

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.

Fall 2011

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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 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 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 | |

| Message | Application | Profile Required Elements | Comments |
|---------------------------------|------------------|---|----------|
| | | UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier UserPrivilege UniqueAgencyId AgencyUserPrivilegeType | |
| CheckInItem | INN-REACH DCB | InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId | |
| | | 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 | |

| Message | Application | Profile Required Elements | Comments |
|----------------|------------------|---|----------|
| | | ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemId VisibleItemIdentifier Type VisibleItemIdentifier Call Number | |
| | | UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier UserPrivilege UniqueAgencyId AgencyUserPrivilegeType | |
| 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 | |

| Message | Application | Profile Required Elements | Comments |
|--------------|------------------|---|----------|
| | | UniqueItemId UniqueAgencyId ItemIdentifierValue | |
| | | DateDue | |
| | | ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemId VisibleItemIdentifier Type VisibleItemIdentifier Call Number | |
| | | 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 | |

| Message | Application | Profile Required Elements | Comments |
|--------------|------------------|---|----------|
| | | UserOptionalFields VisibleUserId VisibleUserIdentifierType VisibleUserIdentifier User Privilege UniqueAgencyId AgencyUserPrivilegeType | |
| ItemReceived | INN-REACH DCB | InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId | |
| | | UniqueItemId UniqueAgencyId ItemIdentifierValue | |
| | | UniqueUserId UniqueAgencyId UserIdentifierValue | |
| | | 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 | |

| Message | Application | Profile Required Elements | Comments |
|----------------------|------------------|---|----------|
| | | UniqueItemId UniqueAgencyId ItemIdentifierValue DateDue | |
| | | ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemId VisibleItemIdentifier Type VisibleItemIdentifier Call Number | |
| | | 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 | |

| Message | Application | Profile Required Elements | Comments |
|-------------|------------------|--|--|
| | | 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. |
| | | 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 | |

| Message | Application | Profile Required Elements | Comments |
|--------------------|---|--|----------|
| | | ItemOptionalFields BibliographicDescription Author Title MediumType ItemDescription VisibleItemIId VisibleItemIdentifier Type VisibleItemIdentifier Call Number | |
| RenewItem | INN-REACH DCB | InitiationHeader FromAgencyId UniqueAgencyId ToAgencyId UniqueAgencyId | |
| | | MandatedAction DateEventOccurred | |
| | | UniqueUserId UniqueAgencyId UserIdentifierValue | |
| | | UniqueItemIId 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 | |

| Message | Application | Profile Required Elements | Comments |
|---------|-------------|---|---|
| | | 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) |

| Element | Description | Sub-elements |
|-----------------------|--|--|
| 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 the INN-Reach consortium, enabling the user to continue with the request. | ElectronicAddressType, ElectronicAddressData |
| 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 |

| Element | Description | Sub-elements |
|-------------------------|--|---|
| 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 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 |
| 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) |

| Element | Description | Sub-elements |
|------------------------------|--|---|
| 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 |

| Element | Description | Sub-elements |
|---------------------------|--|--|
| 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* |

* "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">Hold for Pickup</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/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-
28T03:15:26Z</DateEventOccurred>
    </MandatedAction>
    <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">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=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">2011-01-27T02</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>
</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/IRCIIRC?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>
        <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/IRCIKCD?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/IRCIKCD?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/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>
    <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">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/IRCIIRC?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/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">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/IRCIIRC?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/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>

```

```
</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=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>
      <UniqueUserId>
        <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>
          <UserIdentifierValue datatype="string">mikezloc9</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">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=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>
          <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>
                  </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>
              </UserOptionalFields>
            </ItemOptionalFields>
          </UniqueAgencyId>
        </UniqueItemIdentifierType>
      </Scheme>
    </Value>
  </ItemIdentifierType>
  <ItemIdentifier
datatype="string">31184007247799</ItemIdentifier>
  </ItemIdentifier>
  <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>
  </UserOptionalFields>
</ItemOptionalFields>
</ItemIdentifierType>
</Scheme>

```

```

        </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>
    </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/IRCIIRC?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/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">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/IRCIIRC?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/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>
            </UserOptionalFields>
        </UserOptionalFields>
    </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=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>
    <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>
    <RequestType>
      <Scheme
datatype="string">http://10.3.88.154:6601/IRCIRCD?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/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">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/IRCIKCD?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/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">7rsrsi</Value>
        </UniqueAgencyId>
      </ToAgencyId>
    </InitiationHeader>
  </ItemShipped>
</NCIPMessage>

```

```

</InitiationHeader>
<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">155</RequestIdentifierValue>
  </UniqueRequestId>
  <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">i1970231</ItemIdentifierValue>
    </UniqueItemId>
    <DateShipped datatype="dateTime">2011-03-31T22:50:41Z</DateShipped>
    <ShippingInformation>
      <PhysicalAddress>
        <PhysicalAddressType>
          <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?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/imp1/schemes/unstructuredaddressype/</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/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>
              </Scheme>
            </VisibleItemId>
          </ItemDescription>
        </BibliographicDescription>
      </ItemOptionalFields>
    </UniqueItem>
  </UniqueRequest>
</InitiationHeader>

```

```

        <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=UniqueA
gencyId</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=UniqueA
gencyId</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=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/IRCIRCD?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/IRCIRCD?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/IRCIKCD?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/IRCIKCD?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/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">cent3</Value>
                        </UniqueAgencyId>
                    </ToAgencyId>
                </ResponseHeader>
                <UniqueUserId>
                    <UniqueAgencyId>
                        <Scheme
datatype="string">http://10.3.88.154:6601/IRCIKCD?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://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=UniqueA
gencyId</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">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/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-
27T22:05:55Z</DateEventOccurred>
            </MandatedAction>
        </RenewItem>
    </NCIPMessage>

```



```

    <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>

```