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Change Request #:	**21**
Assigned OGC Document #:	**09-173**
Name:	*Jolyon Martin
Organization:	*ESA
Email:	*Jolyon.Martin@esa.int
Document Name/Version:	*Web Services Common Standard / 1.2
OGC Project Document:	*06-121r8

If this is a revision of a previous submission and you have a Change Request Number, then check here: ☐
Enter the CR number here:
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Title:	* Clarification of Reference / ServiceReference Usage
Source:	*http://wiki.services.eoportal.org/tiki-index.php?page=HMA-FO+OWS+Common+1.2+review
Work item code:	
Category:	* C (Functional modification of feature)

Reason for change: *

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Reference/ServiceReference is going to be used by SPS in its
DescribeResultAccess operation to inform clients from which services
they can retrieve data. The information provided includes the service
type and URL if the question is at which services a sensor stores its
data in general. This is useful for clients as they can determine
whether they will be able to access the data or not - for example, a
sensor might only store data in a SOS, while another one might
provide data only through a WCS. A sensor could even use different
service types (like a SOS for basic data storage, a WCS for processed
data with subsetting abilities and a WMS for direct portrayal). If
clients want to access data gathered in an actual task performed by
the sensor then the SPS would also include the request parameters
required to directly retrieve the actual data (can be a complete KVP
encoded request, or an XML request that needs to be posted to the
service).
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Summary of change: *

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OWS Common 1.2 has an optional ows:type attribute in the XML encoding
of the ReferenceBase type (see the UML model on page 105 of the OWS
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Common 1.2 specification and the AbstractReferenceBase element in the owsManifest.xsd schema). This could well be used by SPS to indicate which type of service a reference points to.

The issue is that this attribute is not contained in the UML model of ReferenceBase and not documented in the specification and schema. It just exists in the schema.

Therefore, OWS Common 1.2 should:

* add the "type" property to the UML model of ReferenceBase (the property could be renamed if required to clarify intended semantics) and

* document it both in the specification and schema

The content of the "type" property could be the service abbreviation (like WCS, WFS, SOS etc.) but would ideally contain the namespace of the service type that is implemented. In the case of OGC services, this would clearly identify both the service type and implemented version. For example, if the value of "type" would be "http://www.opengis.net/sos/2.0" then the service would be a SOS version 2.0. In case the namespace does not contain the version number then still the service type can be identified.

Related issue

The actual type and encoding of the "type" property should also be compatible to the notation of the "serviceType" property in the ServiceIdentification section - see table 11 in 7.4.4.1. There, the "serviceType" is given as a Code (in ISO 19136 this would be a GenericName) with an actual code value and an optional codeSpace. In table 11, the code value is required to be a URN according to the OGC-NA policies and procedures (syntax: "urn:ogc:serviceType" ":" name ":" version ":" binding ":" profile - see http://www.opengeospatial.org/ogcUrnPolicy). This would mean that only URNs registered at OGC would be allowed. The question is if this mechanism is applicable also to non-OGC services that might be used by SPS. If it is not, then the requirement in the OWS Common 1.2 specification to only use OGC governed URNs as service type identifiers should be relaxed.

Consequences if not approved:

If this issue was addressed, then an upcoming version of SPS could leverage the functionality of References / ServiceReferences defined by OWS Common directly rather than to clarify its use for the SPS standard. This would also improve consistent use across OWS, for example in WPS (where References / ServiceReferences might play a role as well).

Clauses affected:

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UML model on page 105 of the OWS Common 1.2 specification and the AbstractReferenceBase element in the owsManifest.xsd schema

Additional Documents affected:

Supporting Documentation:	http://wiki.services.eoportal.org/tiki-index.php?page=HMA-FO+OWS+Common+1.2+review
Comments:	
Status:	Assigned
Disposition:	Reffered