



**MINNESOTA
JUDICIAL BRANCH**

Court Integration Services

MNCIS E-Filing Technical Overview Electronic Submission Services

Consumer Documentation

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1. Document Revision History

Date	Author	Revision Highlights
5/1/2007	R. Gosewisch	Document created.
7/13/2007	R. Gosewisch	Updated the Message Validation section.
8/2/2007	R. Gosewisch	Updated the Message Validation section to include the SOAP fault that could occur as a result of a deadlock.
3/12/2008	R. Gosewisch	Standardized format; updated correlation section; removed information that is specific to criminal case initiation submission services – there is now separate consumer documentation for those services.
4/10/2008	R. Gosewisch	Added some additional information about e-file IDs; added some best practice suggestions  and important notes  .
6/17/2008	R. Gosewisch	Various minor corrections and updates.

2. Preface

This document gives a technical overview of the e-filing or electronic submission services available for MNCIS (Minnesota Court Information System), the case management system for the district courts of Minnesota. The information provided here is intended for technical resources that will be modifying or creating applications that will submit messages to the courts and consume responses that result from those submissions.

This document provides information that is common to all of the submission services available from Court Integration Services. For additional information about a specific submission service, refer to the page for that service on the Court Integration Services website.

See the *Integration Services Technical Overview* document for additional information on how to use Court Integration Services.

3. Overview

An electronic submission service allows authorized court business partners to electronically submit transactions to the court, for purposes of updating the court's case management system. These transactions, or messages, must conform to a specified CourtXML schema. Refer to the Court Integration Services website for a complete list of submission services that are available.

Some submission messages are designed to initiate cases in MNCIS, and others add or update information on existing court cases. These messages are validated, and if valid, they update the MNCIS database. MNCIS provides the capability to have some types of submission messages routed to a workflow queue for review and acceptance by an

authorized court user, prior to the database being updated. Whether or not a particular type of e-file is routed to a MNCIS workflow queue for court user review and acceptance is something that is decided by an individual county court administrator.

Submission messages would typically be formatted and generated by a partner application that is authorized to submit information to the courts electronically. For example, a case management application used in a Prosecutor's office might be modified to use the data entered into that case management system to format a criminal complaint message in the CourtXML format that can be used to initiate the corresponding criminal court case in MNCIS.

4. Submit/Response Messaging

A submit/response message exchange is the typical messaging scenario used by the services that make updates to MNCIS. An update message is submitted via a service, and a corresponding response message is sent back to the submitter, from the service, with information about whether the submission was successful or not, and potentially, whether the submission is pending review by a court user.

Messages will be formatted as SOAP envelopes with all of the appropriate headers. Refer to the *Integration Services Technical Overview* document for information on how the SOAP envelope and headers will be formatted.

The body of these submission and response messages are in the form of CourtXML documents. Each submission service schema specifies the required format for the submission message, as well as the format for the related response message that will be sent back to the submitter.

There are sample submission and response messages for each submission service available on the Court Integration Services website.

4.1. Submission Messages

Submission messages must conform to the appropriate CourtXML message schema specified for the service. The information covered here is common to all MNCIS e-file submission services. Refer to the documentation for a specific e-file service for additional information about that service and the schemas that it uses. The CourtXML schemas represent the 'format of record' for each service.

4.1.1. EFileID and SubmittingAgencyORI

Every submission message intended for MNCIS must specify an EFileID and a SubmittingAgencyORI. These elements are common to every submission service message schema. In MNCIS e-filing functionality, the concatenation of these two elements represents a unique e-filing instance for a given e-file type (e.g. criminal complaint, attorney assignment). Thus, for example, the same submitting agency cannot

submit two criminal complaint e-files with the same EFileID. Any submission of an e-file message with the same [EFile ID + Submitting Agency ORI] as one that has already been submitted will be rejected as a duplicate. This is true even if the first instance was rejected for some reason.



Important note: If correlation functionality is being used (covered in a subsequent section of this document), the EFileID must be unique **across all e-file types**. Thus, in the context of correlation functionality, the following use of e-file IDs is not acceptable:

<u>E-File Type</u>	<u>EFileID</u>	<u>Submitting Agency</u>
Citation	123	MN062105J
Complaint	123	MN062105J

4.1.1.1. EFileID

An EFileID is a unique identifier, assigned by the submitting agency. It can be up to 50 characters in length. The submitting agency decides on a numbering/formatting scheme for this ID.



Best practice suggestion: Use a unique e-file numbering scheme for each submission message type that is used.



Best practice suggestion: For e-files in which the destination court may be trying to match an e-filed document in a workflow queue to a paper document, it may be worthwhile to have the EFileID include, or reference a number that actually appears on the paper document.

This is an example of an EFileID format:

```
<EFileID>  
    <ID> Complaint-2124048-17550081-1</ID>  
</EFileID>
```

4.1.1.2. SubmittingAgencyORI

The SubmittingAgencyORI is the ORI of the entity that electronically submitted the message to the Court Integration Broker.

A business partner that wishes to submit documents to the court must have an Agency ORI identifier. If the agency does not have such an identifier, work with the court administrator to determine how to go about obtaining an ORI for the submitting agency.

Example:

```
<SubmittingAgencyORI>  
  <ID>MN02706IJ</ID>  
</SubmittingAgencyORI>
```

Note: Case initiating e-files (e.g. criminal complaints, tab charges or citations) may also specify a ProsecutingAgencyORI. This may or may not be the same agency as the SubmittingAgencyORI for a given submission message.

4.1.2. Correlation IDs

MNCIS e-filing functionality allows for the use of a Correlation ID with some types of submission messages. A Correlation ID in a given message identifies a prior message submitted to MNCIS to which the current message is associated, and upon which the current message is dependent.

For example, a criminal complaint message may have been submitted to the court and is in a workflow queue awaiting probable cause determination by a judge. An attorney assignment message may be submitted subsequently, by the agency that submitted the complaint, to identify the specific attorney that will be prosecuting the case. The attorney assignment message can be submitted without the actual court case number by linking the message to the e-file upon which it is dependent.

The attorney assignment message would specify a Correlation ID (essentially, the EFileID of the message that was submitted to create the case) that links the attorney assignment message to the criminal complaint message submitted previously. When the criminal complaint message is accepted and creates a court case, the attorney assignment message will subsequently be processed for that case. If the criminal complaint message is rejected, the attorney assignment message would also be rejected since it is linked, or 'correlated' to the complaint message.

Submission messages can only be correlated to a prior message from the same SubmittingAgencyORI.

Refer to specific submission service documentation for any additional information about the use of Correlation IDs with that service.

4.2. Use of Simple Types in Submission Messages

CourtXML message schemas list, or enumerate, the valid values for elements or attributes that represent MNCIS codes. These codes and their descriptions have been implemented as a set of simple type schemas and companion files. Refer to the Court

Integration Services website for additional information on simple type file formats, and the RSS feed that is available for receiving updates to these files.

In the message schema for a specific submission service, the simple type for elements or attributes that represent MNCIS codes will be indicated with a 'type' designation that reflects the corresponding simple type schema and companion file for that code. For example, the CourtJurisdictionORI > ID element has a type named JudicialAgencyORIType. The corresponding schema and companion files for this element are named:

JudicialAgencyORIType.xsd (schema)
JudicialAgencyORIType.xml (companion file)

4.2.1. Code Values vs. Text Values and Use of xsi:nil

When formatting a submission message, you have the option of using the code value only, the text value only, or both the code and the text values for elements that represent codes. There is an attribute named 'code' that can be used to provide the code value for an element. If this attribute is used without supplying the corresponding text value, the 'xsi:nil' attribute must also be used, and set to "true" to indicate to the parser that the element text value was left blank intentionally. The following examples for a code of 'ISSUED' and a description of 'Issued Active' are equally acceptable:

Example 1: Text value only is provided

```
<WarrantStatusTypeText>Issued Active</WarrantStatusTypeText>
```

Example 2: Code value only is provided

```
<WarrantStatusTypeText code="ISSUED" xsi:nil="true"/>
```

Example 3: Both the code and the text value are provided

```
<WarrantStatusTypeText code="ISSUED">Issued Active</WarrantStatusTypeText>
```

Note: If only the 'code' attribute is provided without specifying xsi:nil="true", the message will result in a schema validation error because the enumeration constraint will fail. The parser will try to validate blank text against a list of enumerated text values.

4.2.2. Codes Filtered by CourtJurisdictionORI

While many code values are configured at a system-wide level, MNCIS permits some code values to be configured at a local or county level. For this reason, some simple type companion files contain additional attributes that document which codes are valid for which courts.

For these simple types, the associated companion file contains an additional value (type=CourtJurisdictionORI) that provides the ORI(s) for the court(s) to which the value

applies. This value can be used to restrict the choices to only those that apply to the court that is the destination of a message.

Here is an example entry from the **CommunityOfOffenseTextType** simple type file:

```
<EnumerationValue code="70J">  
  <Text>City of Jordan</Text>  
  <AssociatedValue type="InternalID">  
    <Text>50569</Text>  
  </AssociatedValue>  
  <AssociatedValue type="CourtJurisdictionORI">  
    <Text>MN070015J</Text>  
  </AssociatedValue>  
</EnumerationValue>
```

The value 'City of Jordan' (code '70J') is only valid for CourtJurisdictionORI MN070015J (Scott County District Court).

Some other examples of simple type files that contain the CourtJurisdictionORI attribute are:

CourtCalendarNameTextType
HearingLocationTextType
HearingSessionTypeTextType

Note: If a submission message is submitted to a court with a value that is not valid for that court, the message will be rejected, even though the message will be valid based on the schema.



Best Practice Suggestion: Submitting applications may want to limit the code value options in the source application to only those values that are valid for the court(s) to which they will submit e-files.

4.2.3. Obsolete Codes

When codes are no longer valid in MNCIS, they are updated with an 'obsolete' date. If a code is obsolete, the entry in the corresponding simple type companion file will carry an attribute called 'obsoleteDate'.

Obsolete codes may be valid in a notification message that is published from MNCIS, but they are not valid for submissions into MNCIS. If an obsolete value is used in a submission message, the message will be rejected, even though the message will be valid based on the schema.

Note: The rejection message when an obsolete code is used may only indicate that the code is invalid – the error text may not specifically indicate that the code is invalid because it is obsolete.



Best Practice Suggestion: Submitting applications should filter out codes with a current or past obsolete date.

4.3. Response Messages

There may be one or more response messages generated for a submission message, depending on the scenario. Responses will be returned to the 'ReplyTo' address specified in the SOAP header of the submission message. Response messages can be 'pushed' to a web service or an MQ Series queue, or pulled via a web service call. Refer to the *Integration Services Technical Overview* document for information on these methods for receiving response messages.

A given submission message will generate one of the following response scenarios:

1. A 'Pending' response with a subsequent 'Accepted' response
2. A 'Pending' response with a subsequent 'Rejected' response
3. An 'Accepted' response
4. A 'Rejected' response

4.3.1. Pending Response

Some e-file submissions may result in a response message that includes a <PendingCourtReview> element. Refer to the 'response' message schema for the particular submission service for the complete format of the response message.

A 'pending' response indicates that the e-filing has been routed to a MNCIS workflow queue for intervention/review by an authorized court user. An e-file could be directed to a workflow queue for one of the following reasons.

4.3.1.1. Forced by Org Chart

The specified e-file type (e.g. complaint, tab charge, attorney assignment, etc.) has been configured in MNCIS to be 'forced to a queue' for court user review and acceptance. Whether or not a particular e-file type is 'forced to a queue' is determined by court administration staff in each county that implements e-filing. The response message will contain a <PendingCourtReview> element:

```
<PendingCourtReview>  
    <ReasonText> Forced by OrgChart</ReasonText>  
</PendingCourtReview>
```

4.3.1.2. Possible Party Matches

When the defendant party information in the submission message is not designated with a unique party key, Odyssey will use selected party information from the message to execute party match logic. Refer to the 'Party Match' section in the Case Initiation Services documentation on the website for additional information on party matching.

When Odyssey identifies more than one 'possible' or 'exact' match for the party specified in the submission message, the e-filing will be routed to a workflow queue for court user intervention. The response message will contain a <PendingCourtReview> element:

```
<PendingCourtReview>  
  <ReasonText>Possible party matches</ReasonText>  
</PendingCourtReview>
```

4.3.1.3. Missing Offense Code Mapping

A valid corresponding MNCIS offense code could not be found for a statute ID specified in the message.

```
<PendingCourtReview>  
  <ReasonText>Missing offense code mapping</ReasonText>  
</PendingCourtReview>
```

The statute ID must reference a statute that is 'chargeable' and effective (non-repealed) as of the offense date of the charge. The MNCJSS (Minnesota Criminal Justice Statute Service) is the repository and authoritative source for Minnesota statutes. Refer to the documentation on Criminal Case Initiation submission services for information regarding charges.

4.3.1.4. Multiple Offense Code Mappings Exist

More than one MNCIS offense code was found for a statute ID specified in the message.

```
<PendingCourtReview>  
  <ReasonText>Multiple offense code mappings exist</ReasonText>  
</PendingCourtReview>
```

4.3.1.5. Missing Appear By Date

A citation e-file for a 'Criminal/Traffic Non-Mandatory' case (MNCIS case type 'VIB') does not include an 'Appear by Date', and there is no configuration in MNCIS to calculate this date for the specified county. An 'Appear by Date' is required for this case type.

```
<PendingCourtReview>  
  <ReasonText>Missing appear by date</ReasonText>  
</PendingCourtReview>
```

4.3.2. Rejection Response

A message may be rejected for a variety of reasons. These include schema validation errors, as well as business validation errors. Refer to the documentation for a specific submission service for more information regarding the data validation errors that may occur. [If the message had been previously 'pending', this would be the second response message for the submission message.]

Some errors, such as duplicate e-filings and schema validation errors are returned as SOAP fault responses. Errors that occur as a result of MNCIS data validation will be returned as a CourtXML response message. Refer to the 'response' message schema for the appropriate submission service for the complete definition of the response message.



Important note: As noted earlier, an e-file cannot be resubmitted with the same e-file ID, regardless of whether it was rejected with a CourtXML rejection response or a SOAP fault error. If an e-file is being resubmitted, it must specify a new e-file ID, or it will be rejected as a duplicate.

4.3.3. Accepted Response

When a message has resulted in an update to the MNCIS database, an 'accepted' response message will be sent to the submitter. [If the message had been previously 'pending', this would be the second response message for the submission message.] Refer to the 'response' message schema for the appropriate submission service for the complete definition of the response message.

4.4. Message Validation

Messages submitted to the State Integration Broker will be validated at various points. Refer to **Appendix A: High-Level Message Flow and Validation Diagram**.

4.4.1. State Integration Broker Validation

The Integration Broker validates the message before transforming it into a format that is consumable by MNCIS. This validation includes, for example:

- Schema validation (Does the message conform to the specified CourtXML schema?)
- Version validation (Does the message reference a valid, supported version of the schema?)
- Security validation (Does the submitter have access to use the service?)
- Code/Court ORI validation (Does the message reference a code that is not valid for the court ORI to which the message is being submitted?)

Refer to the SOAP Faults section of the *Integration Services Technical Overview* document for validation that is common to all query request and submission services. That document specifies the SOAP fault responses that could result from Integration Broker validation of the message.

Refer to **Appendix B: Validation Errors** in this document for additional broker validation errors that could occur with submission messages.

4.4.2. MNCIS Validation

If the message passes the validation performed by the integration broker, it is transformed into an XML format that is 'consumable' by MNCIS. MNCIS applies additional validation to the message, and will reject a message if it fails MNCIS validation rules.

Refer to the documentation for each specific submission service for a list of validations and that are implemented by MNCIS for that message type.

Refer to **Appendix B: Validation Errors** in this document for MNCIS validation errors could occur for any submission message type.

5. Notifications Resulting From Submission Messages

An update to the MNCIS case management application that occurs as a result of an e-filed message will generate the same types of notification messages that are generated when a corresponding manual update occurs.

Refer to documentation on the Court Integration Services website regarding the process for 'subscribing' to notifications messages.

6. Recalling Messages – Future Development

Future development will provide the capability to recall a message that has been submitted and is in a workflow queue, but not yet processed. When this functionality is available, documentation will be provided here.

7. Authorization to Use Submission Services

A business partner must be granted a specific right to use a submission service. Refer to the *Request Access* link on the Court Integration Services website for information about the process for requesting access to use any court integration services.

8. Message Retention

Submission and response messages are stored in a warehouse application, and are available for 30 days from the date the message is received by or generated from the

State Integration Broker. Messages are retained for this temporary time period for troubleshooting purposes.

Appendix A: High-Level Message Flow and Validation Diagram

Diagram 1

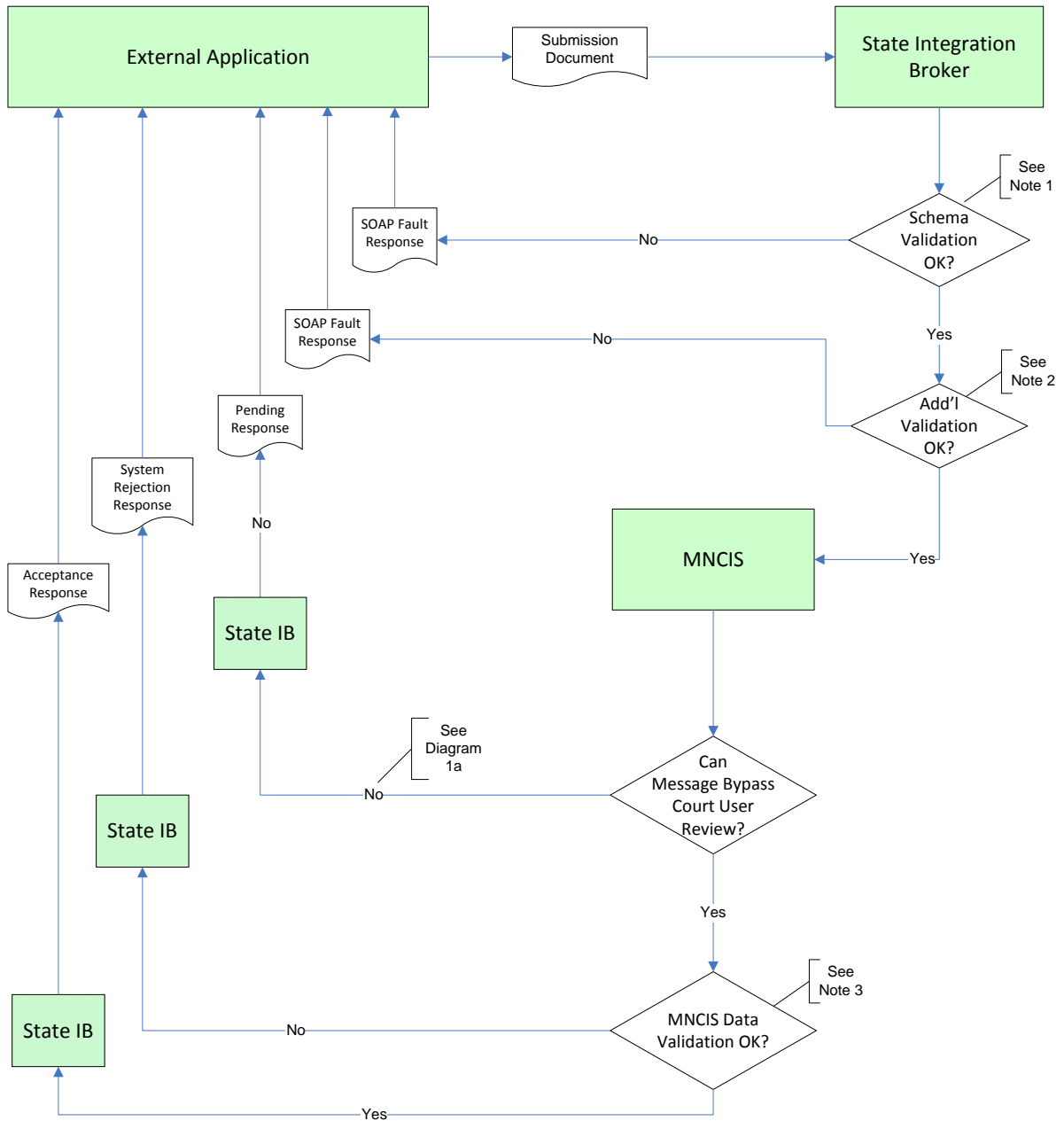
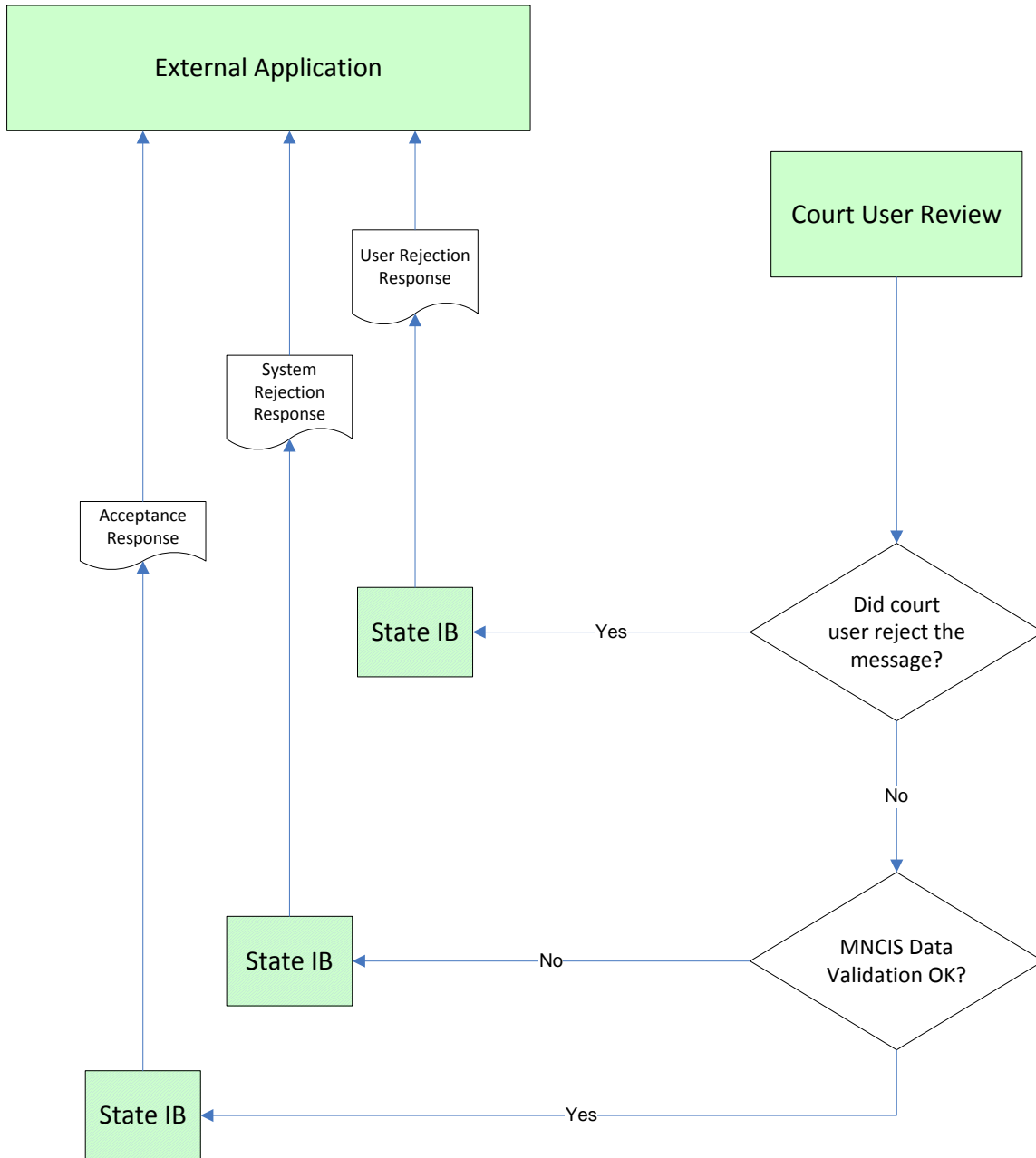


Diagram 1a – Court User Review

Messages that require court user interaction are directed to a workflow queue within the MNCIS application. From this user interface, an authorized court user may accept or reject an e-filed message.



Notes – Diagram 1

Note 1: Schema Validation

Every submission message will be validated against the corresponding CourtXML message schema. This validation ensures that the message contains required elements, that element and attribute values are of the proper data type and that the document is well-formed. This process also validates any codified values against the corresponding enumeration that is specified in the schema.

Any message that fails schema validation will be rejected.

Note 2: Additional Integration Broker Validation

The State IB performs additional validation of the message before transforming it into a format that is consumable by MNCIS. This includes checking that the message is using a valid schema version, and verifying that the submitter of the message has the proper security to submit the message.

Some additional code validation is done, based on filtering that may be specified in a simple type file (described earlier in this document).

For example, the criminal complaint schema lists 'City of Hibbing' as a valid value in the enumeration for the CommunityOfOffenseText element. However, the CommunityOfOffenseTextType.xml companion file specifies that this code is only valid for a CourtJurisdictionORI of MN009015J (Carlton County District Court).

If a message submitted for Blue Earth County District Court specified 'City of Hibbing' for the 'Community of Offense', the message would be rejected.

Note 3: MNCIS Data Validation

If the message passes schema validation, and the additional validation performed by the State IB, the message is transformed into a format that can be processed by MNCIS. Before MNCIS updates the database, it validates the data in the message according to the rules of the MNCIS application. Refer to the consumer documentation for each specific submission service for information regarding the type of validation that MNCIS performs on the data.

If a message fails MNCIS validation, it will be rejected.

Appendix B: Validation Errors

- Refer to the *Integration Services Technical Overview* document for other SOAP fault type errors that can occur with any integration service. That document provides some examples of SOAP validation errors when there are invalid code values or missing elements in a message.
- Refer to the consumer documentation for the specific submission service to see the validation errors that are specific to the service.

SOAP faults from Integration Broker validation:

#	Type	Error Code	Error Text	Description/Resolution
1	SOAP Fault	soap:InvalidMessage	Unknown Enumeration value ['value'] from SimpleTypeCompanion File [value] for court:[value]	This fault would occur if a value specified in the message is not valid for the target court ORI. Some simple type companion files specify filtering by Court ORI value. MNCIS provides for local configuration of codes, and this has been implemented in some areas of the MNCIS application.

SOAP faults from MNCIS validation:

#	Type	Error Code	Error Text	Description/Resolution
1	SOAP Fault	is:Duplicate	The E-Filing record has already been accepted.	The EFileID for the specified message type has already been submitted by the SubmittingAgencyORI, and has already been accepted.
2	SOAP Fault	is:Duplicate	The E-Filing record has already been rejected.	The EFileID for the specified message type has already been submitted by the SubmittingAgencyORI, and has already been rejected.
3	SOAP Fault	is:Duplicate	The E-Filing record has already been queued.	The EFileID for the specified message type has already been submitted by the SubmittingAgencyORI, and is currently pending court user review.