

```

IF Document has DOCTYPE set
  IF DOCTYPE registered locally
    validate(lookup DOCTYPE)
  ELSE
    error()
ELSE IF Document has Namespace set (default or with a prefix definition)
  IF NAMESPACE and FORMATID registered locally
    validate(lookup FORMATID)
  ELSE IF NAMESPACE registered locally
    validate(lookup NAMESPACE)
  ELSE
    error()
ELSE IF Document has noNamespaceSchemaLocation set
  IF FormatID registered locally
    validate(lookup FORMATID)
  ELSE IF noNamespaceSchemaLocation registered locally
    // will probably rarely work, as people will point at local URIs, rather than namespace
    // use noNamespaceSchemaLocation as formatId? Or a new column in xml_catalog
    validate(lookup noNamespaceSchemaLocation)
  ELSE
    error()
ELSE
  checkIfWellFormed()
DONE

```

To be clear: under this proposal, the only source of dtd or xsd documents are the locally registered schemas that have been registered with metacat, and that typically live locally on the Metacat system. Under no circumstances are the hints in `xsi:schemaLocation` and `xsi:noNamespaceSchemaLocation` used to actually go and download a schema. This allows us to use a consistent schema for each namespace, but it also forces us to register any given namespace before it can be used. Until it is registered, any documents that reference a namespace will fail validation with an error. That error should be clear that the namespace needs to be added by the Metacat administrator.