

# INN-Reach DCB Application Profile: Lending and Borrowing

**Abstract:** This application profile describes the method in which the INN-Reach DCB broker application manages circulation transactions using the NCIP protocol.

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# 1. Introduction

This profile is the INN-Reach DCB Application Profile of the NISO Circulation Interchange Protocol (NCIP). It describes the functions, applications, and the operating environment in which the INN-Reach DCB application manages circulation transactions for libraries participating in an INN-Reach System via Innovative's Direct Consortial Borrowing (DCB) system.

The base standard that enables this communication is NCIP. This profile is based on that protocol, as well as the supporting NCIP Implementation Profile 1.0.

## 2. Description of Application Area

Through the INN-Reach DCB application (INN-REACH DCB), users of one agency can request and borrow items from another agency within a consortium. INN-REACH DCB facilitates the transfer of user and item data between disparate circulation applications, thereby allowing an agency to manage borrowing for local patrons, lending to non-local patrons, and/or managing local control of items belonging to another agency. An agency may participate both as an item agency and as a user agency, but for any given circulation transaction an agency must be either an item or user agency.

INN-REACH DCB serves as the NCIP message initiator in this profile. The set of services potentially invoked at item and user agencies are not identical. Ideally, systems will support both set of services; however it is possible to implement only a single set of services, with the result of supporting either borrowing (user agency) or lending (item agency) roles. The responding application is expected to manage transactions on behalf of both the item and user agencies.

INN-REACH DCB is used in combination with the local circulation system as the user interface for users and staff users. This user interface allows users to place requests, view the current status of a request, cancel requests, or request renewals. INN-REACH DCB can be used by staff to perform all user agency and/or item agency functions.

In response to actions taken by users, INN-REACH DCB manages the following actions automatically:

- Performs all necessary communication for the completion of a circulation transaction.
- Seeks the necessary information from both the user and item agencies.
- Applies all business rules (e.g. circulation policies) as defined by the consortium.
- Makes any policy determination (e.g., due date, authorization, etc.) on behalf of the borrowing or lending agency.
- Updates each circulation application as requests move through their lifecycle.

INN-REACH DCB relies on local circulation systems to respond appropriately to messages. INN-REACH DCB may use the services defined in this profile to instruct a local application to place holds, check items in and out and renew items.

This profile outlines the interactions between INN-REACH DCB, the item agency, and the user agency. It does not prescribe how the item agency and user agency accomplish subsequent tasks (e.g., creating temporary records). However, it should be noted that INN-REACH DCB tracks users as individual patrons, rather than as a single “institutional” user (also known as the “pseudo-patron”) to whom all circulated items are checked out. The user information that the application communicates in the NCIP messages (e.g., in the UniqueUserId element or the User Information Name element) is specific to the individual patron.

### 3. Use Case

Libraries that do not use a Millennium or Sierra library automation system but participate in an INN-Reach resource sharing system via Innovative's DCB system can employ this profile to send NCIP messages from the INN-Reach system to their local library automation system. Support is provided for patron authentication and communication of all circulation activities that occur on the DCB system.

## 4. Roles

This profile defines three roles to which an application may claim conformance:

<b>ROLE</b>	<b>DESCRIPTION</b>
INN-Reach DCB	An application that provides a user and staff interface on behalf of a consortium, a user and/or an item agency. INN-REACH DCB initiates NCIP services on behalf of user or item agencies but is itself neither a user nor an item agency.
Item Agency	The agency to which a specific physical information resource belongs.
User Agency	The agency to which a user (person) is affiliated through registration and/or membership.

## 5. Transport Protocol

INN-REACH DCB employs HTTPS as the transport protocol.

The responder shall respond using the same connection, and therefore the same transport protocol, that was used to send the message.

## 6. Security and Privacy

This profile requires the transmission of confidential personal information by the user agency to other agencies. While it provides for the use of a reasonably secure transport protocol (HTTPS), this profile is not intended for use where such sharing of confidential personal information is not acceptable.

The implication of this is that a user agency participating in activity according to this profile is assumed to trust the other agencies with which it shares this confidential user information.

Authentication of the user is assumed to occur prior to invoking further NCIP services at the direction of the user. This profile assumes that conforming user agency applications support the use of the Lookup User service for this purpose.

Mediation in the requesting process by staff is outside the scope of this profile.

Responding applications might require From Agency Authentication and/or From System Authentication elements in the initiation header of some or all messages. Whether they do, and if so what the value should be, is outside the scope of this profile, as are the implications for the consortium if some applications are not able to provide this in initiation messages.



## 7. Messages and Data Elements

The Messages Summary tables define the NCIP messages either initiated by or required as responses by INNREACH DCB, and summarize the data elements of each message. For more detailed information on these elements, see:

- "Data Element Descriptions" on page 22
- "Appendix B - Sample XML Messages" on page 34

This profile does not define any optional NCIP messages.

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### Message Summary Tables

#### Message: AcceptItem

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
MandatedAction	
DateEventOccurred	
UniqueRequestId	
UniqueAgencyId	
RequestIdentifierValue	
RequestedActionType	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	

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## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
ItemOptionalFields	
BibliographicDescription	
Author	
Title	
MediumType	
ItemDescription	
VisibleItemId	
VisibleItemIdentifier Type	
VisibleItemIdentifier	
CallNumber	
UserOptionalFields	
VisibleUserId	
VisibleUserIdentifier Type	
VisibleUserIdentifier	
UserPrivilege	
UniqueAgencyId	
AgencyUserPrivilegeType	

### Message: CheckInItem

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
MandatedAction	
DateEventOccurred	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	

**Message: CheckoutItem**

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
MandatedAction	Local system loan rules are used to set due date.
DateEventOccurred	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	

**Message: CirculationStatusChangeReported**

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
ItemOptionalFields	
BibliographicDescription	
Author	
Title	
MediumType	
ItemDescription	
VisibleItemId	
VisibleItemIdentifier Type	
VisibleItemIdentifier	
CallNumber	
UserOptionalFields	
VisibleUserId	
VisibleUserIdentifier Type	
VisibleUserIdentifier	
UserPrivilege	
UniqueAgencyId	
AgencyUserPrivilegeType	

### Message: ItemCheckedIn

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	
ItemOptionalFields	
BibliographicDescription	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
Author	
Title	
MediumType	
ItemDescription	
VisibleItemId	
VisibleItemIdentifier Type	
VisibleItemIdentifier	
CallNumber	

### Message: ItemCheckedOut

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	
DateDue	
ItemOptionalFields	
BibliographicDescription	
Author	
Title	
MediumType	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
ItemDescription	
VisibleItemId	
VisibleItemIdentifier Type	
VisibleItemIdentifier	
CallNumber	
UserOptionalFields	
VisibleUserId	
VisibleUserIdentifier Type	
VisibleUserIdentifier	
UserPrivilege	
UniqueAgencyId	
AgencyUserPrivilegeType	

### Message: ItemRecalled

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	
DateDue	
ItemOptionalFields	
BibliographicDescription	
Author	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
Title	
MediumType	
ItemDescription	
VisibleItemId	
VisibleItemIdentifier Type	
VisibleItemIdentifier	
CallNumber	
UserOptionalFields	
VisibleUserId	
VisibleUserIdIdentifier Type	
VisibleUserIdIdentifier	
UserPrivilege	
UniqueAgencyId	
AgencyUserPrivilegeType	

### Message: ItemReceived

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	
DateReceived	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
ItemOptionalFields	
BibliographicDescription	
Author	
Title	
MediumType	
ItemDescription	
VisibleItemId	
VisibleItemIdentifier Type	
VisibleItemIdentifier	
CallNumber	
UserOptionalFields	
VisibleUserId	
VisibleUserIdentifier Type	
VisibleUserIdentifier	
UserPrivilege	
UniqueAgencyId	
AgencyUserPrivilegeType	

### Message: ItemRenewed

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	
UniqueItemId	
UniqueAgencyId	



## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
ItemIdentifierValue	
DateDue	
ItemOptionalFields	
BibliographicDescription	
Author	
Title	
MediumType	
ItemDescription	
VisibleItemId	
VisibleItemIdentifier Type	
VisibleItemIdentifier	
CallNumber	
UserOptionalFields	
VisibleUserId	
VisibleUserIdentifier Type	
VisibleUserIdentifier	
UserPrivilege	
UniqueAgencyId	
AgencyUserPrivilegeType	

### Message: ItemRequestCancelled

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	
RequestType	

### Message: ItemRequested

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	
RequestType	
RequestScopeType	
DateOfUserRequest	
ItemOptionalFields	This ItemDescription element does not include the VisibleItemID element (typically included), because the VisibleItemId element corresponds to a local value that is not stored in the INN-Reach Catalog and therefore is not available for inclusion in this message.
BibliographicDescription	
Author	
Title	
MediumType	
ItemDescription	
Call Number	
UserOptionalFields	The VisibleUserID subelement is present only when the transaction is being sent to the borrowing agency.
VisibleUserId	
VisibleUserIdentifier Type	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
VisibleUserIdentifier	
UserPrivilege	
UniqueAgencyId	
AgencyUserPrivilegeType	
ShippingInformation	ShippingNote contains Delivery Stop. See <a href="#">ShippingNote</a> .
Shipping Note	
Physical Address	
PhysicalAddressType	
UnstructuredAddress	
UnstructuredAddressType	
UnstructuredAddressData	

### Message: ItemShipped

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueRequestId	
UniqueAgencyId	
RequestIdentifierValue	
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	
DateShipped	
ShippingInformation	ShippingNote contains Delivery Stop. See <a href="#">ShippingNote</a> .
Shipping Note	
UnstructuredAddress	
UnstructuredAddressType	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
UnstructuredAddressData	
PhysicalAddress	
PhysicalAddressType	
ItemOptionalFields	
BibliographicDescription	
Author	
Title	
MediumType	
ItemDescription	
VisibleItemId	
VisibleItemIdentifier Type	
VisibleItemIdentifier	
CallNumber	

### Message: RenewItem

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
MandatedAction	
DateEventOccurred	
UniqueUserId	
UniqueAgencyId	
UserIdentifierValue	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
UniqueItemId	
UniqueAgencyId	
ItemIdentifierValue	
DesiredDateDue	

### Message: LookupUser

Application: INN-Reach DCB

Profile Required Elements	Comments
InitiationHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
VisibleUserId	Cannot be used with AuthenticationInput
VisibleUserIdentifierType	
VisibleUserIdentifier	
User Element Type	VisibleUserID
Value "Name Information"	
Value "User Address Information"	
Value "Visible User ID"	
Value "User Privilege"	
Value "Block or Trap"	

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## INN-Reach DCB Application Profile: Lending and Borrowing

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Profile Required Elements	Comments
AuthenticationInput	Cannot be used with VisibleUserID; use for PIN authentication
AuthenticationInputData	
AuthenticationInputDataFormatType	
AuthenticationInputType	
User Element Type	AuthenticationInput
Value "Authentication Input"	
Value "Block or Trap"	
Value "Name Information"	
Value "User Address Information"	
Value "User Privilege"	
Value "Visible User ID"	

---

**Message: LookupUserResponse**

Application: User Agency's Circulation Application

Profile Required Elements	Comments
ResponseHeader	
FromAgencyId	
UniqueAgencyId	
ToAgencyId	
UniqueAgencyId	
UniqueUserId	
UniqueAgencyID	
UserIdentifierValue	
UserOptionalFields	<ul style="list-style-type: none"> <li>• If this message includes User-OptionalFields elements that are defined in the NCIP Implementation Profile 1.0 but not defined here, INN-Reach DCB acts on only the elements defined here.</li> <li>• If the message omits elements marked here with an asterisk (*) because this data is not present in the user record, INN-Reach substitutes default information for the missing elements. For more information about these elements, see "Data Element Descriptions" on page 22.</li> </ul>
VisibleUserId	
VisibleUserIdentifierType	
VisibleUserIdentifier	
NameInformation	
PersonalNameInformation	
UnstructuredPersonalUserName	
UserPrivilege	
UniqueAgencyId	
AgencyUserPrivilegeType	
ValidToDate*	
UserPrivilegeStatus	
UserPrivilegeStatusType	
UserAddressInformation	
ElectronicAddress*	
ElectronicAddressType	
ElectronicAddressData	
BlockOrTrap	
UniqueAgencyId	

## INN-Reach DCB Application Profile: Lending and Borrowing

Profile Required Elements	Comments
BlockOrTrapType	

### Data Element Descriptions

Element	Description	Sub-Elements
AgencyUser-PrivilegeType	Specifies the user's requesting privilege level at the User Agency's Circulation Application (for example, "local") as mapped to central patron types (P TYPE). When INN-REACH DCB receives this element, it uses the mapped P TYPE to determine whether the user can make a request.	Scheme, Value
AuthenticationInput	Specifies the PIN of the requesting user at the User Agency's Circulation Application.	Authentication-InputData, AuthenticationInputDataFormatType, AuthenticationInputType
Author	Specifies data from the MARC 300 (Author) field in the central bibliographic record to which the item is attached in the INN-Reach Catalog. If there is no MARC 300 data in the central bibliographic record (for example, if the requested item is a VHS tape, rather than a book), INN-REACH DCB omits this element from the message.	(none)
BibliographicDescription	Specifies data from the bibliographic record to which the item is attached in the INN-Reach Catalog.	Author, Title, MediumType
BlockOrTrap	Specifies whether there are blocks to requesting in the user's record at the User Agency's Circulation Application.	UniqueAgencyId, Block-OrTrapType
BlockOrTrapType	Specifies the type of block to requesting that is present in the	Scheme, Value



## INN-Reach DCB Application Profile: Lending and Borrowing

Element	Description	Sub-Elements
	<p>user's record at the User Agency's Circulation Application. INN-REACH DCB blocks the user from placing a request in the INNReach Catalog if this value in the LookupUserResponse message contains either of the following terms:</p> <ul style="list-style-type: none"> <li>• Value=blocked; message to user: Your patron idhas been blocked.</li> <li>• Value=expired; message to user: Sorry, your patron id has expired.</li> </ul>	
CallNumber	Specifies the call number of the item. INN-Reach DCB obtains this value from the institution record in the INN-Reach Catalog.	(none)
DateDue	<p>Specifies the date on which the checked-out item is due back from the patron. INN-Reach DCB calculates this date based on the INN-Reach consortium's borrowing rules. This value has the following format: <b>YYYY-MM-DDTHH:MM:SSZ</b>.</p> <p>For example:</p> <p><b>2011-03-11T04:00:00Z</b>.</p>	(none)
DateEventOccurred	Specifies the date on which circulation activity took place. This value has the same format as the DateDue element.	(none)
DateOfUserRequest	Specifies the date on which the user initiated the request for the item. This value has the same format as the DateDue element.	(none)
DateReceived	Specifies the date on which the item agency received the item back from the user agency and checked it in. This value has the	(none)

## INN-Reach DCB Application Profile: Lending and Borrowing

Element	Description	Sub-Elements
	same format as the DateDue element.	
DateShipped	Specifies the date on which the item agency shipped the item to the user agency. This value has the same format as the DateDue element.	(none)
DesiredDateDue	Specifies the date on which the renewed item is due. INN-Reach DCB calculates this value based on the INN-Reach consortium's borrowing rules. This value has the same format as the DateDue element.	(none)
ElectronicAddress	Specifies the user's electronic address at the User Agency's Circulation Application. If there is no email address in the user's record at the User Agency's Circulation Application, this element can be omitted in the Look-upUserResponse message. If INN-Reach DCB receives a Look-upUserResponse message that lacks this element, it assigns the user a default email address specified by the INN-Reach consortium, enabling the user to continue with the request.	Electronic AddressType, Electronic AddressData
ElectronicAddressData	Specifies the user's electronic address data.	(none)
ElectronicAddressType	Specifies which type of electronic address is contained in the associated ElectronicAddressData element. This value is always "mailto".	(none)
FromAgencyId	Specifies information related to the site that transmitted this message.	UniqueAgencyId
InitiationHeader	Specifies information related to the sender and recipient of the	FromAgencyId, ToAgencyId

## INN-Reach DCB Application Profile: Lending and Borrowing

Element	Description	Sub-Elements
	message.	
ItemDescription	Specifies item-specific data from the institution record in the INNReach Catalog.	VisibleItemId, CallNumber
ItemIdentifierValue	<p>Specifies the string that uniquely identifies the item at the item agency, as follows:</p> <ul style="list-style-type: none"> <li>• If INN-REACH DCB acts as the item agency in a message, this element specifies the item barcode; such messages include CheckInItem, CheckOutItem, ItemRequestCancelled, and RenewItem.</li> <li>• If INN-REACH DCB acts as the user agency in a message, this element specifies the central item record number; such messages include AcceptItem, CirculationStatusChangeReported, ItemCheckedIn, ItemCheckedOut, ItemRecalled, ItemReceived, ItemRenewed, ItemRequested, and ItemShipped</li> </ul>	(none)
ItemOptionalFields	Specifies data from the bibliographic and institution records in the INN-Reach Catalog	Bibliographic Description, ItemDescription
MandatedAction	Specifies circulation activity information.	DateEventOccurred
MediumType	Specifies the medium type of the item, using the terminology that the User Agency's Circulation Application uses to identify medium types. INN-Reach DCB maps these terms to central item types in the INN-Reach Catalog.	Scheme, Value

## INN-Reach DCB Application Profile: Lending and Borrowing

Element	Description	Sub-Elements
Name Information	Specifies the requesting user's personal name data.	Personal NameInformation
Personal NameInformation	Specifies the requesting user's name data	Unstructured Personal UserName
PhysicalAddress	Specifies the location to which the item agency ships the item. This location corresponds to the pickup location requested by the user during requesting.	Unstructured Address, Physical AddressType
Phys- icalAddressType	Specifies the type of location to which the item agency ships the item. This element always specifies the value "Pickup Location".	Scheme, Value
Reques- tedActionType	Specifies the action requested by the message. Present only in the AcceptItem message, this element always specifies the value "Hold for Pickup".	(none)
RequestIden- tifierValue	Specifies a value that uniquely identifies the item request.	(none)
RequestScopeType	Specifies the scope of the request. This element always specifies the value "item".	Scheme, Value
RequestType	Specifies the type of request. This element always specifies the value "hold".	Scheme, Value
ResponseHeader	Specifies information related to the sender and recipient of the message. This element is present in the LookupUserResponse message only	FromAgencyId, ToAgencyId
ShippingInformation	Specifies information about the pickup location; that is, location to which the item agency ships the item.	PhysicalAddress
ShippingNote	Specifies the delivery stop for item shipment (not necessarily the same as the pickup location).	(none)
Scheme	Specifies the URL of a page that	(none)

## INN-Reach DCB Application Profile: Lending and Borrowing

Element	Description	Sub-Elements
	lists all valid values of the Value element with which this element is paired.	
Title	Specifies data from the MARC 245 (Title) field in the bibliographic record to which the item is attached in the INN-Reach Catalog. If there is no MARC 245 field data present in the central bibliographic record, INN-Reach DCB omits this element from the message.	(none)
ToAgencyId	Specifies identification data for the site to which this message is transmitted	UniqueAgencyId
UniqueAgencyId	Specifies the 5-character INN-Reach site code that uniquely identifies a specific site within the INN-Reach consortium.	Scheme, Value
UniqueItemId	Specifies item identification information.	UniqueAgencyId, Item IdentifierValue
UniqueRequestId	Specifies request identification information	UniqueAgencyId, Request IdentifierValue
UniqueUserId	Specifies user identification information.	UniqueAgencyId, User-IdentifierValue
UnstructuredAddress	Specifies pickup location information at the user agency.	Unstructured AddressType, Unstructured AddressData
Unstructured AddressData	Specifies the delivery stop at the pickup location	(none)
Unstructured AddressType	Specifies the type of pickup location information contained in the UnstructuredAddressData element with which this element is paired. This element always contains the value "Pickup Location".	Scheme, Value
Unstructured PersonalUserName	Specifies the requesting user's name in an unstructured format as it is stored by the User Agency's Circulation Application.	(none)

## INN-Reach DCB Application Profile: Lending and Borrowing

Element	Description	Sub-Elements
User-AddressInformation	Specifies the requesting user's email address at the User Agency's Circulation Application.	ElectronicAddress
UserElementType	Specifies a request for information about the requesting user. This element can specify the following values: <ul style="list-style-type: none"> <li>• Name Information (query for the user's name)</li> <li>• User Address Information (query for the user's email address)</li> <li>• Visible User Id (query for the VisibleUserId value in the user's record)</li> <li>• Block Or Trap (query for user's borrowing privileges)</li> <li>• User Privilege</li> </ul>	Scheme, Value
UserIdentifierValue	Specifies the string value that uniquely identifies the requesting user at the User Agency's Circulation Application (for example, the user's barcode).	(none)
UserOptionalFields	Specifies information about the requesting user.	VisibleUserId, NameInformation, UserPrivilege, User-Address Information
UserPrivilege	Specifies information about the user's borrowing privileges at the User Agency's Circulation Application, using the terminology of the User Agency's Circulation Application. The terms used at the User Agency's Circulation Application (for example, "Undergraduate") are mapped to central patron types in the INN-Reach Catalog.	UniqueAgencyId, AgencyUserPrivilegeType, ValidToDate, UserPrivilege Status
UserPrivilegeStatus	Indicates current status.	UserPrivilege StatusType
User-	Text string; indicates the current	(none)

## INN-Reach DCB Application Profile: Lending and Borrowing

Element	Description	Sub-Elements
PrivilegeStatusType	status of a user privilege. For example: active, cancelled	
ValidToDate	<p>Specifies the expiration date in the user's record at the User Agency's Circulation Application. This value must have the same format as the DateDue element. When INN-Reach DCB receives this element, it compares the specified date to the current date and proceeds as appropriate:</p> <ul style="list-style-type: none"> <li>• If the expiration date is later than the current date, the user can continue with the request (assuming that the user's borrowing privileges enable requesting).</li> <li>• If the expiration date is earlier than the current date, the system prevents the user from continuing with the request.</li> <li>• If user's record does not contain an expiration date, this element can be omitted from the Look-upUserResponse message. When INN-REACH DCB receives a message that lacks this element, it assigns a default expiration date of "2037-01-01T00:00:00Z", so that the user can continue with the request.</li> </ul>	(none)
Value	Specifies data specific to the element in which this sub-element is embedded. For more information on a specific use of this subelement, see the description of the parent element in this table.	(none)

## INN-Reach DCB Application Profile: Lending and Borrowing

Element	Description	Sub-Elements
VisibleItemId	Specifies information about the unique identifying data that physically displays on the item.	VisibleItemIdentifierType, VisibleItemIdentifier
VisibleItemIdentifier	Specifies the unique identifying data that physically displays on the item (i.e., a barcode).	(none)
VisibleItemIdentifierType	Specifies what type of identifying data is physically displayed on the item. This element always contains the value "Barcode".	Scheme, Value
VisibleUserId	Specifies information that uniquely identifies the requesting user at the User Agency's Circulation Application.	VisibleUserIdentifierType, VisibleUserIdentifier
VisibleUserIdentifierType	Specifies the type of unique identifier information contained in the VisibleUserIdentifier element with which this element is paired; for example, this element can specify that the VisibleUserIdentifier element contains a barcode.	Scheme, Value
VisibleUserIdentifier	Specifies unique identification information associated with the requesting user (e.g., the user's barcode). In the LookupUser message, this value corresponds to the value entered by the requesting user in response to the authentication prompts. In the LookupUserResponse message and all subsequent circulation messages, this value corresponds to unique identification information stored in the user's record at the User Agency's Circulation Application.	(none)



## 8. Guidelines for Implementers

The guidelines listed below are intended to assist vendors in implementing this profile. As guidelines, they are non-normative and represent non-protocol assumptions or options that might be employed by a well-designed application that is conformant to this profile.

The success of inter-system interoperability depends on many factors beyond proper coding and decoding of standards-based messages. These guidelines list some of the additional considerations libraries and systems should address as part of their NCIP implementation.

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### General Performance Issues

Users can be expected to search and request materials at any time of day. The listening port should be open as close to 24\*7\*365 as possible. To avoid problems arising from stale data, Circulation Applications are expected to process transactions in “real time” mode. If a Circulation Application is not processing transactions in real time, the responding NCIP application should refuse the connection attempt from INN-Reach DCB.

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### Messages

- In order to support the widest range of functionality, while not required by the protocol or the profile, applications should send the most complete version of any message or message response including optional data.
- Applications should provide means of sending repeat messages in the event where the first message was not received or the response indicates the message could not be understood. Detection of unintentional duplication of messages is the responsibility of the application and not within the scope of the profile.
- It is the responsibility of the item-managing application to determine whether the request requires placing a hold or retrieval from stacks. In either case, the appropriate action occurs at the item agency without staff intervention at either the item or user agency. How the item is delivered is beyond the scope of the profile, as is the way in which non-NCIP errors are detected and handled by INN-Reach DCB and/or some local system at the user or item agency

## Appendix A - Event Table

<b>Triggering Event and Event Location</b>	<b>Initiating Application</b>	<b>Service Initiated</b>	<b>Responding Application</b>
User begins request session	INN-Reach DCB	LookUpUser	User Agency's Circulation Application responds with LookUpUserResponse
LookupUserResponse Received	INN-Reach DCB	ItemRequested (sent to User Agency's Circulation Application and Item Agency's Circulation Application)	User Agency's Circulation Application returns a Response message, but INN-Reach DCB takes no action on the Response message.
Item agency ships item	INN-Reach DCB	ItemShipped (sent to User Agency's Circulation Application) CheckOutItem (sent to Item Agency's Circulation Application)	User Agency's Circulation Application returns a Response message, but INN-Reach DCB takes no action on the Response message.
Item is received by user agency	INN-Reach DCB	AcceptItem (sent to User Agency's Circulation Application)	User Agency's Circulation Application returns a Response message, but INN-Reach DCB takes no action on the Response message.
User cancels a request for an Item	INN-Reach DCB	ItemRequestCancelled (sent to User Agency's Circulation Application and Item Agency's Circulation Application)	User Agency's Circulation Application returns a Response message, but INN-Reach DCB takes no action on the Response message.
User agency checks out Item to User	INN-Reach DCB	ItemCheckedOut (sent to User Agency's Circulation Application)	None
User agency checks in Item	INN-Reach DCB	ItemCheckedIn (sent to User Agency's Circulation Application)	User Agency's Circulation Application returns a Response message, but INN-Reach DCB takes no action on

## INN-Reach DCB Application Profile: Lending and Borrowing

Triggering Event and Event Location	Initiating Application	Service Initiated	Responding Application
			the Response message.
Item agency receives item	INN-REACH DCB	ItemReceived (sent to User Agency's Circulation Application) CheckInItem (sent to Item Agency's Circulation Application)	User Agency's Circulation Application returns a Response message, but INN-Reach DCB takes no action on the Response message.
User renews Item	INN-REACH DCB	ItemRenewed (sent to User Agency's Circulation Application) RenewItem (sent to Item Agency's Circulation Application)	User Agency's Circulation Application returns a Response message, but INN-Reach DCB takes no action on the Response message.
Item is recalled	INN-REACH DCB	ItemRecalled (sent to User Agency's Circulation Application and Item Agency's Circulation Application)	User Agency's Circulation Application returns a Response message, but INN-Reach DCB takes no action on the Response message.
Item is marked lost	INN-REACH DCB	CirculationStatus ChangeReported (sent to User Agency's Circulation Application and Item Agency's Circulation Application)	User Agency's Circulation Application returns a Response message, but INN-Reach DCB takes no action on the Response message.

## Appendix B - Sample XML Messages

This appendix contains sample XML messages for the NCIP messages described in this profile.

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### Sample AcceptItem Message

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
  <AcceptItem>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zlo29</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
    <MandatedAction>
```

```
<DateEventOccurred datatype="dateTime">2011-01-
30T23:43:02Z</DateEventOccurred>

</MandatedAction>

<UniqueRequestId>

  <UniqueAgencyId>

    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>

    <Value datatype="string">zlo29</Value>

  </UniqueAgencyId>

  <RequestIdentifierValue
datatype="string">27</RequestIdentifierValue>

</UniqueRequestId>

<RequestedActionType>

  <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=RequestedActionType</Scheme>

  <Value datatype="string">Hold for Pickup</Value>

</RequestedActionType>

<UniqueUserId>

  <UniqueAgencyId>

    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>

    <Value datatype="string">zloc9</Value>

  </UniqueAgencyId>

  <UserIdentifierValue
datatype="string">millyzloc9</UserIdentifierValue>

</UniqueUserId>

<UniqueItemId>

  <UniqueAgencyId>

    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
        <Value datatype="string">zlo29</Value>
    </UniqueAgencyId>
    <ItemIdentifierValue
    datatype="string">i1185203</ItemIdentifierValue>
</UniqueItemId>
<ItemOptionalFields>
    <BibliographicDescription>
        <Author datatype="string">Westall, Robert</Author>
        <Title datatype="string">Ghost abbey / Robert
        Westall</Title>
        <MediumType>
            <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=MediumType</Scheme>
                <Value datatype="string">undefined</Value>
            </MediumType>
        </BibliographicDescription>
    <ItemDescription>
        <VisibleItemId>
            <VisibleItemIdentifierType>
                <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleItemIdentifierType</Scheme>
                    <Value datatype="string">Barcode</Value>
                </VisibleItemIdentifierType>
                <VisibleItemIdentifier
datatype="string">31184007247799</VisibleItemIdentifier>
                    </VisibleItemId>
                    <CallNumber datatype="string">Y/MYS/WESTALL,R</CallNumber>
                </ItemDescription>
    </ItemOptionalFields>
    <UserOptionalFields>
        <VisibleUserId>
```

```
<VisibleUserIdentifierType>
  <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleUserIdentifierType</Scheme>
    <Value datatype="string">Barcode</Value>
  </VisibleUserIdentifierType>
  <VisibleUserIdentifier
datatype="string">millyzloc9</VisibleUserIdentifier>
</VisibleUserId>
  <UserPrivilege>
    <UniqueAgencyId>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">zloc9</Value>
      </UniqueAgencyId>
    <AgencyUserPrivilegeType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=AgencyUserPrivilegeType</Scheme>
        <Value datatype="string">UDBcent3 Adult</Value>
      </AgencyUserPrivilegeType>
    </UserPrivilege>
  </UserOptionalFields>
</AcceptItem>
</NCIPMessage>
```

---

### Sample CheckInItemMessage

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_
0.dtd">
```

---

```
<CheckInItem>
  <InitiationHeader>
    <FromAgencyId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc8</Value>
        </UniqueAgencyId>
      </FromAgencyId>
    <ToAgencyId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">7polr</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
  <MandatedAction>
    <DateEventOccurred datatype="dateTime">2011-01-
28T03:15:26Z</DateEventOccurred>
  </MandatedAction>
  <UniqueItemId>
    <UniqueAgencyId>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">7polr</Value>
      </UniqueAgencyId>
      <ItemIdentifierValue
datatype="string">0000300661196</ItemIdentifierValue>
    </UniqueItemId>
```



```
</CheckInItem>
</NCIPMessage>
```

---

### Sample CheckOutItem Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_
0.dtd">
  <CheckOutItem>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc8</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">7polr</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
    <MandatedAction>
      <DateEventOccurred datatype="dateTime">2011-01-
27T02</DateEventOccurred>
    </MandatedAction>
    <UniqueUserId>
```

```
<UniqueAgencyId>
  <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
    <Value datatype="string">zloc8</Value>
  </UniqueAgencyId>
  <UserIdentifierValue
datatype="string">p1250287</UserIdentifierValue>
</UniqueUserId>
<UniqueItemId>
  <UniqueAgencyId>
    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
    <Value datatype="string">7polr</Value>
  </UniqueAgencyId>
  <ItemIdentifierValue
datatype="string">0000300661535</ItemIdentifierValue>
</UniqueItemId>
</CheckoutItem>
</NCIPMessage>
```

---

### Sample CirculationStatusChangeReported Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_
0.dtd">
  <CirculationStatusChangeReported>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
    <Value datatype="string">zloc9</Value>
```

```
  </UniqueAgencyId>
```

```
</FromAgencyId>
```

```
<ToAgencyId>
```

```
  <UniqueAgencyId>
```

```
    <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
    <Value datatype="string">7polr</Value>
```

```
  </UniqueAgencyId>
```

```
</ToAgencyId>
```

```
</InitiationHeader>
```

```
<UniqueUserId>
```

```
  <UniqueAgencyId>
```

```
    <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
    <Value datatype="string">7polr</Value>
```

```
  </UniqueAgencyId>
```

```
  <UserIdentifierValue
```

```
    datatype="string">111000111</UserIdentifierValue>
```

```
</UniqueUserId>
```

```
<UniqueItemId>
```

```
  <UniqueAgencyId>
```

```
    <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
    <Value datatype="string">zloc9</Value>
```

```
  </UniqueAgencyId>
```

```
  <ItemIdentifierValue
```

```
    datatype="string">i2432298</ItemIdentifierValue>
```

```
</UniqueItemId>
```

---

```
<ItemOptionalFields>
  <BibliographicDescription>
    <Author datatype="string">Anthony, Marc</Author>
    <Title datatype="string">Vali? la pena [sound recording] /
    Marc Anthony</Title>
    <MediumType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=MediumType</Scheme>
      <Value datatype="string">undefined</Value>
    </MediumType>
  </BibliographicDescription>
  <ItemDescription>
    <VisibleItemId>
      <VisibleItemIdentifierType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleItemIdentifierType</Scheme>
        <Value datatype="string">Barcode</Value>
      </VisibleItemIdentifierType>
      <VisibleUserIdentifier
datatype="string">111000111</VisibleUserIdentifier>
    </VisibleItemId>
    <CallNumber datatype="string">PE1408 .T42 1986</CallNumber>
  </ItemDescription>
</ItemOptionalFields>
<UserOptionalFields>
  <VisibleUserId>
    <VisibleUserIdentifierType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleUserIdentifierType</Scheme>
      <Value datatype="string">Barcode</Value>
```

```
</VisibleUserIdentifierType>
  <VisibleUserIdentifier
datatype="string">millyzloc9</VisibleUserIdentifier>
  </VisibleUserId>
  <UserPrivilege>
    <UniqueAgencyId>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">7polr</Value>
      </UniqueAgencyId>
    <AgencyUserPrivilegeType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=AgencyUserPrivilegeType</Scheme>
        <Value datatype="string">UDBcent3 Adult</Value>
      </AgencyUserPrivilegeType>
    </UserPrivilege>
  </UserOptionalFields>
  <ItemReported>
    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=ItemReported</Scheme>
      <Value datatype="string">Lost</Value>
    </ItemReported>
  </CirculationStatusChangeReported>
</NCIPMessage>
```

---

### Sample ItemCheckedIn Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
```

---

```
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
  <ItemCheckedIn>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc8</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
    <UniqueItemId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">zloc8</Value>
      </UniqueAgencyId>
      <ItemIdentifierValue
datatype="string">i1152718</ItemIdentifierValue>
    </UniqueItemId>
    <ItemOptionalFields>
      <BibliographicDescription>
```

```
<Author datatype="string">Grandgent, C. H. (Charles Hall),
1862-1939</Author>

<Title datatype="string">Prunes and prism [microform] :
with other odds and ends / by Charles Hall
Grandgent</Title>

<MediumType>

<Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=MediumType</Scheme>

<Value datatype="string">undefined</Value>
</MediumType>
</BibliographicDescription>
<ItemDescription>
<VisibleItemId>
<VisibleItemIdentifierType>
<Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleItemIdentifierType</Scheme>
<Value datatype="string">Barcode</Value>
</VisibleItemIdentifierType>
<VisibleItemIdentifier
datatype="string">31304000530534</VisibleItemIdentifier>
</VisibleItemId>
<CallNumber> datatype="string">GRANGENT, C</CallNumber>
</ItemDescription>
</ItemOptionalFields>
</ItemCheckedIn>
</NCIPMessage>
```

---

### Sample ItemCheckedOut Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
```

---

```
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
  <ItemCheckedOut>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">7polr</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
    <UniqueUserId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">7polr</Value>
      </UniqueAgencyId>
      <UserIdentifierValue
datatype="string">111000111</UserIdentifierValue>
    </UniqueUserId>
    <UniqueItemId>
      <UniqueAgencyId>
        <Scheme
```

---



```
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>

  <Value datatype="string">zloc9</Value>

</UniqueAgencyId>

<ItemIdentifierValue
datatype="string">i2432298</ItemIdentifierValue>
</UniqueItemId>

<DateDue datatype="dateTime">2011-03-11T04:00:00Z</DateDue>

<ItemOptionalFields>

  <BibliographicDescription>

    <Author datatype="string">Anthony, Marc</Author>

    <Title datatype="string">Vali? la pena [sound recording] /
Marc Anthony</Title>

    <MediumType>

    <Scheme

datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=MediumType</Scheme>

    <Value datatype="string">undefined</Value>

  </MediumType>

</BibliographicDescription>

<ItemDescription>

  <VisibleItemId>

    <VisibleItemIdentifierType>

    <Scheme

datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibileItemIdentifierType</Scheme>

    <Value datatype="string">Barcode</Value>

    </VisibleItemIdentifierType> <VisibleItemIdentifier

datatype="string">31184016683752</VisibleItemIdentifier>

  </VisibleItemId>

    <CallNumber datatype="string">CD/POP/ANTHONY,M</CallNumber>

  </ItemDescription>

</ItemOptionalFields>
```

```
<UserOptionalFields>
  <VisibleUserId>
    <VisibleUserIdentifierType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleUserIdentifierType</Scheme>
      <Value datatype="string">Barcode</Value>
    </VisibleUserIdentifierType>
    <VisibleUserIdentifier
datatype="string">111000111</VisibleUserIdentifier>
  </VisibleUserId>
  <UserPrivilege>
    <UniqueAgencyId>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
      <Value datatype="string">7polr</Value>
    </UniqueAgencyId>
    <AgencyUserPrivilegeType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=AgencyUserPrivilegeType</Scheme>
      <Value datatype="string">UDBcent3 Adult</Value>
    </AgencyUserPrivilegeType>
  </UserPrivilege>
</UserOptionalFields>
</ItemCheckedOut>
</NCIPMessage>
```

---

### Sample ItemRecalled Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
```

---

```
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
  <ItemRecalled>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc8</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
    <UniqueUserId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">zloc9</Value>
      </UniqueAgencyId>
      <UserIdentifierValue
datatype="string">mikezloc9</UserIdentifierValue>
    </UniqueUserId>
    <UniqueItemId>
      <UniqueAgencyId>
```

```
<Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
  <Value datatype="string">zloc8</Value>
</UniqueAgencyId>
  <ItemIdentifierValue
datatype="string">i1234827</ItemIdentifierValue>
</UniqueItemId>
<DateDue datatype="dateTime">2011-01-30T21:59:15Z</DateDue>
<ItemOptionalFields>
  <BibliographicDescription>
    <Title datatype="string">Canal boat to history
[videorecording] / produced by Garner MacLennan Pty. Ltd., in
association with China Central Television</Title>
    <MediumType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=MediumType</Scheme>
        <Value datatype="string">undefined</Value>
      </MediumType>
    </BibliographicDescription>
    <ItemDescription>
      <VisibleItemId>
        <VisibleItemIdentifierType>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleItemIdentifierType</Scheme>
            <Value datatype="string">Barcode</Value>
          </VisibleItemIdentifierType>
          <VisibleItemIdentifier
datatype="string">31304002600863</VisibleItemIdentifier>
        </VisibleItemId>
        <CallNumber datatype="string">N 7340 .C3 1988</CallNumber>
      </ItemDescription>
```

```
</ItemOptionalFields>
<UserOptionalFields>
  <VisibleUserId>
    <VisibleUserIdentifierType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleUserIdentifierType</Scheme>
      <Value datatype="string">Barcode</Value>
    </VisibleUserIdentifierType>
    <VisibleUserIdentifier
datatype="string">mikezloc9</VisibleUserIdentifier>
  </VisibleUserId>
  <UserPrivilege>
    <UniqueAgencyId>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
      <Value datatype="string">zloc9</Value>
    </UniqueAgencyId>
    <AgencyUserPrivilegeType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=AgencyUserPrivilegeType</Scheme>
      <Value datatype="string">UDBcent3 Adult</Value>
    </AgencyUserPrivilegeType>
  </UserPrivilege>
</UserOptionalFields>
</ItemRecalled>
</NCIPMessage>
```

---

### Sample ItemReceived Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
```

---

```
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
  <ItemReceived>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zlo29</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
    <UniqueItemId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">zlo29</Value>
      </UniqueAgencyId>
      <ItemIdentifierValue
datatype="string">i1185203</ItemIdentifierValue>
    </UniqueItemId>
    <UniqueUserId>
```

```
<UniqueAgencyId>
  <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
  <Value datatype="string">zloc9</Value>
</UniqueAgencyId>
<UserIdentifierValue
datatype="string">millyzloc9</UserIdentifierValue>
</UniqueUserId>
<DateReceived datatype="dateTime">2011-01-
31T02:37:36Z</DateReceived>
<ItemOptionalFields>
  <BibliographicDescription>
    <Author datatype="string">Westall, Robert</Author>
    <Title datatype="string">Ghost abbey / Robert Westall</Title>
    <MediumType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=MediumType</Scheme>
      <Value datatype="string">undefined</Value>
    </MediumType>
  </BibliographicDescription>
  <ItemDescription>
    <VisibleItemId>
      <VisibleItemIdentifierType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleItemIdentifierType</Scheme>
        <Value datatype="string">Barcode</Value>
      </VisibleItemIdentifierType>
      <VisibleItemIdentifier
datatype="string">31184007247799</VisibleItemIdentifier>
    </VisibleItemId>
```

```
<CallNumber datatype="string">Y/MYS/WESTALL,R</CallNumber>
</ItemDescription>
</ItemOptionalFields>
<UserOptionalFields>
  <VisibleUserId>
    <VisibleUserIdentifierType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleUserIdentifierType</Scheme>
      <Value datatype="string">Barcode</Value>
    </VisibleUserIdentifierType>
    <VisibleUserIdentifier
datatype="string">millyzloc9</VisibleUserIdentifier>
  </VisibleUserId>
  <UserPrivilege>
    <UniqueAgencyId>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
      <Value datatype="string">zloc9</Value>
    </UniqueAgencyId>
    <AgencyUserPrivilegeType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=AgencyUserPrivilegeType</Scheme>
      <Value datatype="string">UDBcent3 Adult</Value>
    </AgencyUserPrivilegeType>
  </UserPrivilege>
</UserOptionalFields>
</ItemReceived>
</NCIPMessage>
```



## Sample ItemRenewed Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_
0.dtd">
  <ItemRenewed>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">7polr</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
    <UniqueUserId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">7polr</Value>
      </UniqueAgencyId>
```

```
<UserIdentifierValue
  datatype="string">111000111</UserIdentifierValue>
</UniqueUserId>
<UniqueItemId>
  <UniqueAgencyId>
    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
    <Value datatype="string">zloc9</Value>
  </UniqueAgencyId>
  <ItemIdentifierValue
    datatype="string">i2432298</ItemIdentifierValue>
</UniqueItemId>
<DateDue datatype="dateTime">2011-03-11T04:00:00Z</DateDue>
<ItemOptionalFields>
  <BibliographicDescription>
    <Author datatype="string">Anthony, Marc</Author>
    <Title datatype="string">Vali? la pena [sound recording] /
    MarcAnthony</Title>
    <MediumType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=MediumType</Scheme>
      <Value datatype="string">undefined</Value>
    </MediumType>
  </BibliographicDescription>
  <ItemDescription>
    <VisibleItemId>
      <VisibleItemIdentifierType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleItemIdentifierType</Scheme>
        <Value datatype="string">Barcode</Value>
```

```
</VisibleItemIdentifierType>
  <VisibleItemIdentifier
datatype="string">31184016683752</VisibleItemIdentifier>
  </VisibleItemId>
  <CallNumber datatype="string">CD/POP/ANTHONY,M</CallNumber>
</ItemDescription>
</ItemOptionalFields>
<UserOptionalFields>
  <VisibleUserId>
    <VisibleUserIdentifierType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleUserIdentifierType</Scheme>
      <Value datatype="string">Barcode</Value>
    </VisibleUserIdentifierType>
  <VisibleUserIdentifier
datatype="string">111000111</VisibleUserIdentifier>
  </VisibleUserId>
  <UserPrivilege>
    <UniqueAgencyId>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
      <Value datatype="string">7polr</Value>
    </UniqueAgencyId>
  <AgencyUserPrivilegeType>
    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=AgencyUserPrivilegeType</Scheme>
    <Value datatype="string">UDBcent3 Adult</Value>
  </AgencyUserPrivilegeType>
</UserPrivilege>
</UserOptionalFields>
```

```
</ItemRenewed>  
</NCIPMessage>
```

---

## Sample ItemRequestCancelled Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"  
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">  
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">  
  <ItemRequestCancelled>  
    <InitiationHeader>  
      <FromAgencyId>  
        <UniqueAgencyId>  
          <Scheme  
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_  
values&scheme=UniqueAgencyId</Scheme>  
          <Value datatype="string">zloc8</Value>  
        </UniqueAgencyId>  
      </FromAgencyId>  
      <ToAgencyId>  
        <UniqueAgencyId>  
          <Scheme  
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_  
values&scheme=UniqueAgencyId</Scheme>  
          <Value datatype="string">7polr</Value>  
        </UniqueAgencyId>  
      </ToAgencyId>  
    </InitiationHeader>  
    <UniqueUserId>  
      <UniqueAgencyId>  
        <Scheme  
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_  
values&scheme=UniqueAgencyId</Scheme>
```

```
        <Value datatype="string">zloc8</Value>
    </UniqueAgencyId>
    <UserIdentifierValue
    datatype="string">p1250287</UserIdentifierValue>
</UniqueUserId>
<UniqueItemId>
    <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">7polr</Value>
    </UniqueAgencyId>
    <ItemIdentifierValue
    datatype="string">0000300661535</ItemIdentifierValue>
</UniqueItemId>
<RequestType>
    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=RequestType</Scheme>
        <Value datatype="string">hold</Value>
    </RequestType>
</ItemRequestCancelled>
</NCIPMessage>
```

---

### Sample ItemRequested Message

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_
0.dtd">
    <ItemRequested>
        <InitiationHeader>
            <FromAgencyId>
```

---

```
<UniqueAgencyId>
  <Scheme
    datatype="string">http://72.52.134.169:6601/IRCIRCD?target=
    get_scheme_values&amp;scheme=UniqueAgencyId</Scheme>
  <Value datatype="string">zv318</Value>
</UniqueAgencyId>
</FromAgencyId>
<ToAgencyId>
  <UniqueAgencyId>
    <Scheme
      datatype="string">http://72.52.134.169:6601/IRCIRCD?target=
      get_scheme_values&amp;scheme=UniqueAgencyId</Scheme>
    <Value datatype="string">zv264</Value>
  </UniqueAgencyId>
</ToAgencyId>
</InitiationHeader>
<UniqueUserId>
  <UniqueAgencyId>
    <Scheme
      datatype="string">http://72.52.134.169:6601/IRCIRCD?target=ge
      t_scheme_values&amp;scheme=UniqueAgencyId</Scheme>
    <Value datatype="string">zv264</Value>
  </UniqueAgencyId>
  <UserIdentifierValue
    datatype="string">p13292744</UserIdentifierValue>
</UniqueUserId>
<UniqueItemId>
  <UniqueAgencyId>
    <Scheme
      datatype="string">http://72.52.134.169:6601/IRCIRCD?target=ge
      t_scheme_values&amp;scheme=UniqueAgencyId</Scheme>
    <Value datatype="string">zv318</Value>
  </UniqueAgencyId>
  <ItemIdentifierValue
    datatype="string">i13700556</ItemIdentifierValue>
```

```
</UniqueItemId>
<RequestType>
  <Scheme
    datatype="string">http://72.52.134.169:6601/IRCIRCD?target=get_
    scheme_values&scheme=RequestType</Scheme>
  <Value datatype="string">hold</Value>
</RequestType>
<RequestScopeType>
  <Scheme
    datatype="string">http://72.52.134.169:6601/IRCIRCD?target=get_
    scheme_values&scheme=RequestScopeType</Scheme>
  <Value datatype="string">item</Value>
</RequestScopeType>
<ShippingInformation>
  <ShippingNote datatype="string">zv264 Petoskey District
  Library</ShippingNote>
  <PhysicalAddress>
    <UnstructuredAddress>
      <UnstructuredAddressType>
        <Scheme datatype="string">http://www.niso.org/ncip/v1_
        0/impl/schemes/unstructuredaddress/ </Scheme>
        <Value datatype="string">Pickup Location</Value>
      </UnstructuredAddressType>
      <UnstructuredAddressData datatype="string">Petoskey
      District Lib</UnstructuredAddressData>
    </UnstructuredAddress>
    <PhysicalAddressType>
      <Scheme
        datatype="string">http://72.52.134.169:6601/IRCIRCD?target=
        get_scheme_values&scheme=PhysicalAddressType</Scheme>
      <Value datatype="string">Pickup Location</Value>
    </PhysicalAddressType>
  </PhysicalAddress>
</ShippingInformation>
```

```
<DateOfUserRequest datatype="dateTime">2017-06-
12T20:00:52Z</DateOfUserRequest>

<ItemOptionalFields>
  <BibliographicDescription>
    <Author datatype="string">Herriot, James.</Author>
    <Title datatype="string">All things wise and wonderful [sound
recording] / James Herriot.</Title>
    <MediumType>
      <Scheme
datatype="string">http://72.52.134.169:6601/IRCIRCD?target=
get_scheme_values&scheme=MediumType</Scheme>
      <Value datatype="string">MeL Sound Recording</Value>
    </MediumType>
  </BibliographicDescription>
  <ItemDescription>
    <CallNumber datatype="string">CD 636.089 H</CallNumber>
  </ItemDescription>
</ItemOptionalFields>

<UserOptionalFields>
  <VisibleUserId>
    <VisibleUserIdentifierType>
      <Scheme
datatype="string">http://72.52.134.169:6601/IRCIRCD?target=
get_scheme_
values&scheme=VisibleUserIdentifierType</Scheme>
      <Value datatype="string">Barcode</Value>
    </VisibleUserIdentifierType>
    <VisibleUserIdentifier
datatype="string">861506705783</VisibleUserIdentifier>
  </VisibleUserId>
  <UserPrivilege>
    <UniqueAgencyId>
      <Scheme
datatype="string">http://72.52.134.169:6601/IRCIRCD?target=
get_scheme_values&scheme=UniqueAgencyId</Scheme>
```



```
        <Value datatype="string">zv264</Value>
    </UniqueAgencyId>
    <AgencyUserPrivilegeType>
        <Scheme
            datatype="string">http://72.52.134.169:6601/IRCIRCD?target=
            get_scheme_
            values&scheme=AgencyUserPrivilegeType</Scheme>
        <Value datatype="string">MeL Public Library Adult</Value>
    </AgencyUserPrivilegeType>
</UserPrivilege>
</UserOptionalFields>
</ItemRequested>
</NCIPMessage>
```

---

### Sample ItemShipped Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_
0.dtd">
    <ItemShipped>
        <InitiationHeader>
            <FromAgencyId>
                <UniqueAgencyId>
                    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
                <Value datatype="string">zlo29</Value>
            </UniqueAgencyId>
        </FromAgencyId>
        <ToAgencyId>
            <UniqueAgencyId>
                <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIICD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
    <Value datatype="string">7srsi</Value>
```

```
  </UniqueAgencyId>
```

```
</ToAgencyId>
```

```
</InitiationHeader>
```

```
<UniqueRequestId>
```

```
  <UniqueAgencyId>
```

```
    <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIICD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
    <Value datatype="string">zlo29</Value>
```

```
  </UniqueAgencyId>
```

```
  <RequestIdentifierValue
```

```
    datatype="string">155</RequestIdentifierValue>
```

```
</UniqueRequestId>
```

```
<UniqueItemId>
```

```
  <UniqueAgencyId>
```

```
    <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIICD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
    <Value datatype="string">zlo29</Value>
```

```
  </UniqueAgencyId>
```

```
  <ItemIdentifierValue
```

```
    datatype="string">i1970231</ItemIdentifierValue>
```

```
</UniqueItemId>
```

```
<DateShipped datatype="dateTime">2011-03-
```

```
31T22:50:41Z</DateShipped>
```

```
<ShippingInformation>
```

```
<ShippingNote datatype="string">Holly Township 3/
```

```
</ShippingNote>
```

```
<UnstructuredAddress>
```

```
<PhysicalAddress>
```

```
  <PhysicalAddressType>
```

```
<Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=PhysicalAddressType</Scheme>
  <Value datatype="string">Pickup Location</Value>
</PhysicalAddressType>
<UnstructuredAddress>
  <UnstructuredAddressType>
    <Scheme
datatype="string">http://www.niso.org/ncip/v1_
0/impl/schemes/unstructuredaddresstype</Scheme>
      <Value datatype="string">Pickup Location</Value>
    </UnstructuredAddressType>
    <UnstructuredAddressData datatype="string">Sirsi Dynix
      Delivery Stop</UnstructuredAddressData>
  </UnstructuredAddress>
</PhysicalAddress>
</ShippingInformation>
<ItemOptionalFields>
  <BibliographicDescription>
    <Author datatype="string">Getz, David</Author>
    <Title datatype="string">Frozen girl / David Getz ;
      illustrations by Peter McCarty</Title>
    <MediumType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=MediumT ype</Scheme>
        <Value datatype="string">undefined</Value>
      </MediumType>
    </BibliographicDescription>
  <ItemDescription>
    <VisibleItemId>
      <VisibleItemIdentifierType>
        <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleItemIdentifierType</Scheme>

    <Value datatype="string">Barcode</Value>
  </VisibleItemIdentifierType>
  <VisibleItemIdentifier
datatype="string">31184012832858</VisibleItemIdentifier>
  </VisibleItemId>
  <CallNumber datatype="string">J/930.1/GETZ,D</CallNumber>
</ItemDescription>
</ItemOptionalFields>
</ItemShipped>
</NCIPMessage>
```

---

### Sample LookupUser Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_
0.dtd">
  <LookupUser>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">cent3</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
    <Value datatype="string">7polr</Value>
```

```
  </UniqueAgencyId>
```

```
</ToAgencyId>
```

```
</InitiationHeader>
```

```
<VisibleUserId>
```

```
  <VisibleUserIdentifierType>
```

```
    <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=VisibleUserIdentifierType</Scheme>
```

```
    <Value datatype="string">Barcode</Value>
```

```
  </VisibleUserIdentifierType>
```

```
<VisibleUserIdentifier
```

```
datatype="string">1000402159403</VisibleUserIdentifier>
```

```
</VisibleUserId>
```

```
<UserElementType>
```

```
  <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UserElementType</Scheme>
```

```
    <Value datatype="string">Name Information</Value>
```

```
  </UserElementType>
```

```
<UserElementType>
```

```
  <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UserElementType</Scheme>
```

```
    <Value datatype="string">User Address Information</Value>
```

```
  </UserElementType>
```

```
<UserElementType>
```

```
  <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UserElementType</Scheme>
```

```
    <Value datatype="string">Visible User Id</Value>
```

```
</UserElementType>
<UserElementType>
  <UserPrivilege>
    </UserPrivilege>
    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UserElementType</Scheme>
    <Value datatype="string">Block Or Trap</Value>
  </UserElementType>
</LookupUser>
</NCIPMessage>
```

---

### Sample LookupUserResponse Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_
0.dtd">
  <LookupUserResponse>
    <ResponseHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
```

```
        <Value datatype="string">cent3</Value>
    </UniqueAgencyId>
</ToAgencyId>
</ResponseHeader>
<UniqueUserId>
    <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">cent3</Value>
    </UniqueAgencyId>
    <UserIdentifierValue
datatype="string">barcode123</UserIdentifierValue>
</UniqueUserId>
<UserOptionalFields>
    <VisibleUserId>
        <VisibleUserIdentifierType>
            <Scheme datatype="string">http://library.com</Scheme>
            <Value datatype="string">Barcode</Value>
        </VisibleUserIdentifierType>
        <VisibleUserIdentifier
datatype="string">barcode123</VisibleUserIdentifier>
    </VisibleUserId>
    <NameInformation>
        <PersonalNameInformation>
            <UnstructuredPersonalUserName
datatype="string">Baney, Brian</UnstructuredPersonalUserName>
        </PersonalNameInformation>
    </NameInformation>
    <UserPrivilege>
        <UniqueAgencyId>
            <Scheme
```

```
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>

  <Value datatype="string">cent3</Value>
</UniqueAgencyId>

<AgencyUserPrivilegeType>
  <Scheme datatype="string">http://library.com</Scheme>
  <Value datatype="string">Adult</Value>
</AgencyUserPrivilegeType>

<ValidToDate datatype="string">2015-02-
23T00:00:00Z</ValidToDate>
</UserPrivilege>

<UserAddressInformation>
  <ElectronicAddress>
    <ElectronicAddressType>
      <Scheme datatype="string">http://library.com</Scheme>
      <Value datatype="string">mailto</Value>
    </ElectronicAddressType>
    <ElectronicAddressData
      datatype="string">lindaz@iii.com</ElectronicAddressData>
  </ElectronicAddress>
</UserAddressInformation>

<BlockOrTrap>
  <UniqueAgencyId>
    <Scheme
      datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_
      values&scheme=UniqueAgencyId</Scheme>
      <Value datatype="string">cent3</Value>
    </UniqueAgencyId>
    <BlockOrTrapType>
      <Scheme datatype="string">http://library.com</Scheme>
      <Value datatype="string">expired</Value>
    </BlockOrTrapType>
  </BlockOrTrap>
```



```
</UserOptionalFields>
</LookupUserResponse>
</NCIPMessage>
```

---

### Sample RenewItem Message

```
<!DOCTYPE NCIPMessage PUBLIC "-//NISO//NCIP DTD Version 1.0//EN"
"http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_0.dtd">
<NCIPMessage version="http://www.niso.org/ncip/v1_0/impl/dtd/ncip_v1_
0.dtd">
  <RenewItem>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
          <Value datatype="string">zloc8</Value>
        </UniqueAgencyId>
      </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_
values&scheme=UniqueA gencyId</Scheme>
          <Value datatype="string">7polr</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
    <MandatedAction>
      <DateEventOccurred datatype="dateTime">2011-01-
27T22:05:55Z</DateEventOccurred>
    </MandatedAction>
```

```
<UniqueUserId>
  <UniqueAgencyId>
    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
    <Value datatype="string">zloc8</Value>
  </UniqueAgencyId>
  <UserIdentifierValue
datatype="string">p1250287</UserIdentifierValue>
</UniqueUserId>
<UniqueItemId>
  <UniqueAgencyId>
    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_
values&scheme=UniqueAgencyId</Scheme>
    <Value datatype="string">7polr</Value>
  </UniqueAgencyId>
  <ItemIdentifierValue
datatype="string">0000300661535</ItemIdentifierValue>
</UniqueItemId>
  <DesiredDateDue datatype="dateTime">2011-02-
25T04:00:00Z</DesiredDateDue>
</RenewItem>
</NCIPMessage>
```