

1 DDI Working Paper Series -- Best Practices, No. 7

2 **Subject:**

3 DDI 3.0 Schemes (2009-03-22)

4 **Document identifier:**

5 <http://dx.doi.org/10.3886/DDIBestPractices07>

6
7
8 **Authors:**

9 Jenny Linnerud, Hans Jørgen Marker, Meinhard Moschner, Wendy Thomas

10 **Editors:**

11 Wendy Thomas

12 **Target audience:**

13 Anyone wishing to publish schemes as resource packages for use by their project,
14 organization, or community of users

15 Producers/archivists who seek to provide an implicit level of comparability through
16 the use of common schemes by reference

17 Producers of DDI instances (study units, groups, or resource packages) who want to
18 reuse or reference the content of DDI schemes (published as resource packages)

19 **Abstract:**

20 The intention of resource packages in DDI is to provide a publishing structure that
21 promotes reuse of common material by removing certain metadata content from the
22 context of a specific study and publishing it for the primary purpose of reuse. Reuse
23 of common material such as concept schemes, geographic location schemes, and
24 coding schemes provides implicit comparison between those studies that reference
25 a common source of information. Publication of DDI schemes as resource packages
26 both within organizations or projects and for broader public access requires the
27 consideration of how these materials may be used and incorporated into other
28 studies. Resource packages need to be structurally designed to facilitate reuse
29 among the potential users of the content. In addition, the publication of similar
30 schemes as resource packages supports potential comparison and publication of
31 the structured relationship between two or more schemes. Resource packages are
32 published with the primary intention that their contents be reused and therefore the
33 expectation that they will be maintained and available in perpetuity.



Data Documentation Initiative

34 **Status: Draft**

35 This document is updated periodically on no particular schedule. Send comments to
36 editor: ddi-bp-editors@icpsr.umich.edu



37

38	1 INTRODUCTION.....	4
39	1.1 Problem statement	4
40	1.2 Terminology	4
41	2 BEST PRACTICE SOLUTION	5
42	2.1 Definitions	5
43	2.2 Best Practice behavior	6
44	2.3 Discussion	10
45	2.4 Example.....	11
46	3 REFERENCES	15
47	3.1 Normative	15
48	APPENDIX A. ACKNOWLEDGMENTS	16
49	APPENDIX B. REVISION HISTORY	18
50	APPENDIX C. LEGAL NOTICES	19

51

52 **1 Introduction**

53 DDI was designed to support the reuse of metadata within a single instance and between
54 instances. One of the primary features designed with the intent of reuse between instances
55 is the DDI scheme. A DDI scheme is basically a list of versionable items. An example is a
56 question scheme containing questions that have been tested for wording and structure by
57 an organization and published for reuse within the organization. Items within the scheme
58 are versionable, to ensure that any changes to their content are captured over time. All DDI
59 schemes are maintainable, which means that they can be published as separate resource
60 packages outside of the context of a single study or group of studies. The metadata held in
61 schemes published as resource packages generally reflects material that is commonly used
62 by more than one study unit, e.g., standard occupation code schemes or core variable sets
63 used within an organization. References to schemes allow the use of the complete scheme
64 or the use of the scheme minus identified items. Note that all identifiable elements within a
65 published scheme can be included by reference in another instance as individual items.
66 This document deals with the inclusion by reference of a full DDI scheme. The difference
67 between a DDI scheme published within a study unit or group and one published as a
68 resource package is that the DDI scheme published as a resource package is available
69 independently, outside of the context of an individual study or group.

70 **1.1 Problem statement**

71 When publishing DDI schemes as resource packages for reuse, one needs to consider a
72 broader use than the original intention of the scheme within a particular study.

73 The publisher needs to be aware of internal dependencies between schemes before
74 publishing and to consider resources required to maintain resource packages (see table in
75 2.2 for more information on dependencies).

76 When published as resource packages, schemes require additional metadata to inform
77 discovery engines and to inform users about whether a particular scheme is appropriate for
78 their use.

79 The user should be informed of any important external resources used in creating the
80 scheme. For example, an occupation code scheme from the Integrated Public Use
81 Microdata Series (IPUMS) would contain a reference in Other Material to “Integrated
82 Occupation and Industry Codes and Occupational Standing Variables in IPUMS,” which
83 describes the development of the harmonized structure of the occupation code.

84 **1.2 Terminology**



Data Documentation Initiative

85 The key words *must*, *must not*, *required*, *shall*, *shall not*, *should*, *should not*, *recommended*,
86 *may*, and *optional* in this document are to be interpreted as described in [RFC2119].
87 Additional DDI standard terminology and definitions are found in
88 <http://www.ddialliance.org/bp/definitions>

89 **2 Best Practice Solution**

90 **2.1 Definitions**

91 DDI instance: All instances of DDI 3.0 documents are published as a DDI Instance using the
92 instance module. This module provides a single root element for containing all types of DDI
93 instances. This provides processing applications with a single known starting point for
94 processing all DDI XML instances.

95 Identifiable (in the context of DDI): An element that contains an ID attribute allowing it to be
96 referenced directly by another element. The ID must be unique within its immediate parent
97 Maintainable.

98 Versionable (in the context of DDI): An Identifiable element that can be versioned to reflect
99 change over time. Contains a required version number and optional version date, version
100 responsibility, and version rationale. This allows a user to reference a specific version of an
101 element or the most recent version.

102 Maintainable (in the context of DDI): A Versionable element than can be maintained as a
103 separate entity by a maintenance agency that is responsible for the content and
104 maintenance of the metadata. A maintainable element has the attribute agency.

105 Minor version: The definition and level of detail of a minor version vary according to what is
106 being published. The minor version information indicator is always located to the right of the
107 first decimal and can be further subdivided at the discretion of the maintaining agency.

108 Major version: The definition of a major version varies according to what is being published.
109 However, major versions are expressed by the digits to the left of the decimal point.

110 DDI schemes: Schemes are maintainable lists of metadata elements that may be published
111 separately and reused by a number of studies. They are the basis for resources such as
112 question banks, concept banks, and variable banks. The construction of schemes takes into
113 consideration their potential reuse by others.

114 Resource package: A resource package is a means of packaging any maintainable set of
115 metadata for referencing as part of a study unit or group. A resource package structures
116 materials for publication that are intended to be reused by multiple studies, projects, or



Data Documentation Initiative

117 communities of users. A resource package uses the group module with an alternative top-
118 level element called Resource Package that is used to describe maintainable modules or
119 schemes that may be used by multiple study units outside of a group structure.

120 Inclusion inline vs. by reference: Material is considered included inline when the content is
121 explicitly included. Inclusion by reference means that the material is referenced by one
122 document but published elsewhere.

123 Crosswalk or Correspondence: A structured model of how one list of items map into a
124 related list of items. An example is the NTEE/NAICS/SIC Crosswalk, which provides a
125 bridge between the National Taxonomy of Exempt Entities, the North American Industry
126 Classification System (both US and Canadian), and the Standard Industrial Classification
127 system.¹ The maps in the DDI Comparison module provide a structure for a crosswalk.

128 Internal publication of DDI schemes: This refers to publication of DDI schemes as resource
129 packages within a specified project, working group, or organization. Note that a specific
130 project may involve more than one organization, e.g., the Eurobarometer project.

131 External publication of DDI schemes: This refers to the publication of DDI schemes as
132 resources packages for use by the broader community.

133 DDI schemes with “Relations”: A subgroup of DDI schemes that may refer to other DDI
134 schemes (see table in 2.2 for more information).

135 DDI schemes with “Dependencies”: A subgroup of DDI schemes that requires the existence
136 of other DDI schemes (see table in 2.2 for more information).

137 **2.2 Best Practice behavior**

138 DDI schemes may be published as resource packages for internal use within projects or
139 organizations or externally for use by the broader community. Some schemes within the
140 DDI structure lend themselves primarily to internal publication; others may be published
141 internally or externally. The structural design of a DDI scheme published as a resource
142 package needs to take into consideration the needs of potential users and facilitate the
143 reuse of the contents of the resource package. In addition, some schemes can currently be
144 compared using the mapping structure in the Comparison module, or have the potential to
145 be compared in this way. Support for this kind of comparison should be considered in
146 structuring the contents of the DDI scheme and the provision of supporting materials.
147 Finally, a number of DDI schemes may require or reference other schemes in their internal
148 structure. DDI schemes published as resource packages should be aware of these

¹ <http://nccsdataweb.urban.org/faq/detail.php?linkID=786&category=120&xrefID=2958>

Data Documentation Initiative

149 dependencies and support the reference content. The following table indicates which DDI
 150 schemes belong in the subgroups of:

- 151 • Relations - noting the element(s) which may be referenced from the DDI scheme,
 152 including which of these relations are optional (o)
- 153 • Dependencies - noting the name of any scheme which may be referenced based on
 154 specific content of a published scheme where (m) indicates a mandatory
 155 dependency
- 156 • Comparability - where C identifies those schemes for which comparison is currently
 157 supported by DDI and P those schemes which may potentially be supported for
 158 comparison in DDI
- 159 • Internal - noting those schemes whose general use is primarily internal

SCHEME	Relations (o)	Dependencies	Comparability	Internal
<i>Organization scheme</i>				X
<i>Universe scheme</i>			C	
<i>Concept scheme</i>	<i>Universe</i>		C	
<i>Geographic structure scheme</i>			P	
<i>Geographic location scheme</i>	Geographic structure		P	
<i>Question scheme</i>	<i>Concepts</i>	Category / Code	C	
<i>Control Construct scheme</i>		Questions, Interview instruction		X
<i>Interviewer Instruction scheme</i>				X
<i>Category scheme</i>			C	
<i>Code scheme</i>		Category (m)	C	
<i>Variable scheme</i>	<i>Concepts</i>	Category / Code	C	
<i>NCube scheme</i>		Variables(m), category(m), code(m)	P	
<i>Physical Structure scheme</i>				X
<i>Record Layout scheme</i>		Physical structure scheme (m)		X

160

161 Keep in mind that when publishing schemes internally (for a project and/or an organization)
 162 and externally:

Data Documentation Initiative

- 163 • Schemes published as resource packages for internal or external use should be
164 reviewed in terms of the intended user base and potential use.
- 165 • Schemes may be referenced in their entirety or partially – that is, the user may
166 require only specific sections of the full scheme. The internal structure of the
167 scheme should facilitate easy use of sub-sections using nested schemes. The user
168 should not be required to perform large amounts of item-by-item selection or
169 deselecting to get the desired subset of a scheme.
- 170 • Schemes published for external use should provide a translation of the content when
171 feasible. If translation was not provided, this should be noted in the abstract of the
172 resource package.
- 173 Comparison of schemes:
- 174 • Comparison is an area of DDI that will continue to develop.
- 175 • Comparison in a broad sense takes place between two or more study units as either
176 comparison by design or ad-hoc comparison. Comparison of two schemes published
177 as resource packages is expressed in DDI using the comparison structure. This
178 structure provides for pair-wise comparison of individual items within the schemes
179 being compared.
- 180 • Currently two forms of mapping are provided. The first is a generic structure used for
181 concepts, universes, questions, variables, and categories. A specialized structure
182 was provided for mapping codes [for more information see: DDI Technical
183 Specification - Part I Section 4.7 Lines 2081 – 2123, Part II 2257, and DDI Technical
184 Specification – Part II, Section 8.0 Lines 2215-2280, and Appendix 1].
- 185 • If publishing to support potential comparison, extra care should be taken to provide
186 complete background information and references to supporting materials that may
187 be needed for comparison.
- 188 Standardization through use of published schemes:
- 189 • Within projects and organizations there are frequently standardized ways of
190 describing universes, concepts, questions, and variables (including their category
191 and code schemes). The use of DDI schemes published internally as resource
192 packages provides a means of ensuring adherence to the standard by referencing a
193 stable source. Changes in the standardized content are recorded and versioned
194 centrally and made accessible throughout the organization or project.
- 195 Relations and dependencies between different types of schemes



Data Documentation Initiative

196 • Relations can be created when optional references to other metadata held within a
197 scheme are made. For example, a question may contain a reference to a concept; a
198 variable may contain a reference to a concept and a universe; or a geographic
199 location may refer to a geographic structure. When publishing a scheme for reuse
200 for either internal or external use, a decision needs to be made whether these
201 optional references will be used. If so, the related scheme must be published with
202 the same access level as the initial scheme. For example, if a question scheme
203 published for an external audience uses the concept reference, the concept scheme
204 must also be available to that same external audience.

205 • Some schemes may have dependencies on elements in other schemes based on
206 their specific content expressed as references to metadata outside of a scheme.
207 Control construct may depend on question schemes and/or interviewer instructions.
208 Question schemes may depend upon code or category schemes, depending upon
209 the response domain used. Variable schemes may depend upon code schemes for
210 their representation domain. For other schemes there are required dependencies.
211 NCubes require the use of variables. Code schemes require the use of categories.
212 Geographic locations require the use of geographic structure. Record layout
213 schemes depend on a physical data product. Whenever a dependent relationship
214 occurs within a published scheme, both schemes must be published within the same
215 resource package either in-line or by reference.

216 Schemes for reuse must be published as part of a resource package. This disassociates it
217 from a specific study or group of studies and establishes the intent of publication for reuse.
218 Resource package is one of the two top level elements in the group module and it allows for
219 providing information related to the development, publication, and use of the contained
220 scheme. Resource packages contain elements or information needed to support
221 appropriate use. In addition, many of these elements map to elements used by non-DDI
222 search engines and make these schemes available to a broader audience. The following
223 are recommended for use when publishing schemes as part of a resource package:

224 • Purpose

225 ○ This is a required element in a resource package. The purpose should
226 contain the intended audience for the DDI scheme, limitations regarding its
227 applicability to a given use, and any other general information to assist the
228 user.

229 • Versioning and publication schedule

230 ○ Users need to know when major reviews and versioning take place and
231 when they will be available through publication. Both versioning schedules

Data Documentation Initiative

232 and a publication schedule (if different from the versioning schedule) should
233 be provided in the metadata. There is currently not a specific location for this
234 information in the resource package, so it should be included in the abstract.

235 • Temporal relevance

236 ○ The Coverage element needs to include temporal information, particularly for
237 published schemes containing minor versions.

238 • Topical relevance

239 ○ Use controlled vocabularies where relevant to the published scheme

240 • Spatial relevance

241 ○ Use controlled geospatial vocabularies or relevant DDI scheme references

242 • Predecessor and successor including comparisons, e.g., crosswalks

243 ○ OtherMaterial must provide a complete reference for known predecessor
244 and/or successor schemes.

245 • References to supporting materials relevant to content and decisions

246 ○ Include related supporting materials in the Other Material element that are
247 relevant to the content and decisions made in the creation of the scheme.

248 A detailed list of the resource package elements can be found at DDI Technical
249 Specification -Part I Lines 474 – 505.

250

251 **2.3 Discussion**

252 In publishing a shared resource like a scheme, one needs to ensure that the content is
253 reasonably stable and not resource-intensive to maintain. The concept of a shared resource
254 as expressed by a DDI scheme is a set of metadata that is stable enough to be referenced
255 by a range of studies within an organization or a community of users. While change is
256 expected over time to reflect updates or corrections, it is generally not dynamic.

257 Resource packages should be published and maintained by a persistent organization.
258 There needs to be an assurance of long-term access so that individual or smaller
259 organizations may wish to deposit their resource package in a long-term depository or
260 archive. Information that is published and maintained by an organization in other formats
261 (occupation codes, industry codes, geographic codes and structures, etc.) should ideally be



Data Documentation Initiative

262 maintained in a DDI scheme format by the same agency. This would help ensure
263 consistency between publication formats and provide a “certification of authenticity” for the
264 content. Structuring the content of a DDI scheme to facilitate reuse by a variety of users
265 needs special consideration. It should be easier to reference a published resource than to
266 rewrite the metadata content. The additional value to the end user of a study that
267 references a section of a larger scheme is that it provides context for the selected section.
268 For example, referencing a subset of clerical occupations from a full scheme provides the
269 user with information on how the occupation subset fits into the full range of occupations. If
270 the scheme has been maintained over time and versioned for changes, it can provide
271 information on the development of a set of classification codes over time.

272 Many DDI schemes reference or are dependent upon content from other schemes. A
273 published resource package should include all relevant schemes either inline or by
274 reference. In short a resource package should be complete in and of itself. It should answer
275 the question of what it is, what it covers, and how it should be used. In addition, the end-
276 user needs information on past and future versions of the content. This facilitates
277 comparison between studies over time as well as those referencing the same version of a
278 published DDI scheme.

279 **2.4 Example**

280

281 This resource package below is an example of how to structure a hierarchical category
282 scheme in a way that will facilitate inclusion by reference of all or sub-levels of the structure.

```
283 <?xml version="1.0"?>
284 <ddi:DDIInstance xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
285 xsi:schemaLocation="ddi:instance:3_0 instance.xsd"
286 xmlns:ddi="ddi:instance:3_0" xmlns:r="ddi:reusable:3_0"
287 xmlns:xhtml="http://www.w3.org/1999/xhtml" xmlns:dce="ddi:dcelements:3_0"
288 xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:a="ddi:archive:3_0"
289 xmlns:g="ddi:group:3_0" xmlns:cm="ddi:comparative:3_0"
290 xmlns:c="ddi:conceptualcomponent:3_0" xmlns:d="ddi:datacollection:3_0"
291 xmlns:l="ddi:logicalproduct:3_0" xmlns:p="ddi:physicaldataproperty:3_0"
292 xmlns:ds="ddi:dataset:3_0" xmlns:pi="ddi:physicalinstance:3_0"
293 xmlns:m1="ddi:physicaldataproperty/ncube/normal:3_0"
294 xmlns:m2="ddi:physicaldataproperty/ncube/tabular:3_0"
295 xmlns:m3="ddi:physicaldataproperty/ncube/inline:3_0"
296 xmlns:s="ddi:studyunit:3_0" xmlns:pr="ddi:profile:3_0"
297 isMaintainable="true" id="Sample" version="1.0" versionDate="2009-03-02"
298 agency="mpc.umn.ddi" urn="urn:ddi:3.0:Instance=Sample:mpc.umn.ddi[1.0]">
299 <g:ResourcePackage isMaintainable="true" id="MPC_RP_1" version="1.0"
300 versionDate="2009-03-02">
301 <g:Purpose isIdentifiable="true" id="RP_1P"><r:Content>This resource
302 package is an example of how to structure a hierarchical category scheme
303 in a way that will facilitate inclusion by reference of all or sub-levels
304 of the structure.</r:Content></g:Purpose>
```



Data Documentation Initiative

```
305 <l:CategoryScheme isMaintainable="true" id="NHGIS" version="1.0"
306 versionDate="2009-03-02">
307 <l:CategorySchemeReference isReference="true" isExternal="false">
308 <r:ID>NHGIS_MISSING</r:ID>
309 <r:IdentifyingAgency>mpc.umn.ddi</r:IdentifyingAgency>
310 <r:Version>1.0</r:Version>
311 </l:CategorySchemeReference>
312 <l:CategorySchemeReference isReference="true" isExternal="false">
313 <r:ID>NHGIS_RACE</r:ID>
314 <r:IdentifyingAgency>mpc.umn.ddi</r:IdentifyingAgency>
315 <r:Version>1.0</r:Version>
316 </l:CategorySchemeReference>
317 </l:CategoryScheme>
318 <l:CategoryScheme isMaintainable="true" id="NHGIS_MISSING" version="1.0"
319 versionDate="2009-03-02">
320 <r:Label>Missing Category Types used in NHGIS</r:Label>
321 <l:Category isVersionable="true" id="DK" version="1.0"
322 versionDate="2009-03-02" missing="true">
323 <r:Label>Don't know</r:Label>
324 <l:Definition>The respondent did not know and the enumerator was not
325 able to ascertain the correct value for this response</l:Definition>
326 </l:Category>
327 <l:Category isVersionable="true" id="REF" version="1.0"
328 versionDate="2009-03-02" missing="true">
329 <r:Label>Refused to answer</r:Label>
330 <l:Definition>The respondent refused to provide this
331 response.</l:Definition>
332 </l:Category>
333 <l:Category isVersionable="true" id="UDC" version="1.0"
334 versionDate="2009-03-02" missing="true">
335 <r:Label>Undocumented Code</r:Label>
336 <l:Definition>The documentation for this response value is missing
337 resulting in an undocumented code.</l:Definition>
338 </l:Category>
339 <l:Category isVersionable="true" id="ILL" version="1.0"
340 versionDate="2009-03-02" missing="true">
341 <r:Label>Illegible documentation</r:Label>
342 <l:Definition>Due to damage or a poor rendering of the original
343 documents, the documentation for this response value is illegible
344 resulting in an undocumented code.</l:Definition>
345 </l:Category>
346 </l:CategoryScheme>
347 <l:CategoryScheme isMaintainable="true" id="NHGIS_RACE" version="1.0"
348 versionDate="2009-03-02">
349 <r:Label>Race Related Category Types used in NHGIS</r:Label>
350 <l:CategorySchemeReference isReference="true" isExternal="false">
351 <r:ID>NHGIS_WHITE</r:ID>
352 <r:IdentifyingAgency>mpc.umn.ddi</r:IdentifyingAgency>
353 <r:Version>1.0</r:Version>
354 </l:CategorySchemeReference>
355 <l:CategorySchemeReference isReference="true" isExternal="false">
356 <r:ID>NHGIS_BLACK</r:ID>
357 <r:IdentifyingAgency>mpc.umn.ddi</r:IdentifyingAgency>
358 <r:Version>1.0</r:Version>
359 </l:CategorySchemeReference>
360 <l:CategorySchemeReference isReference="true" isExternal="false">
361 <r:ID>NHGIS_OTHER</r:ID>
362 <r:IdentifyingAgency>mpc.umn.ddi</r:IdentifyingAgency>
```



Data Documentation Initiative

```
363     <r:Version>1.0</r:Version>
364   </l:CategorySchemeReference>
365 </l:CategoryScheme>
366 <l:CategoryScheme isMaintainable="true" id="NHGIS_WHITE" version="1.0"
367 versionDate="2009-03-02">
368   <l:Category isVersionable="true" id="WHT" version="1.0"
369   versionDate="2009-03-02" missing="false">
370     <r:Label>White</r:Label>
371     <l:Definition>Persons from predominantly european ancestry
372     regardless of place of birth.</l:Definition>
373   </l:Category>
374   <l:Category isVersionable="true" id="NBW" version="1.0"
375   versionDate="2009-03-02" missing="false">
376     <r:Label>Native born White</r:Label>
377     <l:Definition>Persons from predominantly european ancestry born in
378     the United States of America or its territories.</l:Definition>
379   </l:Category>
380   <l:Category isVersionable="true" id="FBW" version="1.0"
381   versionDate="2009-03-02" missing="false">
382     <r:Label>Native born White</r:Label>
383     <l:Definition>Persons from predominantly european ancestry born
384     outside of the United States of America or its territories.</l:Definition>
385   </l:Category>
386 </l:CategoryScheme>
387 <l:CategoryScheme isMaintainable="true" id="NHGIS_BLACK" version="1.0"
388 versionDate="2009-03-02">
389   <l:Category isVersionable="true" id="BLACK" version="1.0"
390   versionDate="2009-03-02" missing="false">
391     <r:Label>Black</r:Label>
392     <r:Label>Black / African American</r:Label>
393     <l:Definition>Persons of african acestory regardless of place of
394     birth. Predominance of african ancestry for purposes of racial
395     identification vary over time.</l:Definition>
396   </l:Category>
397   <l:Category isVersionable="true" id="SLV" version="1.0"
398   versionDate="2009-03-02" missing="false">
399     <r:Label>Slave</r:Label>
400     <l:Definition>Persons identified as Black who live in
401     slavery.</l:Definition>
402   </l:Category>
403   <l:Category isVersionable="true" id="FBLK" version="1.0"
404   versionDate="2009-03-02" missing="false">
405     <r:Label>Free Black</r:Label>
406     <l:Definition>Persons identified as Black who were either born as
407     free citizens of the United States or obained their freedom from
408     slavery.</l:Definition>
409   </l:Category>
410 </l:CategoryScheme>
411 <l:CategoryScheme isMaintainable="true" id="NHGIS_OTHER" version="1.0"
412 versionDate="2009-03-02">
413   <l:Category isVersionable="true" id="OTH1" version="1.0"
414   versionDate="2009-03-02" missing="false">
415     <r:Label>Other races</r:Label>
416     <l:Definition>All persons not identified as White or
417     Black.</l:Definition>
418   </l:Category>
419   <l:Category isVersionable="true" id="OTH2" version="1.0"
420   versionDate="2009-03-02" missing="false">
```



Data Documentation Initiative

```
421         <r:Label>Other races</r:Label>
422         <l:Definition>DAll persons not identified as White, Black. Indian,
423 or Chinese.</l:Definition>
424     </l:Category>
425     <l:Category isVersionable="true" id="NW" version="1.0"
426 versionDate="2009-03-02" missing="false">
427         <r:Label>Nonwhite population</r:Label>
428         <l:Definition>All persons not identified as White</l:Definition>
429     </l:Category>
430     <l:Category isVersionable="true" id="NWINT" version="1.0"
431 versionDate="2009-03-02" missing="false">
432         <r:Label>Nonwhite population exceptIndians not taxed</r:Label>
433         <l:Definition>All persons not identified as White or are Indians
434 living in designated areas where they were not subject to
435 taxation.</l:Definition>
436     </l:Category>
437 </l:CategoryScheme>
438 </g:ResourcePackage>
439 </ddi:DDIInstance>
```



440 **3 References**

441 See document for embedded references.

442 **3.1 Normative**

443

444 [RFC2119] S. Bradner, Key words for use in RFCs to Indicate Requirement
445 Levels, <http://www.ietf.org/rfc/rfc2119.txt>, IETF RFC 2119, March 1997.

446

447 OASIS, Best Practice, <http://www.oasis-open.org/committees/uddi-spec/doc/bp/uddi->
448 [spec-tc-bp-template.doc](http://www.oasis-open.org/committees/uddi-spec/doc/bp/uddi-spec-tc-bp-template.doc), 2003



449 **Appendix A. Acknowledgments**

450 The following individuals were members of the DDI Expert Workshop held 10-14 November
451 2008 at Schloss Dagstuhl, Leibniz Center for Informatics, in Wadern, Germany.

452 Nikos Askitas, Institute for the Study of Labor (IZA)

453 Karl Dinkelmann, University of Michigan

454 Michelle Edwards, University of Guelph

455 Janet Eisenhauer, University of Wisconsin

456 Jane Fry, Carleton University

457 Peter Granda, Inter-university Consortium for Political and Social Research (ICPSR)

458 Arofan Gregory, Open Data Foundation

459 Rob Grim, Tilburg University

460 Pascal Heus, Open Data Foundation

461 Maarten Hoogerwerf, Data Archiving and Networked Services (DANS)

462 Chuck Humphrey, University of Alberta

463 Jeremy Iverson, Algenta Technology

464 Jannik Vestergaard Jensen, Danish Data Archive (DDA)

465 Kirstine Kolsrud, Norwegian Social Science Data Services (NSD)

466 Stefan Kramer, Yale University

467 Jenny Linnerud, Statistics Norway

468 Hans Jørgen Marker, Danish Data Archive (DDA)

469 Ken Miller, United Kingdom Data Archive (UKDA)

470 Meinhard Moschner, GESIS - Leibniz Institute for the Social Sciences

471 Ron Nakao, Stanford University

472 Sigbjørn Revheim, Norwegian Social Science Data Services (NSD)



Data Documentation Initiative

- 473 Wendy Thomas, University of Minnesota
- 474 Mary Vardigan, Inter-university Consortium for Political and Social Research (ICPSR)
- 475 Joachim Wackerow, GESIS - Leibniz Institute for the Social Sciences
- 476 Wolfgang Zenk-Möltgen, GESIS - Leibniz Institute for the Social Sciences
- 477



478 **Appendix B. Revision History**

479

Rev	Date	By Whom	What
0.9	2009-03-22	Stefan Kramer	Removed date from filename to accommodate linking. Began revision history tracking.

480



481

482 **Appendix C. Legal Notices**

483 Copyright © DDI Alliance 2009, *All Rights Reserved*

484

485 <http://www.ddialliance.org/>

486

487 Content of this document is licensed under a Creative Commons License:

488 Attribution-Noncommercial-Share Alike 3.0 United States

489 This is a human-readable summary of the Legal Code (the full license).

490 <http://creativecommons.org/licenses/by-nc-sa/3.0/us/>

491

492 You are free:

493 to Share - to copy, distribute, display, and perform the work

494 to Remix - to make derivative works

495

496 Under the following conditions:

497

498 • Attribution. You must attribute the work in the manner specified by the author or
499 licensor (but not in any way that suggests that they endorse you or your use of
500 the work).

501 • Noncommercial. You may not use this work for commercial purposes.

502 • Share Alike. If you alter, transform, or build upon this work, you may distribute
503 the resulting work only under the same or similar license to this one.

504 • For any reuse or distribution, you must make clear to others the license terms of
505 this work. The best way to do this is with a link to this web page.

506 • Any of the above conditions can be waived if you get permission from the
507 copyright holder.

508 • Apart from the remix rights granted under this license, nothing in this license
509 impairs or restricts the author's moral rights.

510

511 Disclaimer

512 The Commons Deed is not a license. It is simply a handy reference for understanding the Legal
513 Code (the full license) — it is a human-readable expression of some of its key terms. Think of it as
514 the user-friendly interface to the Legal Code beneath. This Deed itself has no legal value, and its
515 contents do not appear in the actual license.

516

517 Creative Commons is not a law firm and does not provide legal services. Distributing of, displaying
518 of, or linking to this Commons Deed does not create an attorney-client relationship.

519 Your fair use and other rights are in no way affected by the above.

520

521 Legal Code:

522 <http://creativecommons.org/licenses/by-nc-sa/3.0/us/legalcode>

523