Proposal for FGDC endorsement of OGC® WPS 2.0

# Introduction

This proposal provides documentation needed to obtain FGDC recognition of OGC® WPS 2.0 Interface Standard Corrigendum 1 [14-065], <http://docs.opengeospatial.org/is/14-065/14-065.html>. With endorsement of WPS 2.0, WPS 1.0 will be *retained* as an FGDC-endorsed standard.

The following information responds to the specific questions outlined per Section V.1 of the [FGDC Policy on Recognition of Non-Federally Authored Geographic Information Standards and Specifications](https://www.fgdc.gov/standards/standards_publications/Non-FGDC_StandardsSpecs_Policy.pdf) (November 2005)[[1]](#footnote-1).

# Documentation

1. **The category of the standard or specification (per Section III).**

Consortium developed specifications – specifications developed by consortia such as the Open Geospatial Consortium (OGC).

1. **The proposed level of FGDC recognition (per Section IV).**

Endorsement.

1. **A discussion of the applicability of the proposed standard or specification in Federal geospatial activities, including discussion of the conditions where it should be employed and anywhere it should not be, i.e., provide the scope of Federal geospatial applicability of the standard or specification.**

In many cases, geospatial or location data must be processed before the data can be used effectively. WPS provides a robust, interoperable, and versatile protocol for process execution on web services. It supports both immediate processing for computational tasks that take little time and asynchronous processing for more complex and time consuming tasks. It defines a general process model that is designed to provide an interoperable description of processing functions. It supports process cataloguing and discovery in a distributed environment. It provides rules for standardizing requests and responses (inputs and outputs) for invoking geospatial processing services as Web services. It defines how a client can request execution of a process and how output from the process is handled. It defines an interface that facilitates the publishing of geospatial processes and clients’ discovery of and binding to those processes. Data required by the WPS can be delivered across a network or available at the server. WPS can describe any calculation (i.e. process), including all of its inputs and outputs, and trigger its execution as a Web service.

WPS 2.0 is a continuation of WPS 1.0. It incorporates change requests that have been submitted since the release of WPS 1.0. In contrast to WPS 1.0, WPS 2.0 provides a core conceptual model that may be used to specify a WPS in different architectures such as REST or SOAP. With endorsement of WPS 2.0, WPS 1.0 will be retained as an FGDC-endorsed standard.

1. **The specific reason(s) that the standard or specification would be of value to the Federal government and, if applicable, to other members of the FGDC. These should include, but not be limited to, identification of the specific FGDC subcommittee(s) and/or working group(s) whose members support the submission of the standard or specification and how it benefits its/their responsibilities.**

By implementing WPS 2.0, clients can easily have any geospatial processing service "wrapped" with a standard interface and integrated into existing workflows.

WPS 2.0 is an emerging standard in the DoD IT Standards Registry (DISR), which means that it may be implemented but shall not be used in lieu of a mandated standard. WPS 1.0 is a mandated standard in the DISR.

WPS 2.0 is a core service invocation standard in the SDI standards baseline (unpublished).

1. **Any restrictions, limitations, or other constraints that may affect promulgation and/or adoption and/or implementation of the standard or specification, e.g., copyright, license fees, restriction of applicability to a specific technology, and the like. The FGDC staff will negotiate with standards organizations to make an attempt to acquire free standards documents for FGDC members.**

OGC are copyrighted. See Copyright Notice and Disclaimers | OGC[[2]](#footnote-2). There is no charge in acquiring OGC Standards.

1. **The name and business addresses of a point-of-contact (POC) in the proposing or sponsoring FGDC member agency and, if applicable, the name and business addresses of a POC in the proposing non-Federal body.**

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1. **Identification and/or explanation of the process by which the proposed standard or specification was developed and reviewed. This information will support FGDC determination as to whether the process meets the criteria for a voluntary consensus standards process as defined in OMB Circular A-119. When accredited standards development bodies such as ISO, ANSI/INCITS, and NIST are the authors only their identity need be supplied. Otherwise, a description of the development and review process and a list of participants must be included.**

OGC. See Section 9, Policies and Procedures for Adoption and/or Revisions of Standards, Technical Committee Policies and Procedures[[3]](#footnote-3)

1. <https://www.fgdc.gov/standards/standards_publications/Non-FGDC_StandardsSpecs_Policy.pdf>, accessed June 23, 2017 [↑](#footnote-ref-1)
2. [www.opengeospatial.org/ogc/legal](http://www.opengeospatial.org/ogc/legal), accessed September 1, 2017 [↑](#footnote-ref-2)
3. <http://docs.opengeospatial.org/pol/05-020r25/05-020r25.html#93>, accessed August 30, 2017 [↑](#footnote-ref-3)