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<th>Change Request #:</th>
<th>269</th>
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<td>13-006</td>
</tr>
<tr>
<td>Name:</td>
<td>*Gobe Hobona</td>
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<td>Document Name/Version:</td>
<td>*Filter Encoding 2.0 Encoding Standard / 2.0</td>
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<tr>
<td>OGC Project Document:</td>
<td>*09-026r1</td>
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If this is a revision of a previous submission and you have a Change Request Number, then check here: □
Enter the CR number here: [ ]
Enter the Revision Number that you are revising here: [ ]

**Title:**

* [WFS FES SWG] Support for Semantics in OGC Filters

**Source:**

* OWS-9 CCI

**Work item code:**


**Category:**

* B (Addition of feature)

**Reason for change:**

* This issue arose from the OWS-9 CCI Semantic Mediation activity [OGC 12-103] during the prototyping of a semantically assisted cascading WFS-G. None of the filter comparison operators allows for testing of semantic relationships. In the semantic web, semantic relationships are specified by associating a subject(s) to an object(o) through a predicate (p) thereby forming a triple of the form (s,p,o). The OWS-9 CCI thread considered use of the classifiedAs property that is described in the CSW specification. The thread also considered use of the IsInstanceOf property proposed in 2007. Whereas both approaches work well for describing classifications and inheritance, both approaches prescribe the nature of the relationship between the subject and the object (i.e. classification and instance of). None of the approaches therefore allows for the specification of different predicates between subjects and objects. For semantic mediation, however the nature of the relationships between subjects and objects can vary. Therefore flexibility is needed in specifying
the predicates.

**Summary of change:**

*It is proposed that the Filter specification should include a PropertyIsSemanticallyRelatedTo comparison operator that accepts a propertyname, resourceidentifier and zero or more semanticrelationships.*

**Consequences if not approved:**

Without this extension, the Filter specification will not be able to exploit the full potential of the semantic web.

**Clauses affected:**

* OGC 09-026r1 section 7.7

**Additional Documents affected:**

**Supporting Documentation:**

**Comments:**

**Status:** Assigned

**Assigned To:** WFS/FES SWG

**Disposition:** Referred and Posted