

## A comparison of the PRIA/MISMO and OASIS LegalXML Notary XML Schema Definitions

### Summary

Overall, it appears that the PRIA/MISMO Notary XML Schema Definition (XSD) has a lot in common with the LegalXML eNotary XSD. However, there are some differences that may be the result of PRIA/MISMO's unique business requirements that the eNotary TC may choose to discuss and either include or exclude from an OASIS standard.

Some observations:



1. PRIA/MISMO has chosen to embed information about the Notary Certificate inside an instance of a Notary element, while the OASIS schema does the reverse: it embeds Notary information inside a NotaryCertificate element. While both representations are syntactically "correct", from the perspective of a notarized document, it is my understanding that the NotaryCertificate is a higher order element – at the same level as the document's contents. If we accept that, then the NotaryCertificate element should be the encapsulating container for information about the NotaryCertificate details – such as the date and place of notarization, and the Notary that performed the notarial act. The PRIA/MISMO schema gives the Notary element precedence over the NotaryCertificate. This is acceptable in applications that focus on Notaries – such as a representation of the Journal or some report at the Secretary of State, etc. It seemed to me that for an eNotarized document, the NotaryCertificate would take logical precedence over the Notary.
2. While XSD rules do not mandate this, the general practice of adding the word "Type" to custom XSD types is not followed by the PRIA/MISMO XSD. This makes it a little confusing to follow the schema.

Some detailed observations also follow in the Notes column.



OPTIONAL elements are highlighted in GRAY color, while all REQUIRED elements are in YELLOW.


High-level, container elements are highlighted in CYAN.

Questions for the TC are highlighted in ORANGE.

#	PRIA/MISMO schema	LegalXML eNotary schema	Notes
1	<pre> &lt;xsd:complexType name="NOTARY"&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element minOccurs="0" name="NAME" type="NAME"/&gt;     &lt;xsd:element minOccurs="0" name="NOTARY_COMMISSION"       type="NOTARY_COMMISSION"/&gt;     &lt;xsd:element maxOccurs="unbounded" minOccurs="0"       name="NOTARY_CERTIFICATE"       type="NOTARY_CERTIFICATE"/&gt;     &lt;xsd:element minOccurs="0"       name="NOTARY_SIGNER_IDENTIFICATION"       type="NOTARY_SIGNER_IDENTIFICATION"/&gt;     &lt;xsd:element minOccurs="0" name="EXTENSION"       type="EXTENSION"/&gt;     &lt;xsd:element minOccurs="0" name="SequencelIdentifier"       type="MISMOString"/&gt;   &lt;/xsd:sequence&gt;   &lt;xsd:attributeGroup ref="Notary_Concrete_1:resourceLink"/&gt; &lt;/xsd:complexType&gt; </pre>	<pre> &lt;xsd:complexType name="NotaryPublicType"&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="NotaryName"       type="tns:PersonNameType"       minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="NotaryCommissionNumber"       type="tns:NotaryCommissionNumberType"       minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="NotaryCommissionExpiryDate"       type="tns:DateType" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="NotaryJurisdiction"       type="tns:USAddressType"       minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="NotaryDigitalCertificate"       type="ds:X509DataType" minOccurs="0"/&gt;   &lt;/xsd:sequence&gt;   &lt;xsd:attribute name="Id" type="xsd:ID" use="required"/&gt; &lt;/xsd:complexType&gt; </pre>	<p>MISMOString is nothing more than the standard String defined by XML Schema. Not sure why PRIA/MISMO needed to redefine this:</p> <pre> &lt;xsd:simpleType   name="MISMOString"&gt;   &lt;xsd:restriction     base="xsd:string"/&gt; &lt;/xsd:simpleType&gt; </pre>

<p>2</p>	<pre> &lt;xsd:complexType name="NAME"&gt;   &lt;xsd:choice&gt;     &lt;xsd:choice maxOccurs="2"&gt;       &lt;xsd:sequence minOccurs="0"&gt;         &lt;xsd:element name="NameText" type="MISMOString"/&gt;       &lt;/xsd:sequence&gt;       &lt;xsd:element minOccurs="0" name="NamePrefix"         type="MISMOString"/&gt;       &lt;xsd:element minOccurs="0" name="FirstName"         type="MISMOString"/&gt;       &lt;xsd:element minOccurs="0" name="MiddleName"         type="MISMOString"/&gt;       &lt;xsd:element minOccurs="0" name="LastName"         type="MISMOString"/&gt;       &lt;xsd:element minOccurs="0" name="NameSuffix"         type="MISMOString"/&gt;     &lt;/xsd:choice&gt;     &lt;xsd:element minOccurs="0" name="EducationalAchievements"       type="MISMOString"/&gt;     &lt;xsd:element minOccurs="0" name="FunctionalTitle"       type="MISMOString"/&gt;     &lt;xsd:element minOccurs="0" name="IndividualTitle"       type="MISMOString"/&gt;     &lt;xsd:element minOccurs="0" name="EXTENSION"       type="EXTENSION"/&gt;   &lt;/xsd:choice&gt;   &lt;xsd:attributeGroup ref="Notary_Concrete_1:resourceLink"/&gt; &lt;/xsd:complexType&gt; </pre>	<pre> &lt;xsd:complexType name="PersonNameType"&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="PersonPrefixName"       type="tns:PersonPrefixNameType"       minOccurs="0"/&gt;     &lt;xsd:element name="PersonGivenName"       type="tns:PersonGivenNameType"/&gt;     &lt;xsd:element name="PersonMiddleName"       type="tns:PersonMiddleNameType"       minOccurs="0"/&gt;     &lt;xsd:element name="PersonSurName"       type="tns:PersonSurNameType"/&gt;     &lt;xsd:element name="PersonSuffixName"       type="tns:PersonSuffixNameType"       minOccurs="0"/&gt;     &lt;xsd:element name="PersonMaidenName"       type="tns:PersonMaidenNameType"       minOccurs="0"/&gt;     &lt;xsd:element name="PersonFullName"       type="tns:PersonFullNameType"       minOccurs="0"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>	<p>Not sure what the PRIA/MISMO business rules require, but their schema implies that the Notary name can be a choice of just the Educational-Achievements or the FunctionalTitle, IndividualTitle, etc. The Notary's actual name does not appear to be a requirement.</p>
<p>3</p>	<pre> &lt;xsd:complexType name="NOTARY_COMMISSION"&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element minOccurs="0" name="NotaryCommissionCity"       type="xsd:string"/&gt;     &lt;xsd:element minOccurs="0" name="NotaryCommissionCounty"       type="xsd:string"/&gt;     &lt;xsd:element minOccurs="0" name="NotaryCommissionState"       type="xsd:string"/&gt;     &lt;xsd:element minOccurs="0"       name="NotaryCommissionExpirationDate"       type="MISMODateTime"/&gt;     &lt;xsd:element minOccurs="0"       name="NotaryCommissionNumberIdentifier"       type="MISMONumericString"/&gt;     &lt;xsd:element minOccurs="0"       name="NotaryCommissionBondNumberIdentifier"       type="xsd:string"/&gt;     &lt;xsd:element minOccurs="0" name="NotaryTitleDescription"       type="xsd:string"/&gt;     &lt;xsd:element minOccurs="0" name="EXTENSION" </pre>	<pre> &lt;xsd:simpleType name="NotaryCommissionNumberType"&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:maxLength value="255"/&gt;     &lt;xsd:whiteSpace value="preserve"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;  &lt;xsd:complexType name="USAddressType"&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="StreetAddress1"       type="tns:StreetAddressType" minOccurs="0"/&gt;     &lt;xsd:element name="StreetAddress2"       type="tns:StreetAddressType" minOccurs="0"/&gt;     &lt;xsd:element name="City"       type="tns:CityType" minOccurs="0"/&gt;     &lt;xsd:element name="County"       type="tns:CountyType" minOccurs="1"/&gt;     &lt;xsd:element name="USState"       type="tns:USStateCodeType" minOccurs="1"/&gt;     &lt;xsd:element name="USZipCode" </pre>	<p>While the OASIS schema shows USAddressType, it can be internationalized by adding a choice of an USAddressType or an InternationalAddressType .</p> <p>I will make this change in the next iteration to make this palatable for our international members.</p> <p>Question: Is the Bond number a requirement for an eNotarized document's NotaryCertificate?</p>

	<pre> type="EXTENSION"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>	<pre> type="tns:USZipCodeType" minOccurs="0"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>	
4	<pre> &lt;xsd:complexType name="NOTARY_CERTIFICATE"&gt; &lt;xsd:sequence&gt; &lt;xsd:element minOccurs="0" name="NotaryAppearanceDate" type="MISMODateTime"/&gt; &lt;xsd:element minOccurs="0" name="NotaryCertificateSignerUnparsedName" type="xsd:string"/&gt; &lt;xsd:element minOccurs="0" name="NotaryCertificateSignerCompanyName" type="xsd:string"/&gt; &lt;xsd:element minOccurs="0" name="NotaryCertificateSignerTitleDescription" type="xsd:string"/&gt; &lt;xsd:element minOccurs="0" name="NotaryCertificateSigningCounty" type="xsd:string"/&gt; &lt;xsd:element minOccurs="0" name="NotaryCertificateSigningState" type="xsd:string"/&gt; &lt;xsd:element minOccurs="0" name="SequencelIdentifier" type="MISMOString"/&gt; &lt;xsd:element minOccurs="0" name="EXTENSION" type="EXTENSION"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>	<pre> &lt;xsd:complexType name="NotaryCertificateType"&gt; &lt;xsd:sequence&gt; &lt;xsd:element name="CertificateContent" type="tns:NotaryCertificateContentType" minOccurs="1" maxOccurs="1"/&gt; &lt;xsd:element name="NotaryPublic" type="tns:NotaryPublicType" minOccurs="1" maxOccurs="1"/&gt; &lt;xsd:element name="NotarySignature" type="ds:SignatureType" minOccurs="0" maxOccurs="1"/&gt; &lt;/xsd:sequence&gt; &lt;xsd:attribute name="Id" type="xsd:ID" use="optional"/&gt; &lt;/xsd:complexType&gt;  &lt;xsd:complexType name="NotaryCertificateContentType"&gt; &lt;xsd:sequence&gt; &lt;xsd:element name="NotarizationType" type="tns:NotarizationActType" minOccurs="1" maxOccurs="1"/&gt; &lt;xsd:element name="NotarizationDate" type="tns:DateType" minOccurs="1" maxOccurs="1"/&gt; &lt;xsd:element name="NotarizationLocation" type="tns:USAddressType" minOccurs="1" maxOccurs="1"/&gt; &lt;xsd:element name="StatutoryText" minOccurs="1" maxOccurs="1"&gt; &lt;xsd:simpleType&gt; &lt;xsd:restriction base="xsd:string"&gt; &lt;xsd:maxLength value="4096"/&gt; &lt;xsd:whiteSpace value="preserve"/&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; &lt;/xsd:element&gt; &lt;/xsd:sequence&gt; &lt;xsd:attribute name="Id" type="xsd:ID" use="required"/&gt; &lt;/xsd:complexType&gt; </pre>	<p>All elements in PRIA/MISMO schema appear to be optional. This can cause processing failures in applications since XML parsers will accept empty notary certificates as being valid.</p> 
5	<pre> &lt;xsd:complexType name="NOTARY_SIGNER_IDENTIFICATION"&gt; &lt;xsd:sequence&gt; &lt;xsd:element minOccurs="0" name="NotaryCertificateSignerIdentificationType" type="PRIA_NotaryCertificateSignerIdentificationTypeEnumerated"/&gt; &lt;xsd:element minOccurs="0" name="NotaryCertificateSignerIdentificationDescription" type="MISMOString"/&gt; </pre>	<pre> &lt;xsd:complexType name="PersonIdentificationType"&gt; &lt;xsd:sequence&gt; &lt;xsd:element name="IDCredential" type="tns:IDCredentialType" minOccurs="1"/&gt; &lt;xsd:element name="IDCredentialNumber" type="xsd:string" minOccurs="0"/&gt; &lt;xsd:element name="IDCredentialExpirationDate" type="tns:DateType" minOccurs="0"/&gt; </pre>	<p>The OASIS element IDCredentialNumber and IDCredentialExpirationDate are optional, so they do NOT need to appear in an eNotarized document. Should I leave it in or remove it?</p> 

	<pre>&lt;xsd:element minOccurs="0" name="SequenceIdentifier"   type="xsd:string"/&gt; &lt;xsd:element minOccurs="0" name="EXTENSION"   type="EXTENSION"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>	<pre>&lt;xsd:element name="IDCredentialIssuedBy"   type="xsd:string" minOccurs="0"/&gt; &lt;xsd:element name="IDCredentialComment"   type="xsd:string" minOccurs="0"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>	
6	<pre>&lt;xsd:simpleType   name="PRIA_NotaryCertificateSignerIdentificationTypeEnumerated"&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="ProvidedIdentification"/&gt;     &lt;xsd:enumeration value="PersonallyKnown"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>	<pre>&lt;xsd:simpleType name="IDCredentialType"&gt;   &lt;xsd:restriction base="xsd:token"&gt;     &lt;xsd:enumeration value="Birth Certificate"/&gt;     &lt;xsd:enumeration value="Citizenship Certificate"/&gt;     &lt;xsd:enumeration value="Drivers License"/&gt;     &lt;xsd:enumeration value="Identity Card"/&gt;     &lt;xsd:enumeration value="Military ID Card"/&gt;     &lt;xsd:enumeration value="Other"/&gt;     &lt;xsd:enumeration value="Passport"/&gt;     &lt;xsd:enumeration value="Permanent Resident Card"/&gt;     &lt;del&gt;xsd:enumeration value="Personally Known"/del&gt;     &lt;xsd:enumeration value="REAL ID Card"/&gt;     &lt;xsd:enumeration value="Veteran ID Card"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>	<p>I can remove all the credential-types from the OASIS element, leaving only the "Personally Known" choice here, if required. However, even if we leave the credential type, the eNotarized document does NOT have to carry any uniquely identifying information about the signer, so should I just leave it here?</p>
7	<pre>&lt;xsd:simpleType name="MISMODateTime"&gt;   &lt;xsd:union memberTypes="xsd:gYear xsd:gYearMonth xsd:date   xsd:dateTime"/&gt; &lt;/xsd:simpleType&gt;</pre>	<pre>&lt;xsd:simpleType name="DateType"&gt;   &lt;xsd:restriction base="xsd:date"&gt;     &lt;xsd:pattern value="\d{4}-\d{2}-\d{2}"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>	<p>PRIA/MISMO allows for dates in the notary certificate that are not precise; the schema allows for specifying just the year, or month and year, in addition to a full date (day, month, year).</p> <p>The OASIS element requires all three elements in a consistent YYYY-MM-DD format (which applications can represent in localized formats, as desired).</p> 