TITLE: Land Administration Domain Working Group

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**CATEGORY: Domain Working Group** 

#### 1. Introduction and Problem Statement

This Domain Working Group charter defines the role for OGC activities related to land administration. Worldwide, effective and efficient land administration is an ongoing concern. Only 40 countries around the world have mature land information systems. Of the developing nations, most have 10% or less of their lend in formal systems. In many countries land administration systems are non-existent, or are manual paper-based systems subject to limited public access, and are at significant risk of data loss due to disasters. Challenges exist to guide developing nations in a programmatic way to establish cost effective interoperable land administration capability, to upgrade current manual processes, and to field solutions that are automated and are flexible to new data sources and new technologies.

Key is the ability of land administration frameworks to support the regulatory and policy environments that are often unique to individual jurisdictions and nations.

This DWG will focus on the examination of existing systems of land administration, preparation of best practices that enable nations to address their needs in less time, cost and effort through standards-based implementations, and dialog on the integration of emerging information resources and/or technologies to assist nations in leapfrogging capability. Additionally, this DWG will identify and mature proposals for industry interoperability assessments, interoperability testbeds, pilots and experiments designed to bring together users and technology providers to test, demonstrate and validate best practices that can be used to guide the acquisition and implementation of sustainable, scalable and interoperable systems.

The Land Administration DWG will leverage OGC's membership, as well as Alliance partnerships and liaisons with other <u>associations and</u> standards development organizations (e.g. ISO, W3C, OASIS and IHO) to address interoperability issues that span the geospatial and broader IT environment. Examples include linkages with the ISO regarding the LADM (<u>Land Administration Domain Model</u>, <u>ISO 19152:2012</u>) standard as well as those SDOs responsible for broader IT standards related to topics such as security, web and mobile services.

# 2. Purpose of Land Administration Working Group

This charter represents the interests of OGC members and the broader community to support improving the <u>interoperability</u>, effectiveness and efficiency of land administration systems through the optimized use of OGC and complementary open standards. Nations in both the developing and developed world will benefit from improved interoperability which will contribute to:

Reduced deployment time

- Lower system lifecycle costs
- Improved flexibility and scalability
- Improved choice from the IT marketplace
- Improved ability to share, exchange and integrate information related to land administration.

This DWG will examine the land administration process from the field to jurisdictional level, and with partner organizations across industry, development agencies and others as necessary. <u>Emphasis will be placed on the challenges of the developing world.</u>

## 3. Land Administration Domain Working Group Functions

Operation of OGC Domain Working Group follows the policies and procedures of the <u>Technical</u> <u>Committee</u>. The following definitions from the Technical Policies and Procedures apply to this DWG Charter template.

Definition of a Domain Working Group: A group (organizationally, a subgroup of the TC) of individuals composed of members of the TC and invited guests, with the specific intent of solving some particular interoperability problem or problems in a particular technology domain for recommendation to the Technical Committee.

This DWG will cover the following general functions performed by all OGC DWGs:

- Provide a forum for discussion and documentation of interoperability requirements for a given information or user community;
- Provide a forum to discuss and recommend document actions related to Interoperability Program Reports.
- Develop Change Requests Proposals (CRPs) for existing OGC Standards.
- Develop reports and recommendations with the intent seeking approval by the OGC Technical Committee for release of these documents as OGC White Papers, <u>Discussion Papers</u> or <u>Best Practices Papers</u>.
- Prepare and deliver informational presentations and discussions about the market use of adopted OGC Standards.
- § Maintain a current, approved charter that defines the DWGs Scope of Work and estimated timeline for completion of the work.
- **§** Have missions and goals approved by the TC
- § Have voting process consistent with TC Policies and Procedures

This DWG <u>does not</u> work on RFC submissions, candidate standards, or revisions to existing OGC Standards. However, a DWG can develop change requests as document interoperability requirements that can then be submitted as work items to a SWG.

This DWG will be open to OGC members and the public by default, including member and public access to the DWG via email lists and DWG meetings – whether in person or convened by net meeting or teleconference. A desire for "member only" DWG participation must be justified and approved by a vote of the TC.

Voting in this DWG is by <u>simple majority of OGC Members</u> present at the WG meeting, not just Voting TC Members, with the caveat that no OGC Member organization may cast more than one vote in a WG vote.

#### 4. Charter

## 4.1 Charter Members.

The initial membership of the Land Administration DWG will be open to both OGC members and those outside of OGC in order to learn about the requirements from the entire community. It is being chartered by the following <u>organizational and individual</u> members with strong interest, education and experience in land administration, namely:

AdV Germany Lance McKee

ATOS Leica Geosystems

Esri Metaspatial

Esri Canada Oracle

FM Global Thomson Reuters

INEGI Trimble

Intergraph United Nations / World Bank Group

#### 4.2 Land Administration DWG Activities.

The Land Administration DWG will pursue the following initial activities, with periodic reassessment of its mission based on progress in addressing key land administration issues:

- 1. Examination of current land administration system landscape, with particular emphasis on the developing world
- 2. Identification of best practices in open standards, including those of the OGC, ISO and others, in addressing key data integration, management and sharing challenges
- 3. Development of outreach to help the technology and user community in land administration understand and align on open standards
- 4. Recommend creation of OGC Standards Working Groups as necessary to address the gaps in the OGC standards baseline or provide input to ongoing OGC standards work.
- Communicate standards issues with external standards to SDOs charged with maintenance of these standards.
- 6. Identify and recommend OGC interoperability initiatives pilots and / or experiments to unite the technology and user communities in the testing, demonstration and validation of standards best practices and operational prototypes that:
  - i. Inform organizations regarding how to request / mandate open standards in acquisitions
  - ii. Provide evidence of the value of open standards based approaches
  - iii. Encourage industry-wide scaling of land administration capability

### 4.3 **Business Case**

Land records exist in a spectrum from basic paper information to sophisticated cadastral systems. While standards exist to describe elements of an administrative system, there is not a consistent use of geospatial description of land records nor adequate rules for defining and describing the quality of the records. This DWG will work to provide a common vocabulary for the locational aspects of land administration databases in the context of suitability of those databases for their intended purposes. The DWG will also be a forum for connecting suitable technology for data linkage and quality assessment.

# 5. References

