MEMORANDUM OF UNDERSTANDING
BETWEEN
THE WORLD METEOROLOGICAL
ORGANIZATION
AND
THE OPEN GEOSPATIAL CONSORTIUM, INC.

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AND

THE OPEN GEOSPATIAL CONSORTIUM, INC.

Memorandum of Understanding ("MOU") between the World Meteorological Organization ("WMO"), with its headquarters at 7 bis, avenue de la Paix, Case postale 2300, CH-1211 Geneva 2, Switzerland, and the Open Geospatial Consortium, Inc. ("OGC") with its principal place of business at 35 Main Street, Suite 5, Wayland, Massachusetts 01778 USA:

RECITALS:

WHEREAS, the OGC is a not-for-profit international standards organization founded in 1994, and comprised of industry, government and academic members dedicated to advancing interoperability among IT systems that process geo-referenced information.

WHEREAS, the WMO is a special agency of the United Nations (UN) since 1951, was first established in 1950, having originated from the International Meteorological Organization (IMO) founded in 1873, and is now the UN system's authoritative voice on the state and behavior of the Earth's atmosphere, its interaction with the oceans, the climate it produces and the resulting distribution of water resources, with membership comprising 188 Member States and Territories.

WHEREAS the OGC and WMO desire to collaborate as partners in the development, application, and outreach for standards and best practices for content, metadata, and exchange of meteorological, climatological, oceanographic and hydrologic data for the benefit of the worldwide scientific and operational communities of meteorologists and hydrologists.

WHEREAS the OGC and WMO wish to recognize each other's unique authority, capabilities and memberships in order to promote and advance technology interoperability, and to memorialize their understanding regarding certain joint activities in which they plan to engage.

In consideration of the benefits anticipated from entering into this MOU, the OGC and WMO ("Parties") agree as follows:

1. Work Program. Exhibit A describes the work or activities in which the Parties agree to cooperate (the "Program"). The Parties will act in close cooperation and will consult together regularly on matters of common interest and keep the other informed of all relevant development in regard to current or projected activities and agree to work in good faith to carry out the Program until such time as it is completed or this MOU earlier terminated, as provided in Section 5.

- 2. **Representations and Warranties.** Each Party represents and warrants to the other that (i) it has due authority to enter into and perform this MOU, (ii) its performance of this MOU will not conflict with any other agreement to which it is a party, and (iii) its performance of this MOU will not conflict with its intellectual property rights ("IPR") policy, or with any other policy or obligation binding upon it that relates to IPR matters.
- 3. **Liaison.** Each Party will appoint and maintain a representative to act as liaison with the other Party, and each Party may deal exclusively with the liaison appointed by the other Party if it so chooses, except as otherwise provided in Exhibit A. The initial liaisons are listed in Exhibit A.
- 4. IPR and Confidentiality Policies. Unless otherwise specified in Exhibit A, (a) each Party agrees that when it is engaging in any activity hosted by the other Party, the policies of the other Party regarding IPR and confidentiality of that Party will be binding upon it, (b) in the event that the Parties engage in any activities jointly to create any work product, that work product shall be jointly owned, without obligation or accounting one to the other, and no license rights are granted by either Party to the other solely by reason of entering into this MOU, and (c) each Party will treat all materials supplied to it by the other Party that have been designated in writing as, For Official Use Only, or otherwise non-public, in a manner consistent with such designation.

5. Term and Termination

- (a) This MOU shall remain in force until terminated by either Party. In the event this MOU is terminated each Party shall be solely responsible for the payment of any expenses it has incurred.
- (b) This MOU may be terminated (i) at any time without cause by either Party giving not less than thirty days notice to the other Party of its desire to terminate, and (ii) on ten days notice without cure, in the case of the breach of a material term by the Party receiving notice, providing that the Party giving notice provides sufficient detail in such notice of the nature of the breach to permit cure (except that where the breach, by its nature, is not susceptible to cure, termination shall be effective upon the giving of notice).
- 6. **Notices.** With the exception of amendments to this MOU (see paragraph 9), all notices, by a Party under this MOU shall be provided by the liaisons defined in Exhibit A through mail or email and shall be deemed effective when accepted in writing by the liaisons of the other party. Each Party shall inform the other Party of a current email address and telephone number for its liaison at all times.
- 7. Costs. Each Party shall pay its own costs and expenses with respect to its activities under this MOU, and neither Party shall have the authority to act on behalf of or to obligate the other Party (financially or otherwise) without such Party's prior written consent. The Parties agree that no funds are to be transferred through the auspices of this MOU and that all understandings under this MOU are subject to the availability of resources. This MOU does not create an obligation of the funds and resources of any of the Parties.
- 8. **Public Statements.** Neither Party will make any public statements regarding the purpose of this MOU or the activities to be performed under it without the approval and consent in writing of the other Party.
- 9. **Miscellaneous.** (1) This MOU (a) may only be amended in writing by authorized representatives of each Party; (b) except as otherwise specified in Exhibit A, supersedes any and all other understanding between the Parties, whether written or oral; and (c)

may not be assigned by either Party without the written permission of the other Party. (2) Any dispute between WMO and OGC arising out of the interpretation or execution of this MOU shall be settled by mutual agreement. If WMO and OGC are unable to reach agreement or any question in dispute or on a mode of settlement other than arbitration, either party shall have the right to request arbitration in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL), as at present in force. WMO and OGC agree to be bound by any arbitration award rendered in accordance with the above, as the final adjudication of any such dispute. (3) With the exception of Article 4 in this MOU, nothing in or relating to this MOU shall be deemed a waiver, express or implied, of any of the privileges and immunities of WMO, including its subsidiary organs.

This MOU shall enter into force on the date it is signed by both parties. In witness of the above, the Parties have caused this MOU to be executed by their duly authorized representatives.

For the World Meteorological Organization (WMO)

> (M. Jarraud) Secretary-General

Date: 16 Novemba 2009

For the Open Geospatial Consortium (OGC), Inc.

(M.E. Reichardt)
President

Date: 25 00 2007

EXHIBIT A

DESCRIPTION OF PROGRAM

The OGC and WMO agree to address the following work objectives in accordance with provisions detailed in this MOU:

- 1. OGC will provide WMO with a Not for Profit Associate Membership in the OGC. Membership privileges will be limited to WMO Secretariat staff and up to 8 designated members of WMO (two experts from each of the following disciplines Meteorology, Hydrology, Climatology and Oceanography). WMO will consider granting a consultative status to OGC as an International Non-governmental Organization. Membership privileges will be limited to OGC staff and up to 8 designated members of the OGC (two experts from each of the following disciplines: Meteorology, Hydrology, Climatology, and Oceanography). Representatives will be identified as part of the Liaisons section below.
- 2. The OGC and WMO will support the cooperative development of conventions for using ISO 19100 series of geographic information standards in the respective meteorology, hydrology, climatology, and oceanography communities, in accordance with ISO/OGC Standards and Best Practices and WMO directives to its Members.
- 3. The OGC and WMO will cooperatively develop and publish joint outreach materials designed to promote the mission and standards of both organizations, to include but not limited to one or more best practice papers on usage of ISO 19100 series of geographic information standard, OGC Web Map Service (WMS), Web Feature Service (WFS), Web Coverage Service (WCS), Catalogue Service for the Web (CSW), Geography Markup Language (GML), Sensor Web Enablement (SWE) technology and standards, and others as appropriate.
- 4. The OGC and WMO will arrange for representative(s) to participate in relevant OGC and WMO initiatives, including working groups, testbed activities, or other committee activities related to information modeling, service oriented architecture (SOA) design, spatial data infrastructure (SDI) design and implementation, and relevant workflow development, in coordination with and support for the WMO Information System (WIS) architecture and capabilities for data and metadata representation and monitoring.
- 5. OGC and WMO will work jointly to create and modify standards in areas where appropriate and where there is a mutual benefit of both organizations. Coordination will be conducted in accordance with the policies and procedures of each organization.
- 6. OGC will support participation in relevant domain working groups for meteorology, hydrology, climatology, and oceanography by non-OGC member organizations in accordance with OGC policies and procedures, and as long as such participation is in the service such organizations' contribution to their respective fields of study. OGC will provide its portal content management resources, including but not limited to http- and ftp-based file and mail list management, twiki pages, event calendar, OGCNetwork, and other tools. Organizations that hold membership in both the WMO and OGC may participate in activities of this MOU.

LIAISONS:

The individuals identified below are the designated liaisons for this MOU. Any changes in liaison composition must be pre-approved in writing (following the same procedure as described in paragraph 9 (1) of this MOU) by the affected Party:

OGC LIAISONS

Dr Carl Reed OGC Chief Technology Officer creed@opengeospatial.org, +1 970 402 0284

George Percivall
OGC Chief Architect and Executive Director of Interoperability Program
gpercivall@opengeospatial.org, +1 301 560 6439

Dr David Arctur OGC Director of Interoperability Programs darctur@opengeospatial.org, +1 512 771 1434

WMO SECRETARIAT LIAISONS:

Mr Peiliang Shi Director, WMO Information System Branch pshi@wmo.int, +41 (0) 22 730 8219

Mr Pierre Kerhervé Chief, Data Representation, Metadata and Monitoring Division, WIS Branch pkerherve@wmo.int, +41 (0) 22 730 82 18

Mr Jose Arimatea de Sousa Brito Acting Chief, Information and Telecommunication System Division, WIS Branch jarimatea@wmo.int, +41 (0) 22 730 82 65

Mr David Thomas Project Manager, WIS Branch dthomas@wmo.int, +41 (0) 22 730 82 86