

Version 2.0

Background:

The Electronic Real Estate Recording Task Force (ERERTF) approved Version 1.1 consisting of two schemas for the State of Minnesota XML Standards, representing the Satisfaction and Certificate of Release documents. These schemas were designed as an extension to the Property Records Industry Association (PRIA) National Standards which are based on more of an attribute rather than element based schema. Meetings were held to discuss the information required by Minnesota State law and Minnesota county recorders for the Deed and Assignment of Mortgage documents which brought about discussions concerning the current attribute based schema versus a more element based schema. Following this discussion, the ERERTF was given a presentation on the difference between an attribute and element and the pros and cons of each in the schema world. (Please refer to AttributeVSElement.ppt)

An element based schema is more flexible and easier to maintain for future enhancements by allowing ease of changing relationships from a one to one to a one to many relationship and also requiring less structural changes due to elements being more versatile and independent instead of relying on a grouping relationships as attributes are. Elements created to represent smaller entities with the same business domain also enable business rules to be embedded in the schema instead of being an implementation or user training issue. Creating a separate schema for each document, but reusing element structures when appropriate, allows more document specific business rules to be dictated in the schema thus representing the business requirements of each document as close as possible.

As a result of these discussions, the ERERTF requested that the State of MN XML Standards for the Satisfaction and Certificate of Release be redesigned to represent more of an element based rather than an attribute based schema. Following these changes, a schema will also be designed for each of the Deed (Warranty, Limited Warranty and Quit Claim), Assignment of Mortgage and Certificate of Real Estate Value (CRV) documents which will also follow the more element based schema approach.

At this point, the Affidavit of Purchaser was no longer required by law.

Requirements

- State of Minnesota XML Standards will be designed for the following documents:
 - Satisfaction
 - Certificate of Release
 - Deed (Warranty, Limited Warranty, Quit Claim)
 - Assignment of Mortgage
 - CRV
- Identify information that is required by Minnesota state law for each document

- Identify information that is required by Minnesota county recorders for each document
- Create an element based schema for each document

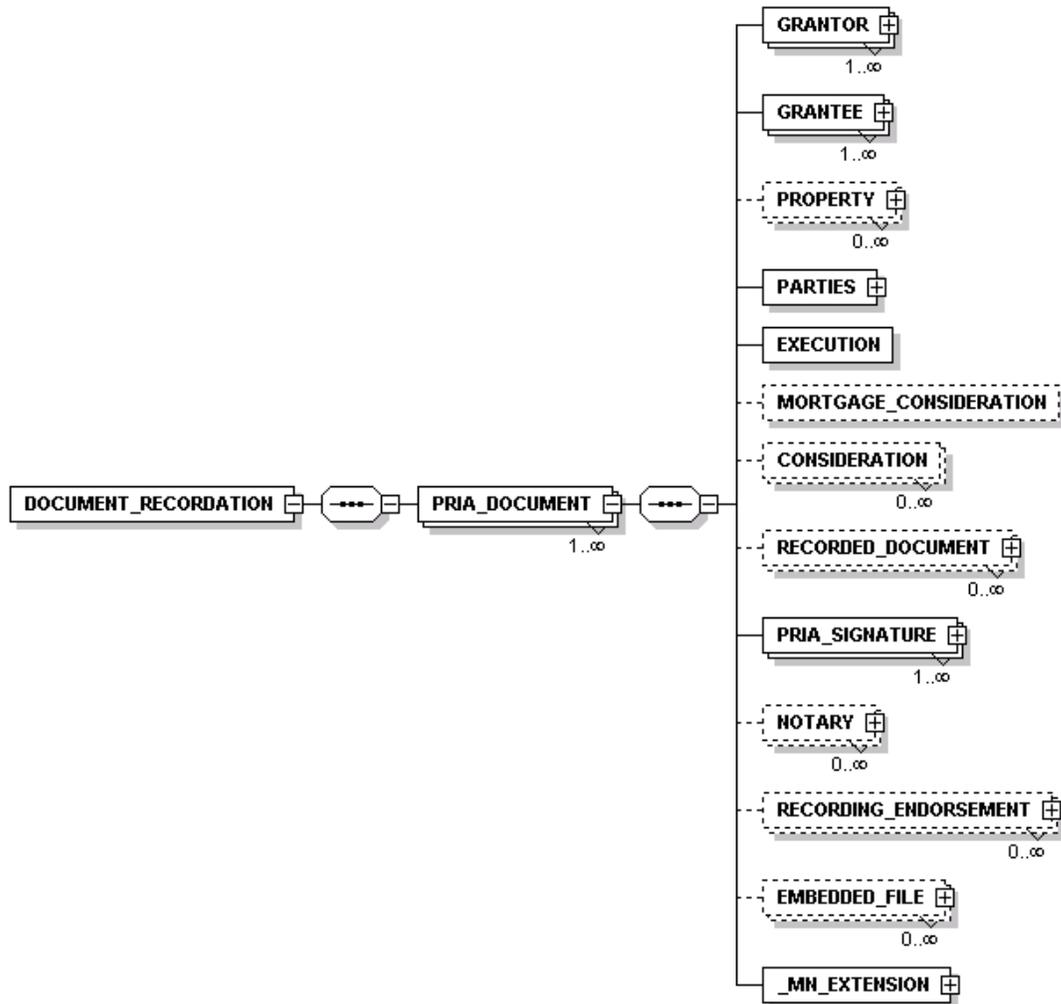
The following design standards were implemented:

1. Mixed case was used to decipher the words within one name
2. No underscores were used in the naming conventions
3. All document schema files started with an upper case value
4. All datatype files started with “dt”
5. All sub-schema files used to create the document schemas started with a lower case value
6. Typing of element structures was used to allow for reuse of these structures and ease of maintenance
7. Grouping of attributes was used to allow for reuse of these groupings and ease of maintenance
8. W3C XML Signature standards were followed for the representations of the persons signing the document (endorsers, notaries, county personnel, buyers and sellers of the property)
9. All elements started with an upper case letter
10. All attributes started with a lower case letter

The **SatisfactionVersionControlChanges.xls** and **CertificateOfReleaseVersionControlChanges.xls** spreadsheets give a detailed explanation of the mapping between the Version 1.1 and Version 2.0 elements and attributes.

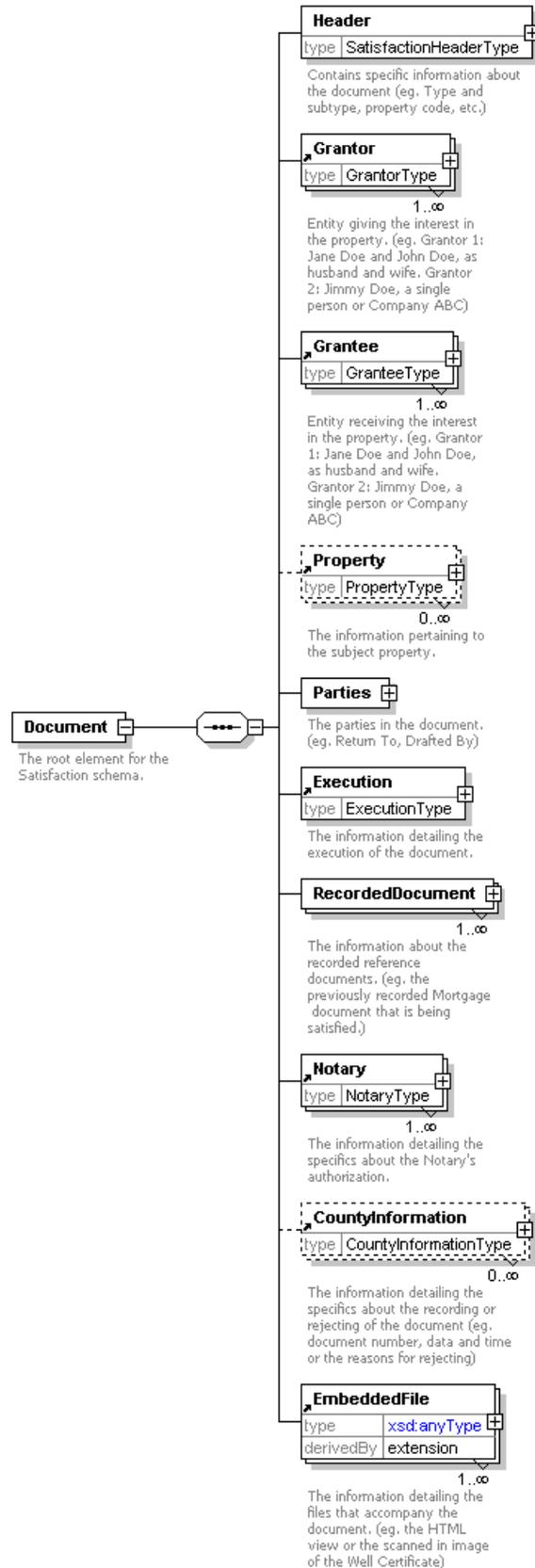
Satisfaction

The following diagram identifies **Version 1.1** of the **Minnesota Satisfaction Schema** :



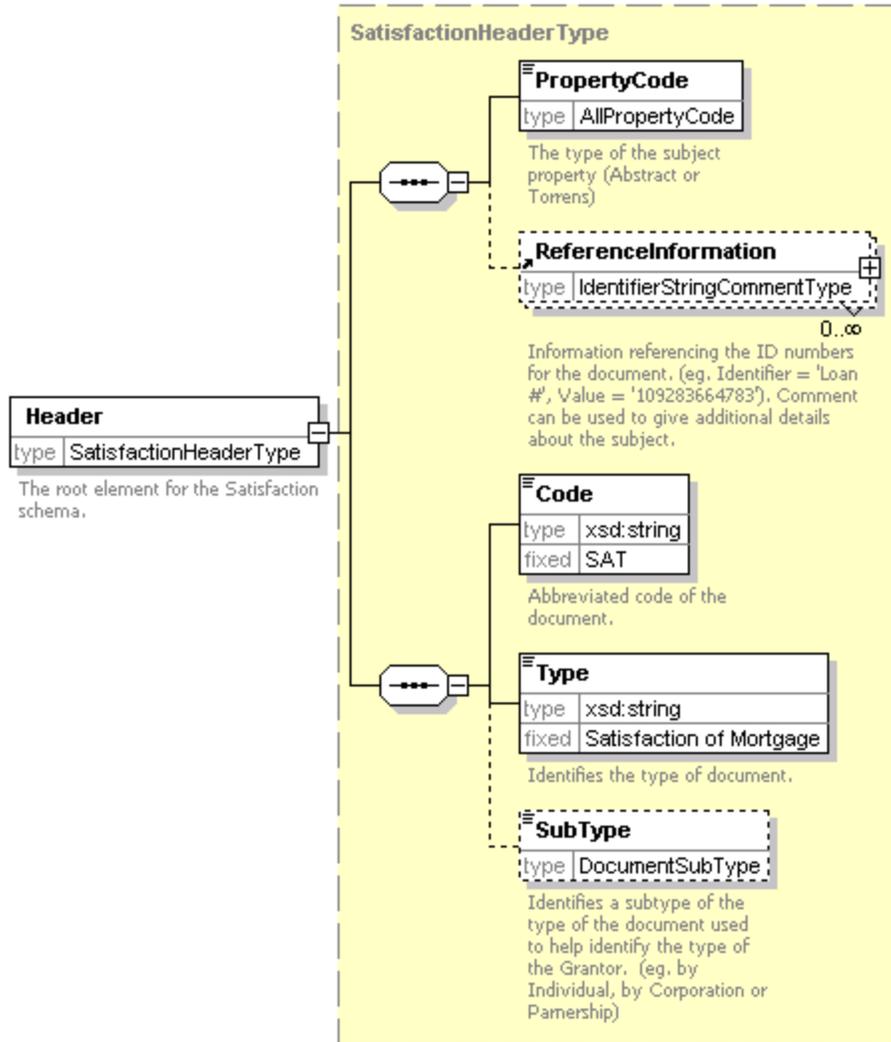
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The following diagram identifies **Version 2.0** of the **Minnesota Satisfaction Schema** :



1. Header

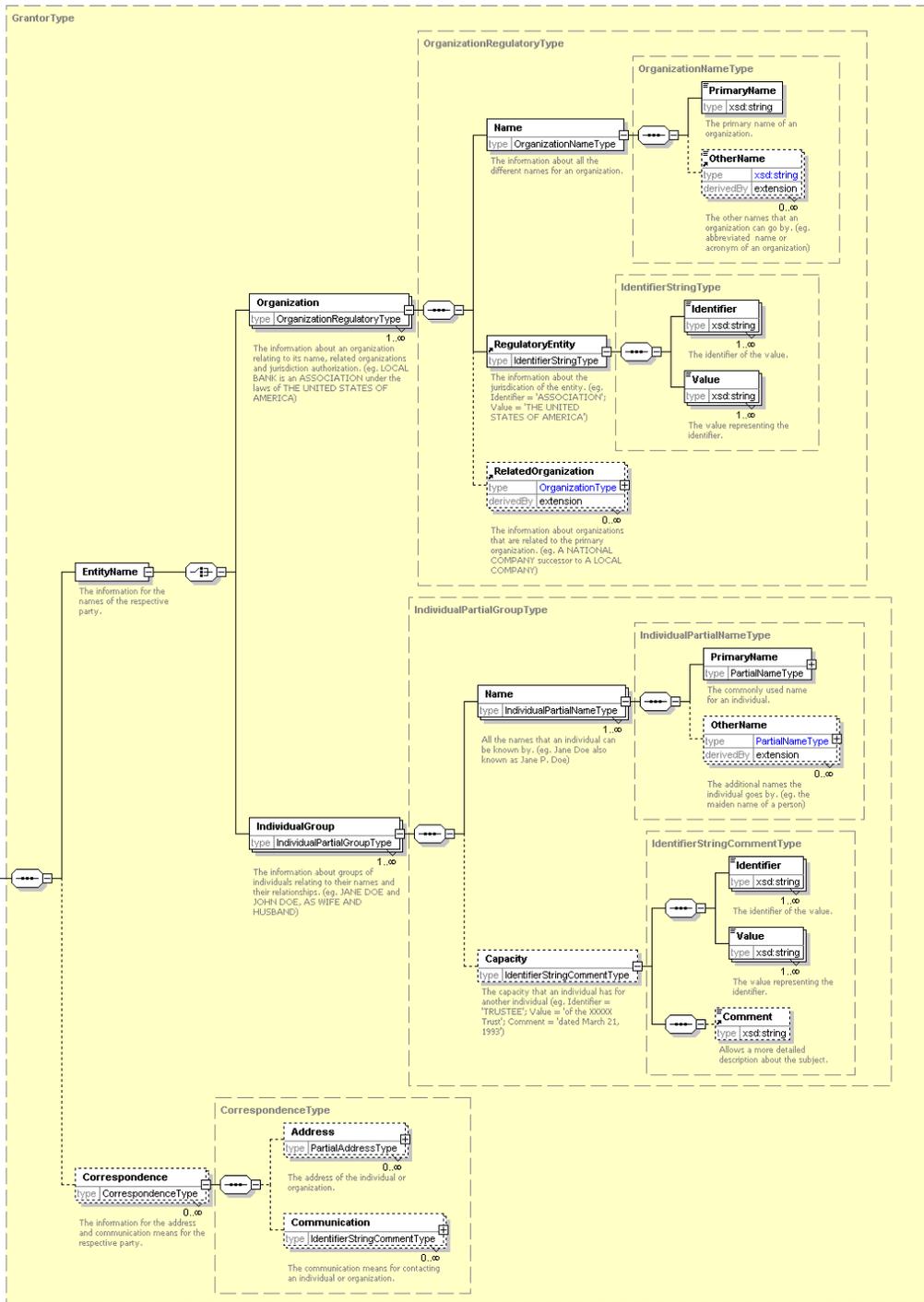
The Version 2.0 **Header** element structure contains the information from the elements and attributes of Version 1.1 **PRIA_DOCUMENT** element and its **_MN_EXTENSION** element structure. This information was identified using elements.



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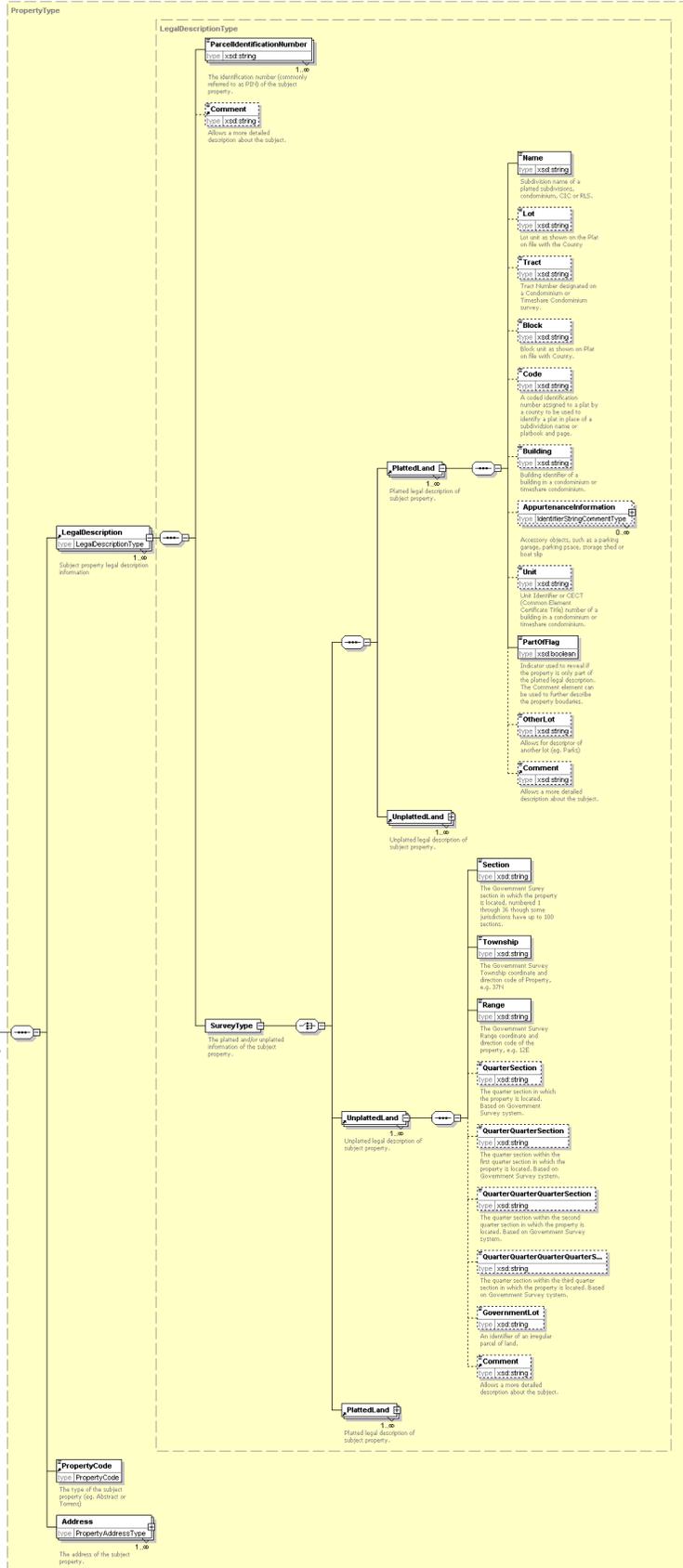
2. Grantor/Grantee

The Version 2.0 **Grantor** and **Grantee** element structures contain the information from the elements and attributes of Version 1.1 **GRANTOR** and **GRANTEE** element and their **_MN_EXTENSION** element structure, respectively. Communication information to hold the address and contact numbers was also added to each element.



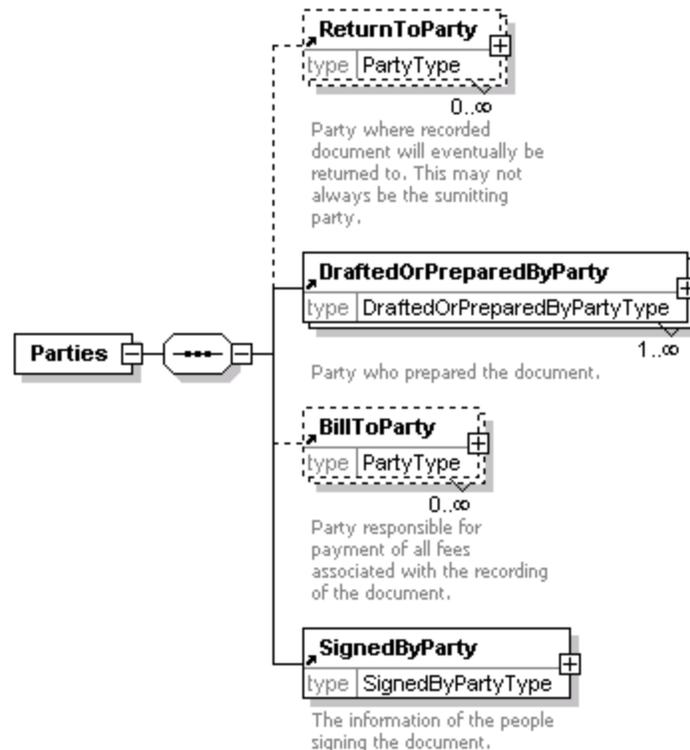
3. Property

The Version 2.0 **Property** element structure was mapped from the elements and attributes of Version 1.1 **PROPERTY** element and its **_MN_EXTENSION** element structure.



4. Parties

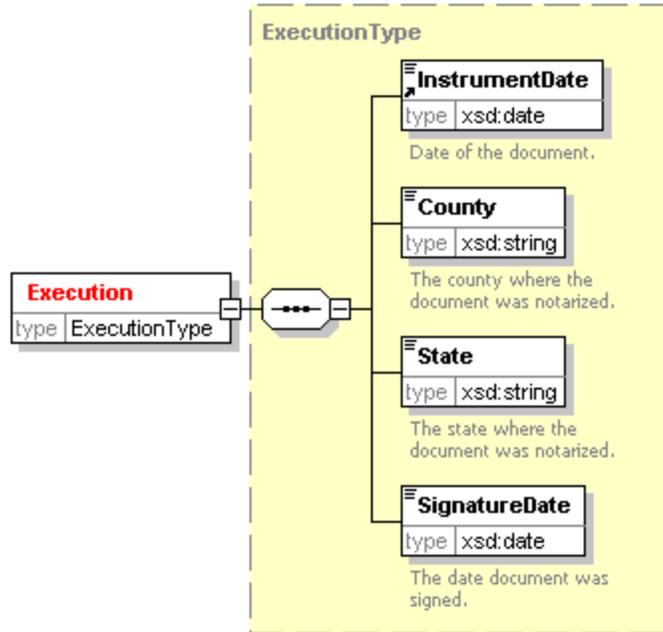
The Version 2.0 **Parties** element structure was mapped from the elements and attributes of Version 1.1 **PARTIES** element and its **_MN_EXTENSION** element structure. The Version 2.0 **SignedByParty** element structure was added to accommodate the persons that would be signing the document and it was mapped from the elements and attributes of Version 1.1 **PRIA_SIGNATURE** element and its **_MN_EXTENSION** element structure.



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5. Execution

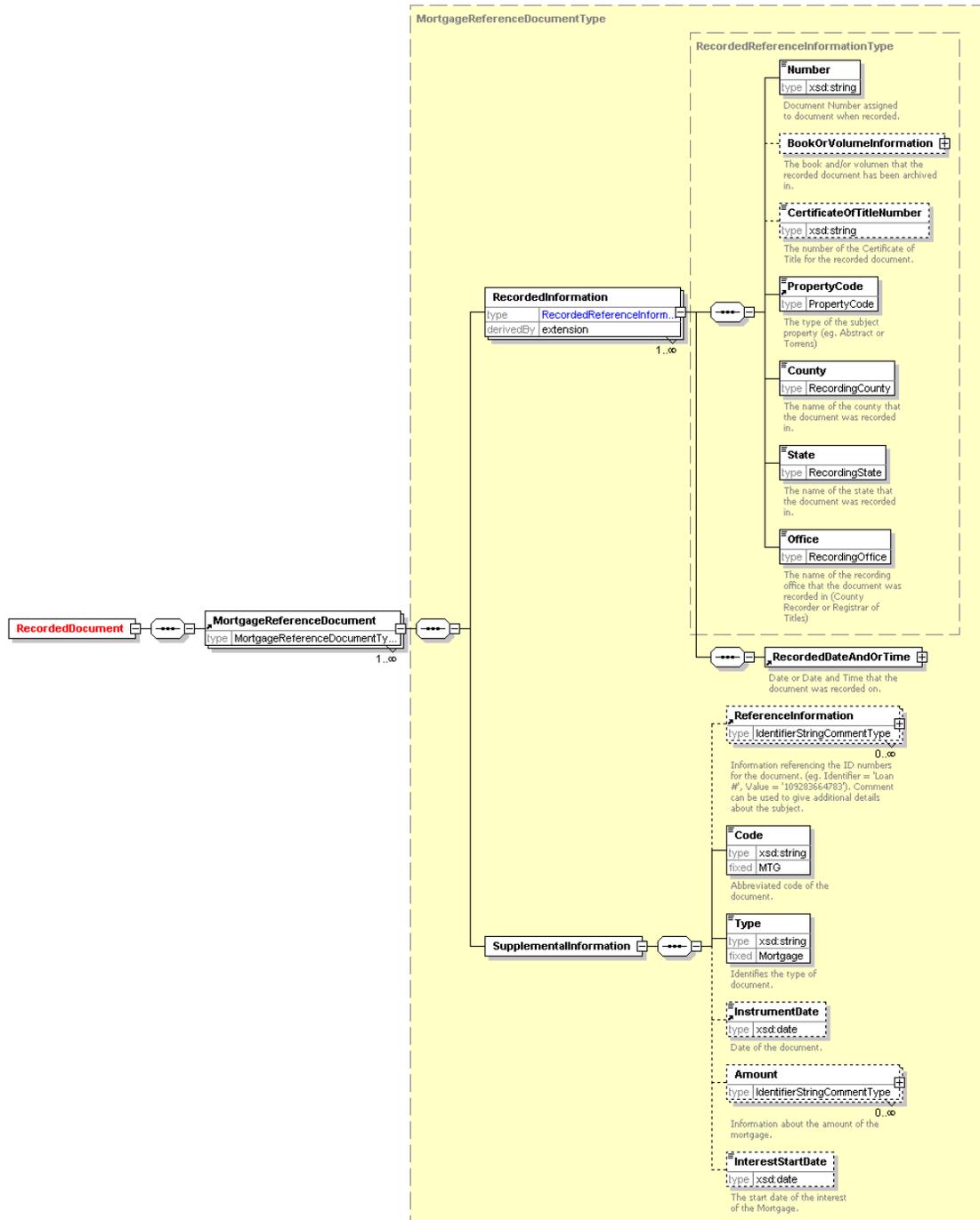
The Version 2.0 **Execution** element structure was mapped from the Version 1.1 **EXECUTION** element and attributes. A **SignatureDate** was added for identifying the date that the document was signed on. This element was mapped from the **_SignatureDate** attribute in the **PRIA_SIGNATURE** element.



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6. RecordedDocument

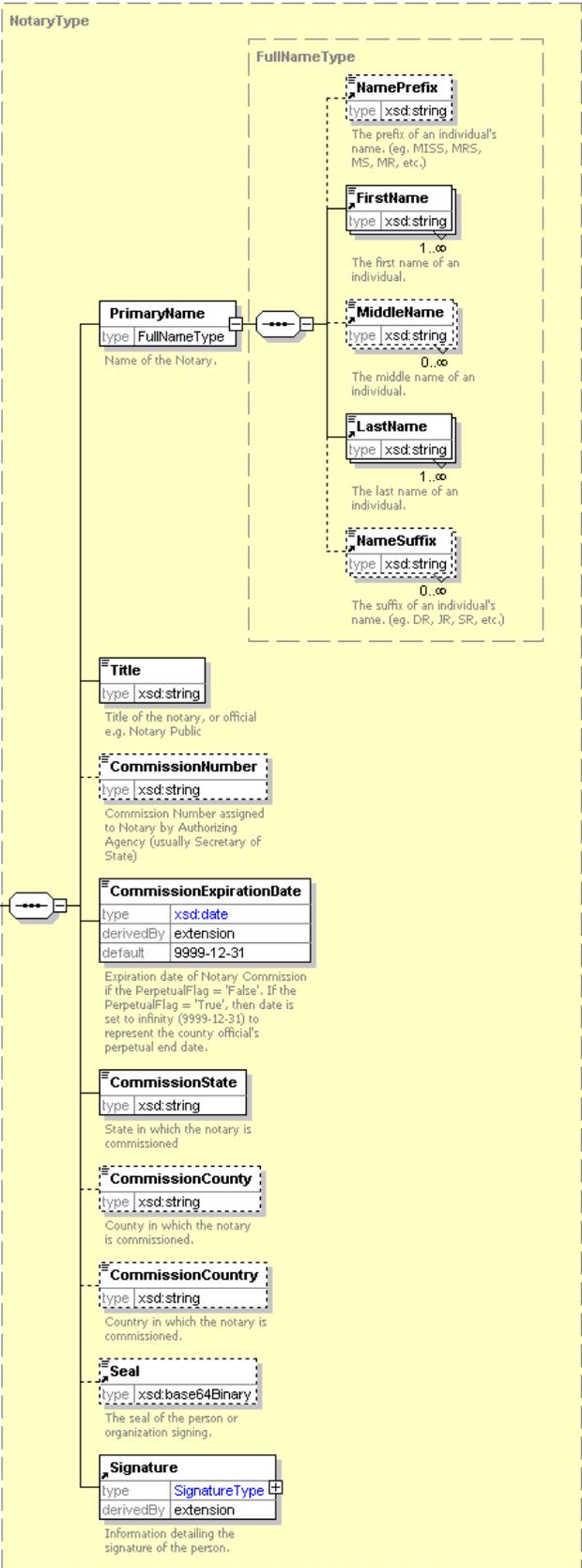
The Version 2.0 **RecordedDocument** element structure was mapped from the elements and attributes of Version 1.1 **RECORDED_DOCUMENT** element and its **_MN_EXTENSION** element structure.



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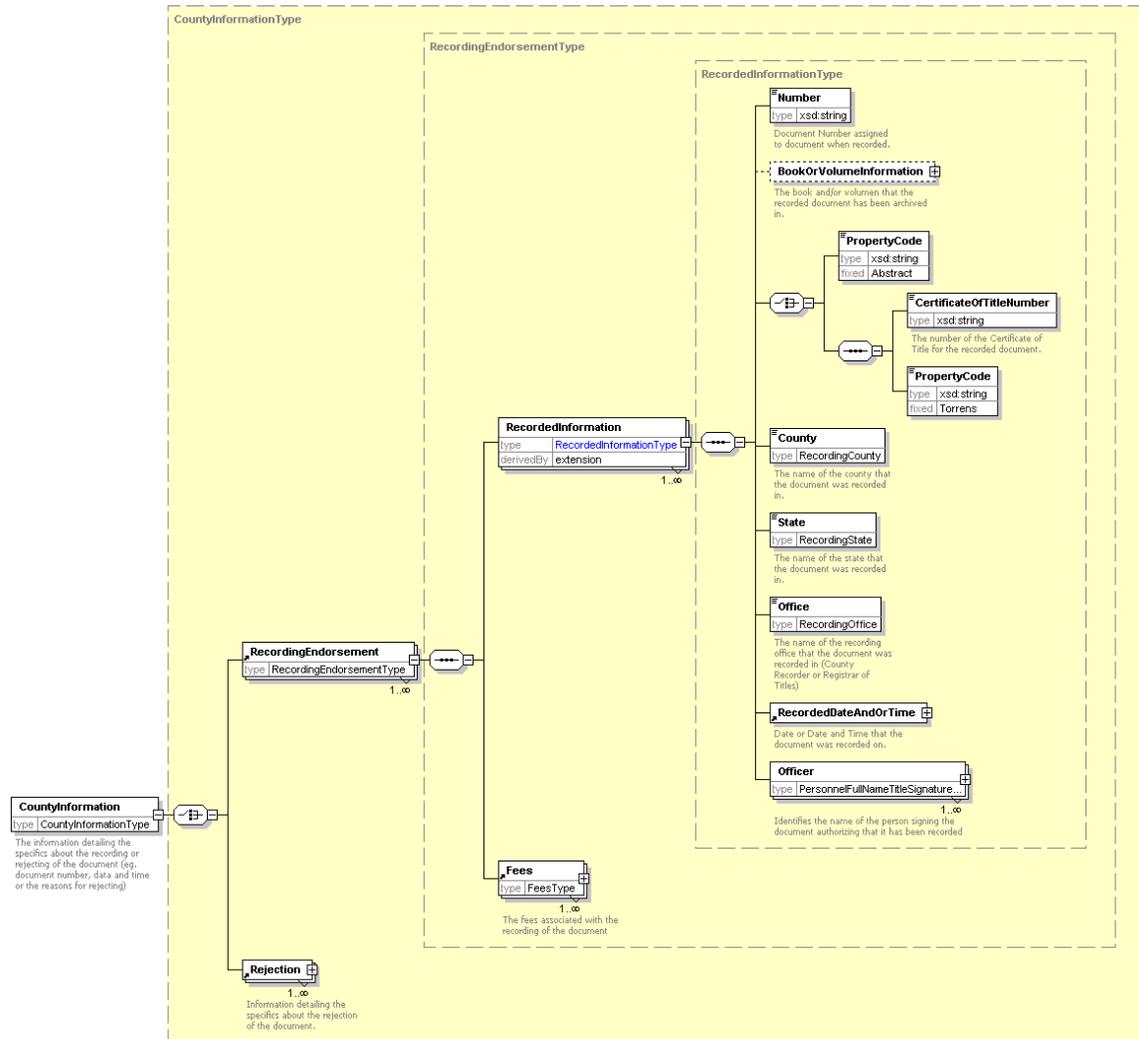
7. Notary

The Version 2.0 **Notary** element was mapped from the elements and attributes of Version 1.1 **NOTARY** element and its **_MN_EXTENSION** element structure.



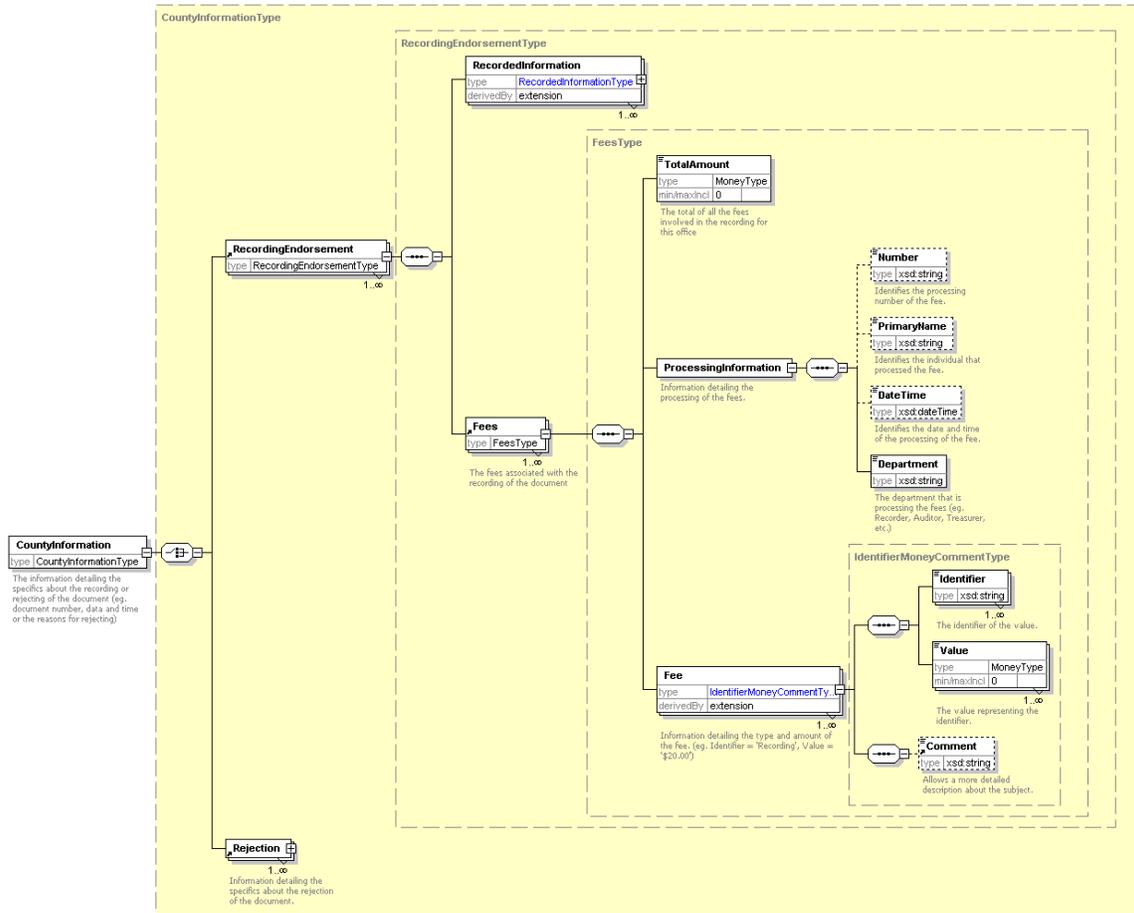
8. CountyInformation

The Version 2.0 **CountyInformation** element was mapped from the elements and attributes of Version 1.1 **RECORDING_ENDORSEMENT** element and its **_MN_EXTENSION** element structure.



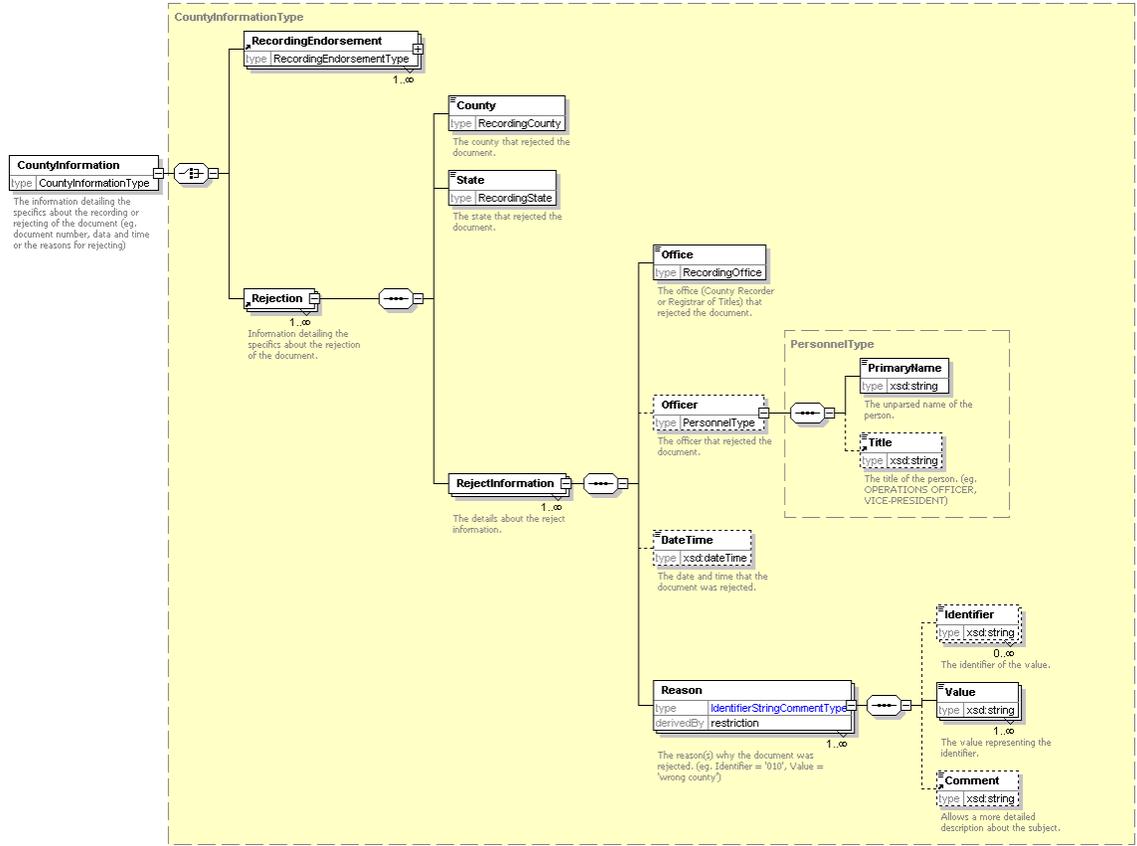
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The Version 2.0 **Fees** element structure was mapped from the attributes of the **_MN_EXTENSION** element structure of Version 1.1 **PRIA_DOCUMENT**.



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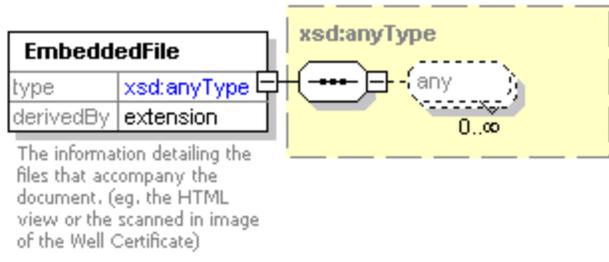
The Version 2.0 **Rejection** element was mapped from elements and attributes of the **_MN_EXTENSION** element structure of Version 1.1 **RECORDING_ENDORSEMENT** element.



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9. EmbeddedFile

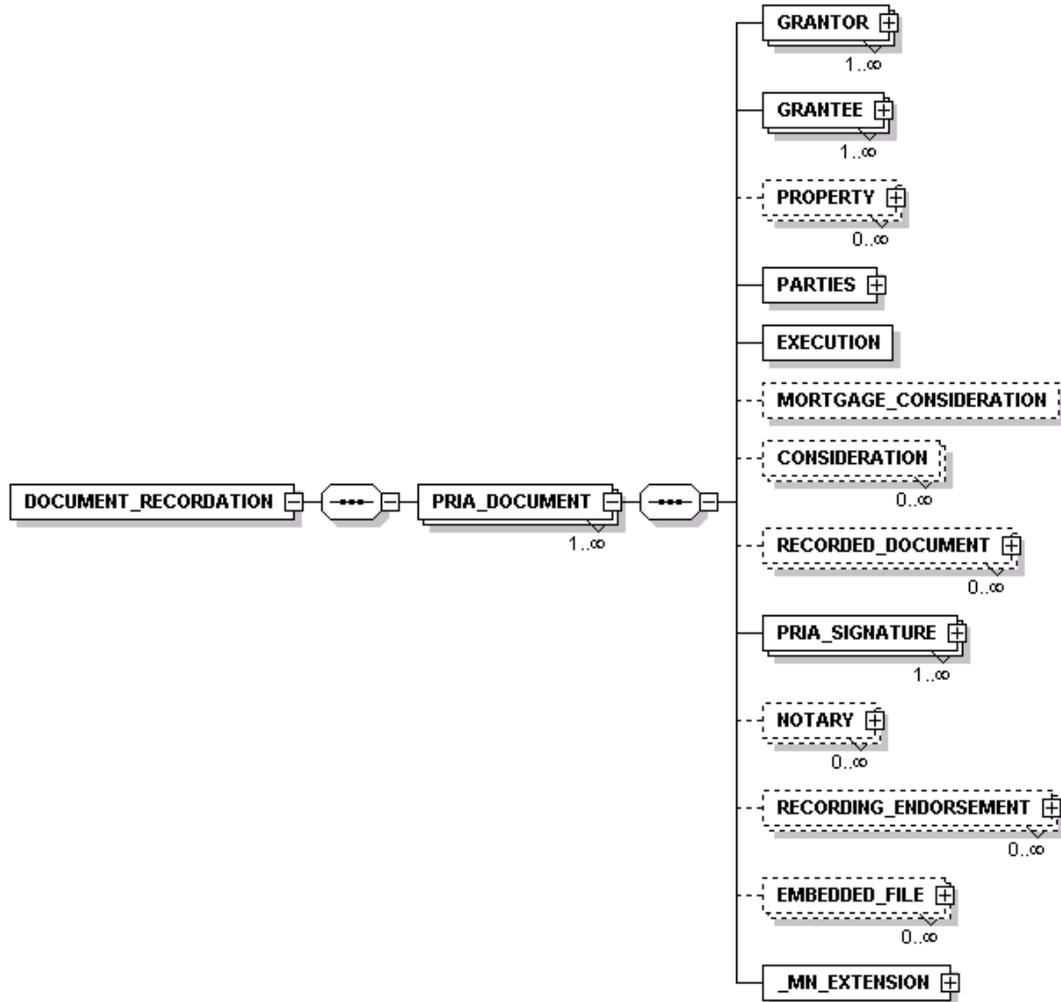
The Version 2.0 **EmbeddedFile** was mapped of Version 1.1 **EMBEDDED_FILE** element and attributes. The Version 1.1 **_MN_VIEW** element extension of Version 1.1 **RECORDED_DOCUMENT** element structure was mapped to the Version 2.0 **EmbeddedFile** element also.



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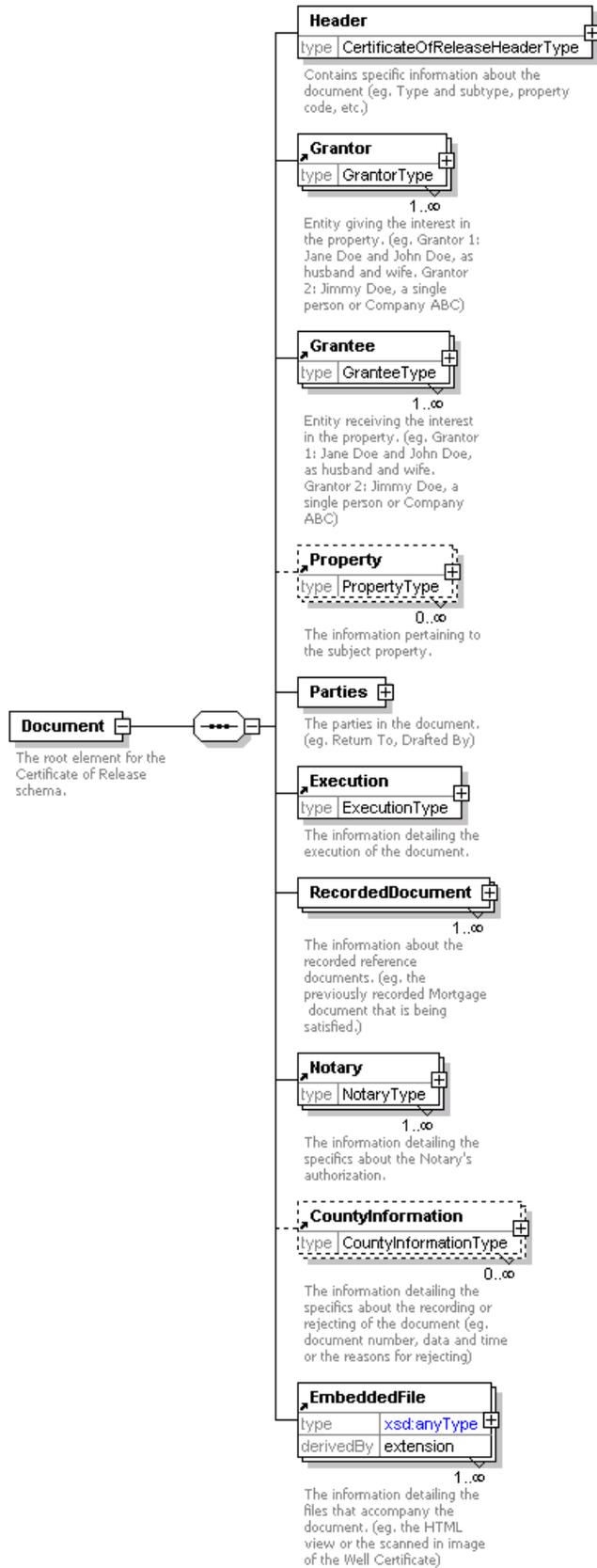
Certificate of Release

The following diagram identifies **Version 1.1** of the **Minnesota Certificate of Release Schema** :



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The following diagram identifies **Version 2.0** of the **Minnesota Certificate of Release Schema** :



1. Header

Same as Satisfaction except the **SubType** element does not exist for the Certificate of Release.

2. Grantor/Grantee

Same as Satisfaction except that the Grantor is the Title Company or its Agent which was the Version 1.1 **_MN_CERTIFIER** element structure.

3. Property

Same as Satisfaction.

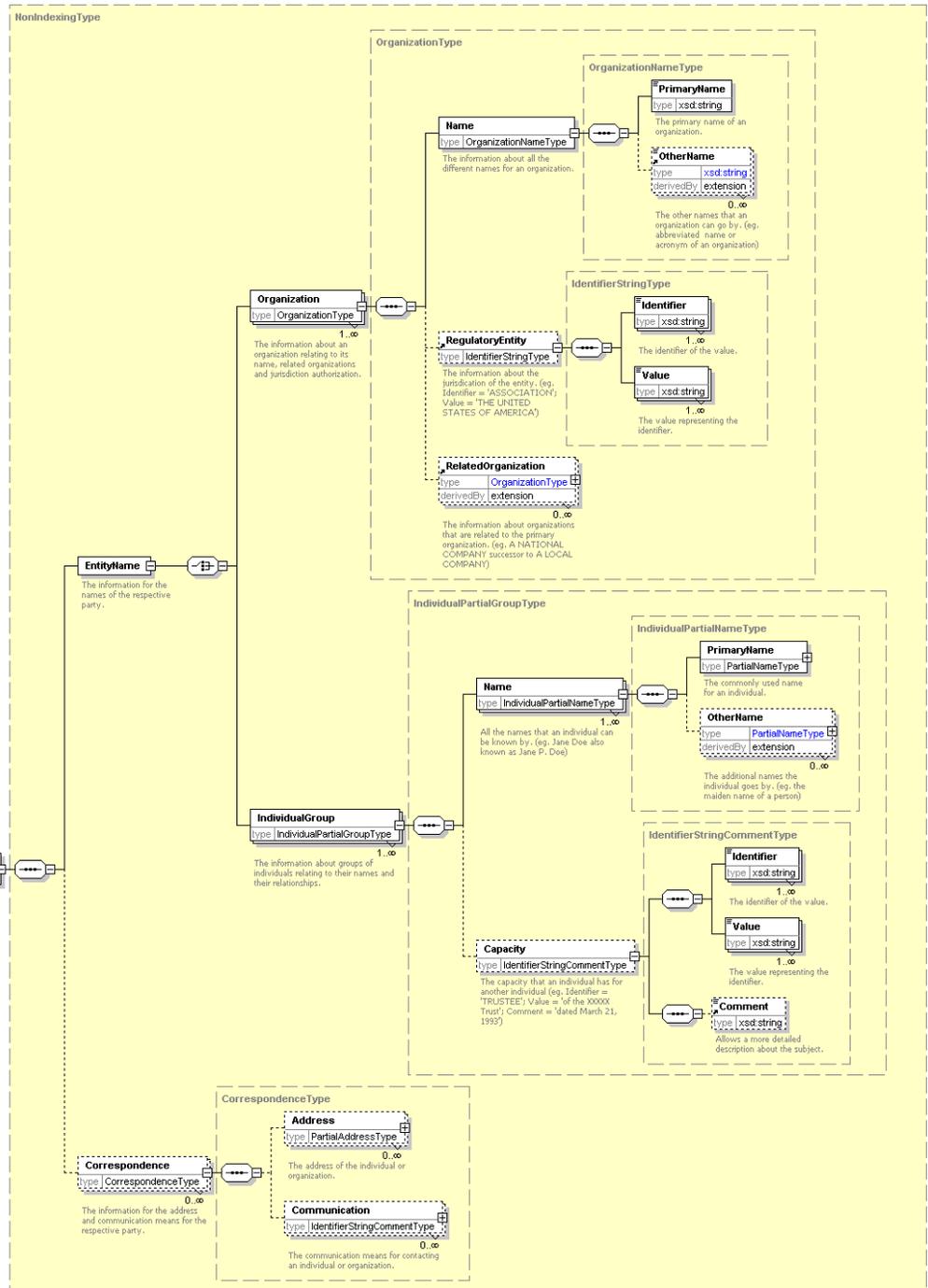
4. Parties

Same as Satisfaction except for the following changes:

The Version 1.1 **_MN_CERTIFIER** was dropped since the Version 2.0 **Grantor** element was used to define this.

The Version 2.0 **OriginalMortgageeParty** element structure was added. This defined the persons or corporations that was the original mortgagee when the mortgage was recorded.

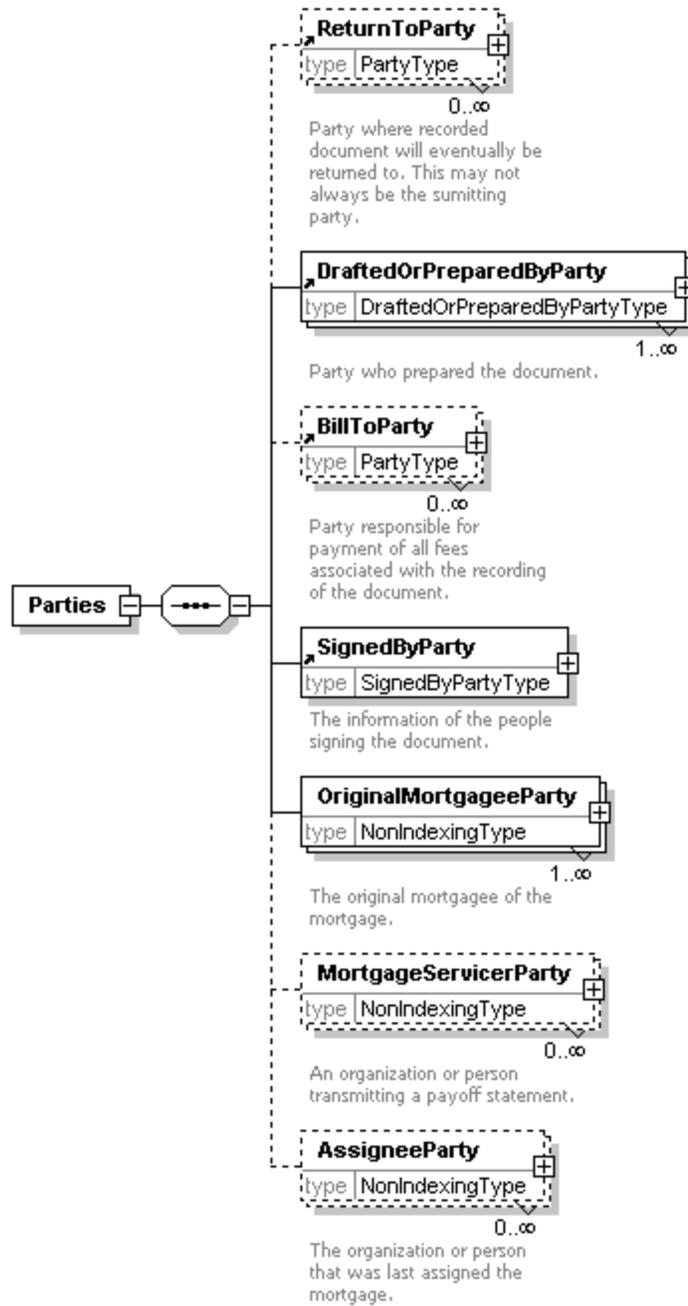
Version 2.0 OriginalMortgageeParty



The Version 2.0 **MortgageServicerParty** element structure was mapped from elements and attributes of Version 1.1 **_MN_MORTGAGE_SERVICER** element of Version 1.1 **_MN_EXTENSION** element structure of Version 1.1 **PRIA_SIGNATURE** element.

The Version 2.0 **AssigneeParty** element structure was mapped from the elements and attributes of Version 1.1 **_MN_ASSIGNEE** element of Version 1.1 **_MN_ASSIGNEE_INFORMATION** element of Version 1.1 **_MN_EXTENSION** element structure of Version 1.1 **PRIA_SIGNATURE** element.

Version 2.0 Parties



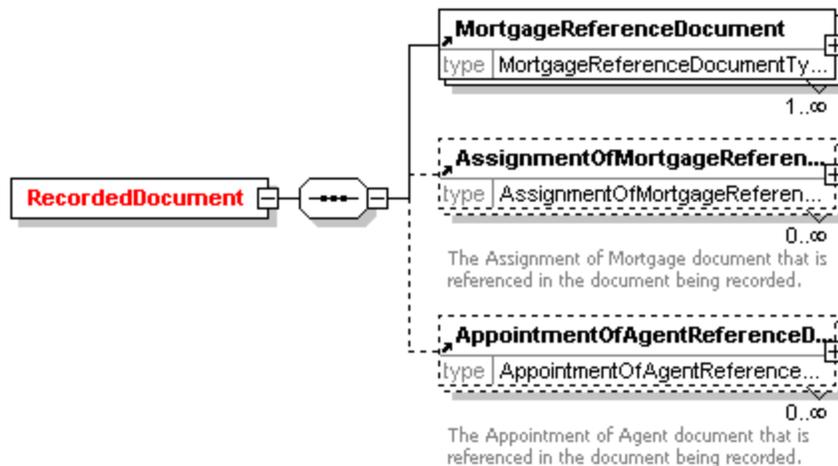
5. Execution

Same as Satisfaction.

6. RecordedDocument

Same as Satisfaction for the **MortgageReferenceDocument** element structure.

Two additional reference document structures were added.



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The Version 2.0 **AssignmentOfMortgageReferenceDocument** element structure was mapped from the the elements and attributes of Version 1.1 **_MN_RECORDED_DOCUMENT** element of Version 1.1 **_MN_ASSIGNEE_INFORMATION** element of Version 1.1 **_MN_EXTENSION** element structure of Version 1.1 **PRIA_SIGNATURE** element.

The Version 2.0 **AppointmentOfAgentReferenceDocument** element structure was mapped from the the elements and attributes of Version 1.1 **_MN_AGENT_APPOINTMENT_DOCUMENT** element structure of Version 1.1 **_MN_EXTENSION** element structure of Version 1.1 **PRIA_SIGNATURE** element.

7. Notary

Same as Satisfaction.

8. CountyInformation

Same as Satisfaction.

9. EmbeddedFile

Same as Satisfaction.