

Bilag E danZIG-45 NCIP Guidelines proposal

NCIP Implementation Guidelines: Collaboration between Danish libraries and other agencies

Introduction

These guidelines describe the requester- and responder-side requirements to support implementation of NCIP in Denmark. In the appendices to these guidelines specific scenarios for the collaboration between Danish libraries and other agencies are found.

Conformance

NCIP Protocol version

All implementations shall support the NCIP ANSI/NISO Z39.83 - 2002 Circulation Interchange Part 1: Protocol and the ANSI/NISO Z39.83 - 2002 Circulation Interchange Part 2: Protocol Implementation Profile 1.

These Guidelines assumes that all implementations are capable of supporting NCIP version 1.0 and version 1.01 of the NCIP DTD. For requesting and responding applications, this means that they must be able to receive and respond to messages according to the definitions of the:

http://ncip.envisionware.com/documentation/ncip_v1_01.dtd

Transport Protocol

The IMP1 requires that responding applications support all three possible transport protocols: HTTP, HTTPS, and direct transmission over TCP/IP, however the DCB-2 and DCB-3 requires HTTPS to be used for transmission. Therefore these guidelines force HTTPS to be used.

Conformance to profiles

These guidelines conform to the Direct Consortial Borrowing: User Agency Manages Transaction Application Profile (DCB-2) for local libraries, and the Direct Consortial Borrowing: Broker Application Manages Transaction Application Profile (DCB-3) for broker applications, unless otherwise stated in this document.

Terminology

All special terminology follows the definitions given in the NCIP standard, its associated Implementation Profile 1 and the DCB-2 and DCB-3 profiles.

Registered schemes

Implementations claiming conformance to these guidelines may utilize the schemes identified specified in the NISO Circulation Interchange Protocol and the Implementation Profile 1.

Additional schemes and extensions or restrictions of existing schemes required in these guidelines:

Name	Note	Scheme
ISIL: Library branch identification	Every instance that can send or receive NCIP messages will be given an ISIL	http://www.bs.dk/isil/scheme/version1.0
Subdivision Identification	Needed in Request Item Service as end users requested pickup place	ISIL + <local subdivision>
Visible User Id Type	For Visible User Id Type, if no bilateral agreements has been made between requester and responder use: <ul style="list-style-type: none"> • User Id 	http://www.niso.org/ncip/v1_0/imp1/schemes/visibleuseridentifiertype/visibleuseridentifiertype.scn
Authentication Input Type	For Authentication Input Type, if no bilateral agreements has been made between requester and responder use: <ul style="list-style-type: none"> • User Id 	http://www.niso.org/ncip/v1_0/imp1/schemes/authenticationinputtype/authenticationinputtype.scn
Bibliographic Item Identifier Code	As Bibliographic Item Identifier Code in Request Item Service for article requests use: <ul style="list-style-type: none"> • OpenURL For other items use: <ul style="list-style-type: none"> • Faust (if available) • Local ID 	http://www.niso.org/ncip/v1_0/imp1/schemes/bibliographicitemidentifiercode/bibliographicitemidentifiercode.scn
Request Type	For Request Type only these are used: <ul style="list-style-type: none"> • Loan (if item is immediately available) • Hold (if item is not immediately available) • Copy 	http://www.niso.org/ncip/v1_0/schemes/requesttype/requesttype.scn
Request Scope Type	For Request Scope Type always use <ul style="list-style-type: none"> • Bibliographic Item 	http://www.niso.org/ncip/v1_0/schemes/requestscopetype/requestscopetype.scn
Electronic Address Type	For Electronic Address Type, following value can be used in addition to existing values: <ul style="list-style-type: none"> • SMS 	http://www.iana.org/assignments/uri-schemes

Additionally required parameters

Agency authentication

[...]

User identification

For Lookup User Service Authentication Input is used if the service is initiated by end-user, if initiated by library staff use Visible User ID¹.

Unless a bilateral agreement between requesting and responding agencies exist to use Visible User ID, if subsequent to a Lookup User Service requester must use Unique User Id from response for other required services, otherwise use Authentication Input.

If subsequent to a Lookup User Service requester must use Unique Item Id or Unique Request Id from response for subsequent services.

¹ The user has already been authorised by other means.

Appendix A Scenarios

Scenario 1: Collaboration between bibliotek.dk and local library systems

This scenario describes a specific implementation of the Direct Consortial Borrowing: Broker Application Manages Transaction Application Profile (DCB-3).

In this scenario bibliotek.dk takes the role of a broker between the end user and the local library system. In order to support a number of specific use cases in this scenario, various NCIP services have to be implemented. Through the bibliotek.dk user interface, the end user will be able to:

1. Get an overview of his or her requested and loaned items from one or more local libraries
2. Cancel his or her requests made through bibliotek.dk and/or one or more local libraries
3. Renew items borrowed from one or more libraries (including items borrowed from other libraries, ILL)
4. Request items owned by his or her own library
5. Authenticate when requesting through bibliotek.dk (described in previously published guidelines)

Services

These guidelines require implementation of the following services² to support scenario 1 and the associated use cases.

NCIP service	Local system	bibliotek.dk	DCB-3
Lookup Item Service	Responder	Requester	Required
Lookup User Service	Responder	Requester	Required
Lookup Request Service	Responder	Requester	Optional
Request Item Service	Responder	Requester	Required
Cancel Request Item Service	Responder	Requester	Optional
Renew Item Service	Responder	Requester	Required

The broker application (bibliotek.dk) is required to implement the services as requester, whereas the user agency (the local library system) shall implement the services as responder, but may also implement the services as requester when communicating directly with other user agencies in other scenarios.

² The basic circulation/service support required in DCB-3 is: Lookup Item, Lookup User, Renew Item, Request Item, Lookup Agency, Check in Item, Checkout Item, Recall Item, Item Shipped, Accept Item

For this scenario all transactions takes place between the Broker and the User Agency. The User Agency may in some cases also be the Item Agency, but this is not important for this specific scenario.

Registered schemes

In addition to the scheme extension and restrictions mentioned in the guidelines, the following is required to support scenario 1:

Name	Note	Scheme
Item Element Type	For Item Element Type following value will always be used: <ul style="list-style-type: none"> • Bibliographic Description 	http://www.niso.org/ncip/v1_0/schemes/itemelementtype/itemelementtype.scm
User Element Type	For User Element Type following value will always be used: <ul style="list-style-type: none"> • Name Information 	http://www.niso.org/ncip/v1_0/schemes/userelementtype/userelementtype.scm

Additionally required request parameters

These guidelines require NCIP messages to be valid according to the NCIP version 1.01 DTD or XML schema. Additionally, all parameters required in the DCB-3 are also required by these guidelines, unless otherwise stated in the following.

Request Item Service is implemented to support direct item request in the local library from the bibliotek.dk user interface. Unfortunately there is a problem when requesting articles. The Request Item Request message cannot carry article data.

For requesting articles requester must use Unique Bibliographic Id and an OpenURL carrying the specific article data including an item id (OpenURL: rft.id) from a previous z39.50 Holdings Request or a bibliographic id (OpenURL: rft.id) from the bibliotek.dk database (danMARC2: 001 *a).

Additionally required response parameters

Some of the response data required in the DCB-3 is not needed in order support scenario 1, and therefore it might be ignored by bibliotek.dk. The data is still required to be delivered in the responses from the local library system.

- Cancel Request Item Service:
 - Unique User Id
- Request Item Service
 - Required Item Use Restriction Type (for problem response)
 - Shipping information
 - Fiscal Transaction Information

Some data is only required if requested. The following will not be requested by bibliotek.dk.

- Cancel Request Item Service:
 - Fiscal Transaction Information
 - Item Optional Fields
 - User Optional Fields
- Lookup Item:
 - Hold Pickup Date
 - Date Recalled
 - Item Transaction
- Lookup User Service:
 - User Fiscal Account
 - Loaned Items Count
 - Requested Items Count
- Request Item Service
 - Item Optional Fields
 - User Optional Fields

For Lookup Item Service and Lookup Request Service, Bibliographic Description will always be requested by bibliotek.dk and is therefore required as part of the Item Optional Fields in the Lookup Item Response. The responding application must supply at least this data if available:

- Author (also used for creators of for example music or movies)
- Title
- Publication Date

For articles [...]

For Lookup User Service, Name Information will always be requested by bibliotek.dk is therefore required as part of User Optional Fields in the response.

For Renew Item Service, Date Due is optional in the DCB-3 profile. In order to support scenario 1 in the best possible way, Date Due is required in the response by these guidelines.

Scenario 2: Combined libraries

[...]

Services

[...]

Registered schemes

[...]

Additionally required request parameters

[...]

Additionally required response parameters

[...]

Appendix B Sample Messages supporting scenario 1

Cancel Request Item Service	
Request	cancelrequestitem.xml
Response (successful)	cancelrequestitemresponse.xml
Response (problem)	cancelrequestitemproblem.xml
Lookup Item Service	
Request	lookupitem.xml
Response (successful)	lookupitemresponse.xml
Response (problem)	lookupitemproblem.xml
Lookup Request Service	
Request	lookuprequest.xml
Response (successful)	lookuprequestresponse.xml
Response (problem)	lookuprequestproblem.xml
Lookup User Service	
Request	lookupuser.xml
Response (successful)	lookupuserresponse.xml
Response (problem)	lookupuserproblem.xml
Renew Item Service	
Request	renewitem.xml
Response (successful)	renewitemresponse.xml
Response (pending)	renewitempending.xml
Response (problem)	renewitemproblem.xml
Request Item Service	
Request	requestitem.xml
Request	requestitemarticle.xml
Response (successful)	requestitemresponse.xml
Response (problem)	requestitemproblem.xml

Appendix C Sample Messages supporting scenario 2

Appendix D References

ANSI/NISO Z39.83 - 2002 Circulation Interchange Part 1: Protocol (NCIP):
<http://www.niso.org/standards/resources/z3983pt1rev1.pdf>

ANSI/NISO Z39.83 - 2002 Circulation Interchange Part 2: Protocol
Implementation Profile 1:
<http://www.niso.org/standards/resources/z3983pt2.pdf>

Direct Consortial Borrowing: User Agency Manages Transaction Application
Profile (DCB-2): <http://www.niso.org/standards/resources/NCIP-DCB-2.pdf>

Direct Consortial Borrowing: Broker Application Manages Transaction
Application Profile (DCB-3): <http://www.niso.org/standards/resources/NCIP-DCB-3.pdf>

NCIP implementation guidelines: User authentication support, version 1.0:
<http://www.bs.dk/showfile.aspx?IdGuid={406BB3E6-9074-4151-90E6-7232E4E3D31C}>