

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.

Spring 2011

Table of Contents

1.	INTRODUCTION.....	4
2.	DESCRIPTION OF APPLICATION AREA	4
3.	USE CASE.....	5
4.	ROLES.....	5
5.	TRANSPORT PROTOCOL.....	5
6.	SECURITY AND PRIVACY	5
7.	MESSAGES AND DATA ELEMENTS.....	5
	Message Summary Table	6
	Data Element Descriptions.....	14
8.	GUIDELINES FOR IMPLEMENTERS	17
	APPENDIX A: EVENT TABLE	19
	APPENDIX B: SAMPLE XML MESSAGES	20
	Sample AcceptItem Message	20
	Sample CheckInItem Message	22
	Sample CheckOutItem Message	22
	Sample CirculationStatusChangeReported Message	23
	Sample ItemCheckedIn Message.....	25
	Sample ItemCheckedOut Message	26
	Sample ItemRecalled Message	27
	Sample ItemReceived Message	29
	Sample ItemRenewed Message	31
	Sample ItemRequestCancelled Message	32
	Sample ItemRequested Message.....	33

Sample ItemShipped Message	35
Sample LookupUser Message	36
Sample LookupUserResponse Message	37
Sample RenewItem Message	39

1. Introduction

This profile, referred to as the INN-Reach DCB Application Profile of the NISO Circulation Interchange Protocol (NCIP) 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 an 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 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 ILS 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 ILS. 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:

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 table defines the NCIP messages either initiated by or required as responses by INN-REACH DCB, and summarizes the data elements of each message. For more detailed information on these elements, see:

- The "Data Elements Description" section below

- The sample messages in Appendix B

This profile does not define any optional NCIP messages.

Message Summary Table

Message	Application	Profile Required Elements	Comments
AcceptItem	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		MandatedAction DateEventOccurred	
		UniqueRequestId UniqueAgencyId RequestIdentifierValue	
		RequestedActionType	
		UniqueUserId UniqueAgencyId UserIdentifierValue	
		UniqueItemId UniqueAgencyId ItemIdentifierValue	
		ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemId VisibleItemIdentifier Type VisibleItemIdentifier CallNumber	
		UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier UserPrivilege UniqueAgencyId AgencyUserPrivilegeType	
CheckInItem	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	

Message	Application	Profile Required Elements	Comments
		MandatedAction DateEventOccurred	
		UniqueItemid UniqueAgencyId ItemIdentifierValue	
CheckOutItem	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		MandatedAction DateEventOccurred	
		UniqueUserId UniqueAgencyId UserIdentifierValue	
		UniqueItemid UniqueAgencyId ItemIdentifierValue	
CirculationStatusChangeReported	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueUserId UniqueAgencyId UserIdentifierValue	
		UniqueItemid UniqueAgencyId ItemIdentifierValue	
		ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemid VisibleItemIdentifier Type VisibleItemIdentifier Call Number	
		UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier UserPrivilege UniqueAgencyId AgencyUserPrivilegeType	

Message	Application	Profile Required Elements	Comments
ItemCheckedIn	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueItemId UniqueAgencyId ItemIdentifierValue	
		ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemId VisibleItemIdentifier Type VisibleItemIdentifier Call Number	
ItemCheckedOut	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueUserId UniqueAgencyId UserIdentifierValue	
		UniqueItemId UniqueAgencyId ItemIdentifierValue	
		DateDue	
		ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemId VisibleItemIdentifier Type VisibleItemIdentifier Call Number	

Message	Application	Profile Required Elements	Comments
		UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier User Privilege UniqueAgencyId AgencyUserPrivilegeType	
ItemRecalled	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueUserId UniqueAgencyId UserIdentifierValue	
		UniqueItemId UniqueAgencyId ItemIdentifierValue	
		DateDue	
		ItemOptionalFields BibliographicDescription Author Title MediumType VisibleItemId VisibleItemIdentifier Type VisibleItemIdentifier Call Number	
		UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier User Privilege UniqueAgencyId AgencyUserPrivilegeType	
ItemReceived	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueItemId UniqueAgencyId ItemIdentifierValue	
		UniqueUserId UniqueAgencyId UserIdentifierValue	

Message	Application	Profile Required Elements	Comments
		DateReceived	
		ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemid VisibleItemIdentifier Type VisibleItemIdentifier Call Number	
		UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier User Privilege UniqueAgencyId AgencyUserPrivilegeType	
ItemRenewed	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueUserId UniqueAgencyId UserIdentifierValue	
		UniqueItemid UniqueAgencyId ItemIdentifierValue	
		DateDue	
		ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemid VisibleItemIdentifier Type VisibleItemIdentifier Call Number	

Message	Application	Profile Required Elements	Comments
		UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier User Privilege UniqueAgencyId AgencyUserPrivilegeType	
ItemRequestCancelled	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueUserId UniqueAgencyId UserIdentifierValue	
		UniqueItemId UniqueAgencyId ItemIdentifierValue	
		RequestType	
ItemRequested	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueUserId UniqueAgencyId UserIdentifierValue	
		UniqueItemId UniqueAgencyId ItemIdentifierValue	
		RequestType	
		RequestScopeType	
		DateOfUserRequest	
		ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription Call Number	This ItemDescription element in 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, thus, is not available for inclusion in this message.

Message	Application	Profile Required Elements	Comments
		UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier User Privilege UniqueAgencyId AgencyUserPrivilegeType	
ItemShipped	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueRequestId UniqueAgencyId RequestIdentifierValue	
		UniqueItemId UniqueAgencyId ItemIdentifierValue	
		DateShipped	
		ShippingInformation PhysicalAddress PhysicalAddressType UnstructuredAddress UnstructuredAddressType UnstructuredAddressData	
		ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemId VisibleItemIdentifier Type VisibleItemIdentifier Call Number	
RenewItem	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		MandatedAction DateEventOccurred	
		UniqueUserId UniqueAgencyId UserIdentifierValue	

Message	Application	Profile Required Elements	Comments
		UniqueItemId UniqueAgencyId ItemIdentifierValue	
		DesiredDateDue	
LookupUser	INN-REACH DCB	InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier	
		User Element Type Value "Name Information" Value "User Address Information" Value "User Privilege" Value "Visible User ID" Value "Block or Trap"	
LookupUserResponse	User Agency's Circulation Application	ResponseHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId	
		UniqueUserId UniqueAgencyId UserIdentifierValue	
		UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier NameInformation PersonalNameInformation UnstructuredPersonalUserName UserPrivilege UniqueAgencyId AgencyUserPrivilegeType ValidToDate* UserAddressInformation ElectronicAddress* ElectronicAddressType ElectronicAddressData	<ul style="list-style-type: none"> If this message includes UserOptionalFields 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. 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, see the description of those data elements.

Data Element Descriptions

Element	Description	Sub-elements
AgencyUserPrivilegeType	Specifies the user's requesting privilege level at the User Agency's Circulation Application (for example, "local"). When INN-REACH DCB receives this element, it converts the value to a central patron type (P TYPE) and uses it to determine whether the user can make a request.	Scheme, Value
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
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	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: YYYY-MM-DDTHH:MM:SSZ. For example: 2011-03-11T04:00:00Z	(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 same format as the DateDue element.	(none)
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 LookupUserResponse message. If INN-REACH DCB receives a LookupUserResponse message that lacks this element, it assigns the user a default email address specified by	ElectronicAddressType, ElectronicAddressData

	the INN-Reach consortium, enabling the user to continue with the request.	
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 "email".	(none)
FromAgencyId	Specifies information related to the site that transmitted this message.	UniqueAgencyId
InitiationHeader	Specifies information related to the sender and recipient of the message.	FromAgencyId, ToAgencyId
ItemDescription	Specifies item-specific data from the institution record in the INN-Reach Catalog.	VisibleItemId, CallNumber
ItemIdentifierValue	Specifies the string that uniquely identifies the item at the item agency, as follows: <ul style="list-style-type: none"> • 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. • 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. 	(none)
ItemOptionalFields	Specifies data from the bibliographic and institution records in the INN-Reach Catalog.	BibliographicDescription, ItemDescription
MandatedAction	Specifies circulation activity information.	DateEventOccurred
MediumType	Specifies the medium type of the item, using the terminology of 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
Name Information	Specifies the requesting user's personal name data.	PersonalNameInformation
PersonalNameInformation	Specifies the requesting user's name data.	UnstructuredPersonalUserName
PhysicalAddress	Specifies the location to which the item agency shipped the item.	PhysicalAddressType, UnstructuredAddress
PhysicalAddressType	Specifies the type of location to which the item agency shipped the item. This element always specifies the value "Pickup Location".	Scheme, Value
RequestedActionType	Specifies the action requested by the message. Present only in the AcceptItem message, this element always specifies the value "Hold for Pickup".	(none)
RequestIdentifierValue	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 has shipped the item.	PhysicalAddress
Scheme	Specifies the URL of a page that lists all valid values of the Value element with which this element is paired.	(none)
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, ItemIdentifierValue
UniqueRequestId	Specifies request identification information.	UniqueAgencyId, RequestIdentifierValue
UniqueUserId	Specifies user identification information.	UniqueAgencyId, UserIdentifierValue
UnstructuredAddress	Specifies pickup location information at the user agency.	UnstructuredAddressType, UnstructuredAddressData
UnstructuredAddressData	Specifies the delivery stop at the pickup location.	(none)
UnstructuredAddressType	Specifies the type of pickup location information contained in the UnstructuredAddressData element with which this element is paired. This element always contains the value "Delivery Stop".	Scheme, Value
UnstructuredPersonalUserName	Specifies the requesting user's name in an unstructured format as it is stored by the User Agency's Circulation Application.	(none)
UserAddressInformation	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"> • Name Information (query for the user's name) • User Address Information (query for the user's email address) • Visible User Id (query for the VisibleUserId value in the user's record) • Block Or Trap (query for user's borrowing privileges) 	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, UserAddressInformation

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. INN-REACH DCB maps the terms used at the User Agency's Circulation Application (for example, "Undergraduate") to central patron types in the INN-Reach Catalog.	UniqueAgencyId, AgencyUserPrivilegeType, ValidToDate
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.</p> <p>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"> • 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). • If the expiration date is earlier than the current date, the system prevents the user from continuing with the request. • If user's record does not contain an expiration date, this element can be omitted from the LookupUserResponse 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. 	(none)
Value	Specifies data specific to the element in which this sub-element is embedded. For more information on a specific use of this sub-element, see the description of the parent element.	(none)
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.

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 INNREACH DCB.

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

Triggering Event and Event Location	Initiating Application	Service Initiated	Responding Application
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)	None*
Item agency ships item	INN-REACH DCB	ItemShipped (sent to User Agency's Circulation Application) CheckOutItem (sent to Item Agency's Circulation Application)	None*
Item is received by user agency	INN-REACH DCB	AcceptItem (sent to User Agency's Circulation Application)	None*
User cancels a request for an Item	INN-REACH DCB	ItemRequestCancelled (sent to User Agency's Circulation Application and Item Agency's Circulation Application)	None*
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)	None*
Item agency receives item	INN-REACH DCB	ItemReceived (sent to User Agency's Circulation Application) CheckInItem (sent to Item Agency's Circulation Application)	None*
User renews Item	INN-REACH DCB	ItemRenewed (sent to User Agency's Circulation Application) RenewItem (sent to Item Agency's Circulation Application)	None*
Item is recalled	INN-REACH DCB	ItemRecalled (sent to User Agency's Circulation Application and Item Agency's Circulation Application)	None*
Item is marked lost	INN-REACH DCB	CirculationStatusChangeReported (sent to User Agency's Circulation Application and Item Agency's Circulation Application)	None*
Item is marked 'claimed returned'	INN-REACH DCB	CirculationStatusChangeReported (sent to User Agency's Circulation Application and Item Agency's Circulation Application)	None*

* "None" indicates that no Response message is expected in this event. If the User Agency's Circulation Application returns a Response message in this case, 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.

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/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
            <Value datatype="string">zlo29</Value>
          </UniqueAgencyId>
        </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</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/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
            <Value datatype="string">zlo29</Value>
          </UniqueAgencyId>
          <RequestIdentifierValue datatype="string">27</RequestIdentifierValue>
        </UniqueRequestId>
        <RequestedActionType>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=Request
edActionType</Scheme>
            <Value datatype="string">Circulate</Value>
          </RequestedActionType>
          <UniqueUserId>
            <UniqueAgencyId>
              <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                <Value datatype="string">zloc9</Value>
              </UniqueAgencyId>
              <UserIdentifierValue datatype="string">millyzloc9</UserIdentifierValue>
            </UniqueUserId>
          </UniqueItemId>
          <UniqueAgencyId>
```

```

        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</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/IRCIKCD?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/IRCIKCD?target=get_scheme_values&scheme=Visibil
eItemIdentifierType</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/IRCIKCD?target=get_scheme_values&scheme=Visible
UserIdentifierType</Scheme>
                    <Value datatype="string">Barcode</Value>
                </VisibleUserIdentifierType>
            <VisibleUserIdentifier
datatype="string">millyzloc9</VisibleUserIdentifier>
            </VisibleUserId>
            <UserPrivilege>
                <UniqueAgencyId>
                    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                        <Value datatype="string">zloc9</Value>
                    </UniqueAgencyId>
                <AgencyUserPrivilegeType>
                    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=AgencyU
serPrivilegeType</Scheme>
                        <Value datatype="string">UDBcent3 Adult</Value>
                    </AgencyUserPrivilegeType>
                </UserPrivilege>
            </UserOptionalFields>
        </AcceptItem>
    </NCIPMessage>

```

Sample CheckInItem 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">
  <CheckInItem>
    <InitiationHeader>
      <FromAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
            <Value datatype="string">zloc8</Value>
          </UniqueAgencyId>
        </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</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/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</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/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
            <Value datatype="string">zloc8</Value>
          </UniqueAgencyId>
        </FromAgencyId>
      <ToAgencyId>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
            <Value datatype="string">7polr</Value>
```

```

        </UniqueAgencyId>
    </ToAgencyId>
</InitiationHeader>
<MandatedAction>
    <DateEventOccurred datatype="dateTime">2011-01-27T02
</MandatedAction>
<UniqueUserId>
    <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_values&scheme=UniqueA
gencyId</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=UniqueA
gencyId</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/IRCIRCD?target=get_scheme_values&scheme=UniqueA
gencyId</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=UniqueA
gencyId</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=UniqueA
gencyId</Scheme>
                            <Value datatype="string">7polr</Value>
                        </UniqueAgencyId>
                        <UserIdentifierValue datatype="string">111000111</UserIdentifierValue>
                    </UniqueUserId>
                <UniqueItemId>

```

```

    <UniqueAgencyId>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</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/IRCIIRC?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/IRCIIRC?target=get_scheme_values&scheme=Visibil
eItemIdentifierType</Scheme>
              <Value datatype="string">Barcode</Value>
            </VisibleItemIdentifierType>
          </VisibleUserIdentifierType>
          <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/IRCIIRC?target=get_scheme_values&scheme=Visible
UserIdentifierType</Scheme>
            <Value datatype="string">Barcode</Value>
          </VisibleUserIdentifierType>
        </VisibleUserIdentifier
datatype="string">millyzloc9</VisibleUserIdentifier>
        </VisibleUserId>
      <UserPrivilege>
        <UniqueAgencyId>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
            <Value datatype="string">7polr</Value>
          </UniqueAgencyId>
          <AgencyUserPrivilegeType>
            <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=AgencyU
serPrivilegeType</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=ItemRep
orted</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=UniqueA
gencyId</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">zloc9</Value>
            </UniqueAgencyId>
          </ToAgencyId>
        </InitiationHeader>
        <UniqueItemId>
          <UniqueAgencyId>
            <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?target=get_scheme_values&scheme=UniqueA
gencyId</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=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=Visibil
eItemIdentifierType</Scheme>

```

```

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

    <VisibleItemIdentifier
datatype="string">31304000530534</VisibleItemIdentifier>
    </VisibleItemId>
    </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=UniqueA
gencyId</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=UniqueA
gencyId</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=UniqueA
gencyId</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=UniqueA
gencyId</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/IRCIKCD?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/IRCIKCD?target=get_scheme_values&scheme=Visibil
eItemIdentifierType</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/IRCIKCD?target=get_scheme_values&scheme=Visible
UserIdentifierType</Scheme>
                <Value datatype="string">Barcode</Value>
            </VisibleUserIdentifierType>
            <VisibleUserIdentifier
datatype="string">111000111</VisibleUserIdentifier>
            </VisibleUserId>
            <UserPrivilege>
                <UniqueAgencyId>
                    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                        <Value datatype="string">7polr</Value>
                    </UniqueAgencyId>
                    <AgencyUserPrivilegeType>
                        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=AgencyU
serPrivilegeType</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/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>

```

```

        <Value datatype="string">zloc8</Value>
      </UniqueAgencyId>
    </FromAgencyId>
    <ToAgencyId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
          <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
    <UniqueUserId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
          <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
        <UserIdentifierValue datatype="string">mikezloc9</UserIdentifierValue>
      </UniqueUserId>
    <UniqueItemId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</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/IRCIKCD?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/IRCIKCD?target=get_scheme_values&scheme=Visibil
eItemIdentifierType</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/IRCIKCD?target=get_scheme_values&scheme=Visible
UserIdentifierType</Scheme>
        <Value datatype="string">Barcode</Value>
        </VisibleUserIdentifierType>
        <VisibleUserIdentifier
datatype="string">mikezloc9</VisibleUserIdentifier>
        </VisibleUserId>
        <UserPrivilege>
        <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
        <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
        <AgencyUserPrivilegeType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=AgencyU
serPrivilegeType</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/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                <Value datatype="string">zlo29</Value>
                </UniqueAgencyId>
            </FromAgencyId>
            <ToAgencyId>
                <UniqueAgencyId>
                <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                <Value datatype="string">zloc9</Value>
                </UniqueAgencyId>
            </ToAgencyId>
        </InitiationHeader>
        <UniqueItemId>
            <UniqueAgencyId>
            <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
            <Value datatype="string">zlo29</Value>
            </UniqueAgencyId>
            <ItemIdentifierValue datatype="string">i1185203</ItemIdentifierValue>
        </UniqueItemId>
    </ItemReceived>
</NCIPMessage>

```

```

    <UniqueUserId>
      <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</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/IRCIKCD?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/IRCIKCD?target=get_scheme_values&scheme=Visibil
eItemIdentifierType</Scheme>
              <Value datatype="string">Barcode</Value>
            </VisibleItemIdentifierType>
            <VisibleItemIdentifier
datatype="string">31184007247799</VisibleItemIdentifier>
              </VisibleItemIdentifier>
            <CallNumber datatype="string">Y/MYS/WESTALL,R</CallNumber>
          </ItemDescription>
        </ItemOptionalFields>
      <UserOptionalFields>
        <VisibleUserId>
          <VisibleUserIdentifierType>
            <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=Visible
UserIdentifierType</Scheme>
              <Value datatype="string">Barcode</Value>
            </VisibleUserIdentifierType>
            <VisibleUserIdentifier
datatype="string">millyzloc9</VisibleUserIdentifier>
              </VisibleUserIdentifier>
          <UserPrivilege>
            <UniqueAgencyId>
              <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                <Value datatype="string">zloc9</Value>
              </UniqueAgencyId>
            <AgencyUserPrivilegeType>
              <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=AgencyU
serPrivilegeType</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/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</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=UniqueA
gencyId</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=UniqueA
gencyId</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=UniqueA
gencyId</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/IRCIKCD?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/IRCIIRC?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>
    <UserOptionalFields>
    <VisibleUserId>
        <VisibleUserIdentifierType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?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/IRCIIRC?target=get_scheme_values&scheme=UniqueAgencyId</Scheme>
        <Value datatype="string">7polr</Value>
        </UniqueAgencyId>
        <AgencyUserPrivilegeType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?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>
    <ItemRequestCancelled>
        <InitiationHeader>
            <FromAgencyId>
                <UniqueAgencyId>
                <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?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/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
        <Value datatype="string">7polr</Value>
        </UniqueAgencyId>
    </ToAgencyId>
</InitiationHeader>
<UniqueUserId>
    <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
        <Value datatype="string">zloc8</Value>
        </UniqueAgencyId>
        <UserIdentifierValue datatype="string">p1250287</UserIdentifierValue>
    </UniqueUserId>
    <UniqueItemId>
        <UniqueAgencyId>
            <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
            <Value datatype="string">7polr</Value>
            </UniqueAgencyId>
            <ItemIdentifierValue datatype="string">0000300661535</ItemIdentifierValue>
        </UniqueItemId>
    </RequestType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=Request
Type</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://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                    <Value datatype="string">zloc8</Value>
                </UniqueAgencyId>
            </FromAgencyId>
            <ToAgencyId>
                <UniqueAgencyId>
                    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                    <Value datatype="string">zloc9</Value>
                </UniqueAgencyId>
            </ToAgencyId>
        </InitiationHeader>
        <UniqueUserId>
            <UniqueAgencyId>

```

```

        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
        <Value datatype="string">zloc9</Value>
        </UniqueAgencyId>
        <UserIdentifierValue datatype="string">millyzloc9</UserIdentifierValue>
</UniqueUserId>
<UniqueItemId>
        <UniqueAgencyId>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
        <Value datatype="string">zloc8</Value>
        </UniqueAgencyId>
        <ItemIdentifierValue datatype="string">i1431180</ItemIdentifierValue>
</UniqueItemId>
<RequestType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=Request
Type</Scheme>
        <Value datatype="string">hold</Value>
</RequestType>
<RequestScopeType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=Request
ScopeTypes</Scheme>
        <Value datatype="string">item</Value>
</RequestScopeType>
<DateOfUserRequest datatype="dateTime">2011-01-28T00:23:46Z</DateOfUserRequest>
<ItemOptionalFields>
        <BibliographicDescription>
                <Author datatype="string">Frechette, Ellen Carley</Author>
                <Title datatype="string">Test and essay writing : exercise book/ Ellen
Carley Frechette, project editor</Title>
        <MediumType>
                <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=MediumT
ype</Scheme>
                <Value datatype="string">undefined</Value>
                </MediumType>
        </BibliographicDescription>
        <ItemDescription>
                <CallNumber datatype="string">PE1408 .T42 1986</CallNumber>
        </ItemDescription>
</ItemOptionalFields>
<UserOptionalFields>
        <VisibleUserId>
                <VisibleUserIdentifierType>
                        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=Visible
UserIdentifierType</Scheme>
                        <Value datatype="string">Barcode</Value>
                        </VisibleUserIdentifierType>
                <VisibleUserIdentifier
datatype="string">millyzloc9</VisibleUserIdentifier>
                </VisibleUserId>
        <UserPrivilege>
                <UniqueAgencyId>
                        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                        <Value datatype="string">zloc9</Value>

```

```

        </UniqueAgencyId>
        <AgencyUserPrivilegeType>
            <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=AgencyU
serPrivilegeType</Scheme>
                <Value datatype="string">UDBcent3 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/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                        <Value datatype="string">zlo29</Value>
                    </UniqueAgencyId>
                </FromAgencyId>
                <ToAgencyId>
                    <UniqueAgencyId>
                        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                            <Value datatype="string">7srsi</Value>
                        </UniqueAgencyId>
                    </ToAgencyId>
                </InitiationHeader>
                <UniqueRequestId>
                    <UniqueAgencyId>
                        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                            <Value datatype="string">zlo29</Value>
                        </UniqueAgencyId>
                    <RequestIdentifierValue datatype="string">155</RequestIdentifierValue>
                </UniqueRequestId>
                <UniqueItemId>
                    <UniqueAgencyId>
                        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                            <Value datatype="string">zlo29</Value>
                        </UniqueAgencyId>
                    <ItemIdentifierValue datatype="string">i1970231</ItemIdentifierValue>
                </UniqueItemId>
                <DateShipped datatype="dateTime">2011-03-31T22:50:41Z</DateShipped>
                <ShippingInformation>
                    <PhysicalAddress>
                        <PhysicalAddressType>
                            <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=Physica
lAddressType</Scheme>

```

```

        <Value datatype="string">Pickup Location</Value>
    </PhysicalAddressType>
    <UnstructuredAddress>
        <UnstructuredAddressType>
            <Scheme
datatype="string">http://www.niso.org/ncip/v1_0/impl/schemes/unstructuredaddresstype/</Sc
heme>
                <Value datatype="string">Delivery stop</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/IRCIIRC?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/IRCIIRC?target=get_scheme_values&scheme=Visibil
eItemIdentifierType</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/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                        <Value datatype="string">cent3</Value>
                    </UniqueAgencyId>
                </FromAgencyId>
            <ToAgencyId>
                <UniqueAgencyId>

```

```

        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
        <Value datatype="string">7polr</Value>
        </UniqueAgencyId>
    </ToAgencyId>
</InitiationHeader>
<VisibleUserId>
    <VisibleUserIdentifierType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=Visible
UserIdentifierType</Scheme>
        <Value datatype="string">Barcode</Value>
        </VisibleUserIdentifierType>
        <VisibleUserIdentifier
datatype="string">1000402159403</VisibleUserIdentifier>
        </VisibleUserId>
    <UserElementType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UserEle
mentType</Scheme>
        <Value datatype="string">Name Information</Value>
        </UserElementType>
    <UserElementType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UserEle
mentType</Scheme>
        <Value datatype="string">User Address Information</Value>
        </UserElementType>
    <UserElementType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UserEle
mentType</Scheme>
        <Value datatype="string">Visible User Id</Value>
        </UserElementType>
    <UserElementType>
        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UserEle
mentType</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/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                    <Value datatype="string">zloc9</Value>
                    </UniqueAgencyId>
                </FromAgencyId>
            <ToAgencyId>
                <UniqueAgencyId>

```

```

        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</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=UniqueA
gencyId</Scheme>
        <Value datatype="string">cent3</Value>
        </UniqueAgencyId>
        <UserIdentifierValue datatype="string">barcode123</UserIdentifierValue>
    </UniqueUserId>
    <UserOptionalFields>
        <VisibleUserId>
            <VisibleUserIdentifierType>
                <Scheme datatype="string">http://blah.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/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                <Value datatype="string">cent3</Value>
                </UniqueAgencyId>
                <AgencyUserPrivilegeType>
                    <Scheme datatype="string">http://blah.com</Scheme>
                    <Value datatype="string">local</Value>
                </AgencyUserPrivilegeType>
                <ValidToDate datatype="string">2015-02-23T00:00:00Z</ValidToDate>
            </UserPrivilege>
            <UserPrivilege>
                <UniqueAgencyId>
                    <Scheme
datatype="string">http://10.3.88.154:6601/IRCIIRC?target=get_scheme_values&scheme=UniqueA
gencyId</Scheme>
                    <Value datatype="string">cent3</Value>
                    </UniqueAgencyId>
                    <AgencyUserPrivilegeType>
                        <Scheme datatype="string">http://blah.com</Scheme>
                        <Value datatype="string">ordinary</Value>
                    </AgencyUserPrivilegeType>
                    <ValidToDate datatype="string">2015-02-23T00:00:00Z</ValidToDate>
                </UserPrivilege>
                <UserAddressInformation>
                    <ElectronicAddress>
                        <ElectronicAddressType>
                            <Scheme datatype="string">http://blah.com</Scheme>
                            <Value datatype="string">email</Value>

```

```

        </ElectronicAddressType>
        <ElectronicAddressData
datatype="string">lindaz@iii.com</ElectronicAddressData>
        </ElectronicAddress>
    </UserAddressInformation>
</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=UniqueA
gencyId</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/IRCIRCD?target=get_scheme_values&scheme=UniqueA
gencyId</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=UniqueA
gencyId</Scheme>
                        <Value datatype="string">7polr</Value>
                    </UniqueAgencyId>
                    <ItemIdentifierValue datatype="string">0000300661535</ItemIdentifierValue>
                </UniqueItemId>
                <DesiredDateDue datatype="dateTime">2011-02-25T04:00:00Z</DesiredDateDue>
            </RenewItem>
        </NCIPMessage>

```