

**Danish Z39.50 Implementers Group**  
**danZIG**

## **danZIG Profile Specification v2007**

**Prepared by**

**Leif Andresen & Poul Henrik Jørgensen**

## **danZIG Profile Specification 2007**

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### **Abstract:**

The danZIG profile specifies the guidelines for systems interconnection between library applications in Denmark. The danZIG profile is primarily based on the ANSI/NISO Z39.50, a.k.a. ISO 23950.

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## **Introduction version v2007**

The version is updated with new codes according to the new version of standard search codes in Danish libraries: Praksisregler for søgeveje. Opsætning af søgeveje og udfoldning af koder under danMARC2. 2. udgave.

Beyond this the specification is not systematic updated.

## **Introduction version v2002-06 r11**

This document describes danZIG Profile Specification v2002-06 r11.

The danZIG Profile Version 2002-06 was prepared by Leif Andresen <mailto:lea@bs.dk> and Poul Henrik Jørgensen (new email) <mailto:phj@portia.dk>.

The danZIG profile specifies the guidelines for systems interconnection between library applications in Denmark. The current version of the danZIG profile is primarily based on the ANSI/NISO Z39.50-1995 Protocol, a.k.a. ISO 23950.

Information about the Danish Z39.50 Implementers Group is available from the Web site of the Danish National Library Authority: <http://www.bs.dk/danzig/>

## **1. Background**

The danZIG Profile Specification v2002-06 for use of Z39.50 is primarily based on the following specifications:

- **DanZIG Profile Version 1.** The previous version of the danZIG Profile including various modifications was approved by the danZIG in September 2001. This version is available here: <http://www.bs.dk/content.aspx?itemguid={A9254596-8D6B-4A59-A11B-ECFB5D23BCB4}#>
- **ONE-2 Profile Version 3.** The ONE-2 Profile Version 3 was prepared by the EU supported ONE-2 project. Parts of the danZIG profile version 2 is based on this ONE-2 Profile.
- **Bath Profile.** The danZIG Profile Version 2 is aligned with the Bath profile in respect to attribute combinations for Bibliographic Search and Retrieval. The danZIG Profile is generally designed to include Bath Profile requirements as a subset of the corresponding danZIG Profile requirements. Ref: <http://www.collectionscanada.ca/bath/bp-current.htm>
- **ZIG Holdings Schema.** The ZIG Holdings Abstract Schema is referenced by the danZIG Profile for retrieval of Holdings information. Ref: <http://www.loc.gov/z3950/agency/defns/holdings1-4.html>
- **Z39.50/ILL Profile 1.** This profile is used by ONE-2 implementations to support ISO Interlibrary Loan (ILL) Transactions over Z39.50. Z39.50/ILL Profile 1. Ref: <http://www.collectionscanada.ca/iso/ill/document/standard/z-ill-1a.pdf>
- **ILL XML Schema.** XML encoding of ILL transactions is used by ONE-2 implementations to support ILL transactions over E-mail (SMTP). The XML Schema for ISO ILL APDUs was developed by ONE-2 project and subsequently refined as part of danZIG work and added to Z39.50 Maintenance Agency web site: <http://www.loc.gov/z3950/agency/defns/illv5.xsd>

- **IPIG Profile for the ISO ILL Protocol.** The content of ISO ILL transactions within the ONE-2 Profile is based on the IPIG Profile v1. Ref.: <http://www.collectionscanada.ca/iso/ill/ipigprfl.htm>
- **Attribute Sets.** Search parameters etc. reference the Bib-1 and the Dan-1 attribute sets.
  - Bib-1.: <http://www.loc.gov/z3950/agency/defs/bib1.html>
  - Dan-1: <http://www.bs.dk/danzig/dan-1.htm>

The profiles listed here in turn references other relevant profiles and materials.

## 2. Scope

The primary objective of the danZIG Profile is to facilitate relevant communications between library systems located at different institutions in Denmark.

Access to local systems within an institution or to library systems at institutions outside Denmark may require additional features, that are outside the scope of the danZIG Profile Version 2.

## 3. Structure

The danZIG profile is intended to cover requirements of the following *functional areas*.

- Common Requirements
- Search and Retrieval of Library Catalogues.
- Search and Retrieval of Holdings information
- Item Ordering and Interlibrary Loans
- Cross-domain Search and Retrieval. (Removed)
- Update (Removed)
- Authority Records Search and Retrieval

Separate sets of specifications are described for each of the functional areas.

The specifications within a given functional area may describe one or more *levels* of requirements. The requirements levels within a given functional area are not necessarily cumulative. I.e. support for a higher level within a given functional area does not always imply support for lower levels within the same functional area.

The profile requirements may be viewed as an irregular matrix or tree:

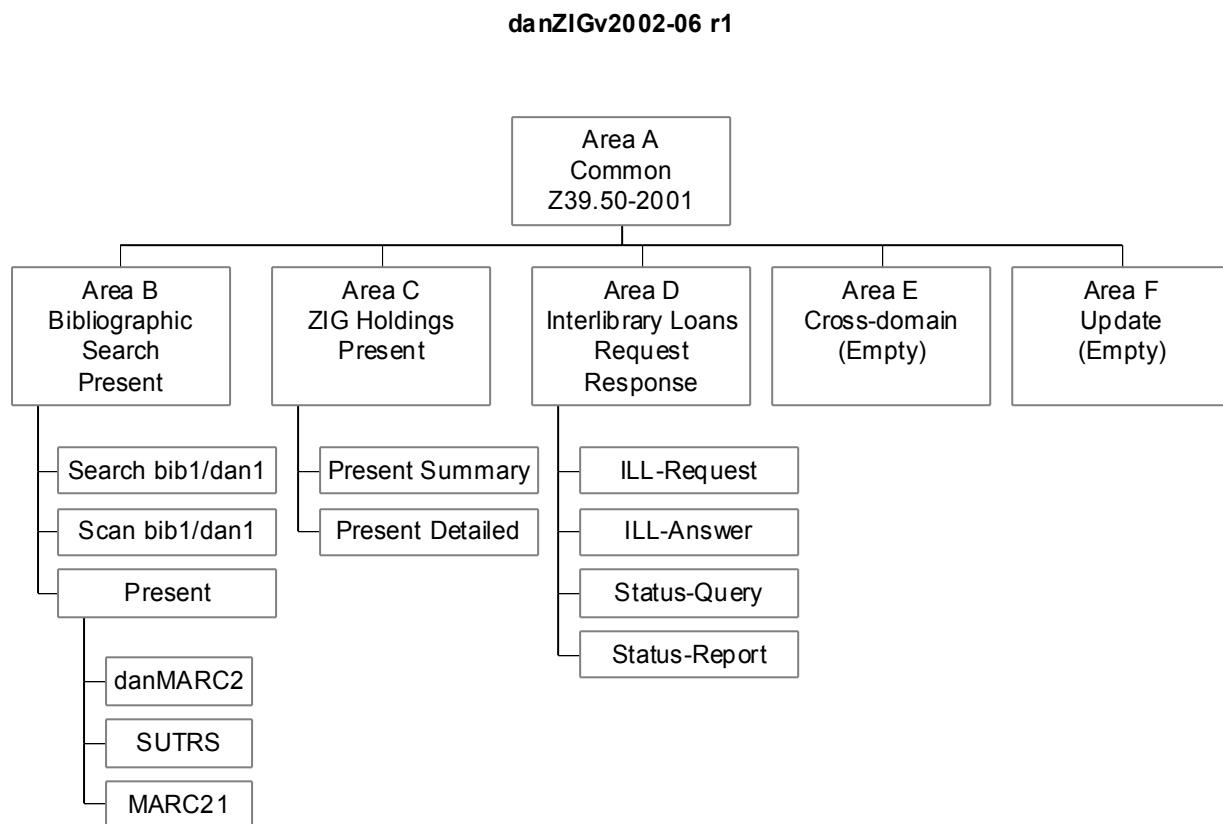
- Functional **Areas** represent different “columns” of specifications
- **Levels** represent different “rows” of specifications

A system may support different levels of requirements within different functional areas. A system may for example support the highest level within functional area A (Search and Retrieval of Library Catalogues), but it may at the same time support only the lowest level within functional area B (Search and Retrieval of Holdings information).

All Z39.50 Target systems must support the Common Requirements of functional area A.

The terms *Target* and *Server* plus *Origin* and *Client* are used interchangeably in relation to Z39.50 Target- and Origin specifications.

The following diagram illustrates the original structure and logical dependencies of the danZIG Profile.



*Remark: Area E and F are removed; area G added and ILL-transactions in area D are added.*

## 4. A Common Requirements

Specifications pertaining to different functional areas and levels imply other general requirements in addition to those specified here, e.g. transfer syntax and Z39.50 Services.

The danZIG Profile primarily specifies requirements to Z39.50 Targets. Z-Target (Server) is for example expected to support all of specified Bibliographic Searches, while a Z39.50 Origin (Client) is only expected to support those facilities that are relevant to its usage.

### 4.1 A Protocol Version

Servers (Targets) and Clients (Origins) must support ISO 23950 i.e. Z39.50-1995 Version 3:

Ref: <http://www.loc.gov/z3950/agency/1995doce.html>

This profile utilises a number of amendments to the above standard. The relevant amendments and clarifications are included in a new revision titled Z39.50-2003.

Ref: <http://www.niso.org/standards/resources/Z39-50-2003.pdf>

## **4.2 A Attribute Sets**

Servers and Clients must support mixed queries containing references to the *Bib-1* attribute set as well as the *Dan-1* attribute set (i.e., process requests and responses that contain the OID for Bib-1 plus optionally the OID for Dan-1):

<http://www.loc.gov/z3950/agency/defns/bib1.html>

<http://www.bs.dk/danzig/dan-1.htm>

Servers and Clients must support the Bib-1 Diagnostic set:

<http://www.loc.gov/z3950/agency/defns/bib1diag.html>

## **4.3 A Initialisation Facility**

Servers and Clients must support the *Init* Service with ID/Authentication parameters UserId and Password.

Servers must support Character set negotiation as part of the Init service.

Servers must support ISO 8859-1:1998 Latin-1 plus the ISO 10646 BMP character set with UTF-8 or UTF-16 encoding.

Search and scan strings must be represented as the InternationalString (CHOICE in Term must be charterString) as specified in Z39.50 Version 3.

## **4.4 A Termination Facility**

Servers and Clients must support the *Close* Service.

# **5. B Bibliographic Search and Retrieval**

Search and retrieval of Library Catalogues (Functional Area B) is specified in terms of one level only.

## **5.1 B Search Service**

Targets and Origins must support Query-type *Type-1*, i.e. RPN.

Target must support the *Result-set-name* parameter and should attempt to retain at least two named result sets for the duration of a session, if the origin names at least two result sets.

Targets and Origins must support level-1 segmentation.

All of the six attribute types should be supplied in each query. This implies that a Z39.50 Origin should supply values for all six attribute types in every query.

The Target must interpret (i.e. neither ignore- nor substitute) the values supplied for all of those attribute types, which are submitted in a given query.

If one or more attribute types are missing in a query, the Server may choose to either substitute default values for the missing attribute type - or reject the incomplete query as "Unsupported Attribute Combinations".

A Server must accept search requests containing any of the attribute combinations specified below. A Server may not treat any of these specified attribute combinations as "Unsupported Attribute Combinations", but it may always choose to return zero hits.

The concepts of “fields” and “subfields” are not clearly defined in the context of the Z39.50 data model. Servers may therefore return the same hits, regardless of whether given *Completeness* and *Position* attributes refer to “fields” or “sub fields”.

The following sections contain a complete enumeration of attribute combinations, which must be recognised by danZIG compliant Z-Servers in connection with Search Requests.

Remark that BIB-1 Relation, Position, Structure, Truncation and Completeness attributtes are used in combination with DAN-1 Use attribute. The DAN-1 Attributte set only consist of the Use attributes.

Danish Guidelines for use of access paths are available here:

<http://www.bs.dk/publikationer/andre/praksisregler/2007/index.htm>

### 5.1.1 Bib-1 Use Attributes for Search

Bib-1 *Use* (type 1) Attribute values for Search in danZIG Profile

| Bib-1 Use Attribute Name    | Bib-1 Use Value | Bib-1 Use Attribute Semantic Definition  |
|-----------------------------|-----------------|--|
| <i>Title</i>                | 4               | A word, phrase, character, or group of characters, normally appearing in an item, that names the item or the work contained in it. |
| <i>Title-series</i>         | 5               | Collective title applying to a group of separate, but related, items.  |
| <i>Title-uniform</i>        | 6               | The particular title by which a work is to be identified for cataloguing purposes.   |
| <i>Identifier-ISBN</i>      | 7               | International Standard Book Number   |
| <i>Identifier-ISSN</i>      | 8               | International Standard Serial Number   |
| <i>Control-number-local</i> | 12              | Character string that uniquely identifies a record in a local system.  |
| <i>Classification-Dewey</i> | 13              | A classification number from the Dewey Decimal Classification developed by Melvil Dewey.   |
| <i>Classification-UDC</i>   | 14              | A classification number from Universal Decimal Classification, a system based on the Dewey Decimal Classification.                 |
| <i>Classification-LC</i>    | 16              | A classification number from the US Library of Congress Classification.  |
| <i>Classification-NLM</i>   | 17              | A classification number from the US National Library of Medicine Classification.   |
| <i>Classification-NAL</i>   | 18              | A classification number from the US National Agriculture Library Classification.   |

| <b>Bib-1 Use Attribute Name</b>          | <b>Bib-1 Use Value</b> | <b>Bib-1 Use Attribute Semantic Definition</b>   |
|--|------------------------|--|
| <i>Classification-local</i>              | 20                     | A local classification number from a system not specified elsewhere in this list of attributes.  |
| <i>Subject</i>                           | 21                     | The primary topic on which a work is focused.  |
| <i>Subject-MESH</i>                      | 25                     | Subject headings from Medical Subject Headings maintained by the US National Library of Medicine.  |
| <i>Date-publication</i>                  | 31                     | The date (usually year) in which a document is published.  |
| <i>Title-key</i>                         | 33                     | The unique name assigned to a serial by the International Serials Data System (ISDS).  |
| <i>Title-parallel</i>                    | 35                     | The title proper in another language and/or script.  |
| <i>Title-former</i>                      | 42                     | A former title or title variation when one bibliographic record represents all issues of a serial that has changed title.  |
| <i>Code-language</i>                     | 54                     | A code that indicates the language of the item. The codes are defined by the Target.   |
| <i>Code-geographic-area</i>              | 55                     | A code that indicates the geographic area(s) that appear or are implied in the headings assigned to the item during cataloguing.   |
| <i>Code--institution</i>                 | 56                     | Code-institution   |
| <i>Name-geographic-place-publication</i> | 59                     | City or town where an item was published.  |
| <i>Identifier-CODEN</i>                  | 60                     | A six-character, unique, alphanumeric code assigned to serial and monographic publications by the CODEN section of the Chemical Abstracts Service.                                     |
| <i>Note</i>                              | 63                     | A concise statement in which such information as extended physical description, relationship to other works, or contents may be recorded.  |
| <i>Author-name</i>                       | 1003                   | A personal or corporate author or a conference or meeting name.  |
| <i>Author-name-personal</i>              | 1004                   | A person's real name, pseudonym, title of nobility, nickname, or initials.   |
| <i>Author-name-corporate</i>             | 1005                   | An organisation or a group of persons that is identified by a particular name. (Differs from attribute "name-corporate (2)" in that corporate name subject headings are not included.) |

| <b>Bib-1 Use Attribute Name</b> | <b>Bib-1 Use Value</b> | <b>Bib-1 Use Attribute Semantic Definition</b>  |
|---------------------------------|------------------------|---|
| <i>Identifier-standard</i>      | 1007                   | Standard numbers such as ISBN, ISSN, music publishers numbers, CODEN, etc., that are indexed together in many online public-access catalogues.  |
| <i>Subject-name-personal</i>    | 1009                   | A person's real name, personal pseudonym, title of nobility nickname, or initials that appears in a subject heading.  |
| <i>Date/time added to db</i>    | 1011                   | Date/time added to database   |
| <i>Date/time last modified</i>  | 1012                   | Date/time last modified   |
| <i>Any</i>                      | 1016                   | When the Origin (Client) uses 'any' the intent is that the Target (Server) locate records via commonly used access points. The Target may define 'any' to refer to a selected set of Use attributes corresponding to its commonly used access points. |
| <i>Name-publisher</i>           | 1018                   | The organisation responsible for the publication of the item.   |
| <i>Code-map-scale</i>           | 1024                   | Coded form of cartographic mathematical data, including scale, projection and/or co-ordinates related to the item.  |
| <i>Title-related-periodical</i> | 1026                   | Serial titles related to this periodical item, either the immediate predecessor or the immediate successor.   |
| <i>Material-type</i>            | 1031                   | A free-form string, more specific than the one-letter code in Leader/06 that describes the material type of the item, e.g., cassette, kit, computer database, and computer file.  |
| <i>Identifier-document</i>      | 1032                   | An identifier or Doc-ID, assigned by a server that uniquely identifies a document on that server. May or may not be persistent. May be, for example, a URL.   |
| <i>Title-host-item</i>          | 1033                   | The title of the item containing the part described in the record, for example, a journal title when the record describes an article in the journal.  |
| <i>Classification</i>           | 1040                   | The code or the section heading of a classification system. The attribute is a general (broad) attribute for codes, which do not exist as a search key.   |
| <i>Control-number-linking</i>   | 1049                   | The unique identification number of the linked record.  |
| <i>Subject-name-corporate</i>   | 1074                   | A corporate body name used as a subject heading.  |
| <i>Subject-uncontrolled</i>     | 1080                   | An uncontrolled subject term. General (broad) attribute for subject terms not specified any further, existing as a search key.  |

| <b>Bib-1 Use Attribute Name</b> | <b>Bib-1 Use Value</b> | <b>Bib-1 Use Attribute Semantic Definition</b>  |
|---------------------------------|------------------------|---|
| <i>Subject-AGROVOC</i>          | 1085                   | A subject heading from the multilingual agricultural thesaurus from FAO.  |
| <i>Subject-COMPASS</i>          | 1086                   | A subject heading from Computer Aided Subject System from British Library.                                      |
| <i>Subject-EPT</i>              | 1087                   | A subject heading from European Pedagogical Thesaurus.  |
| <i>Subject-NAL</i>              | 1088                   | A subject heading from National Agricultural Library.   |
| <i>Classification-BCM</i>       | 1089                   | A classification number from British Catalogue of Music.  |
| <i>Classification-DB</i>        | 1090                   | A classification number from Deutsche Bibliothek.   |
| <i>Identifier-ISRC</i>          | 1091                   | ISRC. International standard recording code (ISO 3901).   |
| <i>Identifier-ISMN</i>          | 1092                   | International standard music number (ISO 10957). ISMN   |
| <i>Identifier-ISRN</i>          | 1093                   | ISRN. International standard technical report number (ISO 10444).   |
| <i>Identifier-DOI</i>           | 1094                   | Digital Object Identifier.  |
| <i>Code-language-original</i>   | 1095                   | A code that indicates the original language of the item   |
| <i>Title-later</i>              | 1096                   | A later version of title.   |
| <i>EAN</i>                      | 1214                   | A 13-digit number where 1-3: type of merchandise 4-12: ISBN minus check digit (if type is book) 13: check digit |

### 5.1.2 Bib-1 Relation Attributes for Search

Bib-1 Relation (type 2) Attribute values for Search in danZIG Profile

| <b>Attribute values</b> | <b>Number</b> | <b>Note</b>  |
|-------------------------|---------------|--|
| Less-than               | 1             | Only in combination with Use attribute number 31 ( <i>Date-publication</i> ) |
| Less- than-or-equal     | 2             | Only in combination with Use attribute number 31 ( <i>Date-publication</i> ) |
| Equal                   | 3             |  |
| Greater-or-equal        | 4             | Only in combination with Use attribute number 31 ( <i>Date-publication</i> ) |
| Greater-than            | 5             | Only in combination with Use attribute number 31 ( <i>Date-publication</i> ) |

### 5.1.3 Bib-1 Position Attributes for Search

Bib-1 *Position* (type 3) Attribute values for Search in danZIG Profile

| Attribute values      | Number | Note |
|-----------------------|--------|------|
| First-in-field        | 1      |      |
| Any-position-in-field | 3      |      |

*First-in-subfield* (value 2) is not used in the danZIG-profile. The reason is, that *First-in-subfield* has no meaning in a data model based on index terms – not the data itself. This profile also references First in field as first in index term.

### 5.1.4 Bib-1 Structure Attributes for Search

BIB-1 *Structure* (type 4) Attribute values for Search in danZIG Profile

| Attribute values | Number | Note   |
|------------------|--------|--|
| Phrase           | 1      |  |
| Word             | 2      |  |
| Year             | 4      | E.g.: 2002   |
| Name-normalised  | 101    | E.g.: Jensen, Poul Erik  |
| Structure        | 103    | Only in combination with <i>Use</i> attribute number 12 ( <i>Control-number-local</i> ) and DAN-1 <i>Use</i> attribute 45 ( <i>ID-record-higher-level</i> ). |

### 5.1.5 Bib-1 Truncation Attributes for Search

BIB-1 *Truncation* (type 5) Attribute values for Search in danZIG Profile

| Attribute values | Number | Note |
|------------------|--------|------|
| Right-truncation | 1      |      |
| Do-not-truncate  | 100    |      |

### 5.1.6 Bib-1 Completeness Attributes for Search

Bib-1 *Completeness* (type 6) Attribute values for Search in danZIG Profile.

| Attribute values    | Number | Note |
|---------------------|--------|------|
| Incomplete-subfield | 1      |      |

| Attribute values   | Number | Note |
|--|--------|------|
| Complete-subfield  | 2      |      |
| Complete-field   | 3      |      |
| The concepts of “fields” and “subfields” are not clearly defined in the context of the Z39.50 data model. Servers may therefore return the same hits, regardless of whether given <i>Completeness</i> and <i>Position</i> attributes refer to “fields” or “subfields”. |        |      |

### 5.1.7 Bib-1 Search Attribute Combinations

The following table enumerates the combinations of Bib-1 attributes that must be supported by a danZIG compliant Server as part of a Search Request.

| BIB- 1<br>Attribute Combination name | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness | Relation to Bath-profile (empty = no) |
|--------------------------------------|-------|------------|------------|-------------|--------------|----------------|---------------------------------------|
| Title-eq-fif-ph-nt-cf                | 4     | 3          | 1          | 1           | 100          | 3              | 5.A.1.6                               |
| Title-eq-fif-ph-rt-cf                | 4     | 3          | 1          | 1           | 1            | 3              | Map from 5.A.1.7 and 5.A.1.8          |
| Title-eq-any-ph-nt-ic                | 4     | 3          | 3          | 1           | 100          | 1              |                                       |
| Title-eq-any-ph-rt-ic                | 4     | 3          | 3          | 1           | 1            | 1              |                                       |
| Title-eq-any-wo-nt-ic                | 4     | 3          | 3          | 2           | 100          | 1              | 5.A.0.2                               |
| Title-eq-any-wo-rt-ic                | 4     | 3          | 3          | 2           | 1            | 1              | 5.A.1.5                               |
| TitleSeries-eq-fif-ph-nt-cf          | 5     | 3          | 1          | 1           | 100          | 3              |                                       |
| TitleSeries-eq-fif-ph-rt-cf          | 5     | 3          | 1          | 1           | 1            | 3              |                                       |
| TitleSeries-eq-any-ph-nt-ic          | 5     | 3          | 3          | 1           | 100          | 1              |                                       |
| TitleSeries-eq-any-ph-rt-ic          | 5     | 3          | 3          | 1           | 1            | 1              |                                       |
| TitleSeries-eq-any-wo-nt-ic          | 5     | 3          | 3          | 2           | 100          | 1              |                                       |
| TitleSeries-eq-any-wo-rt-ic          | 5     | 3          | 3          | 2           | 1            | 1              |                                       |
| TitleUniform-eq-fif-ph-nt-cf         | 6     | 3          | 1          | 1           | 100          | 3              |                                       |
| TitleUniform-eq-fif-ph-rt-cf         | 6     | 3          | 1          | 1           | 1            | 3              |                                       |
| TitleUniform-eq-any-ph-nt-ic         | 6     | 3          | 3          | 1           | 100          | 1              |                                       |
| TitleUniform-eq-any-ph-rt-ic         | 6     | 3          | 3          | 1           | 1            | 1              |                                       |

| BIB- 1<br>Attribute Combination name | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness | Relation to Bath-profile (empty = no) |
|--------------------------------------|-------|------------|------------|-------------|--------------|----------------|---------------------------------------|
| TitleUniform-eq-any-wo-nt-ic         | 6     | 3          | 3          | 2           | 100          | 1              |                                       |
| TitleUniform-eq-any-wo-rt-ic         | 6     | 3          | 3          | 2           | 1            | 1              |                                       |
| ISBN-eq-any-ph-nt-cs                 | 7     | 3          | 3          | 1           | 100          | 2              |                                       |
| ISSN-eq-any-ph-nt-cs                 | 8     | 3          | 3          | 1           | 100          | 2              |                                       |
| ContNoLocal-eq-any-st-nt-cs          | 12    | 3          | 3          | 103         | 100          | 2              |                                       |
| Dewey-eq-any-ph-nt-cf                | 13    | 3          | 1          | 1           | 100          | 3              |                                       |
| Dewey-eq-any-ph-rt-cf                | 13    | 3          | 1          | 1           | 1            | 3              |                                       |
| UDC-eq-any-ph-nt-cf                  | 14    | 3          | 1          | 1           | 100          | 3              |                                       |
| UDC-eq-any-ph-rt-cf                  | 14    | 3          | 1          | 1           | 1            | 3              |                                       |
| LC-eq-any-ph-nt-cf                   | 16    | 3          | 1          | 1           | 100          | 3              |                                       |
| LC-eq-any-ph-rt-cf                   | 16    | 3          | 1          | 1           | 1            | 3              |                                       |
| NLM-eq-any-ph-nt-cf                  | 17    | 3          | 1          | 1           | 100          | 3              |                                       |
| NLM-eq-any-ph-rt-cf                  | 17    | 3          | 1          | 1           | 1            | 3              |                                       |
| NAL-eq-any-ph-nt-cf                  | 18    | 3          | 1          | 1           | 100          | 3              |                                       |
| NAL-eq-any-ph-rt-cf                  | 18    | 3          | 3          | 1           | 1            | 3              |                                       |
| ClassLoc-eq-fif-ph-nt-cf             | 20    | 3          | 1          | 1           | 100          | 3              |                                       |
| ClassLoc-eq-fif-ph-rt-cf             | 20    | 3          | 1          | 1           | 1            | 3              |                                       |
| ClassLoc-eq-any-ph-nt-ic             | 20    | 3          | 3          | 1           | 100          | 1              |                                       |
| ClassLoc-eq-any-ph-rt-ic             | 20    | 3          | 3          | 1           | 1            | 1              |                                       |
| ClassLoc-eq-any-wo-nt-ic             | 20    | 3          | 3          | 2           | 100          | 1              |                                       |
| ClassLoc-eq-any-wo-rt-ic             | 20    | 3          | 3          | 2           | 1            | 1              |                                       |
| Subject-eq-fif-ph-nt-cf              | 21    | 3          | 1          | 1           | 100          | 3              | 5.A.1.10                              |
| Subject-eq-fif-ph-rt-cf              | 21    | 3          | 1          | 1           | 1            | 3              | Map from 5.A.1.11 and 5.A.1.12        |
| Subject-eq-any-ph-nt-ic              | 21    | 3          | 3          | 1           | 100          | 1              |                                       |
| Subject-eq-any-ph-rt-ic              | 21    | 3          | 3          | 1           | 1            | 1              |                                       |
| Subject-eq-any-wo-nt-ic              | 21    | 3          | 3          | 2           | 100          | 1              | 5.A.0.3                               |

| BIB- 1<br>Attribute Combination name | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness | Relation to Bath-profile (empty = no) |
|--------------------------------------|-------|------------|------------|-------------|--------------|----------------|---------------------------------------|
| Subject-eq-any-wo-rt-ic              | 21    | 3          | 3          | 2           | 1            | 1              | 5.A.1.9                               |
| MESH-eq-fif-ph-nt-cf                 | 25    | 3          | 1          | 1           | 100          | 3              |                                       |
| MESH-eq-fif-ph-rt-cf                 | 25    | 3          | 1          | 1           | 1            | 3              |                                       |
| MESH-eq-any-ph-nt-ic                 | 25    | 3          | 3          | 1           | 100          | 1              |                                       |
| MESH-eq-any-ph-rt-ic                 | 25    | 3          | 3          | 1           | 1            | 1              |                                       |
| MESH-eq-any-wo-nt-ic                 | 25    | 3          | 3          | 2           | 100          | 1              |                                       |
| MESH-eq-any-wo-rt-ic                 | 25    | 3          | 3          | 2           | 1            | 1              |                                       |
| DatePubl-lt-any-dn-nt-cs             | 31    | 1          | 3          | 4           | 100          | 2              | 5.A.1.15                              |
| DatePubl-le-any-dn-nt-cs             | 31    | 2          | 3          | 4           | 100          | 2              | 5.A.1.15                              |
| DatePubl-eq-any-dn-nt-cs             | 31    | 3          | 3          | 4           | 100          | 2              | 5.A.1.15                              |
| DatePubl-ge-any-dn-nt-cs             | 31    | 4          | 3          | 4           | 100          | 2              | 5.A.1.15                              |
| DatePubl-gt-any-dn-nt-cs             | 31    | 5          | 3          | 4           | 100          | 2              | 5.A.1.15                              |
| TitleKey-eq-fif-ph-nt-cf             | 33    | 3          | 1          | 1           | 100          | 3              | 5.A.2.3                               |
| TitleKey-eq-fif-ph-rt-cf             | 33    | 3          | 1          | 1           | 1            | 3              | Map from 5.A.2.4 and 5.A.2.5          |
| TitleKey-eq-any-ph-nt-ic             | 33    | 3          | 3          | 1           | 100          | 1              |                                       |
| TitleKey-eq-any-ph-rt-ic             | 33    | 3          | 3          | 1           | 1            | 1              |                                       |
| TitleKey-eq-any-wo-nt-ic             | 33    | 3          | 3          | 2           | 100          | 1              | 5.A.2.1                               |
| TitleKey-eq-any-wo-rt-ic             | 33    | 3          | 3          | 2           | 1            | 1              | 5.A.2.2                               |
| TitlePar-eq-fif-ph-nt-cf             | 35    | 3          | 1          | 1           | 100          | 3              |                                       |
| TitlePar-eq-fif-ph-rt-cf             | 35    | 3          | 1          | 1           | 1            | 3              |                                       |
| TitlePar-eq-any-ph-nt-ic             | 35    | 3          | 3          | 1           | 100          | 1              |                                       |
| TitlePar-eq-any-ph-rt-ic             | 35    | 3          | 3          | 1           | 1            | 1              |                                       |
| TitlePar-eq-any-wo-nt-ic             | 35    | 3          | 3          | 2           | 100          | 1              |                                       |
| TitlePar-eq-any-wo-rt-ic             | 35    | 3          | 3          | 2           | 1            | 1              |                                       |
| TitleForm-eq-fif-ph-nt-cf            | 42    | 3          | 1          | 1           | 100          | 3              |                                       |
| TitleForm-eq-fif-ph-rt-cf            | 42    | 3          | 1          | 1           | 1            | 3              |                                       |

| BIB- 1<br>Attribute Combination name |      | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness   | Relation to Bath-profile (empty = no) |
|--------------------------------------|------|-------|------------|------------|-------------|--------------|------------------|---------------------------------------|
| TitleForm-eq-any-ph-nt-ic            | 42   | 3     | 3          | 1          | 100         | 1            |                  |                                       |
| TitleForm-eq-any-ph-rt-ic            | 42   | 3     | 3          | 1          | 1           | 1            |                  |                                       |
| TitleForm-eq-any-wo-nt-ic            | 42   | 3     | 3          | 2          | 100         | 1            |                  |                                       |
| TitleForm-eq-any-wo-rt-ic            | 42   | 3     | 3          | 2          | 1           | 1            |                  |                                       |
| CodeLang-eq-any-wo-nt-cs             | 54   | 3     | 3          | 2          | 100         | 2            | Map from 5.A.2.8 |                                       |
| CodeGeo-eq-any-wo-nt-cs              | 55   | 3     | 3          | 2          | 100         | 2            |                  |                                       |
| CodeInst-eq-any-wo-rt-ic             | 56   | 3     | 3          | 2          | 1           | 1            |                  |                                       |
| CodeInst-eq-any-wo-nt-ic             | 56   | 3     | 3          | 2          | 100         | 2            |                  |                                       |
| NameGeoPl-eq-any-wo-nt-cs            | 59   | 3     | 3          | 2          | 100         | 2            |                  |                                       |
| NameGeoPl-eq-any-wo-rt-cs            | 59   | 3     | 3          | 2          | 1           | 2            |                  |                                       |
| CODEN-eq-any-wo-nt-cs                | 60   | 3     | 3          | 2          | 100         | 2            |                  |                                       |
| Note-eq-any-ph-nt-ic                 | 63   | 3     | 3          | 1          | 100         | 1            |                  |                                       |
| Note-eq-any-ph-rt-ic                 | 63   | 3     | 3          | 1          | 1           | 1            |                  |                                       |
| Note-eq-any-wo-nt-ic                 | 63   | 3     | 3          | 2          | 100         | 1            |                  |                                       |
| Note-eq-any-wo-rt-ic                 | 63   | 3     | 3          | 2          | 1           | 1            |                  |                                       |
| AuthorName-eq-fif-nn-nt-cs           | 1003 | 3     | 1          | 101        | 100         | 2            | Map from 5.A.1.4 |                                       |
| AuthorName-eq-fif-nn-rt-cs           | 1003 | 3     | 1          | 101        | 1           | 2            | Map from 5.A.1.? |                                       |
| AuthorName-eq-any-wo-nt-ic           | 1003 | 3     | 3          | 2          | 100         | 1            | 5.A.1.2          |                                       |
| AuthorName-eq-any-wo-rt-ic           | 1003 | 3     | 3          | 2          | 1           | 1            | 5.A.1.3          |                                       |
| AuthorName-eq-any-nn-nt-ic           | 1003 | 3     | 3          | 101        | 100         | 1            | 5.A.0.1          |                                       |
| AuthorName-eq-any-nn-rt-ic           | 1003 | 3     | 3          | 101        | 1           | 1            | 5.A.1.1          |                                       |
| AuthorNamePer-eq-fif-nn-nt-cs        | 1004 | 3     | 1          | 101        | 100         | 2            |                  |                                       |
| AuthorNamePer-eq-fif-nn-rt-cs        | 1004 | 3     | 1          | 101        | 1           | 2            |                  |                                       |
| AuthorNamePer-eq-any-wo-nt-ic        | 1004 | 3     | 3          | 2          | 100         | 1            |                  |                                       |
| AuthorNamePer-eq-any-wo-rt-ic        | 1004 | 3     | 3          | 2          | 1           | 1            |                  |                                       |
| AuthorNamePer-eq-any-nn-nt-ic        | 1004 | 3     | 3          | 101        | 100         | 1            |                  |                                       |

| <b>BIB- 1</b><br><b>Attribute Combination name</b> | <b>1 Use</b> | <b>2 Relation</b> | <b>3 Position</b> | <b>4 Structure</b> | <b>5 Truncation</b> | <b>6 Completeness</b> | <b>Relation to Bath-profile (empty = no)</b> |
|--|--------------|-------------------|-------------------|--------------------|---------------------|-----------------------|--|
| AuthorNamePer-eq-any-nn-rt-ic                      | 1004         | 3                 | 3                 | 101                | 1                   | 1                     |  |
| AuthorNameCorp-eq-fif-nn-nt-cs                     | 1005         | 3                 | 1                 | 101                | 100                 | 2                     |  |
| AuthorNameCorp-eq-fif-nn-rt-cs                     | 1005         | 3                 | 1                 | 101                | 1                   | 2                     |  |
| AuthorNameCorp-eq-any-wo-nt-ic                     | 1005         | 3                 | 3                 | 2                  | 100                 | 1                     |  |
| AuthorNameCorp-eq-any-wo-rt-ic                     | 1005         | 3                 | 3                 | 2                  | 1                   | 1                     |  |
| AuthorNameCorp-eq-any-nn-nt-ic                     | 1005         | 3                 | 3                 | 101                | 100                 | 1                     |  |
| AuthorNameCorp-eq-any-nn-rt-ic                     | 1005         | 3                 | 3                 | 101                | 1                   | 1                     |  |
| IdentifierStd-eq-fif-ph-nt-ic                      | 1007         | 3                 | 1                 | 1                  | 100                 | 1                     | 5.A.1.14                                     |
| SubjectNamePer-eq-fif-ph-nt-cf                     | 1009         | 3                 | 1                 | 1                  | 100                 | 3                     |  |
| SubjectNamePer-eq-fif-ph-rt-cf                     | 1009         | 3                 | 1                 | 1                  | 1                   | 3                     |  |
| SubjectNamePer-eq-any-ph-nt-ic                     | 1009         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| SubjectNamePer-eq-any-ph-rt-ic                     | 1009         | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| SubjectNamePer-eq-any-wo-nt-ic                     | 1009         | 3                 | 3                 | 2                  | 100                 | 1                     |  |
| SubjectNamePer-eq-any-wo-rt-ic                     | 1009         | 3                 | 3                 | 2                  | 1                   | 1                     |  |
| DateAdded-lt-any-dn-nt-cs                          | 1011         | 1                 | 3                 | 4                  | 100                 | 2                     |  |
| DateAdded-le-any-dn-nt-cs                          | 1011         | 2                 | 3                 | 4                  | 100                 | 2                     |  |
| DateAdded-eq-any-dn-nt-cs                          | 1011         | 3                 | 3                 | 4                  | 100                 | 2                     |  |
| DateAdded-ge-any-dn-nt-cs                          | 1011         | 4                 | 3                 | 4                  | 100                 | 2                     |  |
| DateAdded-gt-any-dn-nt-cs                          | 1011         | 5                 | 3                 | 4                  | 100                 | 2                     |  |
| DateModified-lt-any-dn-nt-cs                       | 1012         | 1                 | 3                 | 4                  | 100                 | 2                     |  |
| DateModified-le-any-dn-nt-cs                       | 1012         | 2                 | 3                 | 4                  | 100                 | 2                     |  |
| DateModified-eq-any-dn-nt-cs                       | 1012         | 3                 | 3                 | 4                  | 100                 | 2                     |  |
| DateModified-ge-any-dn-nt-cs                       | 1012         | 4                 | 3                 | 4                  | 100                 | 2                     |  |
| DateModified-gt-any-dn-nt-cs                       | 1012         | 5                 | 3                 | 4                  | 100                 | 2                     |  |
| Any-eq-any-ph-nt-ic                                | 1016         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| Any-eq-any-ph-rt-ic                                | 1016         | 3                 | 3                 | 1                  | 1                   | 1                     |  |

| <b>BIB- 1</b><br><b>Attribute Combination name</b> | <b>1 Use</b> | <b>2 Relation</b> | <b>3 Position</b> | <b>4 Structure</b> | <b>5 Truncation</b> | <b>6 Completeness</b> | <b>Relation to Bath-profile (empty = no)</b> |
|--|--------------|-------------------|-------------------|--------------------|---------------------|-----------------------|--|
| Any-eq-any-wo-nt-ic                                | 1016         | 3                 | 3                 | 2                  | 100                 | 1                     | 5.A.0.4                                      |
| Any-eq-any-wo-rt-ic                                | 1016         | 3                 | 3                 | 2                  | 1                   | 1                     | 5.A.1.13                                     |
| NamePubl-eq-any-ph-nt-ic                           | 1018         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| NamePubl-eq-any-ph-rt-ic                           | 1018         | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| CodeMap-eq-any-wo-nt-cs                            | 1024         | 3                 | 3                 | 2                  | 100                 | 2                     |  |
| TitleRelPeri-eq-fif-ph-nt-cf                       | 1026         | 3                 | 1                 | 1                  | 100                 | 3                     |  |
| TitleRelPeri-eq-fif-ph-rt-cf                       | 1026         | 3                 | 1                 | 1                  | 1                   | 3                     |  |
| TitleRelPeri-eq-any-ph-nt-ic                       | 1026         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| TitleRelPeri-eq-any-ph-rt-ic                       | 1026         | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| TitleRelPeri-eq-any-wo-nt-ic                       | 1026         | 3                 | 3                 | 2                  | 100                 | 1                     |  |
| TitleRelPeri-eq-any-wo-rt-ic                       | 1026         | 3                 | 3                 | 2                  | 1                   | 1                     |  |
| MatType-eq-any-wo-nt-cs                            | 1031         | 3                 | 3                 | 2                  | 100                 | 2                     | Map from 5.A.2.6                             |
| MatType-eq-fif-ph-nt-ic                            | 1031         | 3                 | 1                 | 1                  | 100                 | 1                     | 5.A.2.7                                      |
| IdentifierDoc-eq-any-ph-nt-cs                      | 1032         | 3                 | 3                 | 1                  | 100                 | 2                     |  |
| TitleHostItem-eq-fif-ph-nt-cf                      | 1033         | 3                 | 1                 | 1                  | 100                 | 3                     |  |
| TitleHostItem-eq-fif-ph-rt-cf                      | 1033         | 3                 | 1                 | 1                  | 1                   | 3                     |  |
| TitleHostItem-eq-any-ph-nt-ic                      | 1033         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| TitleHostItem-eq-any-ph-rt-ic                      | 1033         | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| TitleHostItem-eq-any-wo-nt-ic                      | 1033         | 3                 | 3                 | 2                  | 100                 | 1                     |  |
| TitleHostItem-eq-any-wo-rt-ic                      | 1033         | 3                 | 3                 | 2                  | 1                   | 1                     |  |
| ClassPhrase-eq-fif-ph-nt-cf                        | 1040         | 3                 | 1                 | 1                  | 100                 | 3                     |  |
| ClassPhrase-eq-fif-ph-rt-cf                        | 1040         | 3                 | 1                 | 1                  | 1                   | 3                     |  |
| ClassPhrase-eq-any-ph-nt-ic                        | 1040         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| ClassPhrase-eq-any-ph-rt-ic                        | 1040         | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| ClassPhrase-eq-any-wo-nt-ic                        | 1040         | 3                 | 3                 | 2                  | 100                 | 1                     |  |
| ClassPhrase-eq-any-wo-rt-ic                        | 1040         | 3                 | 3                 | 2                  | 1                   | 1                     |  |

| <b>BIB- 1</b><br><b>Attribute Combination name</b> | <b>1 Use</b> | <b>2 Relation</b> | <b>3 Position</b> | <b>4 Structure</b> | <b>5 Truncation</b> | <b>6 Completeness</b> | <b>Relation to Bath-profile (empty = no)</b> |
|--|--------------|-------------------|-------------------|--------------------|---------------------|-----------------------|--|
| ControlNoLink-eq-any-wo-nt-cs                      | 1049         | 3                 | 3                 | 2                  | 100                 | 2                     |  |
| SubNameCor-eq-fif-ph-nt-cf                         | 1074         | 3                 | 1                 | 1                  | 100                 | 3                     |  |
| SubNameCor-eq-fif-ph-rt-cf                         | 1074         | 3                 | 1                 | 1                  | 1                   | 3                     |  |
| SubNameCor-eq-any-ph-nt-ic                         | 1074         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| SubNameCor-eq-any-ph-rt-ic                         | 1074         | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| SubNameCor-eq-any-wo-nt-ic                         | 1074         | 3                 | 3                 | 2                  | 100                 | 1                     |  |
| SubNameCor-eq-any-wo-rt-ic                         | 1074         | 3                 | 3                 | 2                  | 1                   | 1                     |  |
| SubUnCon-eq-fif-ph-nt-cf                           | 1080         | 3                 | 1                 | 1                  | 100                 | 3                     |  |
| SubUnCon-eq-fif-ph-rt-cf                           | 1080         | 3                 | 1                 | 1                  | 1                   | 3                     |  |
| SubUnCon-eq-any-ph-nt-ic                           | 1080         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| SubUnCon-eq-any-ph-rt-ic                           | 1080         | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| SubUnCon-eq-any-wo-nt-ic                           | 1080         | 3                 | 3                 | 2                  | 100                 | 1                     |  |
| SubUnCon-eq-any-wo-rt-ic                           | 1080         | 3                 | 3                 | 2                  | 1                   | 1                     |  |
| AGROVOC-eq-fif-ph-nt-cf                            | 1085         | 3                 | 1                 | 1                  | 100                 | 3                     |  |
| AGROVOC-eq-fif-ph-rt-cf                            | 1085         | 3                 | 1                 | 1                  | 1                   | 3                     |  |
| AGROVOC-eq-any-ph-nt-ic                            | 1085         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| AGROVOC-eq-any-ph-rt-ic                            | 1085         | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| AGROVOC-eq-any-wo-nt-ic                            | 1085         | 3                 | 3                 | 2                  | 100                 | 1                     |  |
| AGROVOC-eq-any-wo-rt-ic                            | 1085         | 3                 | 3                 | 2                  | 1                   | 1                     |  |
| COMPASS-eq-fif-ph-nt-cf                            | 1086         | 3                 | 1                 | 1                  | 100                 | 3                     |  |
| COMPASS-eq-fif-ph-rt-cf                            | 1086         | 3                 | 1                 | 1                  | 1                   | 3                     |  |
| COMPASS-eq-any-ph-nt-ic                            | 1086         | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| COMPASS-eq-any-ph-rt-ic                            | 1086         | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| COMPASS-eq-any-wo-nt-ic                            | 1086         | 3                 | 3                 | 2                  | 100                 | 1                     |  |
| COMPASS-eq-any-wo-rt-ic                            | 1086         | 3                 | 3                 | 2                  | 1                   | 1                     |  |
| EPT-eq-fif-ph-nt-cf                                | 1087         | 3                 | 1                 | 1                  | 100                 | 3                     |  |

| BIB- 1<br>Attribute Combination name | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness | Relation to Bath-profile (empty = no) |
|--------------------------------------|-------|------------|------------|-------------|--------------|----------------|---------------------------------------|
| EPT-eq-fif-ph-rt-cf                  | 1087  | 3          | 1          | 1           | 1            | 3              |                                       |
| EPT-eq-any-ph-nt-ic                  | 1087  | 3          | 3          | 1           | 100          | 1              |                                       |
| EPT-eq-any-ph-rt-ic                  | 1087  | 3          | 3          | 1           | 1            | 1              |                                       |
| EPT-eq-any-wo-nt-ic                  | 1087  | 3          | 3          | 2           | 100          | 1              |                                       |
| EPT-eq-any-wo-rt-ic                  | 1087  | 3          | 3          | 2           | 1            | 1              |                                       |
| NAL-eq-fif-ph-nt-cf                  | 1088  | 3          | 1          | 1           | 100          | 3              |                                       |
| NAL-eq-fif-ph-rt-cf                  | 1088  | 3          | 1          | 1           | 1            | 3              |                                       |
| NAL-eq-any-ph-nt-ic                  | 1088  | 3          | 3          | 1           | 100          | 1              |                                       |
| NAL-eq-any-ph-rt-ic                  | 1088  | 3          | 3          | 1           | 1            | 1              |                                       |
| NAL-eq-any-wo-nt-ic                  | 1088  | 3          | 3          | 2           | 100          | 1              |                                       |
| NAL-eq-any-wo-rt-ic                  | 1088  | 3          | 3          | 2           | 1            | 1              |                                       |
| BCM-eq-fif-ph-nt-cf                  | 1089  | 3          | 3          | 1           | 100          | 3              |                                       |
| BCM-eq-fif-ph-rt-cf                  | 1089  | 3          | 3          | 1           | 1            | 3              |                                       |
| ClassDB-eq-fif-ph-nt-cf              | 1090  | 3          | 3          | 1           | 100          | 3              |                                       |
| ClassDB-eq-fif-ph-rt-cf              | 1090  | 3          | 3          | 1           | 1            | 3              |                                       |
| ISRC-eq-any-ph-nt-cs                 | 1091  | 3          | 3          | 1           | 100          | 2              |                                       |
| ISMN-eq-any-ph-nt-cs                 | 1092  | 3          | 3          | 1           | 100          | 2              |                                       |
| ISRN-eq-any-ph-nt-cs                 | 1093  | 3          | 3          | 1           | 100          | 2              |                                       |
| DOI-eq-any-ph-nt-cs                  | 1094  | 3          | 3          | 1           | 100          | 2              |                                       |
| CodeLangOri-eq-any-wo-nt-cs          | 1095  | 3          | 3          | 2           | 100          | 2              |                                       |
| TitleLater-eq-fif-ph-nt-cf           | 1096  | 3          | 1          | 1           | 100          | 3              |                                       |
| TitleLater-eq-fif-ph-rt-cf           | 1096  | 3          | 1          | 1           | 1            | 3              |                                       |
| TitleLater-eq-any-ph-nt-ic           | 1096  | 3          | 3          | 1           | 100          | 1              |                                       |
| TitleLater-eq-any-ph-rt-ic           | 1096  | 3          | 3          | 1           | 1            | 1              |                                       |
| TitleLater-eq-any-wo-nt-ic           | 1096  | 3          | 3          | 2           | 100          | 1              |                                       |
| TitleLater-eq-any-wo-rt-ic           | 1096  | 3          | 3          | 2           | 1            | 1              |                                       |

| BIB- 1<br>Attribute Combination name | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness | Relation to Bath-profile (empty = no) |
|--------------------------------------|-------|------------|------------|-------------|--------------|----------------|---------------------------------------|
| EAN-eq-any-wo-rt-ic                  | 1214  | 3          | 3          | 2           | 1            | 1              |                                       |
| EAN-eq-any-wo-nt-ic                  | 1214  | 3          | 3          | 2           | 100          | 2              |                                       |

### 5.1.8 Relationship with Bath Profile for Search

The following table illustrates the relationship between the Bath Profile attribute combinations and corresponding danZIG Profile attribute combinations.

| Bath-code | Name of Attribute Combinations<br><b>Bath-profile 1.1 with Amendments 1 and 7</b>  | Relation Bath / danZIG | danZIG-profile Attribute Combinations |
|-----------|--|------------------------|---------------------------------------|
| 5.A.0.1.  | Precision Match for Established Name Heading                                       | equal                  | AuthorName-eq-any-nn-nt-ic            |
| 5.A.0.2.  | Title Search - Keyword   | equal                  | Title-eq-any-wo-nt-ic                 |
| 5.A.0.3.  | Subject Search - Keyword   | equal                  | Subject-eq-any-wo-nt-ic               |
| 5.A.0.4.  | Any Search - Keyword   | equal                  | Any-eq-any-wo-nt-ic                   |
| 5.A.1.1.  | Author Search - Precision Match for Established Name Heading with Right Truncation | equal                  | AuthorName-eq-any-nn-rt-ic            |
| 5.A.1.2.  | Author Search - Keyword  | equal                  | AuthorName-eq-any-wo-nt-ic            |
| 5.A.1.3.  | Author Search - Keyword with Right Truncation                                      | equal                  | AuthorName-eq-any-wo-rt-ic            |
| 5.A.1.4.  | Author Search - Exact Match  | map to                 | AuthorName-eq-fif-nn-nt-cs            |
| 5.A.1.5.  | Title Search - Keyword with Right Truncation                                       | equal                  | Title-eq-any-wo-rt-ic                 |
| 5.A.1.6.  | Title Search - Exact Match   | equal                  | Title-eq-fif-ph-nt-cf                 |
| 5.A.1.7.  | Title Search – First Words in Field  | map to                 | Title-eq-fif-ph-rt-cf                 |
| 5.A.1.8.  | Title Search - First Characters in Field   | map to                 | Title-eq-fif-ph-rt-cf                 |
| 5.A.1.9.  | Subject Search - Keyword with Right Truncation                                     | equal                  | Subject-eq-any-wo-rt-ic               |
| 5.A.1.10. | Subject Search - Exact Match   | equal                  | Subject-eq-fif-ph-nt-cf               |

| <b>Bath-code</b> | <b>Name of Attribute Combinations</b><br><b>Bath-profile 1.1 with Amendments 1 and 7</b> | <b>Relation Bath / danZIG</b> | <b>danZIG-profile Attribute Combinations</b>   |
|------------------|--|-------------------------------|--|
| 5.A.1.11.        | Subject Search – First Words in Field  | map to                        | Subject-eq-fif-ph-rt-cf  |
| 5.A.1.12.        | Subject Search - First Characters in Field   | map to                        | Subject-eq-fif-ph-rt-cf  |
| 5.A.1.13.        | Any Search - Keyword with Right Truncation   | equal                         | Any-eq-any-wo-rt-ic  |
| 5.A.1.14.        | Standard Identifier Search   | equal                         | IdentifierStd-eq-fif-ph-nt-ic  |
| 5.A.1.15.        | Date of Publication Search   | equal                         | DatePubl-lt-any-dn-nt-cs<br>DatePubl-le-any-dn-nt-cs<br>DatePubl-eq-any-dn-nt-cs<br>DatePubl-ge-any-dn-nt-cs<br>DatePubl-gt-any-dn-nt-cs |
| 5.A.1? *)        | Author Search - First Characters in Field  | map to                        | AuthorName-eq-fif-mn-rt-cs   |
| 5.A.2.1.         | Key Title Search - Keyword   | equal                         | TitleKey-eq-any-wo-nt-ic   |
| 5.A.2.2.         | Key Title Search - Keyword with Right Truncation   | equal                         | TitleKey-eq-any-wo-rt-ic   |
| 5.A.2.3.         | Key Title Search - Exact Match   | equal                         | TitleKey-eq-fif-ph-nt-cf   |
| 5.A.2.4.         | Key Title Search - First Words in Field  | map to                        | TitleKey-eq-fif-ph-rt-cf   |
| 5.A.2.5.         | Key Title Search - First Characters in Field   | map to                        | TitleKey-eq-fif-ph-rt-cf   |
| 5.A.2.6.         | Format/Type of Material Search – Keyword   | map to                        | MatType-eq-any-wo-nt-cs  |
| 5.A.2.7.         | Format/Type of Material Search - Phrase  | equal                         | MatType-eq-fif-ph-nt-ic  |
| 5.A.2.8.         | Language Search  | map to                        | CodeLang-eq-any-wo-nt-cs   |
| 5.A.2.9          | Date of Publication Range Search   | No mapping                    |  |

\*) Bath Profile Amendment 7: New Author Search in Functional Area A Level 1

Bath Profile Amendment 5: 5.A.1.2. Author Search – Keyword: *This search should be moved to Level 0 to replace 5.A.0.1 Author Search - Precision Match for Established Name Heading* is not reflected. Both 5.A.1.2. and 5.A.0.1. are listed in their original form.

### 5.1.9 Dan-1 Use Attributes for Search

Dan-1 *Use* (type 1) Attribute values for Search in danZIG Profile.

| <b>Dan-1 Use Attribute Value</b> | <b>Dan-1 Use Attribute Name</b>       |
|----------------------------------|---------------------------------------|
| 1                                | Classification-code-DK5               |
| 2                                | Subject-controlled                    |
| 3                                | DBC-subject                           |
| 4                                | DBC-non-fiction-subject               |
| 5                                | DBC-fiction-subject                   |
| 6                                | DBC-music-subject                     |
| 7                                | Format-as-subject                     |
| 8                                | Subject-level                         |
| 9                                | Shelf-mark                            |
| 10                               | Classification-DK5                    |
| 11                               | Classification-as-shelf-mark          |
| 12                               | Obsolete-shelf-mark                   |
| 13                               | Subject-FUI                           |
| 14                               | Catalogue-code                        |
| 15                               | LIX-code                              |
| 16                               | Music-notation                        |
| 17                               | Item-number                           |
| 18                               | Local-item-number                     |
| 19                               | Previous-FAUST-code                   |
| 20                               | Title-host-publication                |
| 21                               | Children/school-shelf-mark            |
| 22                               | Subject-controlled-non-fiction        |
| 23                               | Subject-controlled-fiction            |
| 24                               | Music-shelf-mark                      |
| 25                               | Embossed-printing-abbreviated-version |
| 26                               | Author-name-in-description            |
| 27                               | Technical-specification               |

| <b>Dan-1 Use Attribute Value</b> | <b>Dan-1 Use Attribute Name</b> |
|----------------------------------|---------------------------------|
| 36                               | Code-recom-restriction          |
| 37                               | Code-cataloging-library         |
| 38                               | Primary-material-type           |
| 39                               | Main-title                      |
| 40                               | Identification-package          |
| 41                               | Codes-consultants-marks         |
| 42                               | Codes-consultants-groups        |
| 43                               | Catalogue-code-correction       |
| 44                               | Catalogue-code-express          |
| 45                               | ID-record-higher-level          |
| 46                               | Note-selection-materials        |
| 47                               | Codes-order-list                |
| 48                               | Serial-info-excl-number         |
| 49                               | RegionCounMunc-number           |
| 50                               | Publ-status                     |

### 5.1.10 Dan-1 Search Attribute Combinations

The following table enumerates the combinations of Dan-1 attributes that must be supported by a danZIG compliant Server as part of a Search Request.

Remark that BIB-1 Relation, Position, Structure, Truncation and Completeness attributtes are used in combination with DAN-1 Use attribute.

| <b>DAN-1<br/>Attribute Combination name</b> | <b>1 Use</b> | <b>2 Relation</b> | <b>3 Position</b> | <b>4 Structure</b> | <b>5 Truncation</b> | <b>6 Completeness</b> |
|---|--------------|-------------------|-------------------|--------------------|---------------------|-----------------------|
| DK5Alfa-eq-fif-ph-rt-cf                     | 1            | 3                 | 1                 | 1                  | 1                   | 3                     |
| DK5Alfa-eq-fif-ph-nt-cf                     | 1            | 3                 | 1                 | 1                  | 100                 | 3                     |
| DK5Alfa-eq-any-ph-rt-ic                     | 1            | 3                 | 3                 | 1                  | 1                   | 1                     |
| DK5Alfa-eq-any-ph-nt-ic                     | 1            | 3                 | 3                 | 1                  | 100                 | 1                     |

| DAN-1                        |   | Attribute Combination name   | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness |
|------------------------------|---|------------------------------|-------|------------|------------|-------------|--------------|----------------|
| DK5Alfa-eq-any-wo-rt-ic      | 1 | DK5Alfa-eq-any-wo-rt-ic      | 3     | 3          | 2          | 1           | 1            | 1              |
| DK5Alfa-eq-any-wo-nt-ic      | 1 | DK5Alfa-eq-any-wo-nt-ic      | 3     | 3          | 2          | 100         | 1            | 1              |
| SubjectCon-eq-fif-ph-rt-cf   | 2 | SubjectCon-eq-fif-ph-rt-cf   | 3     | 1          | 1          | 1           | 1            | 3              |
| SubjectCon-eq-fif-ph-nt-cf   | 2 | SubjectCon-eq-fif-ph-nt-cf   | 3     | 1          | 1          | 100         | 3            | 1              |
| SubjectCon-eq-any-ph-rt-ic   | 2 | SubjectCon-eq-any-ph-rt-ic   | 3     | 3          | 1          | 1           | 1            | 1              |
| SubjectCon-eq-any-ph-nt-ic   | 2 | SubjectCon-eq-any-ph-nt-ic   | 3     | 3          | 1          | 100         | 1            | 1              |
| SubjectCon-eq-any-wo-rt-ic   | 2 | SubjectCon-eq-any-wo-rt-ic   | 3     | 3          | 2          | 1           | 1            | 1              |
| SubjectCon-eq-any-wo-nt-ic   | 2 | SubjectCon-eq-any-wo-nt-ic   | 3     | 3          | 2          | 100         | 1            | 1              |
| DBCSubject-eq-fif-ph-rt-cf   | 3 | DBCSubject-eq-fif-ph-rt-cf   | 3     | 1          | 1          | 1           | 1            | 3              |
| DBCSubject-eq-fif-ph-nt-cf   | 3 | DBCSubject-eq-fif-ph-nt-cf   | 3     | 1          | 1          | 100         | 3            | 1              |
| DBCSubject-eq-any-ph-rt-ic   | 3 | DBCSubject-eq-any-ph-rt-ic   | 3     | 3          | 1          | 1           | 1            | 1              |
| DBCSubject-eq-any-ph-nt-ic   | 3 | DBCSubject-eq-any-ph-nt-ic   | 3     | 3          | 1          | 100         | 1            | 1              |
| DBCSubject-eq-any-wo-rt-ic   | 3 | DBCSubject-eq-any-wo-rt-ic   | 3     | 3          | 2          | 1           | 1            | 1              |
| DBCSubject-eq-any-wo-nt-ic   | 3 | DBCSubject-eq-any-wo-nt-ic   | 3     | 3          | 2          | 100         | 1            | 1              |
| DBCSubjectNF-eq-fif-ph-rt-cf | 4 | DBCSubjectNF-eq-fif-ph-rt-cf | 3     | 1          | 1          | 1           | 1            | 3              |
| DBCSubjectNF-eq-fif-ph-nt-cf | 4 | DBCSubjectNF-eq-fif-ph-nt-cf | 3     | 1          | 1          | 100         | 3            | 1              |
| DBCSubjectNF-eq-any-ph-rt-ic | 4 | DBCSubjectNF-eq-any-ph-rt-ic | 3     | 3          | 1          | 1           | 1            | 1              |
| DBCSubjectNF-eq-any-ph-nt-ic | 4 | DBCSubjectNF-eq-any-ph-nt-ic | 3     | 3          | 1          | 100         | 1            | 1              |
| DBCSubjectNF-eq-any-wo-rt-ic | 4 | DBCSubjectNF-eq-any-wo-rt-ic | 3     | 3          | 2          | 1           | 1            | 1              |
| DBCSubjectNF-eq-any-wo-nt-ic | 4 | DBCSubjectNF-eq-any-wo-nt-ic | 3     | 3          | 2          | 100         | 1            | 1              |
| DBCSubjectF-eq-fif-ph-rt-cf  | 5 | DBCSubjectF-eq-fif-ph-rt-cf  | 3     | 1          | 1          | 1           | 1            | 3              |
| DBCSubjectF-eq-fif-ph-nt-cf  | 5 | DBCSubjectF-eq-fif-ph-nt-cf  | 3     | 1          | 1          | 100         | 3            | 1              |
| DBCSubjectF-eq-any-ph-rt-ic  | 5 | DBCSubjectF-eq-any-ph-rt-ic  | 3     | 3          | 1          | 1           | 1            | 1              |
| DBCSubjectF-eq-any-ph-nt-ic  | 5 | DBCSubjectF-eq-any-ph-nt-ic  | 3     | 3          | 1          | 100         | 1            | 1              |
| DBCSubjectF-eq-any-wo-rt-ic  | 5 | DBCSubjectF-eq-any-wo-rt-ic  | 3     | 3          | 2          | 1           | 1            | 1              |
| DBCSubjectF-eq-any-wo-nt-ic  | 5 | DBCSubjectF-eq-any-wo-nt-ic  | 3     | 3          | 2          | 100         | 1            | 1              |

| DAN-1                         |    | Attribute Combination name | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness |
|-------------------------------|----|----------------------------|-------|------------|------------|-------------|--------------|----------------|
| DBCSubjectMus-eq-fif-ph-rt-cf | 6  | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| DBCSubjectMus-eq-fif-ph-nt-cf | 6  | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| DBCSubjectMus-eq-any-ph-rt-ic | 6  | 3                          | 3     | 1          | 1          | 1           | 1            | 1              |
| DBCSubjectMus-eq-any-ph-nt-ic | 6  | 3                          | 3     | 1          | 1          | 1           | 100          | 1              |
| DBCSubjectMus-eq-any-wo-rt-ic | 6  | 3                          | 3     | 2          | 1          | 1           | 1            | 1              |
| DBCSubjectMus-eq-any-wo-nt-ic | 6  | 3                          | 3     | 2          | 1          | 1           | 100          | 1              |
| FormatSubj-eq-fif-ph-rt-cf    | 7  | 3                          | 1     | 1          | 1          | 1           | 1            | 3              |
| FormatSubj-eq-fif-ph-nt-cf    | 7  | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| FormatSubj-eq-any-ph-rt-ic    | 7  | 3                          | 3     | 1          | 1          | 1           | 1            | 1              |
| FormatSubj-eq-any-ph-nt-ic    | 7  | 3                          | 3     | 1          | 1          | 1           | 100          | 1              |
| FormatSubj-eq-any-wo-rt-ic    | 7  | 3                          | 3     | 2          | 1          | 1           | 1            | 1              |
| FormatSubj-eq-any-wo-nt-ic    | 7  | 3                          | 3     | 2          | 1          | 1           | 100          | 1              |
| SubjectLevel-eq-fif-ph-rt-cf  | 8  | 3                          | 1     | 1          | 1          | 1           | 1            | 3              |
| SubjectLevel-eq-fif-ph-nt-cf  | 8  | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| SubjectLevel-eq-any-ph-rt-ic  | 8  | 3                          | 3     | 1          | 1          | 1           | 1            | 1              |
| SubjectLevel-eq-any-ph-nt-ic  | 8  | 3                          | 3     | 1          | 1          | 1           | 100          | 1              |
| SubjectLevel-eq-any-wo-rt-ic  | 8  | 3                          | 3     | 2          | 1          | 1           | 1            | 1              |
| SubjectLevel-eq-any-wo-nt-ic  | 8  | 3                          | 3     | 2          | 1          | 1           | 100          | 1              |
| ShelfMark-eq-fif-ph-rt-cf     | 9  | 3                          | 1     | 1          | 1          | 1           | 1            | 3              |
| ShelfMark-eq-fif-ph-nt-cf     | 9  | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| ShelfMark-eq-any-ph-rt-ic     | 9  | 3                          | 3     | 1          | 1          | 1           | 1            | 1              |
| ShelfMark-eq-any-ph-nt-ic     | 9  | 3                          | 3     | 1          | 1          | 1           | 100          | 1              |
| ShelfMark-eq-any-wo-rt-ic     | 9  | 3                          | 3     | 2          | 1          | 1           | 1            | 1              |
| ShelfMark-eq-any-wo-nt-ic     | 9  | 3                          | 3     | 2          | 1          | 1           | 100          | 1              |
| DK5-eq-fif-ph-rt-cf           | 10 | 3                          | 1     | 1          | 1          | 1           | 1            | 3              |
| DK5-eq-fif-ph-nt-cf           | 10 | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |

| DAN-1<br>Attribute Combination name |    | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness |
|-------------------------------------|----|-------|------------|------------|-------------|--------------|----------------|
| DK5-eq-any-ph-rt-ic                 | 10 | 3     | 3          | 1          | 1           | 100          | 1              |
| DK5-eq-any-ph-nt-ic                 | 10 | 3     | 3          | 1          | 100         | 1            | 1              |
| DK5-eq-any-wo-rt-ic                 | 10 | 3     | 3          | 2          | 1           | 100          | 1              |
| DK5-eq-any-wo-nt-ic                 | 10 | 3     | 3          | 2          | 1           | 100          | 1              |
| ClassSM-eq-fif-ph-rt-cf             | 11 | 3     | 1          | 1          | 1           | 100          | 3              |
| ClassSM-eq-fif-ph-nt-cf             | 11 | 3     | 1          | 1          | 100         | 3            | 3              |
| ClassSM-any-ph-rt-ic                | 11 | 3     | 3          | 1          | 1           | 100          | 1              |
| ClassSM-any-ph-nt-ic                | 11 | 3     | 3          | 1          | 100         | 1            | 1              |
| ClassSM-any-wo-rt-ic                | 11 | 3     | 3          | 2          | 1           | 100          | 1              |
| ClassSM-any-wo-nt-ic                | 11 | 3     | 3          | 2          | 1           | 100          | 1              |
| ObsoleteSM-eq-fif-ph-rt-cf          | 12 | 3     | 1          | 1          | 1           | 100          | 3              |
| ObsoleteSM-eq-fif-ph-nt-cf          | 12 | 3     | 1          | 1          | 100         | 3            | 3              |
| ObsoleteSM-eq-any-ph-rt-ic          | 12 | 3     | 3          | 1          | 1           | 100          | 1              |
| ObsoleteSM-eq-any-ph-nt-ic          | 12 | 3     | 3          | 1          | 100         | 1            | 1              |
| ObsoleteSM-eq-any-wo-rt-ic          | 12 | 3     | 3          | 2          | 1           | 100          | 1              |
| ObsoleteSM-eq-any-wo-nt-ic          | 12 | 3     | 3          | 2          | 1           | 100          | 1              |
| FUI-eq-any-wo-nt-cs                 | 13 | 3     | 3          | 2          | 100         | 2            | 2              |
| CatCode-eq-any-wo-nt-cs             | 14 | 3     | 3          | 2          | 100         | 2            | 2              |
| LIX-eq-any-wo-nt-cs                 | 15 | 3     | 3          | 2          | 100         | 2            | 2              |
| MusicNot-eq-any-wo-nt-cs            | 16 | 3     | 3          | 2          | 100         | 2            | 2              |
| ItemNo-eq-any-wo-nt-cs              | 17 | 3     | 3          | 2          | 100         | 2            | 2              |
| LocItemNo-eq-any-wo-nt-cs           | 18 | 3     | 3          | 2          | 100         | 2            | 2              |
| PrevFAUST-eq-any-wo-nt-cs           | 19 | 3     | 3          | 2          | 100         | 2            | 2              |
| TitleHost-eq-fif-ph-rt-cs           | 20 | 3     | 1          | 1          | 1           | 100          | 3              |
| TitleHost-eq-fif-ph-nt-cs           | 20 | 3     | 1          | 1          | 100         | 3            | 3              |
| ChildSchSM-eq-any-wo-nt-cs          | 21 | 3     | 3          | 2          | 100         | 2            | 2              |

| DAN-1                        |    | Attribute Combination name | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness |
|------------------------------|----|----------------------------|-------|------------|------------|-------------|--------------|----------------|
| SubjConNF-eq-fif-ph-rt-cf    | 22 | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| SubjConNF-eq-fif-ph-nt-cf    | 22 | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| SubjConNF-eq-any-ph-rt-ic    | 22 | 3                          | 3     | 1          | 1          | 1           | 1            | 1              |
| SubjConNF-eq-any-ph-nt-ic    | 22 | 3                          | 3     | 1          | 1          | 1           | 100          | 1              |
| SubjConNF-eq-any-wo-rt-ic    | 22 | 3                          | 3     | 2          | 1          | 1           | 1            | 1              |
| SubjConNF-eq-any-wo-nt-ic    | 22 | 3                          | 3     | 2          | 1          | 1           | 100          | 1              |
| SubjConF-eq-fif-ph-rt-cf     | 23 | 3                          | 1     | 1          | 1          | 1           | 1            | 3              |
| SubjConF-eq-fif-ph-nt-cf     | 23 | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| SubjConF-eq-any-ph-rt-ic     | 23 | 3                          | 3     | 1          | 1          | 1           | 1            | 1              |
| SubjConF-eq-any-ph-nt-ic     | 23 | 3                          | 3     | 1          | 1          | 1           | 100          | 1              |
| SubjConF-eq-any-wo-rt-ic     | 23 | 3                          | 3     | 2          | 1          | 1           | 1            | 1              |
| SubjConF-eq-any-wo-nt-ic     | 23 | 3                          | 3     | 2          | 1          | 1           | 100          | 1              |
| MusicSM-eq-fif-ph-rt-cf      | 24 | 3                          | 1     | 1          | 1          | 1           | 1            | 3              |
| MusicSM-eq-fif-ph-nt-cf      | 24 | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| MusicSM-eq-any-ph-rt-ic      | 24 | 3                          | 3     | 1          | 1          | 1           | 1            | 1              |
| MusicSM-eq-any-ph-nt-ic      | 24 | 3                          | 3     | 1          | 1          | 1           | 100          | 1              |
| MusicSM-eq-any-wo-rt-ic      | 24 | 3                          | 3     | 2          | 1          | 1           | 1            | 1              |
| MusicSM-eq-any-wo-nt-ic      | 24 | 3                          | 3     | 2          | 1          | 1           | 100          | 1              |
| EmbPrAbb-eq-any-wo-nt-cs     | 25 | 3                          | 3     | 2          | 1          | 1           | 100          | 2              |
| AuthorInDesc-eq-any-ph-rt-ic | 26 | 3                          | 3     | 1          | 1          | 1           | 1            | 1              |
| AuthorInDesc-eq-any-ph-nt-ic | 26 | 3                          | 3     | 1          | 1          | 1           | 100          | 1              |
| AuthorInDesc-eq-any-wo-rt-cs | 26 | 3                          | 3     | 2          | 1          | 1           | 1            | 2              |
| AuthorInDesc-eq-any-wo-nt-cs | 26 | 3                          | 3     | 2          | 1          | 1           | 100          | 2              |
| TechSpec-eq-fif-ph-rt-cf     | 27 | 3                          | 1     | 1          | 1          | 1           | 1            | 3              |
| TechSpec-eq-fif-ph-nt-cf     | 27 | 3                          | 1     | 1          | 1          | 1           | 100          | 3              |
| TechSpec-eq-any-ph-rt-ic     | 27 | 3                          | 3     | 1          | 1          | 1           | 1            | 1              |

| DAN-1                       |    | Attribute Combination name | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness |
|-----------------------------|----|----------------------------|-------|------------|------------|-------------|--------------|----------------|
| TechSpec-eq-any-ph-nt-ic    | 27 |                            | 3     | 3          | 1          | 100         | 1            |                |
| TechSpec-eq-any-wo-rt-ic    | 27 |                            | 3     | 3          | 2          | 1           | 1            |                |
| TechSpec-eq-any-wo-nt-ic    | 27 |                            | 3     | 3          | 2          | 100         | 1            |                |
| CodeReRe-eq-any-wo-nt-cs    | 36 |                            | 3     | 3          | 2          | 100         | 2            |                |
| CodeCatLib-eq-any-ph-nt-ic  | 37 |                            | 3     | 3          | 1          | 1           | 1            |                |
| CodeCatLib-eq-any-ph-rt-ic  | 37 |                            | 3     | 3          | 1          | 100         | 1            |                |
| PrimMat-eq-any-wo-nt-cs     | 38 |                            | 3     | 3          | 2          | 100         | 2            |                |
| PrimMat-eq-fif-ph-nt-cf     | 38 |                            | 3     | 1          | 1          | 100         | 3            |                |
| MainTitle-eq-any-ph-rt-ic   | 39 |                            | 3     | 3          | 1          | 1           | 1            |                |
| MainTitle-eq-any-ph-nt-ic   | 39 |                            | 3     | 3          | 1          | 100         | 1            |                |
| MainTitle-eq-any-wo-rt-ic   | 39 |                            | 3     | 3          | 2          | 1           | 1            |                |
| MainTitle-eq-any-wo-nt-ic   | 39 |                            | 3     | 3          | 2          | 100         | 1            |                |
| IdentPack-eq-fif-ph-rt-ic   | 40 |                            | 3     | 1          | 1          | 1           | 1            |                |
| IdentPack-eq-fif-ph-nt-cf   | 40 |                            | 3     | 1          | 1          | 100         | 3            |                |
| CodesConMa-eq-any-wo-rt-cs  | 41 |                            | 3     | 3          | 2          | 1           | 2            |                |
| CodesConMa-eq-any-wo-nt-cs  | 41 |                            | 3     | 3          | 2          | 100         | 2            |                |
| CodesConGr-eq-any-wo-rt-cs  | 42 |                            | 3     | 3          | 2          | 1           | 2            |                |
| CodesConGr-eq-any-wo-nt-cs  | 42 |                            | 3     | 3          | 2          | 100         | 2            |                |
| CodesConCor-eq-any-wo-rt-cs | 43 |                            | 3     | 3          | 2          | 1           | 2            |                |
| CodesConCor-eq-any-wo-nt-cs | 43 |                            | 3     | 3          | 2          | 100         | 2            |                |
| CatCodeExp-eq-any-wo-rt-cs  | 44 |                            | 3     | 3          | 2          | 1           | 2            |                |
| CatCodeExp-eq-any-wo-nt-cs  | 44 |                            | 3     | 3          | 2          | 100         | 2            |                |
| IdRecHigh-eq-any-st-rt-cs   | 45 |                            | 3     | 3          | 103        | 1           | 2            |                |
| IdRecHigh-eq-any-st-nt-cs   | 45 |                            | 3     | 3          | 103        | 100         | 2            |                |
| NoteSeMat-eq-any-wo-rt-ic   | 46 |                            | 3     | 3          | 2          | 1           | 1            |                |
| NoteSeMat-eq-any-wo-nt-ic   | 46 |                            | 3     | 3          | 2          | 100         | 1            |                |

| DAN-1<br>Attribute Combination name | 1 Use | 2 Relation | 3 Position | 4 Structure | 5 Truncation | 6 Completeness |
|-------------------------------------|-------|------------|------------|-------------|--------------|----------------|
| CodesOrder-eq-any-wo-rt-ic          | 47    | 3          | 3          | 2           | 1            | 2              |
| CodesOrder-eq-any-wo-nt-ic          | 47    | 3          | 3          | 2           | 100          | 2              |
| TitleSeriesWN-eq-fif-ph-nt-cf       | 48    | 3          | 1          | 1           | 100          | 3              |
| TitleSeriesWN-eq-fif-ph-rt-cf       | 48    | 3          | 1          | 1           | 1            | 3              |
| TitleSeriesWN-eq-any-ph-nt-ic       | 48    | 3          | 3          | 1           | 100          | 1              |
| TitleSeriesWN-eq-any-ph-rt-ic       | 48    | 3          | 3          | 1           | 1            | 1              |
| TitleSeriesWN-eq-any-wo-nt-ic       | 48    | 3          | 3          | 2           | 100          | 1              |
| TitleSeriesWN-eq-any-wo-rt-ic       | 48    | 3          | 3          | 2           | 1            | 1              |
| RegCounMunc-eq-any-wo-nt-cs         | 49    | 3          | 3          | 2           | 100          | 2              |
| Publ-status-eq-any-wo-nt-cs         | 50    | 3          | 3          | 2           | 100          | 2              |

## 5.2 B Scan Service

Targets must support scanning of the same *Use* attribute values as listed under Search Service requirements above, **except** the ones listed in the following table:

| Bib-1 Use Attribute Name       | Bib-1 Use Value |
|--------------------------------|-----------------|
| <i>Identifier-ISBN</i>         | 7               |
| <i>Identifier-ISSN</i>         | 8               |
| <i>Control-number-local</i>    | 12              |
| <i>Date-publication</i>        | 31              |
| <i>Identifier-standard</i>     | 1007            |
| <i>Date/time added to db</i>   | 1011            |
| <i>Date/time last modified</i> | 1012            |
| <i>Identifier-document</i>     | 1032            |
| <i>Identifier-ISRC</i>         | 1091            |
| <i>Identifier-ISMN</i>         | 1092            |
| <i>Identifier-ISBN</i>         | 1093            |
| <i>Identifier-DOI</i>          | 1094            |

| Dan-1 Use Attribute Name      | Dan-1 Use Value |
|-------------------------------|-----------------|
| <i>ID-record-higher-level</i> | 45              |

Servers may ignore *Truncation* and *Relation* attributes specified in connection with Scan Requests. Other attribute types may not be ignored.

The Target must interpret (i.e. neither ignore- nor substitute) the values supplied for all of those attribute types, which are submitted in a given Scan Request.

If one or more attribute types are missing in a query, the Server may choose to either substitute default values for the missing attribute type - or reject the incomplete request as "Unsupported Attribute Combinations".

A Server must accept Scan requests containing any of the attribute combinations specified below. A Server may not treat any of these specified attribute combinations as "Unsupported Attribute Combinations", but it may always choose to return zero hits.

The concepts of "fields" and "subfields" are not clearly defined in the context of the Z39.50 data model. Servers may therefore return the same hits, regardless of whether given *Completeness* and *Position* attributes refer to "fields" or "subfields".

Target must support *Step-size* = 0, i.e. "do not skip any entries" and *Position-in-response* = 1.

Target must return the number of entries (hits) associated with each SCAN Term.

The following sections contain a complete enumeration of attribute combinations, which must be recognised by danZIG compliant Z-Servers in connection with Scan Requests.

### 5.2.1 Bib-1 Use Attributes for Scan

Bib-1 Use (type 1) Attribute Combinations for Scan in danZIG Profile

| BIB- 1<br>Attribute Combination name | 1 Use | 2 Position | 3 Structure | 4 Completeness | 5 Relation to Bath-profile (empty = no) |
|--------------------------------------|-------|------------|-------------|----------------|---|
| Title-fif-ph-cf                      | 4     | 1          | 1           | 3              | Mapping                                 |
| Title-any-wo-ic                      | 4     | 3          | 2           | 1              | Mapping                                 |
| TitleSeries-fif-ph-cf                | 5     | 1          | 1           | 3              |   |
| TitleSeries-any-wo-ic                | 5     | 3          | 2           | 1              |   |
| TitleUniform-fif-ph-cf               | 6     | 1          | 1           | 3              |   |
| TitleUniform-any-wo-ic               | 6     | 3          | 2           | 1              |   |
| Dewey-any-ph-cf                      | 13    | 1          | 1           | 3              |   |
| UDC-any-ph-cf                        | 14    | 1          | 1           | 3              |   |

| <b>BIB- 1</b><br><b>Attribute Combination name</b> |      | <b>1 Use</b> | <b>3 Position</b> | <b>4 Structure</b> | <b>6 Completeness</b> | <b>Relation to Bath-profile (empty = no)</b> |
|--|------|--------------|-------------------|--------------------|-----------------------|--|
| LC-any-ph-cf                                       | 16   | 1            | 1                 | 3                  |                       |  |
| NLM-any-ph-cf                                      | 17   | 1            | 1                 | 3                  |                       |  |
| NAL-any-ph-cf                                      | 18   | 1            | 1                 | 3                  |                       |  |
| ClassLoc-fif-ph-cf                                 | 20   | 1            | 1                 | 3                  |                       |  |
| ClassLoc-any-wo-ic                                 | 20   | 3            | 2                 | 1                  |                       |  |
| Subject-fif-ph-cf                                  | 21   | 1            | 1                 | 3                  |                       | Mapping                                      |
| Subject-any-wo-ic                                  | 21   | 3            | 2                 | 1                  |                       | Mapping                                      |
| MESH-fif-ph-cf                                     | 25   | 1            | 1                 | 3                  |                       |  |
| MESH-any-wo-ic                                     | 25   | 3            | 2                 | 1                  |                       |  |
| TitleKey-fif-ph-cf                                 | 33   | 1            | 1                 | 3                  |                       |  |
| TitleKey-any-wo-ic                                 | 33   | 3            | 2                 | 1                  |                       |  |
| TitlePar-fif-ph-cf                                 | 35   | 1            | 1                 | 3                  |                       |  |
| TitlePar-any-wo-ic                                 | 35   | 3            | 2                 | 1                  |                       |  |
| TitleForm-fif-ph-cf                                | 42   | 1            | 1                 | 3                  |                       |  |
| TitleForm-any-wo-ic                                | 42   | 3            | 2                 | 1                  |                       |  |
| CodeLang-any-wo-cs                                 | 54   | 3            | 2                 | 2                  |                       |  |
| CodeGeo-any-wo-cs                                  | 55   | 3            | 2                 | 2                  |                       |  |
| CodeInst-any-wo-ic                                 | 56   | 3            | 2                 | 1                  |                       |  |
| NameGeoPl-any-wo-cs                                | 59   | 3            | 2                 | 2                  |                       |  |
| CODEN-any-wo-cs                                    | 60   | 3            | 2                 | 2                  |                       |  |
| Note-any-wo-ic                                     | 63   | 3            | 2                 | 1                  |                       |  |
| AuthorName-fif-nn-cs                               | 1003 | 1            | 101               | 2                  |                       | Mapping                                      |
| AuthorName-any-wo-ic                               | 1003 | 3            | 2                 | 1                  |                       |  |
| AuthorNamePer-fif-nn-cs                            | 1004 | 1            | 101               | 2                  |                       |  |
| AuthorNamePer-any-wo-ic                            | 1004 | 3            | 2                 | 1                  |                       |  |
| AuthorNameCorp-fif-nn-cs                           | 1005 | 1            | 101               | 2                  |                       |  |

| <b>BIB- 1</b>            | <b>Attribute Combination name</b> | <b>1 Use</b> | <b>3 Position</b> | <b>4 Structure</b> | <b>6 Completeness</b> | <b>Relation to Bath-profile (empty = no)</b> |
|--------------------------|-----------------------------------|--------------|-------------------|--------------------|-----------------------|--|
| AuthorNameCorp-any-wo-ic | 1005                              | 3            | 2                 | 1                  |                       |  |
| SubjectNamePer-fif-ph-cf | 1009                              | 1            | 1                 | 3                  |                       |  |
| SubjectNamePer-any-wo-ic | 1009                              | 3            | 2                 | 1                  |                       |  |
| Any-any-wo-ic            | 1016                              | 3            | 2                 | 1                  |                       |  |
| NamePubl-any-ph-ic       | 1018                              | 3            | 1                 | 1                  |                       |  |
| CodeMap-any-wo-cs        | 1024                              | 3            | 2                 | 2                  |                       |  |
| TitleRelPeri-fif-ph-cf   | 1026                              | 1            | 1                 | 3                  |                       |  |
| TitleRelPeri-any-wo-ic   | 1026                              | 3            | 2                 | 1                  |                       |  |
| MatType-any-wo-cs        | 1031                              | 3            | 2                 | 2                  |                       |  |
| MatType-fif-ph-cs        | 1031                              | 1            | 1                 | 1                  |                       |  |
| TitleHostItem-fif-ph-cf  | 1033                              | 1            | 1                 | 3                  |                       |  |
| TitleHostItem-any-wo-ic  | 1033                              | 3            | 2                 | 1                  |                       |  |
| ClassPhrase-fif-ph-cf    | 1040                              | 1            | 1                 | 3                  |                       |  |
| ClassPhrase-any-wo-ic    | 1040                              | 3            | 2                 | 1                  |                       |  |
| SubNameCor-fif-ph-cf     | 1074                              | 1            | 1                 | 3                  |                       |  |
| SubNameCor-any-wo-ic     | 1074                              | 3            | 2                 | 1                  |                       |  |
| SubUnCon-fif-ph-cf       | 1080                              | 1            | 1                 | 3                  |                       |  |
| SubUnCon-any-wo-ic       | 1080                              | 3            | 2                 | 1                  |                       |  |
| AGROVOC-fif-ph-cf        | 1085                              | 1            | 1                 | 3                  |                       |  |
| AGROVOC-any-wo-ic        | 1085                              | 3            | 2                 | 1                  |                       |  |
| COMPASS-fif-ph-cf        | 1086                              | 1            | 1                 | 3                  |                       |  |
| COMPASS-any-wo-ic        | 1086                              | 3            | 2                 | 1                  |                       |  |
| EPT-fif-ph-cf            | 1087                              | 1            | 1                 | 3                  |                       |  |
| EPT-any-wo-ic            | 1087                              | 3            | 2                 | 1                  |                       |  |
| NAL-fif-ph-cf            | 1088                              | 1            | 1                 | 3                  |                       |  |
| NAL-any-wo-ic            | 1088                              | 3            | 2                 | 1                  |                       |  |

| BIB- 1<br>Attribute Combination name |      | Relation to Bath-profile (empty = no) |             |            |
|--------------------------------------|------|---------------------------------------|-------------|------------|
|                                      |      | 6 Completeness                        | 4 Structure | 3 Position |
| 1 Use                                |      |                                       |             |            |
| BCM-fif-ph-cf                        | 1089 | 1                                     | 1           | 3          |
| ClassDB-fif-ph-cf                    | 1090 | 1                                     | 1           | 3          |
| CodeLangOri-any-wo-cs                | 1095 | 3                                     | 2           | 2          |
| TitleLater-fif-ph-cf                 | 1096 | 1                                     | 1           | 3          |
| TitleLater-any-wo-ic                 | 1096 | 3                                     | 2           | 1          |
| EAN-any-wo-ic                        | 1214 | 3                                     | 2           | 1          |

### 5.2.2 Relationship with Bath Profile for Scan

The following table illustrates the relationship between the Bath Profile attribute combinations and corresponding danZIG Profile attribute combinations.

| Bath-no      | Bath-name             | 1 Use | 2 Position | 3 Structure | Equivalent danZIG SCAN attribute combination name |
|--------------|-----------------------|-------|------------|-------------|---|
| 5.A.1SCAN.1. | Author - Exact Match  | 1003  | 1          | 1           | AuthorName-fif-nn-cs                              |
| 5.A.1SCAN.2. | Title - Exact Match   | 4     | 1          | 1           | Title-fif-ph-cf                                   |
| 5.A.1SCAN.3. | Title - Keyword       | 4     | 3          | 2           | Title-any-wo-ic                                   |
| 5.A.1SCAN.4. | Subject - Exact Match | 21    | 1          | 1           | Subject-fif-ph-cf                                 |
| 5.A.1SCAN.5. | Subject - Keyword     | 21    | 3          | 2           | Subject-any-wo-ic                                 |
| 5.A.1SCAN.6. | Any - Keyword         | 1016  | 3          | 2           | Any-any-wo-ic                                     |

The danZIG-profile specifies the Completeness Attribute and the Bath-profile does not. In addition 5.A.1SCAN.1. - *Author - Exact Match* use Structure Attribute Value 1 where the equivalent danZIG combination AuthorName-fif-nn-cs use Attribute Value 101.

### 5.2.3 Dan-1 Use Attributes for Scan

Dan-1 Use Attribute Combinations for SCAN.

Remark that BIB-1 Position, Structure, and Completeness attributtes are used in combination with DAN-1 Use attribute.

| <b>DAN-1<br/>Attribute Combination name</b> | <b>1<br/><i>Dan-1 Use<br/>Attribute<br/>Value</i></b> | <b>3<br/><i>Position<br/>Attribute<br/>Value</i></b> | <b>4<br/><i>Structure<br/>Attribute<br/>Value</i></b> | <b>6<br/><i>Com-<br/>pleteness<br/>Attribute<br/>Value</i></b> |
|---|---|--|---|--|
| DK5Alfa-fif-ph-cf                           | 1   | 1  | 1   | 3  |
| DK5Alfa-any-wo-ic                           | 1   | 3  | 2   | 1  |
| SubjectCon-fif-ph-cf                        | 2   | 1  | 1   | 3  |
| SubjectCon-any-wo-ic                        | 2   | 3  | 2   | 1  |
| DBCSUBJECT-fif-ph-cf                        | 3   | 1  | 1   | 3  |
| DBCSUBJECT-any-wo-ic                        | 3   | 3  | 2   | 1  |
| DBCSUBJECTNF-fif-ph-cf                      | 4   | 1  | 1   | 3  |
| DBCSUBJECTNF-any-wo-ic                      | 4   | 3  | 2   | 1  |
| DBCSUBJECTF-fif-ph-cf                       | 5   | 1  | 1   | 3  |
| DBCSUBJECTF-any-wo-ic                       | 5   | 3  | 2   | 1  |
| DBCSUBJECTMUS-fif-ph-cf                     | 6   | 1  | 1   | 3  |
| DBCSUBJECTMUS-any-wo-ic                     | 6   | 3  | 2   | 1  |
| FormatSubj-fif-ph-cf                        | 7   | 1  | 1   | 3  |
| FormatSubj-any-wo-ic                        | 7   | 3  | 2   | 1  |
| SubjectLevel-fif-ph-cf                      | 8   | 1  | 1   | 3  |
| SubjectLevel-any-wo-ic                      | 8   | 3  | 2   | 1  |
| ShelfMark-fif-ph-cf                         | 9   | 1  | 1   | 3  |
| ShelfMark-any-wo-ic                         | 9   | 3  | 2   | 1  |
| DK5-fif-ph-cf                               | 10  | 1  | 1   | 3  |
| DK5-any-wo-ic                               | 10  | 3  | 2   | 1  |
| ClassSM-fif-ph-cf                           | 11  | 1  | 1   | 3  |
| ClassSM-any-wo-ic                           | 11  | 3  | 2   | 1  |
| ObsoleteSM-fif-ph-cf                        | 12  | 1  | 1   | 3  |
| ObsoleteSM-any-wo-ic                        | 12  | 3  | 2   | 1  |

| <b>DAN-1<br/>Attribute Combination name</b> | <b>1<br/><i>Dan-1 Use<br/>Attribute<br/>Value</i></b> | <b>3<br/><i>Position<br/>Attribute<br/>Value</i></b> | <b>4<br/><i>Structure<br/>Attribute<br/>Value</i></b> | <b>6<br/><i>Com-<br/>pleteness<br/>Attribute<br/>Value</i></b> |
|---|---|--|---|--|
| FUI-any-wo-cs                               | 13  | 3  | 2   | 2  |
| CatCode-any-wo-cs                           | 14  | 3  | 2   | 2  |
| LIX-any-wo-cs                               | 15  | 3  | 2   | 2  |
| MusicNot-any-wo-cs                          | 16  | 3  | 2   | 2  |
| ItemNo-any-wo-cs                            | 17  | 3  | 2   | 2  |
| LocItemNo-any-wo-cs                         | 18  | 3  | 2   | 2  |
| TitleHost-fif-ph-cs                         | 20  | 1  | 1   | 3  |
| ChildSchSM-any-wo-cs                        | 21  | 3  | 2   | 2  |
| SubjConNF-fif-ph-cf                         | 22  | 1  | 1   | 3  |
| SubjConNF-any-wo-ic                         | 22  | 3  | 2   | 1  |
| SubjConF-fif-ph-cf                          | 23  | 1  | 1   | 3  |
| SubjConF-any-wo-ic                          | 23  | 3  | 2   | 1  |
| MusicSM-fif-ph-cf                           | 24  | 1  | 1   | 3  |
| MusicSM-any-wo-ic                           | 24  | 3  | 2   | 1  |
| EmbPrAbb-any-wo-cs                          | 25  | 3  | 2   | 2  |
| AuthorInDesc-any-wo-cs                      | 26  | 3  | 2   | 2  |
| TechSpec-fif-ph-cf                          | 27  | 1  | 1   | 3  |
| TechSpec-any-wo-ic                          | 27  | 3  | 2   | 1  |
| CodeReRe-any-wo-cs                          | 36  | 3  | 2   | 2  |
| CodeCatLib-any-ph-ic                        | 37  | 3  | 2   | 1  |
| PrimMat-fif-ph-ic                           | 38  | 1  | 1   | 1  |
| MainTitle-fif-ph-cf                         | 39  | 1  | 1   | 3  |
| MainTitle-any-wo-ic                         | 39  | 3  | 2   | 1  |
| IdentPack-fif-ph-cf                         | 40  | 1  | 2   | 3  |
| CodesConMa-any-wo-cs                        | 41  | 3  | 2   | 2  |
| CodesConGr-any-wo-cs                        | 42  | 3  | 2   | 2  |

| DAN-1<br>Attribute Combination name | 1<br><i>Dan-1 Use</i><br>Attribute<br>Value | 3<br><i>Position</i><br>Attribute<br>Value | 4<br><i>Structure</i><br>Attribute<br>Value | 6<br><i>Com-</i><br><i>pleteness</i><br>Attribute<br>Value |
|-------------------------------------|---|--|---|--|
| CodesConCor-any-wo-cs               | 43  | 3  | 2   | 2  |
| CatCodeExp-any-wo-cs                | 44  | 3  | 2   | 2  |
| IdRecHigh-any-st-cs                 | 45  | 3  | 103   | 2  |
| NoteSeMat-any-wo-ic                 | 46  | 3  | 2   | 1  |
| CodesOrder-any-wo-ic                | 47  | 3  | 2   | 1  |
| TitleSeriesWN-fif-ph-cf             | 48  | 1  | 1   | 3  |
| TitleSeriesWN-any-wo-ic             | 48  | 3  | 2   | 1  |
| RegCounMunc-any-wo-cs               | 49  | 3  | 2   | 2  |
| Publ-status-any-wo-cs               | 50  | 3  | 2   | 2  |

### 5.3 B Present Service

Targets must support the following *Element-set-names* in relation to bibliographic MARC records:

- *F* for Full, e.g. all available bibliographic elements. Servers may optionally include summary Holdings data, if this information is available from the bibliographic MARC record (e.g. MARC21 fields 85x and 86x)
- *B* for Brief, e.g. Author, Title and Publication date.

Targets *must* support the following types of *Preferred-record-syntaxes*:

- SUTRS
- DanMARC2

Targets are *recommended* to support the MARC21 Concise format for bibliographic data.

Targets *may* optionally use the Preferred-record-syntax *DanMARC2X* if they deliver MARC (ISO2709) records, which include danMARC2 as a subset in addition to any *private* extensions.

The principles for assigning of Object Identifiers to this type of extended formats are defined in <http://www.loc.gov/z3950/agency/defns/oids.html#5> (last paragraph).

The following table illustrates the relationships between record syntax and element set names.

| <i>ES</i><br><i>N</i> | <b>danMARC2</b> | <b>MARC21</b> | <b>SUTRS</b> | <b>DanMARC2X</b> |
|-----------------------|-----------------|---------------|--------------|------------------|
| <i>F</i>              | +               | +             | +            | +                |
| <i>B</i>              | -               | -             | +            | -                |

Strictly speaking, a record is not conforming to the danMARC2 specifications, if this record contains private extensions to danMARC2. Z39.50 Servers operated by some institutions do however sometimes return records with private extensions in response to requests for danMARC2. This is why the DanMARC2X record syntax was introduced.

OID's for format used in this specification:

| Record syntax | OID                    |
|---------------|------------------------|
| danMARC2      | 1.2.840.10003.5.14     |
| MARC21        | 1.2.840.10003.5.10.1   |
| SUTRS         | 1.2.840.10003.5.101    |
| danMARC2X     | 1.2.840.10003.5.14.100 |

*Multi-volume works* may be handled as follows: When a client sends a PresentRequest for a given record, the target returns the requested record only (i.e. no related superior- or subordinate records). If the requested record is part of a multi-volume work, the client must extract the 014 and 015 fields in the danMARC2 format in order to search- and request the upper and/or the lower records in the multi-volume tree using BIB1 Use attribute 12.

## 6. C Holdings Information Search and Retrieval

Search and retrieval of bibliographic Holdings information is specified in two levels:

- Level 1: Retrieval of Summary Holdings information in an XML structure according to the ZIG Holdings Schema Element Set *B2*
- Level 2: Retrieval of Detailed Holdings information in an XML structure according to the ZIG Holdings Schema Element Set *B3*

Servers are not required to support searching of the Holdings attribute set within either level 1 or 2.

Servers are recommended to support the *Use* attribute number 1044 i.e. *Possessing-Institution* within bibliographic searches.

A two-step process can retrieve holdings information:

- First perform a bibliographic search with Bib-1 and/or Dan-1 attributes
- Then retrieve the relevant Holdings records via traditional Present Requests, which specify the desired Record Syntax, Record Schema and Element Set Name

Record Syntax is XML and is specified in *preferredRecordSyntax* with:

- OID = 1.2.840.10003.5.109.10

Record Schema and ESN are specified by means of the Z39.50 *compSpec* feature:

- Record Schema: ZIG Holdings Abstract Schema
  - OID = 1.2.840.10003.13.7.2
- Element Set Name:
  - B2 for Summary Bibliographic Level Holdings or
  - B3 for Detailed Bibliographic Level Holdings

The ZIG Holdings Abstract Schema and the corresponding Holdings XML Schemas are available via the US Library of Congress: <http://www.loc.gov/z3950/agency/defns/holdings1-4.html>

For validation of records the danZIG Profile recommends to use the general XML Schema for holdings and not the specific ESN schemas. Actual schema is:

<http://www.loc.gov/z3950/agency/defns/HoldingsSchema8.xsd>

The corresponding data element tables in the text below are for information purposes only.

*For information:* The Danish National Union Catalogue DanBib allows an extension to element set name B2 with a library code (syntax: B2:[library code]). This code define the sorting of other libraries based on the specified library's reported order. If no such extension added, DanBib will provide holdings information sorted by default.

## 6.1 C Level-1 Holdings Retrieval

Level-1 Holdings supports retrieval of Summary bibliographic level holdings information according to the ZIG Holdings Abstract Schema Element Set B2 (*summaryBibLevelHoldings*).

This level of Holdings information may be supplied by either Union Catalogues (e.g. DanBib) or local libraries. DanBib for example will only supply general holdings information.

A library must return its earliest expected shipment date for the bibliographic item. Alternatively, the library may return information to the effect, that the bibliographic item is not available for loans (to the prospective borrower).

If the material is unavailable for loans, but is available by other means (e.g. in the library reading room), then this information must be supplied in a suitable clear-text message (e.g. "Udlånes kun til brug på læsesal").

Dynamic information about periodicals holdings must be supplied within the *SummaryEnum* element in a structured format with top-level issue and chronology (e.g. "årstal 1982-1993 og Vol. 41 – 52").

More static holdings information derived from danMARC2 records must be returned within the *HoldingsNotes* element.

### 6.1.1 Summary Bibliographic Holdings Structure

This section contains an informal overview of data elements within the Summary BibLevel Holdings Element Set (B2).

| Holdings Structure          | Tag 0                          |
|-----------------------------|--------------------------------|
| BibItemInfo as targetItemId | Local bibliographic identifier |

|                          |                              |       |
|--------------------------|------------------------------|-------|
| <b>HoldingsStatement</b> | Pointer to HoldingsStatement | Tag 4 |
|--------------------------|------------------------------|-------|

|                                 |                         |        |
|---------------------------------|-------------------------|--------|
| <b>Holdings Statement</b>       |                         | Tag 4  |
| <b>HoldingsSiteLocation</b>     | Pointer to SiteLocation | Tag 6  |
| <b>UnionCatShelfMark</b>        | Local shelfmark         | Tag 9  |
| <b>localHoldings as bibView</b> | Pointer to BibPart      | Tag 10 |

|                         |                              |         |
|-------------------------|------------------------------|---------|
| <b>Site Location</b>    |                              | Tag 125 |
| <b>TargetLocationId</b> | Identifier in local system   | Tag 26  |
| <b>isilCode</b>         | Library number               | Tag 29  |
| <b>networkAddress</b>   | Networksaddress (Z39.50 URL) | Tag 33  |
| <b>SiteNotes</b>        | Accessibility                | Tag 34  |

|   |                                 |         |
|---|---------------------------------|---------|
| <b>BibPart</b>                              |                                 | Tag 126 |
| <b>targetBibPartId</b>                      | Identifier in local system      | Tag 40  |
| <b>bibPartLendingInfo</b>                   | Pointer to ServiceInfo          | Tag 115 |
| <b>bibPartReproductionInfo</b>              | Pointer to ServiceInfo          | Tag 116 |
| <b>childEnumChronSummary<br/>structured</b> | Pointer to SummaryEnumSeq       | Tag 51  |
| <b>bibPartNotes</b>                         | Description of volume (no. etc) | Tag 54  |

|                         |                            |         |
|-------------------------|----------------------------|---------|
| <b>SummaryEnumSeq</b>   |                            | Tag 130 |
| <b>TargetSequenceId</b> | Identifier in local system | Tag 86  |
| <b>primaryEnum</b>      | Pointer to SummaryEnum     | Tag 87  |

|                      |                        |         |
|----------------------|------------------------|---------|
| <b>SummaryEnum</b>   |                        | Tag 131 |
| <b>startingEnum</b>  | Pointer to Enumeration | Tag 89  |
| <b>startingChron</b> | Pointer to Chronology  | Tag 90  |
| <b>endingEnum</b>    | Pointer to Enumeration | Tag 91  |

|             |                       |        |
|-------------|-----------------------|--------|
| endingChron | Pointer to Chronology | Tag 92 |
|-------------|-----------------------|--------|

| Enumeration         |                       | Tag 132 |
|---------------------|-----------------------|---------|
| enumLevel           | Level 1               | Tag 93  |
| enumCaption         | Term for enumeration  | Tag 94  |
| specificEnumeration | Value for enumeration | Tag 95  |
| childEnumeration    | Empty                 | Tag 137 |

| Chronology         |                      | Tag 133 |
|--------------------|----------------------|---------|
| chronLevel         | Level 1              | Tag 96  |
| chronCaption       | Term for chronology  | Tag 97  |
| specificChronology | Value for chronology | Tag 98  |
| childChronology    | Empty                | Tag 138 |

| ServiceInfo           |                              | Tag 136 |
|-----------------------|------------------------------|---------|
| servicePolicy         | Value 0/1/2                  | Tag 109 |
| serviceFee            | Price                        | Tag 110 |
| ExpectedDiaspatchDate | Expected day of delivery     | Tag 111 |
| serviceNotes          | Text about terms of delivery | Tag 112 |

## 6.2 Level-2 Holdings Retrieval

Level-2 Holdings supports retrieval of Detailed bibliographic level holdings information according to the ZIG Holdings Abstract Schema Element Set B3 (*detailedBibLevelHoldings*).

Level-2 supplements Level-1 by detailed holdings information about individual issues of periodicals. It is possible to report up to six levels of enumerations and up to four levels of chronology.

Each entry may include both a value (*enumeration/chronology*) plus a description (*enumCaption/chronCaption*). For example value="1998" plus description ="ÅR" & value="11" plus description="Hæfte".

If the local system has encoded value and description within a single data element, then both types of information are turned as a value element.

The different levels are not guided by any fixed rules. Volume may usually represent the top-level enumeration, while the year should always represent the top-level chronology information.

### 6.2.1 Detailed Bibliographic Holdings Structure

This section contains an informal overview of data elements within the Detailed Bibliographic Holdings Element Set (B3).

| <b>Holdings Structure</b>   |                                | Tag 0 |
|-----------------------------|--------------------------------|-------|
| BibItemInfo as targetItemId | Local bibliographic identifier | Tag 1 |
| holdingsStatement           | Pointer to HoldingsStatement   | Tag 4 |

| <b>Holdings Statement</b> |                         | Tag 4  |
|---------------------------|-------------------------|--------|
| holdingsSiteLocation      | Pointer to SiteLocation | Tag 6  |
| unionCatShelfMark         | Local shelfmark         | Tag 9  |
| unionCatLendingInfo       | Pointer to ServiceInfo  | Tag 19 |
| localHoldings as bibView  | Pointer to BibPart      | Tag 10 |
| holdingsNotes             | Holdings for serials    | Tag 25 |

| <b>Site Location</b> |                              | Tag 125 |
|----------------------|------------------------------|---------|
| targetLocationId     | Identifier in local system   | Tag 26  |
| isilCode             | Library number               | Tag 29  |
| networkAddress       | Networksaddress (Z39.50 URL) | Tag 33  |
| siteNotes            | Accessibility                | Tag 34  |

| <b>BibPart</b>          |                                 | Tag 126 |
|-------------------------|---------------------------------|---------|
| targetBibPartId         | Identifier in local system      | Tag 40  |
| bibPartLendingInfo      | Pointer to ServiceInfo          | Tag 115 |
| bibPartReproductionInfo | Pointer to ServiceInfo          | Tag 116 |
| bibPartEnumeration      | Pointer to Enumeration          | Tag 45  |
| bibPartChronology       | Pointer to Chronology           | Tag 46  |
| bibPartNotes            | Description of volume (no. etc) | Tag 54  |

|                     |                                |         |
|---------------------|--------------------------------|---------|
| <b>Enumeration</b>  |                                | Tag 132 |
| enumLevel           | Level 1                        | Tag 93  |
| enumCaption         | Term for enumeration           | Tag 94  |
| specificEnumeration | Value for enumeration          | Tag 95  |
| childEnumeration    | Pointer to Enumeration level 2 | Tag 137 |

|                     |                                |         |
|---------------------|--------------------------------|---------|
| <b>Enumeration</b>  |                                | Tag 132 |
| enumLevel           | Level 2                        | Tag 93  |
| enumCaption         | Term for enumeration           | Tag 94  |
| specificEnumeration | Value for enumeration          | Tag 95  |
| childEnumeration    | Pointer to Enumeration level 3 | Tag 137 |

|                     |                                |         |
|---------------------|--------------------------------|---------|
| <b>Enumeration</b>  |                                | Tag 132 |
| enumLevel           | Level 3                        | Tag 93  |
| enumCaption         | Term for enumeration           | Tag 94  |
| specificEnumeration | Value for enumeration          | Tag 95  |
| childEnumeration    | Pointer to Enumeration level 4 | Tag 137 |

|                     |                                |         |
|---------------------|--------------------------------|---------|
| <b>Enumeration</b>  |                                | Tag 132 |
| enumLevel           | Level 4                        | Tag 93  |
| enumCaption         | Term for enumeration           | Tag 94  |
| specificEnumeration | Value for enumeration          | Tag 95  |
| childEnumeration    | Pointer to Enumeration level 5 | Tag 137 |

|                     |                                |         |
|---------------------|--------------------------------|---------|
| <b>Enumeration</b>  |                                | Tag 132 |
| enumLevel           | Level 5                        | Tag 93  |
| enumCaption         | Term for enumeration           | Tag 94  |
| specificEnumeration | Value for enumeration          | Tag 95  |
| childEnumeration    | Pointer to Enumeration level 6 | Tag 137 |

|                     |                       |         |
|---------------------|-----------------------|---------|
| <b>Enumeration</b>  |                       | Tag 132 |
| enumLevel           | Level 6               | Tag 93  |
| enumCaption         | Term for enumeration  | Tag 94  |
| specificEnumeration | Value for enumeration | Tag 95  |
| childEnumeration    | Empty                 | Tag 137 |

|                    |                               |         |
|--------------------|-------------------------------|---------|
| <b>Chronology</b>  |                               | Tag 133 |
| chronLevel         | Level 1                       | Tag 96  |
| chronCaption       | Term for chronology           | Tag 97  |
| specificChronology | Value for chronology          | Tag 98  |
| childChronology    | Pointer to Chronology level 2 | Tag 138 |

|                    |                               |         |
|--------------------|-------------------------------|---------|
| <b>Chronology</b>  |                               | Tag 133 |
| chronLevel         | Level 2                       | Tag 96  |
| chronCaption       | Term for chronology           | Tag 97  |
| specificChronology | Value for chronology          | Tag 98  |
| childChronology    | Pointer to Chronology level 3 | Tag 138 |

|                    |                               |         |
|--------------------|-------------------------------|---------|
| <b>Chronology</b>  |                               | Tag 133 |
| chronLevel         | Level 3                       | Tag 96  |
| chronCaption       | Term for chronology           | Tag 97  |
| specificChronology | Value for chronology          | Tag 98  |
| childChronology    | Pointer to Chronology level 4 | Tag 138 |

|                    |                      |         |
|--------------------|----------------------|---------|
| <b>Chronology</b>  |                      | Tag 133 |
| chronLevel         | Level 4              | Tag 96  |
| chronCaption       | Term for chronology  | Tag 97  |
| specificChronology | Value for chronology | Tag 98  |
| childChronology    | Empty                | Tag 138 |

| ServiceInfo           |                              | Tag 136 |
|-----------------------|------------------------------|---------|
| servicePolicy         | Value 0/1/2                  | Tag 109 |
| serviceFee            | Price                        | Tag 110 |
| ExpectedDiaspatchDate | Expected day of delivery     | Tag 111 |
| ServiceNotes          | Text about terms of delivery | Tag 112 |

### 6.3 Holdings Structure Comments

If the target is a union catalogue with only summary holdings information, only HoldingsStructure, HoldingsStatement, SiteLocation and ServiceInfo are relevant.

In HoldingsStatement, unionCatLendingInfo are only filled in, if target is a union catalogue.

In HoldingsStatement, localHoldings as bibView is only filled in, if target is a local library.

**networkAddress:** In DanBib the networkAddress is the library's Z39.50 URL if the library has one. If not, the networkAddress is Z39.50 URL for DanBib.

**holdingsNotes:** Can be used for a text-note describing the holdings of the library. Normal source will be danMARC2-tag 980 (*Bibliotekets beholdning af et periodicum*).

**BibPart:** If the bibliographic record describes a multi volume in one record. And there is no physical items connected to the bibliographic record, then bibPartNotes may include the following information from tag 247 or 248:

- subtag g: *bindnummer eller supplementsbetegnelse*
- subtag a: *bindtitel eller supplementstitel*
- subtag w: *udgavebetegnelse*:

**ServicePolicy:** If ServiceInfo exist, it is mandatory to use the following codes:

- Value 0 : Conditions for loan not known or too complicated. Conditions must be described with a text in *serviceNotes*.
- Value 1 : Yes
- Value 2 : No

If target is the national union catalogue DanBib, the value is 2 ...

- if sub tag l or u in tag 096 (for) is reported for a research library
- or if a h-mark is reported for a public library.

**ExpectedDispatchDate:** Empty if target is the national union catalogue DanBib.

**ServiceNotes:** If *servicePolicy* is 2 for No, ServiceNotes can be used for supplementary information such as "Kun tilgængelig på læsesal". The individual library must transform status codes to human readable text.

**Enumeration:** For level B3, levels 1 to 6 are filled in order of priority by:

- Series
- Volume
- Issue number
- Start page
- End page

**Chronology:** For level B3, levels 1 to 4 are filled in order of priority by:

- Year
- Month / season
- Week
- Day

## 7. D Ordering and Interlibrary Loans

This profile addresses the ordering of items between parties acting as either borrowers (ISO ILL Requester) or lenders (ISO ILL Responder). Other ISO ILL Transaction modes and roles, e.g. Intermediary parties are outside the scope of this profile.

DanZIG Profile 2 is intended to support communications between two ISO ILL conformant systems.

The content of ISO ILL messages supported by ONE-2 ILL Level-2 conforms to the corresponding IPIG Profile specifications.

Encoding of ILL messages conforms to a revised version of the ILL XML Schema produced as part of the ONE-2 project.

The normative specification of the current ILL XML Schema called *illv5.xsd* is available here:

<http://www.loc.gov/z3950/agency/defns/illv5.xsd>

(Actuel here <http://www.bs.dk/standards/illv5.xsd> waiting for update by Z39.50 MA – you can find illv4.xsd on the MA website: <http://www.loc.gov/z3950/agency/defns/illv4.xsd> )

The corresponding data element tables in the text below are for information purposes only.

The use of Z39.50 Item Order transport is guided by the *Z39.50/ILL Profile 1* for the Use of Z39.50 Item Order Extended service to Transport ILL Protocol APDUs. Z39.50/ILL Profile 1 is available from the National Library of Canada: <http://www.collectionscanada.ca/iso/ill/document/standard/z-ill-1a.pdf>

It is assumed, that a ILL-Request is immediately preceded by a corresponding check of Holdings information within the same (Z39.50) Session in order to verify, that the intended lending institution does indeed hold the bibliographic item in question.

The requested item is identified by the following elements:

|   |                   |
|---|-------------------|
| Bibliographic record                      | TargetLocation Id |
| Sub-record from danMARC2 field 247 or 248 | TargetBibPartId   |
| Serial issue number                       | TargetBibPartId   |
| Copy of periodical *)                     | TargetPieceId     |

\*) not required by the current version of the danZIG Profile.

The ISO ILL Services used by the current level of the danZIG Z39.50 Profile for Client and Server are listed in the following table.

| Role      | Service                | Function |
|-----------|------------------------|----------|
| Requester | ILL-REQUEST            | Client   |
| Requester | STATUS-QUERY           | Client   |
| Responder | ILL-ANSWER             | Server   |
| Responder | STATUS-OR-ERROR-REPORT | Server   |
| Requester | CANCEL                 | Client   |
| Responder | CANCEL-REPLY           | Server   |
| Requester | RECALL                 | Server   |
| Requester | OVERDUE                | Server   |
| Requester | RENEW                  | Client   |
| Responder | RENEW-ANSWER           | Server   |
| Requester | SHIPPING               | Server   |

The ILL-Answer transaction includes a data element to return information about the expected delivery date of a requested item. But the ILL Status-or-Error-Report transaction does not include such a data element.

In order to return the expected delivery date, an ILL Responder system is therefore required to return both an ILL Status-or-Error-Report plus and ILL-Answer transaction in response to a single ILL Status-Query request.

The supplemental ILL-Answer is only necessary, when the ILL Status-or-Error-Report contains a Provider-Status-Report data element with the code value *In-Process*. Otherwise there is no need to return any expected delivery date.

Both of the two ILL transactions (Status-or-Error-Report plus ILL-Answer) must be returned as XML documents carried within a single Z39.50 Item-Order response.

## 7.1 ILL Transaction Structures

This section includes an informal overview of the relevant ILL Transaction data elements referenced by the danZIG Profile.

### 7.1.1 ILL-Request

| Parameter                   | Mandatory | Comments and values  |
|-----------------------------|-----------|--|
| transaction-id              | M         | Unique serial number assigned by the library who request. Are used as ID for following transactions  |
| service-date-time           |           |  |
| - date-time-of-this-service |           |  |
| -- date                     | M         | ISO-date: YYYY-MM-DD   |
| -- time                     |           | ISO-time: hh:mm:ss   |
| requester-id                | M         | Identification of the library which dispatch the request: ISIL, e.g.: DK-810010 for Royal Library  |
| responder-id                | M         | Identification of the library which receive the request: ISIL, e.g.: DK-810010 for Royal Library   |
| iLL-service-type            | M         | It is mandatory to support service type 1 and 2.<br>loan (1)<br>copy-non-returnable (2)<br>locations (3)<br>estimate (4)<br>responder-specific (5) |
| search-type                 |           |  |
| - need-before-date          |           |  |
| - expiry-flag               |           | need-Before-Date (1)<br>other-Date (2)<br>no-Expiry (3)  |
| - expiry-date               |           | If expiry-flag is 1, this is date of latest interest   |
| place-on-hold               |           | Place-On-Hold-Type :<br>yes (1)<br>no (2)<br>according-to-responder-policy (3)   |
| item-id                     |           |  |

| Parameter           | Mandatory | Comments and values  |
|---------------------|-----------|--|
| - system-no         | M         | Unique identification from Z39.50 Holdings Schema:<br>TargetLocationId, TargetBibPartId or TargetPieceId |
| - author-of-article |           |  |
| - title-of-article  |           |  |
| - pagination        |           |  |

### 7.1.2 ILL-Answer

| Parameter                   | Mandatory | Comments and values  |
|-----------------------------|-----------|--|
| transaction-id              | M         | Unique identification defined in the original ILL-Request  |
| service-date-time           |           |  |
| - date-time-of-this-service |           |  |
| -- date                     | M         | ISO-date: CCYY-MM-DD   |
| -- time                     |           | ISO-time: hh:mm:ss   |
| requester-id                | M         | Identification of the library which dispatch the request: ISIL,<br>e.g.: DK-810010 for Royal Library   |
| responder-id                | M         | Identification of the library which receive the request: ISIL, e.g.:<br>DK-810010 for Royal Library  |
| transaction-results         | M         | It is mandatory to support transaction-results type 3, 5 and 6<br>conditional (1)<br>retry (2)<br>unfilled (3)<br>locations-provided (4)<br>will-supply (5)<br>hold-placed (6)<br>estimate (7) |
| results-explanation         |           |  |
| - unfilled-results          |           |  |

| <b>Parameter</b>      | <b>Mandatory</b> | <b>Comments and values</b>  |
|-----------------------|------------------|---|
| -- reason-unfilled    | M                | <p>Translation to Danish, see following section.</p> <p>in-use-on-loan (1)<br/>     in-process (2)<br/>     lost (3)<br/>     non-circulating (4)<br/>     not-owned (5)<br/>     on-order (6)<br/>     volume-issue-not-yet-available (7)<br/>     at-bindery (8)<br/>     lacking (9)<br/>     not-on-shelf (10)<br/>     on-reserve (11)<br/>     poor-condition (12)<br/>     cost-exceeds-limit (13)<br/>     charges (14)<br/>     prepayment-required (15)<br/>     lacks-copyright-compliance (16)<br/>     not-found-as-cited (17)<br/>     locations-not-found (18)<br/>     on-hold (19)<br/>     policy-problem (20)<br/>     mandatory-messaging-not-supported (21)<br/>     expiry-not-supported (22)<br/>     requested-delivery-services-not-supported (23)<br/>     preferred-delivery-time-not-possible (24)<br/>     other (27)<br/>     responder-specific (28)</p> |
| - will-supply-results |                  |   |

| Parameter                   | Mandatory | Comments and values  |
|-----------------------------|-----------|--|
| -- reason-will-supply       | M         | Translation to Danish, see following section<br>in-use-on-loan (1)<br>in-process (2)<br>on-order (6)<br>at-bindery (8)<br>on-hold (19)<br>being-processed-for-supply (26)<br>other (27)<br>responder-specific (28)<br>electronic-delivery (30) |
| -- supply-date              |           |  |
| - hold-placed-results       |           |  |
| -- estimated-date-available |           |  |

### 7.1.3 Status-Query

| Parameter                   | Mandatory | Comments and values   |
|-----------------------------|-----------|---|
| transaction-id              | M         | Unique identification defined in the original ILL-Request   |
| service-date-time           |           |   |
| - date-time-of-this-service |           |   |
| -- date                     | M         | ISO-date: CCYY-MM-DD  |
| -- time                     |           | ISO-time: hh:mm:ss  |
| requester-id                | M         | Identification of the library which dispatch the Status-query:<br>ISIL, e.g.: DK-810010 for Royal Library |
| responder-id                | M         | Identification of the library which receive the Status-query:<br>ISIL, e.g.: DK-810010 for Royal Library  |

### 7.1.4 Status-or-Error-Report

| Parameter         | Mandatory | Comments and values                                       |
|-------------------|-----------|---|
| transaction-id    | M         | Unique identification defined in the original ILL-Request |
| service-date-time |           |   |

| <b>Parameter</b>            | <b>Mandatory</b> | <b>Comments and values</b>   |
|-----------------------------|------------------|--|
| - date-time-of-this-service |                  |  |
| -- date                     | M                | ISO-date: CCYY-MM-DD   |
| -- time                     |                  | ISO-time: hh:mm:ss   |
| requester-id                | M                | Identification of the library which dispatch the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library |
| responder-id                | M                | Identification of the library which receive the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library  |
| reason-no-report            |                  | If status-report or error-report is empty, is reason-no-report mandatory:<br>temporary (1)<br>permanent (2)      |
| status-report               |                  |  |
| - user-status-report        |                  |  |
| -- date-of-last-transition  |                  | Date for last change of status – also if the change was not result of an ILL-transaction                         |

| Parameter                           | Mandatory | Comments and values  |
|-------------------------------------|-----------|--|
| -- most-recent-service              |           | The last ILL-transaction:<br>ILL-REQUEST (1)<br>FORWARD (21)<br>FORWARD-NOTIFICATION (2)<br>SHIPPED (3)<br>ILL-ANSWER (4)<br>CONDITIONAL-REPLY (5)<br>ANCEL (6)<br>ANCEL-REPLY (7)<br>RECEIVED (8)<br>RECALL (9)<br>RETURNED (10)<br>CHECKED-IN (11)<br>RENEW-ANSWER (14)<br>LOST (15)<br>DAMAGED (16)<br>MESSAGE (17)<br>STATUS-QUERY (18)<br>STATUS-OR-ERROR-REPORT (19)<br>EXPIRED (20) |
| -- date-of-most-recent-service      |           | Date for last ILL-transaction  |
| -- initiator-of-most-recent-service |           | Identification of the library which initiated the last ILL-transaction: ISIL, e.g.: DK-810010 for Royal Library  |
| -- shipped-service-type             |           | If SHIPPED or RECEIVED is used earlier, the newest service-type. Allowed are:<br>loan (1)<br>copy-non-returnable (2)   |
| -- transaction-results              |           | See ILL-Answer, transaction-results  |
| -- most-recent-service-note         |           | Text   |

| Parameter                 | Mandatory | Comments and values   |
|---------------------------|-----------|---|
| - provider-status-report  |           | <p>Explenation of some status codes in X.Y.Z</p> <p>nOT-SUPPLIED (1)</p> <p>pENDING (2)</p> <p>iN-PROCESS (3)</p> <p>fORWARD (4)</p> <p>cONDITIONAL (5)</p> <p>cANCEL-PENDING (6) cANCELLED (7)</p> <p>sHIPPED (8)</p> <p>rECEIVED (9)</p> <p>rENEW-PENDING (10) )</p> <p>nOT-RECEIVED-OVERDUE (11)</p> <p>rENEW-OVERDUE (12)</p> <p>oVERDUE (13)</p> <p>rETURNED (14)</p> <p>cHECKED-IN (15)</p> <p>rECALL (16)</p> <p>lOST (17)</p> <p>uNKNOWN (18)</p> |
| error-report              |           |   |
| - correlation-information |           | This parameter includes information that permits correlation of the error-report with the ILL service to which it applies.  |
| - report-source           |           | <p>Values:</p> <p><b>user</b>: user-error-report is filled in</p> <p><b>provider</b>: provider-error-report is filled in</p>  |
| - user-error-report       |           |   |
| -- already-forwarded      |           |   |
| -- responder-id           |           | See ILL-Request, responder-id   |
| -- security-problem       |           | Text  |
| -- unable-to-perform      |           | <p>not-available (1)</p> <p>resource-limitation (2)</p> <p>other (3)</p>  |
| - provider-error-report   |           |   |

| <b>Parameter</b>               | <b>Mandatory</b> | <b>Comments and values</b>  |
|--------------------------------|------------------|---|
| -- general-problem             |                  | unrecognized-APDU (1)<br>mistyped-APDU (2)<br>badly-structured-APDU (3)<br>protocol-version-not-supported (4)<br>other (5)  |
| -- transaction-id-problem      |                  | duplicate-transaction-id (1)<br>invalid-transaction-id (2)<br>unknown-transaction-id (3)  |
| -- state-transition-prohibited |                  |   |
| -- aPDU-type                   |                  | iLL-REQUEST (1)<br>FORWARD-NOTIFICATION (2)<br>sHIPPED (3)<br>iLL-ANSWER (4)<br>cONDITIONAL-REPLY (5)<br>cANCEL (6)<br>cANCEL-REPLY (7)<br>rECEIVED (8)<br>rECALL (9)<br>rETURNED (10)<br>cHECKED-IN (11)<br>rENEW-ANSWER (14)<br>lOST (15)<br>dAMAGED (16)<br>mESSAGE (17)<br>sTATUS-QUERY (18)<br>sTATUS-OR-ERROR-REPORT (19)<br>eXPIRED (20) |

| Parameter           | Mandatory | Comments and values  |
|---------------------|-----------|--|
| - - - current-state |           | nOT-SUPPLIED (1)<br>pENDING (2)<br>iN-PROCESS (3)<br>fORWARD (4)<br>cONDITIONAL (5)<br>cANCEL-PENDING (6)<br>cANCELLED (7)<br>sHIPPED (8)<br>rECEIVED (9)<br>rENEW-PENDING (10)<br>nOT-RECEIVED-OVERDUE (11)<br>rENEW-OVERDUE (12)<br>oVERDUE (13)<br>rETURNED (14)<br>cHECKED-IN (15)<br>rECALL (16)<br>lOST (17)<br>uNKNOWN (18) |
| note                |           | Text   |

### 7.1.5 Cancel

| Parameter                   | Mandatory | Comments and values  |
|-----------------------------|-----------|--|
| transaction-id              | M         | Unique identification defined in the original ILL-Request  |
| service-date-time           |           |  |
| - date-time-of-this-service |           |  |
| - - date                    | M         | ISO-date: CCYY-MM-DD   |
| - - time                    |           | ISO-time: hh:mm:ss   |
| requester-id                | M         | Identification of the library which dispatch the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library |
| Responder-id                | M         | Identification of the library which receive the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library  |

| Parameter      | Mandatory | Comments and values |
|----------------|-----------|---------------------|
| Requester-mote |           | Not used            |

### 7.1.6 Cancel-reply

| Parameter                   | Mandatory | Comments and values  |
|-----------------------------|-----------|--|
| Transaction-id              | M         | Unique identification defined in the original ILL-Request  |
| service-date-time           |           |  |
| - date-time-of-this-service |           |  |
| -- date                     | M         | ISO-date: CCYY-MM-DD   |
| -- time                     |           | ISO-time: hh:mm:ss   |
| requester-id                | M         | Identification of the library which dispatch the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library |
| responder-id                | M         | Identification of the library which receive the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library  |
| answer                      | M         | Values:<br>YES<br>NO   |
| responder-note              |           | Only used is answer is NO  |

### 7.1.7 Recall

| Parameter                   | Mandatory | Comments and values  |
|-----------------------------|-----------|--|
| transaction-id              | M         | Unique identification defined in the original ILL-Request  |
| service-date-time           |           |  |
| - date-time-of-this-service |           |  |
| -- date                     | M         | ISO-date: CCYY-MM-DD   |
| -- time                     |           | ISO-time: hh:mm:ss   |
| requester-id                | M         | Identification of the library which dispatch the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library |
| responder-id                | M         | Identification of the library which receive the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library  |

| Parameter      | Mandatory | Comments and values |
|----------------|-----------|---------------------|
| responder-note |           | Not used            |

### 7.1.8 Overdue

| Parameter                   | Mandatory | Comments and values  |
|-----------------------------|-----------|--|
| transaction-id              | M         | Unique identification defined in the original ILL-Request  |
| service-date-time           |           |  |
| - date-time-of-this-service |           |  |
| -- date                     | M         | ISO-date: CCYY-MM-DD   |
| -- time                     |           | ISO-time: hh:mm:ss   |
| requester-id                | M         | Identification of the library which dispatch the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library |
| responder-id                | M         | Identification of the library which receive the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library  |
| date-due                    |           | New return date  |
| responder-note              |           | Not used   |

### 7.1.9 Renew

| Parameter                   | Mandatory | Comments and values  |
|-----------------------------|-----------|--|
| transaction-id              | M         | Unique identification defined in the original ILL-Request  |
| service-date-time           |           |  |
| - date-time-of-this-service |           |  |
| -- date                     | M         | ISO-date: CCYY-MM-DD   |
| -- time                     |           | ISO-time: hh:mm:ss   |
| requester-id                | M         | Identification of the library which dispatch the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library |
| responder-id                | M         | Identification of the library which receive the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library  |
| Desired-due-date            | M         | Expected new return date   |
| Responder-note              |           | Not used   |

### 7.1.10 Renew-answer

| Parameter                   | Mandatory | Comments and values  |
|-----------------------------|-----------|--|
| transaction-id              | M         | Unique identification defined in the original ILL-Request  |
| service-date-time           |           |  |
| - date-time-of-this-service |           |  |
| -- date                     | M         | ISO-date: CCYY-MM-DD   |
| -- time                     |           | ISO-time: hh:mm:ss   |
| requester-id                | M         | Identification of the library which dispatch the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library |
| responder-id                | M         | Identification of the library which receive the Status-or-Error-Report: ISIL, e.g.: DK-810010 for Royal Library  |
| date-due                    | M         | If answer is YES: New return date<br>If answer is NO: The unchanged return date                                  |
| answer                      | M         | Values:<br>YES<br>NO   |
| responder-note              |           | Only used if answer is NO  |

### 7.1.11 Shipped

| Parameter                   | Mandatory | Comments and values   |
|-----------------------------|-----------|---|
| transaction-id              | M         | Unique serial number assigned by the library who request. Are used as ID for following transactions |
| service-date-time           |           |   |
| - date-time-of-this-service |           |   |
| -- date                     | M         | ISO-date: CCYY-MM-DD  |
| -- time                     |           | ISO-time: hh:mm:ss  |
| requester-id                | M         | Identification of the library which dispatch the request: ISIL, e.g.: DK-810010 for Royal Library   |
| responder-id                | M         | Identification of the library which receive the request: ISIL, e.g.: DK-810010 for Royal Library    |

| Parameter                     | Mandatory | Comments and values   |
|-------------------------------|-----------|---|
| supply-details                |           |   |
| date-shipped                  | M         | ISO-date: CCYY-MM-DD  |
| supplemental-item-description |           | External defined: code for item identification (barcode/RFIDitemcode) |

## 7.2 ILL Codes in Danish

This section defines Danish language translations corresponding to selected code-values within relevant ILL data elements.

### 7.2.1 Reason-unfilled (ILL-Answer)

| Code | Value                          | Danish translation                           | Note |
|------|--------------------------------|--|------|
| 1    | in-use-on-loan                 | udlånt                                       |      |
| 2    | in-process                     | i proces                                     |      |
| 3    | lost                           | bortkommet                                   |      |
| 4    | non-circulating                | udlånes ikke                                 |      |
| 5    | not-owned                      | haves ikke                                   |      |
| 6    | on-order                       | i bestilling                                 |      |
| 7    | volume-issue-not-yet-available | Bind/hæfte endnu ikke tilgængeligt           |      |
| 8    | at-bindery                     | hos bogbinder                                |      |
| 9    | lacking                        | bortkommet                                   |      |
| 10   | not-on-shelf                   | pt. bortkommet                               |      |
| 11   | on-reserve                     | udlånes pt. ikke                             |      |
| 12   | poor-condition                 | skrøbelig                                    |      |
| 13   | cost-exceeds-limit             | gebyr overstiger maximum                     | *)   |
| 14   | charges                        | gebyr  |      |
| 15   | prepayment-required            | forudbetaling krævet                         | *)   |
| 16   | lacks-copyright-compliance     | accept af ophavsretsbestemmelser mangler     | *)   |
| 17   | not-found-as-cited             | kan ej findes på de foreliggende oplysninger |      |
| 18   | locations-not-found            | kan ej lokaliseres                           |      |
| 19   | on-hold                        | reserveret                                   |      |

| <b>Code</b> | <b>Value</b>                              | <b>Danish translation</b>                | <b>Note</b> |
|-------------|---|--|-------------|
| 20          | policy-problem                            | reglementært problem                     |             |
| 21          | mandatory-messaging-not-supported         | obligatorisk besked ej understøttet      | *)          |
| 22          | expiry-not-supported                      | udløb ej understøttet                    | *)          |
| 23          | requested-delivery-services-not-supported | ønsket leveringsform ej understøttet     | *)          |
| 24          | preferred-delivery-time-not-possible      | foretrakket leveringstidspunkt ej muligt | *)          |
| 27          | other                                     | andet                                    | *)          |
| 28          | responder-specific                        | svargiver-afhængigt                      | *)          |

Note: \*) Not used in Danish libraries.

### 7.2.2 Reason-will-supply (ILL-Answer)

| <b>Code</b> | <b>Value</b>               | <b>Danish translation</b> | <b>Note</b> |
|-------------|----------------------------|---------------------------|-------------|
| 1           | in-use-on-loan             | Udlånt                    |             |
| 2           | in-proces                  | i proces                  |             |
| 6           | on-order                   | i bestilling              |             |
| 8           | at-bindery                 | hos bogbinder             |             |
| 19          | on-hold                    | reserveret                |             |
| 26          | being-processed-for-supply | sendes                    |             |
| 27          | other                      | andet                     | *)          |
| 28          | responder-specific         | svargiver-afhængigt       | *)          |
| 30          | electronic-delivery        | leveres elektronisk       | *)          |

Note: \*) Not used in Danish libraries.

### 7.2.3 Provider-status-report (Status-or-Error-Report)

| <b>Code</b> | <b>Value</b>   | <b>Danish translation</b>   | <b>Note</b> |
|-------------|----------------|---|-------------|
| 2           | pENDING        | modtaget og ligger og venter uden at der er sket noget endnu  |             |
| 3           | iN-PROCESS     | modtaget og der er sket noget - det kan f.eks. være at den ikke er fundet på hylden og efterfølgende aktion ikke er besluttet |             |
| 6           | cANCEL-PENDING | Sletning af bestilling modtaget, men ikke effektueret   | *)          |

| <b>Code</b> | <b>Value</b>         | <b>Danish translation</b>                              | <b>Note</b> |
|-------------|----------------------|--|-------------|
| 10          | rENEW-PENDING        | fornyelse af bestilling modtaget, men ikke effektueret | *)          |
| 11          | nOT-RECEIVED-OVERDUE | lånene bibliotek har hjemkaldt hos sluttåner           |             |

Note: \*) Not expected to be used in Danish libraries.

### 7.3 Packaging of ILL as XML document

The danZIG Profile prescribe XML encoding of the ISO ILL PDUs in Z39.50/ILL Profile 1 - instead of the customary BER encoding. The ILL XML document is packaged within itemRequest.

Request (e.g. ILL-Request) is packaged as follows:

```

ExtendedServicesRequest->
taskSpecificParameters (EXTERNAL) which contains...
ItemOrder->
esRequest->
notToKeep->
itemRequest (EXTERNAL)

```

The ILL XML record itself is placed within itemRequest EXTERNAL.

Response (e.g. ILL Answer) is packaged as follows:

```

ExtendedServicesResponse->
taskPackage (EXTERNAL) which contains:
TaskPackage->
taskSpecificParameters (EXTERNAL) which contains:
ItemOrder->
taskPackage->
targetPart->
itemRequest (EXTERNAL)

```

The itemRequest EXTERNAL contains the ILL XML record itself.

The datatype in the EXTERNAL is octet-aligned.

## 8. E Cross-domain Search and Retrieval

This section is deliberately left empty. At the danZIG meeting September 2005 decided not to fill in this section.

## 9. F Update

This section is deliberately left empty in this version. At the danZIG meeting September 2005 decided not to fill in this section.

## 10. G Authority Record Search and Retrieval

### 10.1 G Search Service

#### 10.1.1 Bib-1 Use Attributes for Search

Bib-1 *Use* (type 1) Attribute values for Search in danZIG Profile

| <b>Bib-1 Use Attribute Name</b> | <b>Bib-1 Use Value</b> | <b>Bib-1 Use Attribute Semantic Definition</b>  |
|---------------------------------|------------------------|---|
| <i>Name-personal</i>            | 1                      | Personal name used as an author, subject or reference                                       |
| <i>Name-corporate</i>           | 2                      | Corporate name used as an author, subject or reference<br>(Note: includes conference names) |
| <i>Title</i>                    | 4                      | Title incl. uniform and serial titles used as a heading or reference                        |
| <i>Title-series</i>             | 5                      | Serial title used as a heading or reference   |
| <i>Title-uniform</i>            | 6                      | Uniform title used as a heading or reference  |
| <i>Identifier-ISSN</i>          | 8                      | International Standard Serial Number  |
| <i>Control-number-local</i>     | 12                     | Character string that uniquely identifies a record in a local system                        |

|                                       |      |   |
|---------------------------------------|------|---|
| <i>Subject</i>                        | 21   | Subject term, including personal and corporate names used as a subject  |
| <i>Subject-MESH</i>                   | 25   | Subject heading from Medical Subject Headings maintained by the US National Library of Medicine   |
| <i>Subject-headings-LC</i>            | 27   | Subject heading from the Library of Congress  |
| <i>Subject-geographic</i>             | 58   | Geographic name used as and in headings or references   |
| <i>Note</i>                           | 63   | Extended information about the heading or references in the record  |
| <i>Name-personal-corporate</i>        | 1002 | Personal, corporate or conference name used as an author, subject or reference  |
| <i>Identifier-standard</i>            | 1007 | Standard number such as ISSN  |
| <i>Subject-name-personal</i>          | 1009 | Personal name used as a subject heading or reference  |
| <i>Date-added</i>                     | 1011 | Date/time when the record is added to the database  |
| <i>Date-modified</i>                  | 1012 | Date/time when the record is last modified in the database  |
| <i>Any</i>                            | 1016 | Default search in a selected set of use attributes defined by the target (Note: recommends use 1=4, 1=21, 1=1002)                                   |
| <i>Material-type</i>                  | 1031 | Free-form string more specific than the one-letter code in Leader/06 that describes the type of authority record e.g. name, subject or title record |
| <i>Classification</i>                 | 1040 | Classification of a subject heading in any classification system  |
| <i>Subject-name-corporate</i>         | 1074 | Corporate or conference name used as a subject heading or reference   |
| <i>Subject-chronological</i>          | 1077 | Chronological subject heading incl. verbal forms  |
| <i>Subject-title</i>                  | 1078 | Title used as a subject heading or reference  |
| <i>Subject-AGROVOC</i>                | 1085 | Subject heading from the multilingual agricultural thesaurus from FAO   |
| <i>Subject-COMPASS</i>                | 1086 | Subject heading from Computer Aided Subject System from British Library   |
| <i>Subject-EPT</i>                    | 1087 | Subject heading from European Pedagogical Thesaurus (Note: Danish translation of EUDISED)   |
| <i>Subject-NAL</i>                    | 1088 | Subject heading from National Agricultural Library  |
| <i>Nationality-person-corporation</i> | 1217 | Nationality of a person or corporation  |

### 10.1.2 Bib-1 Relation, Position, Structure, Truncation, Completeness

Definitions in 5.1.1-6

### 10.1.3 Bib-1 Search Attribute combinations

The following table enumerates the combinations of Bib-1 attributes that must be supported by a danZIG compliant Server as part of a Search Request

| <b>Bib-1</b><br><b>Attribute combination name</b> | <b>1 Use</b> | <b>2 Relation</b> | <b>3 Position</b> | <b>4 Structure</b> | <b>5 Truncation</b> | <b>6 Completeness</b> | <b>Relation to Bath-profile<br/>(empty = no)</b> |
|---|--------------|-------------------|-------------------|--------------------|---------------------|-----------------------|--|
| NamePer-eq-fif-nn-nt-cs                           | 1            | 3                 | 1                 | 101                | 100                 | 2                     | 5.D.2.3 (4=1,6=3)                                |
| NamePer-eq-fif-nn-rt-cs                           | 1            | 3                 | 1                 | 101                | 1                   | 2                     | 5.D.2.4 (4=1,6=1)                                |
| NamePer-eq-any-wo-nt-ic                           | 1            | 3                 | 3                 | 2                  | 100                 | 1                     | 5.D.2.1  |
| NamePer-eq-any-wo-rt-ic                           | 1            | 3                 | 3                 | 2                  | 1                   | 1                     | 5.D.2.2  |
| NamePer-eq-any-nn-nt-ic                           | 1            | 3                 | 3                 | 101                | 100                 | 1                     |  |
| NamePer-eq-any-nn-rt-ic                           | 1            | 3                 | 3                 | 101                | 1                   | 1                     | 5.D.2.4 (3=1,4=1)                                |
| NameCorp-eq-fif-nn-nt-cs                          | 2            | 3                 | 1                 | 101                | 100                 | 2                     | 5.D.2.7 (4=1,6=3)                                |
| NameCorp-eq-fif-nn-rt-cs                          | 2            | 3                 | 1                 | 101                | 1                   | 2                     | 5.D.2.8 (4=1,6=1)                                |
| NameCorp-eq-any-wo-nt-ic                          | 2            | 3                 | 3                 | 2                  | 100                 | 1                     | 5.D.2.5  |
| NameCorp-eq-any-wo-rt-ic                          | 2            | 3                 | 3                 | 2                  | 1                   | 1                     | 5.D.2.6  |
| NameCorp-eq-any-nn-nt-ic                          | 2            | 3                 | 3                 | 101                | 100                 | 1                     |  |
| NameCorp-eq-any-nn-rt-ic                          | 2            | 3                 | 3                 | 101                | 1                   | 1                     | 5.D.2.8 (3=1,4=1)                                |
| Title-eq-fif-ph-nt-cf                             | 4            | 3                 | 1                 | 1                  | 100                 | 3                     | 5.D.1.7  |
| Title-eq-fif-ph-rt-cf                             | 4            | 3                 | 1                 | 1                  | 1                   | 3                     | 5.D.1.9 (6=1)                                    |
| Title-eq-any-ph-nt-ic                             | 4            | 3                 | 3                 | 1                  | 100                 | 1                     | 5.D.2.24   |
| Title-eq-any-ph-rt-ic                             | 4            | 3                 | 3                 | 1                  | 1                   | 1                     | 5.D.1.9 (3=1)                                    |
| Title-eq-any-wo-nt-ic                             | 4            | 3                 | 3                 | 2                  | 100                 | 1                     | 5.D.1.5  |
| Title-eq-any-wo-rt-ic                             | 4            | 3                 | 3                 | 2                  | 1                   | 1                     | 5.D.1.6  |
| TitleSeries-eq-fif-ph-nt-cf                       | 5            | 3                 | 1                 | 1                  | 100                 | 3                     |  |
| TitleSeries-eq-fif-ph-rt-cf                       | 5            | 3                 | 1                 | 1                  | 1                   | 3                     |  |
| TitleSeries-eq-any-ph-nt-ic                       | 5            | 3                 | 3                 | 1                  | 100                 | 1                     |  |
| TitleSeries-eq-any-ph-rt-ic                       | 5            | 3                 | 3                 | 1                  | 1                   | 1                     |  |
| TitleSeries-eq-any-wo-nt-ic                       | 5            | 3                 | 3                 | 2                  | 100                 | 1                     |  |

|                              |    |   |   |     |     |   |                        |
|------------------------------|----|---|---|-----|-----|---|------------------------|
| TitleSeries-eq-any-wo-rt-ic  | 5  | 3 | 3 | 2   | 1   | 1 |                        |
| TitleUniform-eq-fif-ph-nt-cf | 6  | 3 | 1 | 1   | 100 | 3 | 5.D.2.15               |
| TitleUniform-eq-fif-ph-rt-cf | 6  | 3 | 1 | 1   | 1   | 3 | 5.D.2.16 (6=1)         |
| TitleUniform-eq-any-ph-nt-ic | 6  | 3 | 3 | 1   | 100 | 1 | 5.D.2.17 (3=1)         |
| TitleUniform-eq-any-ph-rt-ic | 6  | 3 | 3 | 1   | 1   | 1 | 5.D.2.16 (3=1)         |
| TitleUniform-eq-any-wo-nt-ic | 6  | 3 | 3 | 2   | 100 | 1 | 5.D.2.13               |
| TitleUniform-eq-any-wo-rt-ic | 6  | 3 | 3 | 2   | 1   | 1 | 5.D.2.14               |
| ISSN-eq-any-ph-nt-cs         | 8  | 3 | 3 | 1   | 100 | 2 | 5.D.2.18 (3=1,6=1)     |
| ContNoLocal-eq-any-st-nt-cs  | 12 | 3 | 3 | 103 | 100 | 2 | 5.D.2.19 (3=1,4=1,6=1) |
| Subject-eq-fif-ph-nt-cf      | 21 | 3 | 1 | 1   | 100 | 3 | 5.D.1.12               |
| Subject-eq-fif-ph-rt-cf      | 21 | 3 | 1 | 1   | 1   | 3 | 5.D.1.14 (6=1)         |
| Subject-eq-any-ph-nt-ic      | 21 | 3 | 3 | 1   | 100 | 1 | 5.D.2.25               |
| Subject-eq-any-ph-rt-ic      | 21 | 3 | 3 | 1   | 1   | 1 | 5.D.1.14 (3=1)         |
| Subject-eq-any-wo-nt-ic      | 21 | 3 | 3 | 2   | 100 | 1 | 5.D.1.10               |
| Subject-eq-any-wo-rt-ic      | 21 | 3 | 3 | 2   | 1   | 1 | 5.D.1.11               |
| MESH-eq-fif-ph-nt-cf         | 25 | 3 | 1 | 1   | 100 | 3 |                        |
| MESH-eq-fif-ph-rt-cf         | 25 | 3 | 1 | 1   | 1   | 3 |                        |
| MESH-eq-any-ph-nt-ic         | 25 | 3 | 3 | 1   | 100 | 1 |                        |
| MESH-eq-any-ph-rt-ic         | 25 | 3 | 3 | 1   | 1   | 1 |                        |
| MESH-eq-any-wo-nt-ic         | 25 | 3 | 3 | 2   | 100 | 1 |                        |
| MESH-eq-any-wo-rt-ic         | 25 | 3 | 3 | 2   | 1   | 1 |                        |
| LCHead-eq-fif-ph-nt-cf       | 27 | 3 | 1 | 1   | 100 | 3 |                        |
| LCHead-eq-fif-ph-rt-cf       | 27 | 3 | 1 | 1   | 1   | 3 |                        |
| LCHead-eq-any-ph-nt-ic       | 27 | 3 | 3 | 1   | 100 | 1 |                        |
| LCHead-eq-any-ph-rt-ic       | 27 | 3 | 3 | 1   | 1   | 1 |                        |
| LCHead-eq-any-wo-nt-ic       | 27 | 3 | 3 | 2   | 100 | 1 |                        |
| LCHead-eq-any-wo-rt-ic       | 27 | 3 | 3 | 2   | 1   | 1 |                        |
| SubjectGeogr-eq-fif-ph-nt-cf | 58 | 3 | 1 | 1   | 100 | 3 | 5.D.2.22               |
| SubjectGeogr-eq-fif-ph-rt-cf | 58 | 3 | 1 | 1   | 1   | 3 | 5.D.2.23 (6=1)         |
| SubjectGeogr-eq-any-ph-nt-ic | 58 | 3 | 3 | 1   | 100 | 1 |                        |
| SubjectGeogr-eq-any-ph-rt-ic | 58 | 3 | 3 | 1   | 1   | 1 | 5.D.2.23 (3=1)         |
| SubjectGeogr-eq-any-wo-nt-ic | 58 | 3 | 3 | 2   | 100 | 1 | 5.D.2.20               |

|                                |      |   |   |   |     |   |               |
|--------------------------------|------|---|---|---|-----|---|---------------|
| SubjectGeogr-eq-any-wo-rt-ic   | 58   | 3 | 3 | 2 | 1   | 1 | 5.D.2.21      |
| Note-eq-any-ph-nt-ic           | 63   | 3 | 3 | 1 | 100 | 1 |               |
| Note-eq-any-ph-rt-ic           | 63   | 3 | 3 | 1 | 1   | 1 |               |
| Note-eq-any-wo-nt-ic           | 63   | 3 | 3 | 2 | 100 | 1 | 5.D.2.27      |
| Note-eq-any-wo-rt-ic           | 63   | 3 | 3 | 2 | 1   | 1 | 5.D.2.28      |
| NamePerCorp-eq-fif-ph-nt-cf    | 1002 | 3 | 1 | 1 | 100 | 3 | 5.D.1.3       |
| NamePerCorp-eq-fif-ph-rt-cf    | 1002 | 3 | 1 | 1 | 1   | 3 | 5.D.1.4 (6=1) |
| NamePerCorp-eq-any-wo-nt-ic    | 1002 | 3 | 3 | 2 | 100 | 1 | 5.D.1.1       |
| NamePerCorp-eq-any-wo-rt-ic    | 1002 | 3 | 3 | 2 | 1   | 1 | 5.D.1.2       |
| NamePerCorp-eq-any-ph-nt-ic    | 1002 | 3 | 3 | 1 | 100 | 1 | 5.D.2.26      |
| NamePerCorp-eq-any-ph-rt-ic    | 1002 | 3 | 3 | 1 | 1   | 1 | 5.D.1.4 (3=1) |
| IdentifierStd-eq-fif-ph-nt-ic  | 1007 | 3 | 1 | 1 | 100 | 1 |               |
| SubjectNamePer-eq-fif-ph-nt-cf | 1009 | 3 | 1 | 1 | 100 | 3 |               |
| SubjectNamePer-eq-fif-ph-rt-cf | 1009 | 3 | 1 | 1 | 1   | 3 |               |
| SubjectNamePer-eq-any-ph-nt-ic | 1009 | 3 | 3 | 1 | 100 | 1 |               |
| SubjectNamePer-eq-any-ph-rt-ic | 1009 | 3 | 3 | 1 | 1   | 1 |               |
| SubjectNamePer-eq-any-wo-nt-ic | 1009 | 3 | 3 | 2 | 100 | 1 |               |
| SubjectNamePer-eq-any-wo-rt-ic | 1009 | 3 | 3 | 2 | 1   | 1 |               |
| DateAdded-lt-any-date-nt-cs    | 1011 | 1 | 3 | 5 | 100 | 2 |               |
| DateAdded-le-any-date-nt-cs    | 1011 | 2 | 3 | 5 | 100 | 2 |               |
| DateAdded-eq-any-date-nt-cs    | 1011 | 3 | 3 | 5 | 100 | 2 |               |
| DateAdded-ge-any-date-nt-cs    | 1011 | 4 | 3 | 5 | 100 | 2 |               |
| DateAdded-gt-any-date-nt-cs    | 1011 | 5 | 3 | 5 | 100 | 2 |               |
| DateModified-lt-any-date-nt-cs | 1012 | 1 | 3 | 5 | 100 | 2 |               |
| DateModified-le-any-date-nt-cs | 1012 | 2 | 3 | 5 | 100 | 2 |               |
| DateModified-eq-any-date-nt-cs | 1012 | 3 | 3 | 5 | 100 | 2 |               |
| DateModified-ge-any-date-nt-cs | 1012 | 4 | 3 | 5 | 100 | 2 |               |
| DateModified-gt-any-date-nt-cs | 1012 | 5 | 3 | 5 | 100 | 2 |               |
| Any-eq-any-ph-nt-ic            | 1016 | 3 | 3 | 1 | 100 | 1 |               |
| Any-eq-any-ph-rt-ic            | 1016 | 3 | 3 | 1 | 1   | 1 |               |
| Any-eq-any-wo-nt-ic            | 1016 | 3 | 3 | 2 | 100 | 1 | 5.D.2.29      |
| Any-eq-any-wo-rt-ic            | 1016 | 3 | 3 | 2 | 1   | 1 | 5.D.2.30      |

|                                |      |   |   |   |     |   |  |
|--------------------------------|------|---|---|---|-----|---|--|
| MatType-eq-any-wo-nt-cs        | 1031 | 3 | 3 | 2 | 100 | 2 |  |
| MatType-eq-fif-ph-nt-ic        | 1031 | 3 | 1 | 1 | 100 | 1 |  |
| ClassPhrase-eq-fif-ph-nt-cf    | 1040 | 3 | 1 | 1 | 100 | 3 |  |
| ClassPhrase-eq-fif-ph-rt-cf    | 1040 | 3 | 1 | 1 | 1   | 3 |  |
| ClassPhrase-eq-any-ph-nt-ic    | 1040 | 3 | 3 | 1 | 100 | 1 |  |
| ClassPhrase-eq-any-ph-rt-ic    | 1040 | 3 | 3 | 1 | 1   | 1 |  |
| ClassPhrase-eq-any-wo-nt-ic    | 1040 | 3 | 3 | 2 | 100 | 1 |  |
| ClassPhrase-eq-any-wo-rt-ic    | 1040 | 3 | 3 | 2 | 1   | 1 |  |
| SubjectNameCor-eq-fif-ph-nt-cf | 1074 | 3 | 1 | 1 | 100 | 3 |  |
| SubjectNameCor-eq-fif-ph-rt-cf | 1074 | 3 | 1 | 1 | 1   | 3 |  |
| SubjectNameCor-eq-any-ph-nt-ic | 1074 | 3 | 3 | 1 | 100 | 1 |  |
| SubjectNameCor-eq-any-ph-rt-ic | 1074 | 3 | 3 | 1 | 1   | 1 |  |
| SubjectNameCor-eq-any-wo-nt-ic | 1074 | 3 | 3 | 2 | 100 | 1 |  |
| SubjectNameCor-eq-any-wo-rt-ic | 1074 | 3 | 3 | 2 | 1   | 1 |  |
| SubjectChron-eq-fif-ph-nt-cf   | 1077 | 3 | 1 | 1 | 100 | 3 |  |
| SubjectChron-eq-fif-ph-rt-cf   | 1077 | 3 | 1 | 1 | 1   | 3 |  |
| SubjectChron-eq-any-ph-nt-ic   | 1077 | 3 | 3 | 1 | 100 | 1 |  |
| SubjectChron-eq-any-ph-rt-ic   | 1077 | 3 | 3 | 1 | 1   | 1 |  |
| SubjectChron-eq-any-wo-nt-ic   | 1077 | 3 | 3 | 2 | 100 | 1 |  |
| SubjectChron-eq-any-wo-rt-ic   | 1077 | 3 | 3 | 2 | 1   | 1 |  |
| SubjectTitle-eq-fif-ph-nt-cf   | 1078 | 3 | 1 | 1 | 100 | 3 |  |
| SubjectTitle-eq-fif-ph-rt-cf   | 1078 | 3 | 1 | 1 | 1   | 3 |  |
| SubjectTitle-eq-any-ph-nt-ic   | 1078 | 3 | 3 | 1 | 100 | 1 |  |
| SubjectTitle-eq-any-ph-rt-ic   | 1078 | 3 | 3 | 1 | 1   | 1 |  |
| SubjectTitle-eq-any-wo-nt-ic   | 1078 | 3 | 3 | 2 | 100 | 1 |  |
| SubjectTitle-eq-any-wo-rt-ic   | 1078 | 3 | 3 | 2 | 1   | 1 |  |
| AGROVOC-eq-fif-ph-nt-cf        | 1085 | 3 | 1 | 1 | 100 | 3 |  |
| AGROVOC-eq-fif-ph-rt-cf        | 1085 | 3 | 1 | 1 | 1   | 3 |  |
| AGROVOC-eq-any-ph-nt-ic        | 1085 | 3 | 3 | 1 | 100 | 1 |  |
| AGROVOC-eq-any-ph-rt-ic        | 1085 | 3 | 3 | 1 | 1   | 1 |  |
| AGROVOC-eq-any-wo-nt-ic        | 1085 | 3 | 3 | 2 | 100 | 1 |  |
| AGROVOC-eq-any-wo-rt-ic        | 1085 | 3 | 3 | 2 | 1   | 1 |  |

|                                |      |   |   |   |     |   |  |
|--------------------------------|------|---|---|---|-----|---|--|
| COMPASS-eq-fif-ph-nt-cf        | 1086 | 3 | 1 | 1 | 100 | 3 |  |
| COMPASS-eq-fif-ph-rt-cf        | 1086 | 3 | 1 | 1 | 1   | 3 |  |
| COMPASS-eq-any-ph-nt-ic        | 1086 | 3 | 3 | 1 | 100 | 1 |  |
| COMPASS-eq-any-ph-rt-ic        | 1086 | 3 | 3 | 1 | 1   | 1 |  |
| COMPASS-eq-any-wo-nt-ic        | 1086 | 3 | 3 | 2 | 100 | 1 |  |
| COMPASS-eq-any-wo-rt-ic        | 1086 | 3 | 3 | 2 | 1   | 1 |  |
| EPT-eq-fif-ph-nt-cf            | 1087 | 3 | 1 | 1 | 100 | 3 |  |
| EPT-eq-fif-ph-rt-cf            | 1087 | 3 | 1 | 1 | 1   | 3 |  |
| EPT-eq-any-ph-nt-ic            | 1087 | 3 | 3 | 1 | 100 | 1 |  |
| EPT-eq-any-ph-rt-ic            | 1087 | 3 | 3 | 1 | 1   | 1 |  |
| EPT-eq-any-wo-nt-ic            | 1087 | 3 | 3 | 2 | 100 | 1 |  |
| EPT-eq-any-wo-rt-ic            | 1087 | 3 | 3 | 2 | 1   | 1 |  |
| NAL-eq-fif-ph-nt-cf            | 1088 | 3 | 1 | 1 | 100 | 3 |  |
| NAL-eq-fif-ph-rt-cf            | 1088 | 3 | 1 | 1 | 1   | 3 |  |
| NAL-eq-any-ph-nt-ic            | 1088 | 3 | 3 | 1 | 100 | 1 |  |
| NAL-eq-any-ph-rt-ic            | 1088 | 3 | 3 | 1 | 1   | 1 |  |
| NAL-eq-any-wo-nt-ic            | 1088 | 3 | 3 | 2 | 100 | 1 |  |
| NAL-eq-any-wo-rt-ic            | 1088 | 3 | 3 | 2 | 1   | 1 |  |
| CodeNatPerCorp-eq-any-wo-nt-ic | 1217 | 3 | 3 | 2 | 100 | 1 |  |

#### 10.1.4 Relationship with Bath Profile for Search

The following table illustrates the relationship between the Bath Profile attribute combinations and corresponding danZIG Profile attribute combinations

| Bath-code | Name of Attribute Combinations<br>Bath-profile 2.0 | Relation<br>Bath /<br>danZIG | danZIG-profile<br>Attribute Combinations |
|-----------|--|------------------------------|--|
| 5.D.1.1   | Name Search -- Keyword                             | equal                        | NamePerCorp-eq-any-wo-nt-ic              |
| 5.D.1.2   | Name Search -- Keyword with Right Truncation       | equal                        | NamePerCorp-eq-any-wo-rt-ic              |
| 5.D.1.3   | Name Search -- Exact Match                         | equal                        | NamePerCorp-eq-fif-ph-nt-cf              |
| 5.D.1.4   | Name Search -- First Characters in Field           | map to                       | NamePerCorp-eq-any-ph-rt-ic              |
| 5.D.1.4   | Name Search -- First Characters in Field           | map to                       | NamePerCorp-eq-fif-nn-rt-cf              |

|          |   |        |                          |
|----------|---|--------|--------------------------|
| 5.D.1.5  | Title Search -- Keyword                                 | equal  | Title-eq-any-wo-nt-ic    |
| 5.D.1.6  | Title Search -- Keyword with Right Truncation           | equal  | Title-eq-any-wo-rt-ic    |
| 5.D.1.7  | Title Search -- Exact Match                             | equal  | Title-eq-fif-ph-nt-cf    |
| 5.D.1.8  | Title Search -- First Words in Field                    | map to | Title-eq-fif-ph-rt-cf    |
| 5.D.1.9  | Title Search -- First Characters in Field               | map to | Title-eq-fif-ph-rt-cf    |
| 5.D.1.9  | Title Search -- First Characters in Field               | map to | Title-eq-any-ph-rt-ic    |
| 5.D.1.10 | Subject Search -- Keyword                               | equal  | Subject-eq-any-wo-nt-ic  |
| 5.D.1.11 | Subject Search -- Keyword with Right Truncation         | equal  | Subject-eq-any-wo-rt-ic  |
| 5.D.1.12 | Subject Search -- Exact Match                           | equal  | Subject-eq-fif-ph-nt-cf  |
| 5.D.1.13 | Subject Search -- First Words in Field                  | map to | Subject-eq-fif-ph-rt-cf  |
| 5.D.1.14 | Subject Search -- First Characters in Field             | map to | Subject-eq-fif-ph-rt-cf  |
| 5.D.1.14 | Subject Search -- First Characters in Field             | map to | Subject-eq-any-ph-rt-ic  |
| 5.D.2.1  | Personal Name Search -- Keyword                         | equal  | NamePer-eq-any-wo-nt-ic  |
| 5.D.2.2  | Personal Name Search -- Keyword with Right Truncation   | equal  | NamePer-eq-any-wo-rt-ic  |
| 5.D.2.3  | Personal Name Search -- Exact Match                     | map to | NamePer-eq-fif-nn-nt-cs  |
| 5.D.2.4  | Personal Name Search -- First Characters in Field       | map to | NamePer-eq-fif-nn-rt-cs  |
| 5.D.2.4  | Personal Name Search -- First Characters in Field       | map to | NamePer-eq-any-nn-rt-ic  |
| 5.D.2.5  | Corporate Name Search -- Keyword                        | equal  | NameCorp-eq-any-wo-nt-ic |
| 5.D.2.6  | Corporate Name Search -- Keyword with Right Truncation  | equal  | NameCorp-eq-any-wo-rt-ic |
| 5.D.2.7  | Corporate Name Search -- Exact Match                    | map to | NameCorp-eq-fif-nn-nt-cs |
| 5.D.2.8  | Corporate Name Search -- First Characters in Field      | map to | NameCorp-eq-fif-nn-rt-cs |
| 5.D.2.8  | Corporate Name Search -- First Characters in Field      | map to | NameCorp-eq-any-nn-rt-ic |
| 5.D.2.9  | Conference Name -- Keyword                              | map to | NameCorp-eq-any-wo-nt-ic |
| 5.D.2.10 | Conference Name Search -- Keyword with Right Truncation | map to | NameCorp-eq-any-wo-rt-ic |
| 5.D.2.11 | Conference Name Search -- Exact Match                   | map to | NameCorp-eq-fif-nn-nt-cs |

|          |   |            |                              |
|----------|---|------------|------------------------------|
| 5.D.2.12 | Conference Name Search -- First Characters in Field     | map to     | NameCorp-eq-fif-nn-rt-cs     |
| 5.D.2.12 | Corporate Name Search -- First Characters in Field      | map to     | NameCorp-eq-any-nn-rt-ic     |
| 5.D.2.13 | Uniform Title Search -- Keyword                         | equal      | TitleUniform-eq-any-wo-nt-ic |
| 5.D.2.14 | Uniform Title Search -- Keyword with Right Truncation   | equal      | TitleUniform-eq-any-wo-rt-ic |
| 5.D.2.15 | Uniform Title Search -- Exact Match                     | equal      | TitleUniform-eq-fif-ph-nt-cf |
| 5.D.2.16 | Uniform Title Search -- First Characters in Field       | map to     | TitleUniform-eq-fif-ph-rt-cf |
| 5.D.2.16 | Uniform Title Search -- First Characters in Field       | map to     | TitleUniform-eq-any-ph-rt-ic |
| 5.D.2.17 | Uniform Title Search -- First Words in Field            | map to     | TitleUniform-eq-any-ph-nt-ic |
| 5.D.2.18 | ISSN Search   | map to     | ISSN-eq-any-ph-nt-cs         |
| 5.D.2.19 | Remote System Record Number Search                      | map to     | ContNoLocal-eq-any-st-nt-cs  |
| 5.D.2.20 | Geographic Name Search -- Keyword                       | equal      | GeogrName-eq-any-wo-nt-ic    |
| 5.D.2.21 | Geographic Name Search -- Keyword with Right Truncation | equal      | GeogrName-eq-any-wo-rt-ic    |
| 5.D.2.22 | Geographic Name Search -- Exact Match                   | equal      | GeogrName-eq-fif-ph-nt-cf    |
| 5.D.2.23 | Geographic Name Search -- First Characters in Field     | map to     | GeogrName-eq-fif-ph-rt-cf    |
| 5.D.2.23 | Geographic Name Search -- First Characters in Field     | map to     | GeogrName-eq-any-ph-rt-ic    |
| 5.D.2.24 | Title Search -- Unanchored Phrase                       | equal      | Title-eq-any-ph-nt-ic        |
| 5.D.2.25 | Subject Search -- Unanchored Phrase                     | equal      | Subject-eq-any-ph-nt-ic      |
| 5.D.2.26 | Name Search -- Unanchored Phrase                        | equal      | NamePerCorp-eq-any-ph-nt-ic  |
| 5.D.2.27 | Note Search -- Keyword                                  | equal      | Note-eq-any-wo-nt-ic         |
| 5.D.2.28 | Note Search -- Keyword with Right Truncation            | equal      | Note-eq-any-wo-rt-ic         |
| 5.D.2.29 | Any Search -- Keyword                                   | equal      | Any-eq-any-wo-nt-ic          |
| 5.D.2.30 | Any Search -- Keyword with Right Truncation             | equal      | Any-eq-any-wo-rt-ic          |
| 5.D.2.31 | Topical Subject Search -- Keyword                       | no mapping |                              |
| 5.D.2.32 | Topical Subject Search -- Keyword with Right Truncation | no mapping |                              |

|          |  |            |  |
|----------|--|------------|--|
| 5.D.2.33 | Topical Subject Search -- Exact Match                      | no mapping |  |
| 5.D.2.34 | Topical Subject Search -- First Words in Field             | no mapping |  |
| 5.D.2.35 | Topical Subject Search -- First Characters in Field        | no mapping |  |
| 5.D.2.36 | Genre/form Subject Search -- Keyword                       | no mapping |  |
| 5.D.2.37 | Genre/form Subject Search -- Keyword with Right Truncation | no mapping |  |
| 5.D.2.38 | Genre/form Subject Search -- Exact Match                   | no mapping |  |
| 5.D.2.39 | Genre/form Subject Search -- First Words in Field          | no mapping |  |
| 5.D.2.40 | Genre/form Subject Search -- First Characters in Field     | no mapping |  |

#### 10.1.5 Dan-1 Use Attributes for Search

Dan-1 *Use* (type 1) Attribute values for Search in danZIG Profile

| Dan-1 <i>Use</i> Value | Dan-1 <i>Use</i> Attribute Name                                   |
|------------------------|---|
| 1                      | Classification-code-DK5 (Note: for classification of the heading) |
| 2                      | Subject-controlled (identical with Bib-1 Use 21)                  |
| 3                      | DBC-subject   |
| 4                      | DBC-subject-non-fiction   |
| 5                      | DBC-subject-fiction   |
| 6                      | DBC-subject-music   |
| 7                      | Subject-form-DBC  |
| 8                      | Subject-level-DBC   |
| 10                     | Classification-DK5  |
| 14                     | Catalogue-code  |
| 17                     | Item-number   |
| 19                     | FAUST-code-previous   |
| 22                     | Subject-controlled-non-fiction                                    |

|    |                                |
|----|--------------------------------|
| 23 | Subject-controlled-fiction     |
| 26 | Name-author-in-description     |
| 28 | Heading (name, title, subject) |
| 29 | Subject-chronological-DBC      |
| 30 | Subject-geographic-DBC         |
| 31 | Authentication-code            |
| 32 | Transliteration-code           |
| 33 | Language-person-corporation    |
| 34 | DBC-subject-general            |
| 35 | Code-cataloguing-rules         |

#### 10.1.6 Dan-1 Search Attribute combinations

The following table enumerates the combinations of Dan-1 attributes that must be supported by a danZIG compliant Server as part of a Search Request

Dan-1 Relation, Position, Structure, Truncation, Completeness - definitions in 5.1.1-6

| <b>Dan-1<br/>Attribute combination name</b> | <b>1 Use</b> | <b>2 Relation</b> | <b>3 Position</b> | <b>4 Structure</b> | <b>5 Truncation</b> | <b>6 Completeness</b> |
|---|--------------|-------------------|-------------------|--------------------|---------------------|-----------------------|
| SubjectCon-eq-fif-ph-nt-cf                  | 2            | 3                 | 1                 | 1                  | 100                 | 3                     |
| SubjectCon-eq-fif-ph-rt-cf                  | 2            | 3                 | 1                 | 1                  | 1                   | 3                     |
| SubjectCon-eq-any-ph-nt-ic                  | 2            | 3                 | 3                 | 1                  | 100                 | 1                     |
| SubjectCon-eq-any-ph-rt-ic                  | 2            | 3                 | 3                 | 1                  | 1                   | 1                     |
| SubjectCon-eq-any-wo-nt-ic                  | 2            | 3                 | 3                 | 2                  | 100                 | 1                     |
| SubjectCon-eq-any-wo-rt-ic                  | 2            | 3                 | 3                 | 2                  | 1                   | 1                     |
| DBCSubject-eq-fif-ph-nt-cf                  | 3            | 3                 | 1                 | 1                  | 100                 | 3                     |
| DBCSubject-eq-fif-ph-rt-cf                  | 3            | 3                 | 1                 | 1                  | 1                   | 3                     |
| DBCSubject-eq-any-ph-nt-ic                  | 3            | 3                 | 3                 | 1                  | 100                 | 1                     |
| DBCSubject-eq-any-ph-rt-ic                  | 3            | 3                 | 3                 | 1                  | 1                   | 1                     |

|                                 |   |   |   |   |     |   |
|---------------------------------|---|---|---|---|-----|---|
| DBCSSubject-eq-any-wo-nt-ic     | 3 | 3 | 3 | 2 | 100 | 1 |
| DBCSSubject-eq-any-wo-rt-ic     | 3 | 3 | 3 | 2 | 1   | 1 |
| DBCSSubjectNF-eq-fif-ph-nt-cf   | 4 | 3 | 1 | 1 | 100 | 3 |
| DBCSSubjectNF-eq-fif-ph-rt-cf   | 4 | 3 | 1 | 1 | 1   | 3 |
| DBCSSubjectNF-eq-any-ph-nt-ic   | 4 | 3 | 3 | 1 | 100 | 1 |
| DBCSSubjectNF-eq-any-ph-rt-ic   | 4 | 3 | 3 | 1 | 1   | 1 |
| DBCSSubjectNF-eq-any-wo-nt-ic   | 4 | 3 | 3 | 2 | 100 | 1 |
| DBCSSubjectNF-eq-any-wo-rt-ic   | 4 | 3 | 3 | 2 | 1   | 1 |
| DBCSSubjectF-eq-fif-ph-nt-cf    | 5 | 3 | 1 | 1 | 100 | 3 |
| DBCSSubjectF-eq-fif-ph-rt-cf    | 5 | 3 | 1 | 1 | 1   | 3 |
| DBCSSubjectF-eq-any-ph-nt-ic    | 5 | 3 | 3 | 1 | 100 | 1 |
| DBCSSubjectF-eq-any-ph-rt-ic    | 5 | 3 | 3 | 1 | 1   | 1 |
| DBCSSubjectF-eq-any-wo-nt-ic    | 5 | 3 | 3 | 2 | 100 | 1 |
| DBCSSubjectF-eq-any-wo-rt-ic    | 5 | 3 | 3 | 2 | 1   | 1 |
| DBCSSubjectMus-eq-fif-ph-nt-cf  | 6 | 3 | 1 | 1 | 100 | 3 |
| DBCSSubjectMus-eq-fif-ph-rt-cf  | 6 | 3 | 1 | 1 | 1   | 3 |
| DBCSSubjectMus-eq-any-ph-nt-ic  | 6 | 3 | 3 | 1 | 100 | 1 |
| DBCSSubjectMus-eq-any-ph-rt-ic  | 6 | 3 | 3 | 1 | 1   | 1 |
| DBCSSubjectMus-eq-any-wo-nt-ic  | 6 | 3 | 3 | 2 | 100 | 1 |
| DBCSSubjectMus-eq-any-wo-rt-ic  | 6 | 3 | 3 | 2 | 1   | 1 |
| SubjectFormDBC-eq-fif-ph-nt-cf  | 7 | 3 | 1 | 1 | 100 | 3 |
| SubjectFormDBC-eq-fif-ph-rt-cf  | 7 | 3 | 1 | 1 | 1   | 3 |
| SubjectFormDBC-eq-any-ph-nt-ic  | 7 | 3 | 3 | 1 | 100 | 1 |
| SubjectFormDBC-eq-any-ph-rt-ic  | 7 | 3 | 3 | 1 | 1   | 1 |
| SubjectFormDBC-eq-any-wo-nt-ic  | 7 | 3 | 3 | 2 | 100 | 1 |
| SubjectFormDBC-eq-any-wo-rt-ic  | 7 | 3 | 3 | 2 | 1   | 1 |
| SubjectLevelDBC-eq-fif-ph-nt-cf | 8 | 3 | 1 | 1 | 100 | 3 |
| SubjectLevelDBC-eq-fif-ph-rt-cf | 8 | 3 | 1 | 1 | 1   | 3 |
| SubjectLevelDBC-eq-any-ph-nt-ic | 8 | 3 | 3 | 1 | 100 | 1 |
| SubjectLevelDBC-eq-any-ph-rt-ic | 8 | 3 | 3 | 1 | 1   | 1 |
| SubjectLevelDBC-eq-any-wo-nt-ic | 8 | 3 | 3 | 2 | 100 | 1 |
| SubjectLevelDBC-eq-any-wo-rt-ic | 8 | 3 | 3 | 2 | 1   | 1 |

|                                 |    |   |   |   |     |   |
|---------------------------------|----|---|---|---|-----|---|
| DK5-eq-fif-ph-nt-cf             | 10 | 3 | 1 | 1 | 100 | 3 |
| DK5-eq-fif-ph-rt-cf             | 10 | 3 | 1 | 1 | 1   | 3 |
| DK5-eq-any-ph-nt-ic             | 10 | 3 | 3 | 1 | 100 | 1 |
| DK5-eq-any-ph-rt-ic             | 10 | 3 | 3 | 1 | 1   | 1 |
| DK5-eq-any-wo-nt-ic             | 10 | 3 | 3 | 2 | 100 | 1 |
| DK5-eq-any-wo-rt-ic             | 10 | 3 | 3 | 2 | 1   | 1 |
| CatCode-eq-any-wo-nt-cs         | 14 | 3 | 3 | 2 | 100 | 2 |
| ItemNo-eq-any-wo-nt-cs          | 17 | 3 | 3 | 2 | 100 | 2 |
| PrevFAUST-eq-any-wo-nt-cs       | 19 | 3 | 3 | 2 | 100 | 2 |
| SubjectNF-eq-fif-ph-nt-cf       | 22 | 3 | 1 | 1 | 100 | 3 |
| SubjectNF-eq-fif-ph-rt-cf       | 22 | 3 | 1 | 1 | 1   | 3 |
| SubjectNF-eq-any-ph-nt-ic       | 22 | 3 | 3 | 1 | 100 | 1 |
| SubjectNF-eq-any-ph-rt-ic       | 22 | 3 | 3 | 1 | 1   | 1 |
| SubjectNF-eq-any-wo-nt-ic       | 22 | 3 | 3 | 2 | 100 | 1 |
| SubjectNF-eq-any-wo-rt-ic       | 22 | 3 | 3 | 2 | 1   | 1 |
| SubjectF-eq-fif-ph-nt-cf        | 23 | 3 | 1 | 1 | 100 | 3 |
| SubjectF-eq-fif-ph-rt-cf        | 23 | 3 | 1 | 1 | 1   | 3 |
| SubjectF-eq-any-ph-nt-ic        | 23 | 3 | 3 | 1 | 100 | 1 |
| SubjectF-eq-any-ph-rt-ic        | 23 | 3 | 3 | 1 | 1   | 1 |
| SubjectF-eq-any-wo-nt-ic        | 23 | 3 | 3 | 2 | 100 | 1 |
| SubjectF-eq-any-wo-rt-ic        | 23 | 3 | 3 | 2 | 1   | 1 |
| AuthorInDesc-eq-any-ph-nt-ic    | 26 | 3 | 3 | 1 | 100 | 1 |
| AuthorInDesc-eq-any-ph-rt-ic    | 26 | 3 | 3 | 1 | 1   | 1 |
| AuthorInDesc-eq-any-wo-nt-cs    | 26 | 3 | 3 | 2 | 100 | 2 |
| AuthorInDesc-eq-any-wo-rt-cs    | 26 | 3 | 3 | 2 | 1   | 2 |
| HeadingNorm-eq-fif-ph-nt-cf     | 28 | 3 | 1 | 1 | 100 | 3 |
| HeadingNorm-eq-fif-ph-rt-cf     | 28 | 3 | 1 | 1 | 1   | 3 |
| HeadingNorm-eq-any-ph-nt-ic     | 28 | 3 | 3 | 1 | 100 | 1 |
| HeadingNorm-eq-any-ph-rt-ic     | 28 | 3 | 3 | 1 | 1   | 1 |
| HeadingNorm-eq-any-wo-nt-ic     | 28 | 3 | 3 | 2 | 100 | 1 |
| HeadingNorm-eq-any-wo-rt-ic     | 28 | 3 | 3 | 2 | 1   | 1 |
| SubjectChronDBC-eq-fif-ph-nt-cf | 29 | 3 | 1 | 1 | 100 | 3 |

|                                     |    |   |   |   |     |   |
|-------------------------------------|----|---|---|---|-----|---|
| SubjectChronDBC-eq-fif-ph-rt-cf     | 29 | 3 | 1 | 1 | 1   | 3 |
| SubjectChronDBC-eq-any-ph-nt-ic     | 29 | 3 | 3 | 1 | 100 | 1 |
| SubjectChronDBC-eq-any-ph-rt-ic     | 29 | 3 | 3 | 1 | 1   | 1 |
| SubjectChronDBC-eq-any-wo-nt-ic     | 29 | 3 | 3 | 2 | 100 | 1 |
| SubjectChronDBC-eq-any-wo-rt-ic     | 29 | 3 | 3 | 2 | 1   | 1 |
| SubjectGeogrDBC-eq-fif-ph-nt-cf     | 30 | 3 | 1 | 1 | 100 | 3 |
| SubjectGeogrDBC-eq-fif-ph-rt-cf     | 30 | 3 | 1 | 1 | 1   | 3 |
| SubjectGeogrDBC-eq-any-ph-nt-ic     | 30 | 3 | 3 | 1 | 100 | 1 |
| SubjectGeogrDBC-eq-any-ph-rt-ic     | 30 | 3 | 3 | 1 | 1   | 1 |
| SubjectGeogrDBC-eq-any-wo-nt-ic     | 30 | 3 | 3 | 2 | 100 | 1 |
| SubjectGeogrDBC-eq-any-wo-rt-ic     | 30 | 3 | 3 | 2 | 1   | 1 |
| AuthenticationCode-eq-any-wo-nt-cs  | 31 | 3 | 3 | 2 | 100 | 2 |
| TransliterationCode-eq-any-wo-nt-cs | 32 | 3 | 3 | 2 | 100 | 2 |
| CodeLangPerCor-eq-any-wo-nt-cs      | 33 | 3 | 3 | 2 | 100 | 2 |
| DBCSubjectGen-eq-fif-ph-nt-cf       | 34 | 3 | 1 | 1 | 100 | 3 |
| DBCSubjectGen-eq-fif-ph-rt-cf       | 34 | 3 | 1 | 1 | 1   | 3 |
| DBCSubjectGen-eq-any-ph-nt-ic       | 34 | 3 | 3 | 1 | 100 | 1 |
| DBCSubjectGen-eq-any-ph-rt-ic       | 34 | 3 | 3 | 1 | 1   | 1 |
| DBCSubjectGen-eq-any-wo-nt-ic       | 34 | 3 | 3 | 2 | 100 | 1 |
| DBCSubjectGen-eq-any-wo-rt-ic       | 34 | 3 | 3 | 2 | 1   | 1 |
| CodeCatRul-eq-any-wo-nt-cs          | 35 | 3 | 3 | 2 | 100 | 2 |

## 10.2 G Scan Service

Target must support scanning of the same *Use* attribute values as listed under Search Service requirements above, **except** the ones listed in the following table:

| Bib-1 <i>Use</i> Attribute Name | Bib-1 <i>Use</i> Value |
|---------------------------------|------------------------|
| <i>Identifier-ISSN</i>          | 8                      |
| <i>Control-number-local</i>     | 12                     |
| <i>Date-publication</i>         | 31                     |
| <i>Identifier-standard</i>      | 1007                   |
| <i>Date-added</i>               | 1011                   |

|               |      |
|---------------|------|
| Date-modified | 1012 |
|---------------|------|

Servers may ignore *Truncation* and *Relation* attributes specified in connection with Scan Requests. Other attribute types may not be ignored.

The Target must interpret (i.e. neither ignore- nor substitute) the values supplied for all of those attribute types, which are submitted in a given Scan Request.

If one or more attribute types are missing in a query, the Server may choose to either substitute default values for the missing attribute type - or reject the incomplete request as "Unsupported Attribute Combinations".

A Server must accept Scan requests containing any of the attribute combinations specified below. A Server may not treat any of these specified attribute combinations as "Unsupported Attribute Combinations", but it may always choose to return zero hits.

The concepts of "fields" and "subfields" are not clearly defined in the context of the Z39.50 data model. Servers may therefore return the same hits, regardless of whether given *Completeness* and *Position* attributes refer to "fields" or "subfields".

Target must support *Step-size* = 0, i.e. "do not skip any entries" and *Position-in-response* = 1.

Target must return the number of entries (hits) associated with each SCAN Term.

The following sections contain a complete enumeration of attribute combinations, which must be recognised by danZIG compliant Z-Servers in connection with Scan Requests.

### 10.2.1 Bib-1 Use Attributes for Scan

Bib-1 *Use* (type 1) Attribute Combinations for Scan in danZIG Profile

| <b>Bib-1</b><br><b>Attribute combination name</b> | <b>1 Use</b> | <b>3 Position</b> | <b>4 Structure</b> | <b>6 Completeness</b> | <b>Relation to Bath-profile<br/>(empty = no)</b> |
|---|--------------|-------------------|--------------------|-----------------------|--|
| NamePer-fif-nn-cs                                 | 1            | 1                 | 101                | 2                     |  |
| NamePer-any-wo-ic                                 | 1            | 3                 | 2                  | 1                     |  |
| NameCorp-fif-nn-cs                                | 2            | 1                 | 101                | 2                     |  |
| NameCorp-any-wo-ic                                | 2            | 3                 | 2                  | 1                     |  |
| Title-fif-ph-cf                                   | 4            | 1                 | 1                  | 3                     | 5.D.1.SCAN.2 (6=und)                             |
| Title-any-wo-ic                                   | 4            | 3                 | 2                  | 1                     | 5.D.2.SCAN.2 (6=und)                             |
| TitleSeries-fif-ph-cf                             | 5            | 1                 | 1                  | 3                     |  |
| TitleSeries-any-wo-ic                             | 5            | 3                 | 2                  | 1                     |  |
| TitleUniform-fif-ph-cf                            | 6            | 1                 | 1                  | 3                     |  |

|                          |      |   |   |   |                      |
|--------------------------|------|---|---|---|----------------------|
| TitleUniform-any-wo-ic   | 6    | 3 | 2 | 1 |                      |
| Subject-fif-ph-cf        | 21   | 1 | 1 | 3 | 5.D.1.SCAN.3 (6=und) |
| Subject-any-wo-ic        | 21   | 3 | 2 | 1 | 5.D.2.SCAN.3 (6=und) |
| MESH-fif-ph-cf           | 25   | 1 | 1 | 3 |                      |
| MESH-any-wo-ic           | 25   | 3 | 2 | 1 |                      |
| LCHead-fif-ph-cf         | 27   | 1 | 1 | 3 |                      |
| LCHead-any-wo-ic         | 27   | 3 | 2 | 1 |                      |
| SubjectGeogr-fif-ph-cf   | 58   | 1 | 1 | 3 |                      |
| SubjectGeogr-any-wo-ic   | 58   | 3 | 2 | 1 |                      |
| Note-any-wo-ic           | 63   | 3 | 2 | 1 |                      |
| NamePerCorp-fif-ph-cf    | 1002 | 1 | 1 | 3 | 5.D.1.SCAN.1 (6=und) |
| NamePerCorp-any-wo-ic    | 1002 | 3 | 2 | 1 | 5.D.2.SCAN.1 (6=und) |
| SubjectNamePer-fif-ph-cf | 1009 | 1 | 1 | 3 |                      |
| SubjectNamePer-any-wo-ic | 1009 | 3 | 2 | 1 |                      |
| Any-any-wo-ic            | 1016 | 3 | 2 | 1 |                      |
| MatType-any-wo-cs        | 1031 | 3 | 2 | 2 |                      |
| MatType-fif-ph-ic        | 1031 | 1 | 1 | 1 |                      |
| ClassPhrase-fif-ph-cf    | 1040 | 1 | 1 | 3 |                      |
| ClassPhrase-any-wo-ic    | 1040 | 3 | 2 | 1 |                      |
| SubjectNameCor-fif-ph-cf | 1074 | 1 | 1 | 3 |                      |
| SubjectNameCor-any-wo-ic | 1074 | 3 | 2 | 1 |                      |
| SubjectChron-fif-ph-cf   | 1077 | 1 | 1 | 3 |                      |
| SubjectChron-any-wo-ic   | 1077 | 3 | 2 | 1 |                      |
| SubjectTitle-fif-ph-cf   | 1078 | 1 | 1 | 3 |                      |
| SubjectTitle-any-wo-ic   | 1078 | 3 | 2 | 1 |                      |
| AGROVOC-fif-ph-cf        | 1085 | 1 | 1 | 3 |                      |
| AGROVOC-any-wo-ic        | 1085 | 3 | 2 | 1 |                      |
| COMPASS-fif-ph-cf        | 1086 | 1 | 1 | 3 |                      |
| COMPASS-any-wo-ic        | 1086 | 3 | 2 | 1 |                      |
| EPT-fif-ph-cf            | 1087 | 1 | 1 | 3 |                      |
| EPT-any-wo-ic            | 1087 | 3 | 2 | 1 |                      |
| NAL-fif-ph-cf            | 1088 | 1 | 1 | 3 |                      |

|                          |      |   |   |   |  |
|--------------------------|------|---|---|---|--|
| NAL-any-wo-ic            | 1088 | 3 | 2 | 1 |  |
| CodeNatPerCorp-any-wo-ic | 1217 | 3 | 2 | 1 |  |

### 10.2.2 Relationship with Bath Profile for Scan

The following table illustrates the relationship between the Bath Profile attribute combinations and corresponding danZIG Profile attribute combinations

| Bath-code    | Name of Attribute Combinations<br><b>Bath-profile 2.0</b> | 1 Use | 4 Structure | 3 Position | Equivalent danZIG SCAN attribute combination name |
|--------------|---|-------|-------------|------------|---|
| 5.D.1.SCAN.1 | Name -- Exact Match                                       | 1002  | 1           | 1          | NamePerCorp-fif-ph-cf                             |
| 5.D.1.SCAN.2 | Title -- Exact Match                                      | 4     | 1           | 1          | Title-fif-ph-cf                                   |
| 5.D.1.SCAN.3 | Subject -- Exact Match                                    | 21    | 1           | 1          | Subject-fif-ph-cf                                 |
| 5.D.2.SCAN.1 | Name -- Keyword   | 1002  | 3           | 2          | NamePerCorp-any-wo-ic                             |
| 5.D.2.SCAN.2 | Title -- Keyword  | 4     | 3           | 2          | Title-any-wo-ic                                   |
| 5.D.2.SCAN.3 | Subject -- Keyword  | 21    | 3           | 2          | Subject-any-wo-ic                                 |

### 10.2.3 Dan-1 Use Attributes for Scan

Dan-1 Use Attribute Combinations for SCAN

Dan-1 Relation, Position, Structure, Truncation, Completeness - definitions in 5.1.1-6

| Dan-1<br>Attribute combination name | 1 Use | 3 Position | 4 Structure | 6 Completeness |
|-------------------------------------|-------|------------|-------------|----------------|
| SubjectCon-fif-ph-cf                | 2     | 1          | 1           | 3              |
| SubjectCon-any-wo-ic                | 2     | 3          | 2           | 1              |
| DBCSSubject-fif-ph-cf               | 3     | 1          | 1           | 3              |

|                               |    |   |   |   |
|-------------------------------|----|---|---|---|
| DBCSSubject-any-wo-ic         | 3  | 3 | 2 | 1 |
| DBCSSubjectNF-fif-ph-cf       | 4  | 1 | 1 | 3 |
| DBCSSubjectNF-any-wo-ic       | 4  | 3 | 2 | 1 |
| DBCSSubjectF-fif-ph-cf        | 5  | 1 | 1 | 3 |
| DBCSSubjectF-any-wo-ic        | 5  | 3 | 2 | 1 |
| DBCSSubjectMus-fif-ph-cf      | 6  | 1 | 1 | 3 |
| DBCSSubjectMus-any-wo-ic      | 6  | 3 | 2 | 1 |
| SubjectFormDBC-fif-ph-cf      | 7  | 1 | 1 | 3 |
| SubjectFormDBC-any-wo-ic      | 7  | 3 | 2 | 1 |
| SubjectLevelDBC-fif-ph-cf     | 8  | 1 | 1 | 3 |
| SubjectLevelDBC-any-wo-ic     | 8  | 3 | 2 | 1 |
| DK5-fif-ph-cf                 | 10 | 1 | 1 | 3 |
| DK5-any-wo-ic                 | 10 | 3 | 2 | 1 |
| CatCode-any-wo-cs             | 14 | 3 | 2 | 2 |
| ItemNo-any-wo-cs              | 17 | 3 | 2 | 2 |
| PrevFAUST-any-wo-cs           | 19 | 3 | 2 | 2 |
| SubjectNF-fif-ph-cf           | 22 | 1 | 1 | 3 |
| SubjectNF-any-wo-ic           | 22 | 3 | 2 | 1 |
| SubjectF-fif-ph-cf            | 23 | 1 | 1 | 3 |
| SubjectF-any-wo-ic            | 23 | 3 | 2 | 1 |
| AuthorInDesc-any-wo-cs        | 26 | 3 | 2 | 2 |
| HeadingNorm-fif-ph-cf         | 28 | 1 | 1 | 3 |
| HeadingNorm-any-wo-ic         | 28 | 3 | 2 | 1 |
| SubjectChronDBC-fif-ph-cf     | 29 | 1 | 1 | 3 |
| SubjectChronDBC-any-wo-ic     | 29 | 3 | 2 | 1 |
| SubjectGeogrDBC-fif-ph-cf     | 30 | 1 | 1 | 3 |
| SubjectGeogrDBC-any-wo-ic     | 30 | 3 | 2 | 1 |
| AuthenticationCode-any-wo-cs  | 31 | 3 | 2 | 2 |
| TransliterationCode-any-wo-cs | 32 | 3 | 2 | 2 |
| CodeLangPerCor-any-wo-cs      | 33 | 3 | 2 | 2 |
| DBCSSubjectGen-fif-ph-cf      | 34 | 1 | 1 | 3 |
| DBCSSubjectGen-any-wo-ic      | 34 | 3 | 2 | 1 |

|                      |    |   |   |   |
|----------------------|----|---|---|---|
| CodeCatRul-any-wo-cs | 35 | 3 | 2 | 2 |
|----------------------|----|---|---|---|

## 10.3 G Present Service

Targets must support the following *Element-set-names* in relation to authority MARC records:

- *F* for Full, e.g. all available authority elements.
- *B* for Brief

Targets *must* support the following type of *Preferred-record-syntaxes*:

- DanMARC2

## Annex 1: Mapping to Praksisregler for søgeveje

Mappings between Bib-1/Dan-1 use attributes and codes for searching as defined in

*Praksisregler for søgeveje. Opsætning af søgeveje og udfoldning af koder under danMARC2. 2. udgave* by Danish Library Agency (2007):

<http://www.bs.dk/publikationer/andre/praksisregler/2007/index.htm>

| Bib-1 Use Attribute Name          | Value | Single Word | Phrase |
|-----------------------------------|-------|-------------|--------|
| Title                             | 4     | ti          | lti    |
| Title-series                      | 5     | se          | lse    |
| Title-uniform                     | 6     | ut          | lut    |
| Identifier-ISBN                   | 7     | ib          |        |
| Identifier-ISSN                   | 8     | in          |        |
| Control-number-local              | 12    | id          |        |
| Classification-Dewey              | 13    |             | ddc    |
| Classification-UDC                | 14    |             | udk    |
| Classification-LC                 | 16    |             | lcc    |
| Classification-NLM                | 17    |             | nlm    |
| Classification-NAL                | 18    |             | nal    |
| Classification-local              | 20    | kl          | lkl    |
| Subject                           | 21    | em          | lem    |
| Subject-MESH                      | 25    | ms          | lms    |
| Date-publication                  | 31    | år          |        |
| Title-key                         | 33    | nt          | lnt    |
| Title-parallel                    | 35    | pa          | lpa    |
| Title-former                      | 42    | tt          | ltt    |
| Code-language                     | 54    | sp          |        |
| Code-geographic-area              | 55    | ul          |        |
| Code--institution                 | 56    | ln          |        |
| Name-geographic-place-publication | 59    | pu          |        |
| Identifier-CODEN                  | 60    | co          |        |

| Bib-1 Use Attribute Name | Value | Single Word | Phrase |
|--------------------------|-------|-------------|--------|
| Note                     | 63    | no          |        |
| Author-name              | 1003  | fo          | lfo    |
| Author-name-personal     | 1004  | pe          | lpe    |
| Author-name-corporate    | 1005  | ko          | lko    |
| Identifier-standard      | 1007  | is          |        |
| Subject-name-personal    | 1009  | ep          | lep    |
| Date/time added to db    | 1011  | op          |        |
| Date/time last modified  | 1012  | aj          |        |
| Any                      | 1016  | default     |        |
| Name-publisher           | 1018  | fl          |        |
| Code-map-scale           | 1024  | km          |        |
| Title-related-periodical | 1026  | rt          | lrt    |
| Material-type            | 1031  | ma          | lma    |
| Identifier-document      | 1032  | ww          |        |
| Title-host-item          | 1033  | vp          | lvp    |
| Classification           | 1040  | cl          | lcl    |
| Subject-name-corporate   | 1074  | ek          | lek    |
| Subject-uncontrolled     | 1080  | uk          | luk    |
| Subject-AGROVOC          | 1085  | ac          | lac    |
| Subject-COMPASS          | 1086  | cp          | lcp    |
| Subject-EPT              | 1087  | ed          | led    |
| Subject-NAL              | 1088  | ag          | lag    |
| Classification-BCM       | 1089  |             | bcm    |
| Classification-DB        | 1090  |             | dbk    |
| Identifier-ISRC          | 1091  | ic          |        |
| Identifier-ISMN          | 1092  | im          |        |
| Identifier-ISRN          | 1093  | ir          |        |
| Code-language-original   | 1095  | ou          |        |
| Title-later              | 1096  | st          | lst    |

| Bib-1 Use Attribute Name | Value | Single Word | Phrase |
|--------------------------|-------|-------------|--------|
| EAN                      | 1214  | bc          |        |

| Dan-1 Use Attribute Name              | Value | Single Word | Phrase |
|---------------------------------------|-------|-------------|--------|
| Classification-code-DK5               | 1     | au          | lau    |
| Subject-controlled                    | 2     | ke          | lke    |
| DBC-subject                           | 3     | db          | ldb    |
| DBC-non-fiction-subject               | 4     | df          | ldf    |
| DBC-fiction-subject                   | 5     | ds          | lds    |
| DBC-music-subject                     | 6     | me          | lme    |
| Format-as-subject                     | 7     | fm          | lfm    |
| Subject-level                         | 8     | nb          | lnb    |
| Shelf-mark                            | 9     | po          | lpo    |
| Classification-DK5                    | 10    | dk          | ldk    |
| Classification-as-shelf-mark          | 11    | ok          | lok    |
| Obsolete-shelf-mark                   | 12    | gd          | lgd    |
| Subject-FUI                           | 13    | fg          |        |
| Catalogue-code                        | 14    | kk          |        |
| LIX-code                              | 15    | ix          |        |
| Music-notation                        | 16    | nm          |        |
| Item-number                           | 17    | nr          |        |
| Local-item-number                     | 18    | en          |        |
| Previous-FAUST-code                   | 19    | tf          |        |
| Title-host-publication                | 20    |             | lvx    |
| Children/school-shelf-mark            | 21    | bs          |        |
| Subject-controlled-non-fiction        | 22    | ef          | lef    |
| Subject-controlled-fiction            | 23    | es          | les    |
| Music-shelf-mark                      | 24    | mo          | lmo    |
| Embossed-printing-abbreviated-version | 25    | fv          |        |

| <b>Dan-1 Use Attribute Name</b> | <b>Value</b> | <b>Single Word</b> | <b>Phrase</b> |
|---------------------------------|--------------|--------------------|---------------|
| Author-name-in-description      | 26           | fb                 |               |
| Technical-specification         | 27           | ts                 | lts           |
| Code-recom-restriction          | 36           | ar                 |               |
| Code-cataloging-library         | 37           | ej                 |               |
| Primary-material-type           | 38           | hm                 |               |
| Main-title                      | 39           | ht                 | lht           |
| Identification-package          | 40           | ip                 |               |
| Codes-consultants-marks         | 41           | ka                 |               |
| Codes-consultants-groups        | 42           | kg                 |               |
| Catalogue-code-correction       | 43           | kr                 |               |
| Catalogue-code-express          | 44           | kx                 |               |
| ID-record-higher-level          | 45           | ld                 |               |
| Note-selection-materials        | 46           | ns                 |               |
| Codes-order-list                | 47           | sf                 |               |
| Serial-info-excl-number         | 48           | so                 | lso           |
| RegionCounMunc-number           | 49           | kn                 | lkn           |
| Publ-status                     | 50           | uu                 |               |

## Mapping to Praksisregler for Søgeveje - supplement for authorities

Mappings between Bib-1/Dan-1 use attributes and codes for searching as defined in "Søgeveje til hjælpepostformatet til danMARC2" by The National Danish Library Authority:

<http://www.bs.dk/content.aspx?itemguid={9C6AD7BC-813D-4347-BD9F-172F2E073393}#>

| <b>Bib-1 Use Attribute Name</b> | <b>Value</b> | <b>Single Word</b> | <b>Phrase</b> |
|---------------------------------|--------------|--------------------|---------------|
| Name-personal                   | 1            | np                 | lnp           |
| Name-corporate                  | 2            | nk                 | lnk           |
| Subject-headings-LC             | 27           | ce                 | lce           |
| Subject-geographic              | 58           | el                 | lel           |
| Name-personal-corporate         | 1002         | na                 | lna           |
| Date-added                      | 1011         | op                 |               |

|                                |      |    |     |
|--------------------------------|------|----|-----|
| Date-modified                  | 1012 | aj |     |
| Subject-chronological          | 1077 | et | let |
| Subject-title                  | 1078 | te | lte |
| Nationality-person-corporation | 1217 | fn |     |

| Dan-1 Use Attribute Name                 | Value | Single Word | Phrase |
|--|-------|-------------|--------|
| Heading-normative (name, title, subject) | 28    | kv          | lkv    |
| Subject-chronological-DBC                | 29    | ta          | lta    |
| Subject-geographic-DBC                   | 30    | sn          | lsn    |
| Authorization-code                       | 31    | ak          |        |
| Transliteration-code                     | 32    | tr          |        |
| Language-person-corporation              | 33    | fs          |        |
| DBC-subject-general                      | 34    | da          | lda    |
| Code-cataloguing-rules                   | 35    | rk          |        |

## Annex 2: Change Record Sheet

### Version v2007

| Revision | Date       | Details   | Editor |
|----------|------------|---|--------|
| 1        | 2007-07-30 | <p><i>Introduction v2007-06</i> added.</p> <p>In 1. <i>Background</i>: Link to ONE-2 Profile Version 3 deleted (not activ) and text about ILL XML Schema revised</p> <p><i>4.5 ExplainLite Facility</i> deleted.</p> <p><i>5.1. B Search Service</i>: Link to <i>Praksisregler for søgeveje</i> updated to second edition</p> <p><i>5.1.1 Bib-1 Use Attributes for Search</i>: BIB-1 use attributes 56, 1011, 1012 and 1214 added.</p> <p><i>5.1.4 Bib-1 Structure Attributes for Search</i>: In text for Structure 103 DAN-1 use 45 added.</p> <p><i>5.1.7 Bib-1 Search Attribute Combinations</i>: BIB-1 use attributes 56, 1011, 1012 and 1214 added.</p> <p><i>5.1.9 Dan-1 Use Attributes for Search</i>: DAN-1 use attributes 36-50 added.</p> <p><i>5.1.10 Dan-1 Search Attribute Combinations</i>: DAN-1 use attributes 36-50 added.</p> <p><i>5.2 B Scan Service</i>: In list BIB-1 use attributes 1011 and 1012 added and also DAN-1 use attribute 45 added.</p> <p><i>5.2.1 Bib-1 Use Attributes for Scan</i>: BIB-1 use attributes 56 and 1214 added.</p> <p><i>5.2.3 Dan-1 Use Attributes for Scan</i>: DAN-1 use attributes 36-50 added.</p> <p><i>10.1.5 Dan-1 Use Attributes for Search</i>: DAN-1 use attribute 35 added.</p> <p><i>10.1.6 Dan-1 Search Attribute combinations</i>: DAN-1 use attribute 35 added.</p> <p><i>10.2.3 Dan-1 Use Attributes for Scan</i>: DAN-1 use attribute 35 added.</p> <p><i>Annex 1</i>: Link to <i>Praksisregler for søgeveje</i> updated to second edition. BIB-1 use attributes 56, 1011, 1012 and 1214 added. DAN-1 use attributes 36-50 added. For supplement for authorities DAN-1 use attribute 35 added.</p> <p>As agreed on 43 danZIG meeting 15 June 2007 with subsequent comment period for all details to 30 July 2007.</p> | LEA    |

## Version v2002-06

| Revision | Date       | Details  | Editor |
|----------|------------|--|--------|
| 11       | 2006-03-07 | Draft approved at 42. danZIG meeting 1.2.2006 with only few editorial changes including adding due-date in 7.1.10 Renew-answer.  | LEA    |
| 11       | 2006-01-24 | <p>Change history moved to annex 2.</p> <p>7.3 Packaging of ILL as XML document added.</p> <p>Links are updated.</p> <p>ISIL example changed (used library obsolete)</p> <p>Changes agreed at danZIG meeting 41:</p> <p>7.1.11 Shipped added.</p> <p>Area E (8.) Cross-domain Search and Retrieval let empty for ever.</p> <p>Area F (9.) Update let empty for ever.</p> <p>In 5.1.7 MatType-eq-fif-ph-nt-cs changed to MatType-eq-fif-ph-nt-ic (error correction)</p> <p>For ILL “time” M for mandatory was deleted.</p> <p>For ILL “date” and “time” example was added.</p> <p>Changes agreed at danZIG meeting 40:</p> <p>New Area G Authority Record Search and Retrieval added.</p> | LEA    |

|    |            |  |     |
|----|------------|--|-----|
| 10 | 2004-03-15 | <p>Editorial details agreed at danZIG meeting 39:</p> <p>Section 7D: List of transactions expanded from 4 to 10</p> <p>Section 4.3: New text about search strings (last sentence)</p> <p>Section 5.1: Make clear that DAN-1 only include USE attributtes and that the five others attributtes are BIB-1:</p> <ul style="list-style-type: none"> <li>• 5.1, sentence number 4: the word Bib-1 deleted</li> <li>• 5.1: New text as third last sentense: “Remark that BIB-1 Relation, Position, Structure, Truncation and Completeness attributtes are used in combination with DAN-1 Use attribute. The DAN-1 Attributte set only consist of the Use attributes.”</li> <li>• As consequence similar tekst in new 5.1.10 and 5.2.3. 5.1.10 to 5.1.14 deleted and old 5.1.15 now 5.1.10</li> </ul> <p>Section 5.3: danMARC2 OID:</p> <ul style="list-style-type: none"> <li>• OID's for format used in this specification added</li> <li>• Reference to “The principles for assigning”.. OID's updated from proposal to registration.</li> </ul> <p>Annex 1 added with mapping between BIB-1 / DAN-1 and Danish Guidelines for use of access paths added. Thanks to Henrik Dahl from Dantek for this contribution.</p> | LEA |
|----|------------|--|-----|

|   |            |   |     |
|---|------------|---|-----|
| 9 | 2003-01-20 | <p>Section 6.1.1:</p> <ul style="list-style-type: none"> <li>• In SiteLocation institutionOrSiteId changed to ISILCode</li> </ul> <p>Section 6.2.1:</p> <ul style="list-style-type: none"> <li>• In SiteLocation institutionOrSiteId changed to ISILCode</li> </ul> <p>Section 7.1.1:</p> <ul style="list-style-type: none"> <li>• In parameter item-id added: author-of-article, title-of-article and pagination</li> </ul> <p>New sections added:</p> <ul style="list-style-type: none"> <li>• 7.1.5 Cancel</li> <li>• 7.1.6 Cancel-reply</li> <li>• 7.1.7 Recall</li> <li>• 7.1.8 Overdue</li> <li>• 7.1.9 Renew</li> <li>• 7.1.10 Renew-Answer</li> </ul> <p>Section 7.2.1:</p> <ul style="list-style-type: none"> <li>• Note for Code 20 deleted (Was: Not used in Danish libraries)</li> </ul> <p>Section 7.2.2:</p> <ul style="list-style-type: none"> <li>• Danish translation for code 26 changed to “sendes”</li> </ul> | LEA |
| 8 | 2002-11-22 | <p>Page footers:</p> <ul style="list-style-type: none"> <li>• Revision date updated.</li> </ul> <p>Section 5.2:</p> <ul style="list-style-type: none"> <li>• Inserted note about treatment of records for multi-volume works.</li> </ul>  | PHJ |

|   |            |   |     |
|---|------------|---|-----|
| 7 | 2002-11-22 | <p>Section 5.2:</p> <ul style="list-style-type: none"> <li>Removed requirement to support database name “<i>xxdefault</i>”</li> </ul> <p>Section 5.2.1:</p> <ul style="list-style-type: none"> <li>Changed <i>BCM-fif-ph-cf</i> position attribute to “1”</li> <li>Changed <i>ClassDB-fif-ph-cf</i> position attribute to “1”</li> </ul> <p>Section 5.2.3:</p> <p>Removed <i>AuthorInDesc-any-ph-ic</i> combination</p> <p>Section 5.3:</p> <ul style="list-style-type: none"> <li>Removed references to Element set name DM2PX.</li> <li>Changed requirement to support MARC21 changed to a recommendation to support MARC21.</li> <li>Inserted option to support danMARC2 Extensions designated as Preferred record syntax.</li> <li>Inserted reference to proposed OID for extended MARC formats.</li> </ul> <p>Section 7:</p> <ul style="list-style-type: none"> <li>Removed reference to piggyback present.</li> <li>Inserted reference to revised ILL XML v3 Schema.</li> </ul> | PHJ |
| 6 | 2002-08-26 | <p>Minor editorial changes.</p> <p>Requirement to support database name “<i>xxdefault</i>” removed.</p> <p>Diagram updated.</p>   | PHJ |
| 5 | 2002-08-20 | Edited according to results from danZIG Meeting June 3 <sup>rd</sup> 2002   | PHJ |
| 4 | 2002-05-23 | Edited according to minutes of danZIG Meeting number 35 on March 20 <sup>th</sup> 2002  | PHJ |
| 3 | 2002-03-19 | <p>Updated ILL specifications</p> <p>Editorial changes.</p> <p>Changed table layouts.</p> <p>Updated diagram in chapter 4.</p>  | PHJ |
| 2 | 2002-03-13 | Included updated tables etc.  | PHJ |
| 1 | 2002-02-13 | First draft   | PHJ |

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