6.3 Audio Message

The façade book announcement shall be examined for compliance with the requirements of section 3.3.4.3.

4.6.6.4 Package File

The façade book OPF shall be examined for compliance with the requirements of section 3.3.4.4.

4.6.7 Media Types For Encrypted Audio Files

All media type references for encrypted .3gp audio files shall be examined for compliance with the requirements of section 3.4.

4.6.8 DTB Ancestry Check Metadata

The PPF shall be examined to confirm the presence and validity of the metadata item described in section 3.5.1.

4.6.9 Authorization Object

4.6.9.1. Filename

The authorization object filename shall be examined for compliance with the requirements of section 3.6.1.

4.6.9.2 Issuer Element

The authorization object's issuer element shall be examined for compliance with the requirements of section 3.6.2.

4.6.9.3   Content keys

The authorization object content keys shall be examined for compliance with the requirements of section 3.6.3.

4.6.9.4   Rights Expression

The authorization object's rights expression section shall be examined for compliance with the requirements of section 3.6.4.

4.6.10   Encryption Options

4.6.10.1 Public Key

The authorization object shall be examined to confirm the use of the public key supplied by NLS and for compliance with the requirements of section 3.8.1.

4.6.10.2 Unencrypted Headings Files

The PDTB headings file shall be examined to confirm that it is not encrypted per section 3.8.2.

4.6.10.3 Audio Encryption

The encrypted audio files shall be examined for compliance with the requirements of section 3.8.2

4.6.10.4 Protected NCX (PNCX)

The PNCX shall be examined for compliance with the requirements of section 3.8.3.1.

4.6.10.5 SMIL file

All SMIL files (other than that of the façade book) shall be examined for compliance with the requirements of section 3.8.3.2.

4.6.11 Complete PDTB

4.6.11.1 Conformance of Files

The complete set of files comprising the PDTB shall be tested using playback software compliant with ANSI/NISO Z39.86-2002 and DAISY PDTB V2.0. The PDTB shall be tested for navigation using the PNCX, local navigation as defined in section 1.2 of ANSI/NISO Z39.86-2002, and playback with particular attention to boundaries between files and media objects. Any required links shall be tested.

4.6.11.2 Included Files

Each CD-R of the PDTB shall be examined for compliance with the requirements of section 3.10.

4.7 Parser

The XML parser shall be examined for compliance with the applicable standard referenced by ANSI/NISO Z39.86-2002.

4.8 Checksum File

The generated XML Checksum file for each file on the CD-R shall conform to the requirements of section 3.9.

5. Labeling and Packaging

5.1 Labeling

5.1.1 Label on the Disc

Discs may be labeled with a paper label, or by ink-jet or thermal printing directly on the disc. All discs in a PDTB must be labeled with the same labeling process.

5.1.2 Paper Label

When paper labels are used, the labels shall be of white stock and conform to the following:

1. Each label shall be a circular label that has a center cutout. The diameter of the label shall be a nominal 116 millimeters and the diameter of the center cutout shall be a nominal 46 millimeters.

2. The label may not interfere with disc playback in any manner.

3. The label shall not be distorted, off center, or misaligned.

4. The label must adhere firmly and uniformly to the label area without any bubbling, slipping, or peeling.

5.1.3 Label Information For Books and Magazines

The print for each label, whether paper, ink-jet, or thermal, shall be 14-point Times New Roman in black ink. No writing with any type of marking pen is permitted on either the disc or paper label. The label shall contain the following information as shown in figure 1.

a. Book number (Books only)

b. Book title or Magazine title and issue date

c. Date and time stamp of most recently altered file on the CD-R

d. The designation "PDTB" followed by the disc number of the total number of discs containing the complete PDTB (e.g., PDTB 1 of 1)

e. Producer code as used on NLS production authorization record

f. File name: the unique identifier (UID) defined by section 3.2.1.2 of specification 1203, or section 3.2.1.3 of specification #1204

g. Identifier for complete PDTB: "PDTB"

5.2 Packaging

5.2.1 Order of Discs in Disc Storage Box

The CD(s) for the PDTB shall be submitted in the same disc storage box(es) as the review copy. The discs shall be inserted in the storage box(es) in the following

order: review file discs(s), DTB-specific WAV file disc(s), if any, disc(s) (in sequence) for complete DTB, disc(s) (in sequence) for complete PDTB.
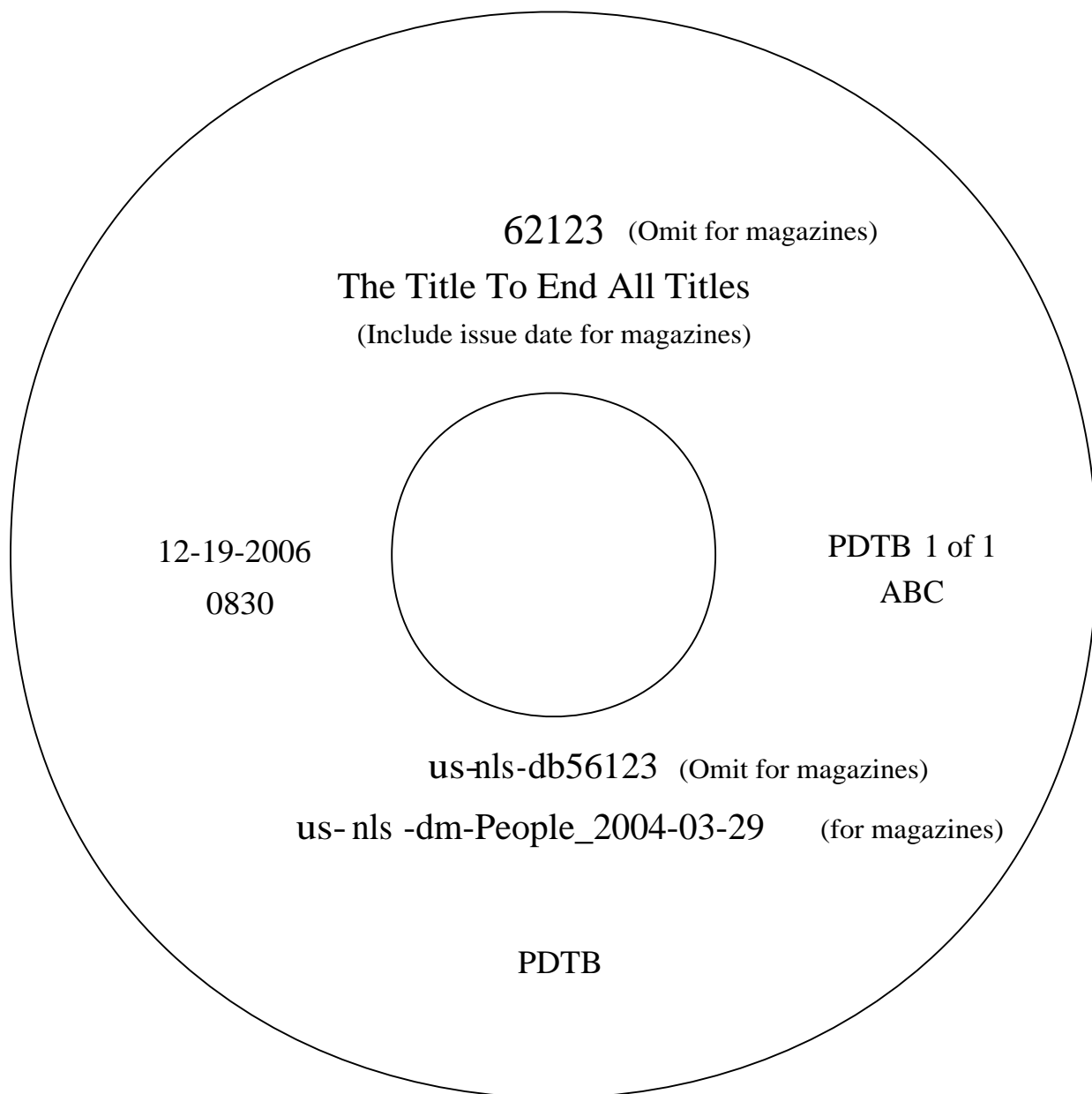
5.2.2 Label on Disc Storage Box

See NLS Specification 1202 or 1204, section 5.2.2.

5.2.3 Packaging Disc Storage Boxes for Shipment

Storage boxes must be packaged for shipment to NLS in a manner that will provide a high degree of protection during shipment.

62123   (Omit for magazines)

The Title To End All Titles

(Include issue date for magazines)

12-19-2006

0830

PDTB 1 of 1

ABC

us-nls-db56123   (Omit for magazines)

us- nls -dm-People_2004-03-29   (for magazines)

PDTB

Label Information for Complete PDTB

Figure 1