GML – outstanding Change Requests

78th OGC Technical Committee
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Open change requests


• 3 categories
  – Minor, but missed GML 3.3 deadline
  – Minor, but not backward compatible, so deferred to GML 4
  – Major, disruptive
Missed GML 3.3 deadline, probably uncontroversial

- **08-108: Add temporal aggregates**
  - Complete GML implementation of 19108 temporal object hierarchy
- **08-158: Parametric CRS & 08-159: Spatiotemporal support**
  - Upgrade to match ISO 19111 revision
- **08-194: CurveInterpolationType**
  - Make interpolation-type extensible
- **09-023r2: Extend TimeIndeterminateValueType**
  - Add (estimated, +inf, -inf)
- **08-156: Use of schema components outside of GML application schemas**
  - esp. geometry
  - New conformance class
Minor, probably uncontroversial

- **08-080/08-082: Correct grid cell terms**
  - Align imageDatum and pixelInCell with ISO 19123 / Topic 6

- **08-106: Allow double in TimePositionUnion**
  - Switch from xsd:decimal to xsd:double
  - Align with use of xsd:double as generic FP representation in GML

- **08-135r1: AbstractFeatureMemberType XSD**
  - Remove redundant <sequence/>

- **08-137r2: Schema subsetting scripts**
  - Fix bugs so they work with Saxon
  - *But if GML is modularized, maybe drop schema subsetting scripts*
**08-150r3: Change association to GeneralParameterValue**

- Align CRS schema with ISO 19111 / Topic 2

- *Labelled Major, but not really*
Major 08-107r1: Add standard XML attributes

- Use ‘localizableString’ with @xml:lang for all text elements

- Replace gml:id with xml:id
  - Is xml:id actually used anywhere? (29M Google hits, vs 2M for gml:id)
  - However, also see ‘Clarify Identifier Usage’ CR
Major 08-110: Clarify identifier usage

- @gml:id, gml:identifier, gml:name - local vs. global scope

- gml:id
  - Type=xsd:ID – a document-fragment identifier
  - Make optional?

- gml:identifier
  - Persistent external identifier
  - Replace codeSpace/name syntax with URI?
  - Move to attribute instead of element? (c.f. RDF/XML rdf:about)
  - Clarify semantics – IR vs. NIR

- gml:name
  - Just a label ... ?
• How to link from a property value to metadata about it?
  – What is the ‘evidence’ for this value, such as an Observation

• Common requirement, particularly in environmental applications ➔ a common solution would be nice

• Proposed solution: xlink:href with xlink:arcrole="evidence"
  – What if property-value is by-reference?
  – Need to add xlinks to simple properties
Major **08-114: Deprecate various components**

- Some GML components have been superseded:
  - Definition/Dictionary → RDF/SKOS/OWL/other
    - Retain only as root for CRS definitions
  - Value Objects → SWE Common
  - gml:Observation → OM_Observation

- Other components should be re-factored into separate namespaces, with separate governance
  - CRS
  - Coverages
  - Dynamic Features (also harmonize with ISO 19141)
Major **08-151: Coverage encoding approach**

- GML coverage encoding is too prescriptive, yet not properly aligned with ISO 19123 / Topic 6
- Change to ‘pattern’ rather than ‘by derivation’
  - Clemens?
Major

08-153: Reconsider deferred enhancements

• Change to multi-part standard

• To be discussed this afternoon.