TITLE: GeoPackage Standards Working Group Charter

Author Name (s): Paul Daisey

Email: pauld@imagemattersllc.com

DATE: 25 June 2014

CATEGORY: SWG Charter

To:  OGC members & interested parties  
  
The OGC GeoPackage Standards Working Group charter is being amended. The OGC members listed below have proposed this amendment per the purpose clause of the SWG charter amendment below.

The SWG charter amendment provided in this document meets the requirements of the OGC TC Policies and Procedures. The SWG name, statement of purpose, scope, list of deliverables, audience, and language specified in the proposal will constitute the SWG's official charter. Technical discussions may occur no sooner than the SWG's first meeting.  
  
This SWG will operate under the OGC 2007 IPR Policy. The eligibility requirements for becoming a participant in the SWG at the first meeting (see details below) are that:

* You must be an employee of an OGC member organization or an individual  
  member of OGC;
* The OGC member must have signed the OGC Membership agreement;
* You must notify the SWG chair of your intent to participate to the first meeting. Members may do so by logging onto the OGC Portal and navigating to the Observer page and clicking on the link for the SWG they wish to join and;
* You must attend meetings of the SWG. The first meeting of this SWG is at the time and date fixed below. Attendance may be by teleconference.

Of course, participants also may join the SWG at any time. The OGC and the SWG welcomes all interested parties.  
  
Non-OGC members who wish to participate may contact us about joining the OGC. In addition, the public may access some of the resources maintained for each SWG: the SWG public description, the SWG Charter, Change Requests, and public comments, which will be linked from the SWG’s page.  
  
Please feel free to forward this announcement to any other appropriate lists. The OGC is an open standards organization; we encourage your feedback.

# GeoPackage

This OGC® Encoding Standard defines GeoPackages for exchange and GeoPackage SQLite Extensions for direct use of vector geospatial features and / or tile matrix sets of earth images and raster maps at various scales. Direct use means the ability to access and update data in a “native” storage format without

intermediate format translations in an environment (e.g. through an API) that guarantees data model and data set integrity and identical access and update results in response to identical requests from different client applications. GeoPackages are interoperable across all enterprise and personal computing environments, and are particularly useful on mobile devices like cell phones and tablets in communications environments with limited connectivity and bandwidth.

# Purpose of this Standards Working Group

The purposes of the GeoPackage SWG are to:

1. Make corrections to and adjudicate Change Request Proposals (CRPs) for the GeoPackage Encoding Standard
2. Address potential future work items identified in the version 1.0.0 Standard as requested
3. Develop a GeoPackage Implementation Guide Best Practices Document
4. Develop an OWS Context Document Guide for GeoPackage Best Practices Document in collaboration with the OWS Context SWG
5. Ensure long-term collaboration with other SWGs, including
   1. those responsible for standards on which the GeoPackage encoding standard depends
   2. those that may extend their standards to use GeoPackage as a supported exchange format
6. Develop a Conformance Interoperability Test and Evaluation (CITE) TEAM Engine TestNG Executable Test Suite (ETS) for GeoPackage and its SQLite Configuration and SQLite Extension based on the Abstract Test Suite in Annex A.

# Business Value Proposition

An open standard non-proprietary platform-independent GeoPackage container for distribution and direct use of all kinds of geospatial data will increase the cross-platform interoperability of geospatial applications and web services. Standard APIs for access and management of GeoPackage data will provide consistent query and update results across such applications and services. Increased interoperability and result consistency will enlarge the potential market for such applications and services, particularly in resource-constrained computing environments like smart phones and tablets. GeoPackages will become the standard containers that are used as a transfer format by Geospatial Web Services and a storage format for direct use of geospatial data on personal and enterprise devices.

# Scope of Work

The SWG has received and will continue to accept notices of errors in and omissions from the GeoPackage Encoding Standard. The SWG will evaluate these notices, draft corrections and additions to correct the notice items, and make edits to the standard based on decisions of the SWG membership. This task will begin as soon as the amended charter is approved. A corrigendum revision is scheduled to be completed by the end of September 2014.

The SWG will collect all outstanding Change Request Proposals , evaluate each of the proposals, and make edits to the standard based on CRPs and related decisions of the SWG membership. This task will begin as soon as CRPs are approved by the TC Chair and received by the SWG.

The SWG, at their discretion, may ask the membership for any additional change requests that have not been previously submitted, including potential future work items identified in the version 1.0.0 Standard.

The SWG will address potential future work items identified in the version 1.0.0 Standard as requested in a CRP. (Informal requests have been received for an extension to encode elevation data in TIFF format.)

The SWG will develop a GeoPackage Implementation Guide Best Practices Document.

The SWG will collaborate with the Simple Features SWG on additional geometry types and changes to Well Known Text (WKT) / Well Known Binary (WKB) geometry encodings.

The SWG will develop an OWS Context Document Guide for GeoPackage Best Practices Document in collaboration with the OWS Context SWG. Both SWGs voted to perform this task and have started working on it together.

The SWG will collaborate with other SWGS to extend their standards to use GeoPackage as a supported exchange format, and to make any changes to the GeoPackage Encoding Standard that may be required to enable these new uses.

The SWG will produce a CITE TEAM Engine TestNG ETS for the GeoPackage Encoding Standard and its SQLite Configuration and SQLite Extension. A beta version of the ETS is scheduled to be completed by the end of September 2014.

The SWG will produce one or more revisions of the GeoPackage Encoding Standard for consideration by the OGC membership for adoption. The first such revision is scheduled to be completed by the end of March 2015.

## Statement of relationship of planned work to the current OGC standards baseline

OGC Simple Features Standards may be extended to include and provide WKT/WKB encoding for several GeoPackage optional geometry types .

The GeoPackage Encoding Standard relationship to the OWS Context Document Abstract and Implementation Encoding Standards will be described in a Best Practices Document developed jointly by both SWGs. Change Request Proposals for the GeoPackage and OWC Standards may be created to enable the practices described in that document.

Other OGC Standards including but not limited to WFS, WMTS, WCS, WPS, and CSW, may be extended to use GeoPackage as a supported exchange format. Changes to the GeoPackage Encoding Standard may be required to enable these new uses.

## What is Out of Scope?

Work on informal requests is out of scope.

## Specific Contribution of Existing Work as a Starting Point

OGC 12-128r10 OGC® GeoPackage Encoding Standard

## Determination of SWG Completion

The GeoPackage SWG will be a persistent SWG until no CRPs or collaboration activities with other SWGs have occurred for a period of 1 year.

## Is this a persistent SWG?

Yes

# Description of Deliverables

1. One corrigendum revision of the GeoPackage Encoding Standard
2. GeoPackage Implementation Guide Best Practices Document
3. OWS Context Document Guide for GeoPackage Best Practices Document
4. CRPs for the GeoPackage and other OGC Standards
5. CITE TEAM Engine TestNG ETS for the GeoPackage Encoding Standard and its SQLite Configuration and SQLite Extension
6. One or more revisions of the GeoPackage Encoding Standard

# IPR Policy for this SWG

RAND-Royalty Free.

# Anticipated Participants

The primary anticipated participants in this SWG include developers, vendors, and users of Geospatial Applications, Geospatial Web Services, and Geospatial Data Stores. Other anticipated participants include participants in current and past SWGs for OWS specifications that may be subject of future Change Requests to harmonize them with the GeoPackage specification (e.g. OWS Common and OWS Context) or to use GeoPackages as an exchange and storage format.

# Other Informative Remarks about this SWG

a. Details of the First Meeting  
  
The first meeting of the SWG will be held by telephone conference call on Tuesday xx July , 2014 at 11:00 AM Eastern.

b. Projected On-going Meeting Schedule

The work of the SWG will be carried out primarily by email and conference calls, possibly every 1-2 weeks, probably continuing the existing schedule of Tuesdays at 11:00 AM Eastern, with face-to-face meetings perhaps at each of the OGC TC meetings.  
  
   
c. Supporters of the Proposal  
  
The following people support this proposal and are committed to the Charter and projected meeting schedule. These members are known as SWG Founding or Charter members. Once the SWG is officially activated, this group is immediately “opted-into” the SWG and have voting rights from the first day the SWG is officially formed. Extend the table as necessary.

|  |  |  |
| --- | --- | --- |
| Name | Email | Organization |
| Kevin Backe | [kevin.backe<at>usace.army.mil](mailto:Kevin.Backe@usace.army.mil) | U.S. Army Geospatial Center |
| Paul Daisey | [pauld<at>imagemattersllc.com](mailto:pauld@imagemattersllc.com) | Image Matters LLC |
| Keith Ryden | [kryden<at>esri.com](mailto:kryden@esri.com) | ESRI |
| Pepijn Van Eeckhoudt | [pepijn.vaneeckhoudt<at>luciad.com](mailto:pepijn.vaneeckhoudt@luciad.com) | Luciad |
| David Wesloh | [david.g.wesloh<at>nga.mil](mailto:David.G.Wesloh@nga.mil) | U.S. National Geospatial Intelligence Agency |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

e. Convener(s)  
  
Kevin Backe (U.S. Army Geospatial Center)