

To: MHS's NDIIPP Project Team
Subject: Current experience with XML schemas
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Observations by Minnesota Revisor's Office IS staff on XML schemas for bills

1. Use XHTML tags when possible.
XHTML tags applicable to bills are:
<p>
 <ins>
<sub> <sup>
2. Try to use generic tag names. Then use 1 schema in many document types.
This: <section>
Not: <bill_section> <amendment_section> <statute_section>

3. Create a document level tag that includes the 1, generic schema.

Example:

```
<document type="bill">  
  <section>  
    <p> This is paragraph number 1. </p>  
    <p> This is paragraph number 2. </p>  
    <p> This is paragraph number 2. </p>  
  </section>  
</document>
```

```
<document type="law">  
  <section>  
    <p> This is paragraph number 1. </p>  
    <p> This is paragraph number 2. </p>  
    <p> This is paragraph number 2. </p>  
  </section>  
</document>
```

The benefits of this approach are:

- a. The 1 generic schema can be used for multiple document types. The number and complexity of schemas is reduced.
 - b. The document type="" allows style sheets to display paragraphs in "bill" differently than in "law".
 - c. Software (e.g., XPath code) becomes more consistent and manageable because the tag names are constant across multiple document types.
4. Opinion – Using attributes within a tag is preferable to many unique tags.
This: <ref type="statute"> <ref type="law"> <ref type="adminrule">
Not: <statute_ref> <law_ref> <adminrule_ref>
 5. In addition to capturing content, tags and attributes are used for these purposes
 - a. publishing to web (i.e XSLT programming to generate .html)
 - b. publishing to paper (i.e., FOSI, XSL-FO programming to generate paper)
 - c. software functions (i.e., MN XTEND function to auto generate the bill title)
 - d. generate reports & QC (e.g., List all bills amending Statute chapter 287.)

6. Use features of XSD language to :
 - a. include one schema into another schema
 - b. extend or override the definition of a tag