Open Geospatial Consortium

Compliance Testing Program

Policies & Procedures

Warning

This document is an OGC Policies and Procedures Document. The document is subject to change based on membership requirements and motions.

Table of Contents

1   Introduction

1.1   Overview Document

This document describes the Open Geospatial Consortium (OGC) Compliance Testing Program. It describes the roles and responsibilities, compliance testing procedures, development of test packaging, and policies for developing and releasing the software use for testing.

The Compliance Test Program provides the resources, procedures, and policies to certify products for compliance with one or more OGC standards.

The primary purpose of the Compliance Testing Program is to increase systems interoperability while reducing technology risks by providing a process whereby compliance with OGC standards can be tested. The Compliance Testing Program provides confidence to technology vendors and buyers. Vendors feel confident that they are providing a product compliant with OGC standards, which will be easier to integrate and easier to market. Buyers fill confident that a compliant product will work with another compliant product based on the same OGC standard, regardless of which company developed the product.

1.2   Changes to this document

Any changes to this document are discussed at the OGC CITE Steering Committee (SC). Main changes are discussed at the Planning Committee (PC). Ultimately the Technical Committee (TC) votes for the release and approval of this document. A change request can also be submitted against this document via the OGC web site at http://www.opengeospatial.org/standards/cr.

2   Definitions

Abstract Test Suite (ATS) – A set of testable assertions about the functionality of a standard, which an implementation must support in order to achieve compliance to the standard. ATS are based on the conformance clauses defined in the standard.

Compliance – A state of a specific software product, which implements an OGC Standard and has passed the Compliance Testing Evaluation.

Compliance and Interoperability Testing & Evaluation (CITE) – The same as Compliance Testing Program.

Conformance – A standard's "abstract conformance" to Standards Packages for that standard (see ISO 19105:2000 Geographic information - Conformance and Testing at http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=26010).

Candidate Organization – An organization that has made, or intends to make, an application for compliance testing.

Candidate Product – A particular product version that has been submitted for compliance testing by a Candidate Organization.

Certification Authority – The body that certifies that a Candidate Organization meets the requirements to receive a Compliance Certificate—in this case, the Open Geospatial Consortium, Inc.

Compliance Testing Engine – A software tool use to evaluate compliance of candidate products.

Compliance Testing Evaluation Procedure – Set of steps used to evaluate a software product for proper implementation of an OGC standard.

Compliance Test Package (CTP) – This includes the ETS, test data sets, and a reference to the Standards Package and TEAM Engine build. This is versioned to represent a particular state of each component (ETS, test data). Note that changes to Test Package components may not necessitate a change in the Standards Package.

Compliance Testing Language (CTL) – An XML grammar used for documenting and scripting suites of tests, used by the Compliance Testing Engine. It is the OGC best practice document OGC 06-126.

Executable Test Suite (ETS) – A set of code (e.g. Java and CTL) that provides runtime tests for the assertions defined by the ATS. Test data required to do the tests are part of the ETS.

Implementation – A computer program that claims to fulfill the requirements defined in a particular OGC Standard.

Implementation Standard – A document or set of documents containing a technology specification created and approved by OGC. It may define a service interface, an encoding language, specific message encodings or data formats.

Licensee – Organization that has been granted an OGC Certification Trademark License over a implementation software product, which a version has been certified as compliant for a particular version of a standard.

OGC CITE Subcommittee (SC) – A sub-committee of the OGC Technical Committee (TC) consisting of OGC Members interested in the Compliance Testing Program. The SC guides the direction and focus of CITE, through its role in reviewing formal motions brought from OGC Members and Staff, and recommending approval by the TC.

OGC Member – an organization that is a member in good standing of OGC.

OGC Planning Committee (PC) – A committee of the OGC consisting of representatives from OGC Principal and Strategic Members. The PC guides the direction and focus of the OGC Specification Program, through its role in approving formal motions brought from the OGC TC.

OGC Staff—individuals employed directly by OGC or seconded to OGC by its Strategic Members.

OGC Technical Committee (TC) – A committee of the OGC consisting of representatives from all OGC member organizations. The TC develops standards, specifications, and best practices, subject to approval by the OGC Planning Committee.

OGC Compliance Test Coordinator (CTC) – The OGC staff member responsible to coordinate and manage the operation of the Compliance Testing Program.

OGC Web Testing Facility – Software used by OGC to check compliance of software to OGC standards. It is available as a web interface. OCG has an official web site for approved official CTPs and a beta web site for beta CTPs.

Reference Implementation (RI) – A fully functional, licensed copy of a tested, branded software that has passes the test for an associated conformance class in a version of an Implementation Standard and that is free and publicly available for testing via a web service or download. The RI does not need to pass all the conformance classes within the standard. In most of the cases, the Reference Implementation will pass at least the core and possibly some number of

extension conformance classes. Multiple reference implementations can exist for an associated version of an Implementation Standard

Software Implementation – The same as Implementation.

Standards Package – A set of documents including the Implementation Standard Revision, all appropriate schemas supporting the Implementation Standard Revision, the conformance clauses, and the ATS. This is versioned to represent a particular state of each component (standard, schemas, conformance clauses).

Testing Evaluation And Measurement (TEAM) Engine – An open source software package designed for testing web services and other resources. It executes test scripts written in Compliance Test Language (CTL). It is used at the OGC Web Testing Facility.

3   Compliance Testing Program Roles and Responsibilities

3.1   CITE Subcommittee

The CITE Subcommittee (CITE SC) is a committee of the OGC TC consisting of OGC Members interested in the Compliance Testing Program. CITE SC has the following responsibilities:

- Guides the direction of the Compliance Testing Program.
- Reviews formal motions brought from OGC Members and OGC Staff.
- Submits formal motions and recommends approval by the TC.
- Reviews and approves roadmap.

3.2   Director of Interoperability Certification

The Director of interoperability Certification currently oversees the Compliance Testing Program and acts as the Compliance Testing Coordinator.

3.3   The Compliance Testing Coordinator

The Compliance Testing Coordinator (CTC) is the OGC Staff member responsible for coordinating and managing the operation of the Compliance Testing Program. The CTC has the following responsibilities:

- Propose candidate guidelines, policies, and procedures to the CITE SC.
- Coordinate the developing and maintenance of Compliance Test Packages.
- Coordinate the developing and maintenance of the Compliance Testing Engine.
- Propose candidate Compliance Test Packages to the CITE SC.
- Maintain guidelines and documentation of the Program.
- Select Reference Implementations (RI) for a Compliance Test Package and coordinate with the Reference Implementations developers for proper maintenance.
- Coordinate the Compliance Testing Evaluation of a Candidate Product.
- Manage and execute the interpretation and clarification process in collaboration with Standards Working Groups and Revision Working Groups.

   ☐   Manage and execute the dispute and challenge resolution process in collaboration with the appropriate working groups and OGC Member discussion forums.

3.4 The CITE Subcommittee, Technical and Planning Committees (PC)

With respect to compliance testing, the SC, TC and PC have the following responsibilities:

- ☐ Review and approve compliance testing guidelines, policies, and procedures.
- ☐ Review and select Compliance Test Packages including adaptations and provide an analysis of the adaptations to the CTC.
- ☐ Approve the release of Compliance Test Package versions.

3.5 OGC Compliance Team

The OGC Compliance Team is composed of OGC staff supporting this program. It includes the Compliance Testing Coordinator and other OGC staff.

For compliance testing, the OGC Staff has the following responsibilities:

- ☐ Support the Compliance Testing Coordinator related to the Compliance Testing Program.
- ☐ Administer the certification process including invoice processing and fees.

4 Compliance Testing Evaluation Procedure

4.1 Description of the Compliance Testing Evaluation Procedure

The Compliance Testing Evaluation Procedure is a set of steps used to evaluate a software product for proper implementation of an OGC standard. OGC has setup a web site providing an online procedure for most of the tests; however, there are some tests that are not available via the web site. The tests not available as an online test (e.g. Simple Feature related tests) can be found here:

http://www.opengeospatial.org/compliance/downloads

The online test procedure is detailed in Figure 1. A box indicates a process. A red box indicates a process for which a Candidate Organization (CO) is responsible. A blue box indicates a process for which the Compliance Team (CT) is responsible.

In August of 2013, OGC made available a compliance submission website simplifying the submission process and the need to submit forms and results manually. The forms are available as online web forms and the web site links with the testing website facility. Link: http://www.opengeospatial.org/resource/products/registration
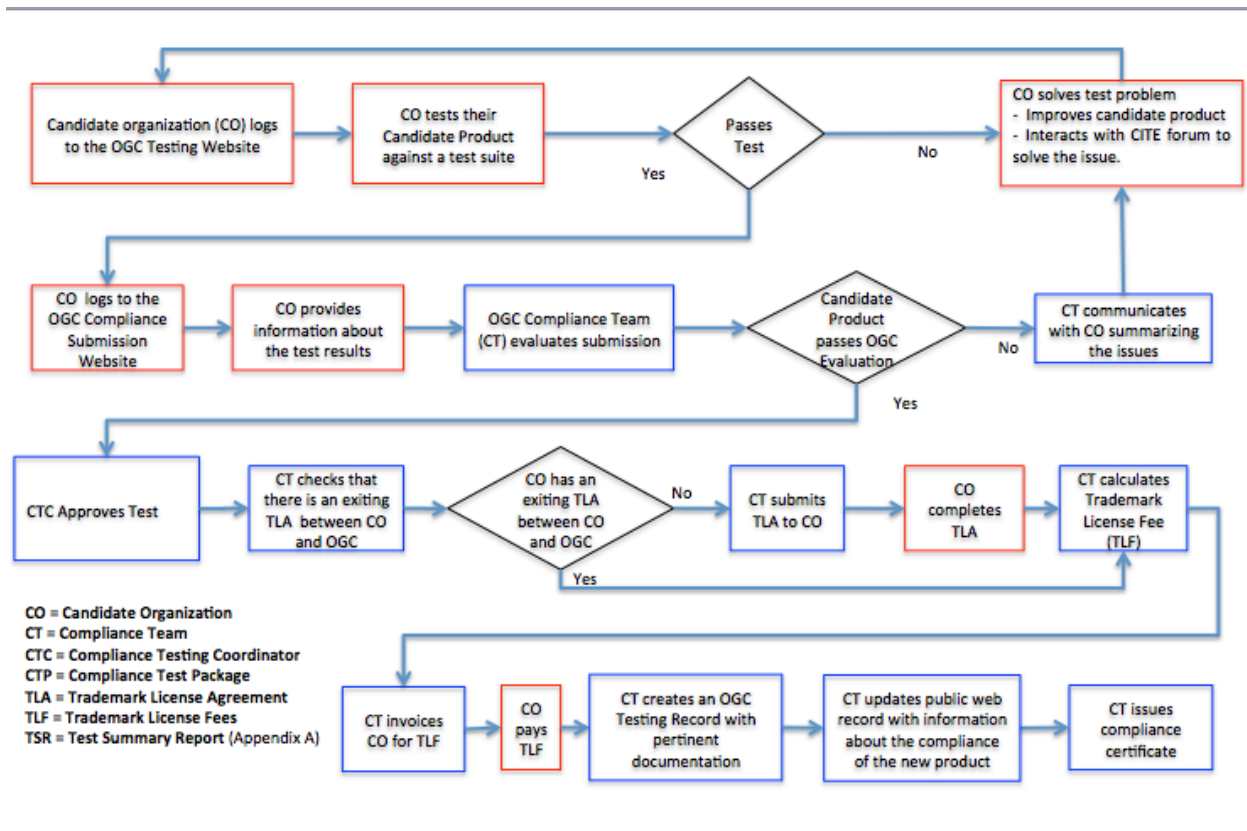
Figure 1 – Flow chart for the Compliance Testing Evaluation Procedure

4.2 Policy on Previously Approved Products and Future Releases

Compliance will be determined **once** for a product version with respect to a particular Implementation Standard Version, and requires the successful completion of the Testing Procedure. Compliance of **future releases** of the same product requires the successful completion of the Testing Procedure.

4.3 Compliance Determination

Candidate Products that pass all the tests in a Compliance Test Package, and that OGC has reviewed and certified as having passed those tests, are considered compliant with that Implementation Standard version. This is the sole criterion for determining the compliance of a Candidate Product.

4.4 Test Records

The CTC will maintain a file of records pertaining to testing, hereafter referred to as the OGC Testing Record. Records pertaining to a particular organization will be available for examination by that organization upon request. Records maintained in the OGC Testing Record will be maintained for a minimum of three (3) years.

OGC will make a good faith effort to retain the following documents in the OGC Test Record:
- Abstract Test Suites,
- Executable Test Suites,

□   Test Summary Reports (and all attachments),

□   Test Failure Notification Letters,

□   Compliance Certificates,

□   Trademark License Agreements,

□   Compliant Product Records, and

□   Any other correspondence of importance related to the OGC Compliance Testing Program.

4.5   Certificate Issuance

A Compliance Certificate (Appendix F) is issued for tested software products that successfully pass the Compliance Testing Evaluation Procedure.

The holder of such a certificate is entitled to use the "Certified OGC Compliant" mark (Figure 2) according to terms and conditions set forth in the Trademark License Agreement (Appendix E) and after the applicable Trademark Licensing Fee has been paid (Appendix G). The Trademark Licensing Fee shall be paid annually in order to maintain a valid certificate.

Figure 2 – Certified OGC Compliant Mark

The Compliance team will create an OGC Testing Record with a copy of the Compliance Certificate and the supporting Test Summary Report. The Compliance Team will add any product that receives a Compliance Certificate to the Compliant Products Record (Appendix F). Products that are added to the Compliant Products Record will be removed three (3) months after failure to pay the annual trademark-licensing fee, or by written request of the Candidate Organization. Relevant information from the Compliant Products Record will be maintained on the OGC public web site (http://www.opengeospatial.org/) for every product that receives a Compliance Certificate.

In order to avoid confusion in the place, OGC reserves the right to terminate the right of a Candidate Organization to use OGC trademarks to indicate successful Compliance testing at such time as OGC deems consumer confusion likely. In the event that this occurs, OGC shall give advance notice to the extent possible, and transitional steps will be taken, to minimize any inconvenience to vendors of Candidate Products.

4.6. Live Logos

OGC provides a link to live logos for organizations that have successfully passed the Compliance Testing Evaluation Procedure. Every product has its own link where an image is automatically generated. An example is shown in Figure 3. The image contains the company name, the product name and the standards for which the product has been certified with. It also contains the date of validity. The logo links directly to the OGC public record that contains more information about the company.

Figure 3 – Live Logo

5   Compliance Test Package Development

Subject to available resources and the perceived need of the marketplace, OGC intends to adopt and maintain at least one **Compliance Test Package (CTP)** for each conformance class in each OGC Implementation Standard.

A CTP is composed of an Abstract Test Suite (ATS) and an Executable Test Suite (ETS). An ATS is a set of testable assertions about the functionality of a standard, which an implementation must support in order to achieve compliance to the standard. An ATS is based on the conformance classes defined in the standard in accordance with the latest revision of "OGC 08-131r3 The Specification Model — A Standard for Modular specifications". An ETS is a set of code (e.g. Java and CTL) that provides runtime tests for the assertions defined by the ATS. Test data required to do the tests are part of the ETS.

OGC provides the following resources that support the development and maintenance of the CTP:

- An official web testing facility with the official tests
- A beta web testing facility with the tests in beta
- Public Forum for discussion of any issues
- SVN repository to maintain and make available the CTPs
- Public Issue tracker to manage the issues for the CTPs

 The CITE wiki (cite.opengeospatial.org) provides further information about these resources.

The overall process to develop a CTP is illustrated in Figure 4.
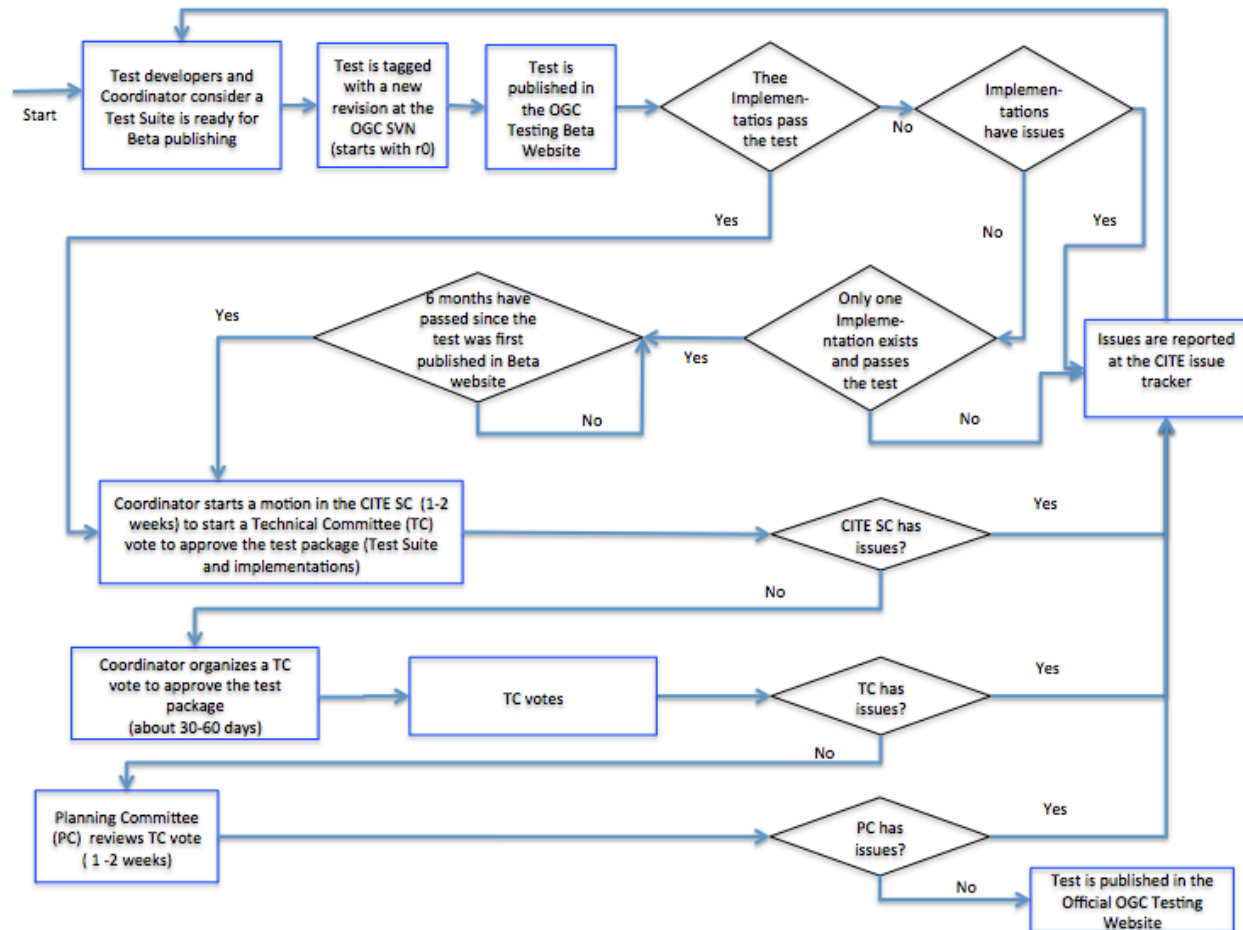
Figure 4 – Overall Compliance Test Package Development

Tests are composed of conformance classes. It is required to have at least three implementations that pass a conformance class for a conformance class to be released as official. However, if a test has been in beta for more than 6 months and one or two implementations have passed the test, the CITE SC can consider a motion related to releasing the test as official with an exception about requiring three minimum implementations.

When the TC approves a Compliance Test Package. It is published at the OGC Web-based Testing Facility. Organizations may then certify their products using the new Compliance Test Package as described in section 4.

The roadmap is maintained at the public CITE wiki (http://cite.opengeospatial.org/roadmap).

5.1   Parties Who May Develop Compliance Test Packages

Candidate Compliance Test Packages may be developed by any of:

- ☐ OGC Members
- ☐ The CTC and/or other OGC Staff
- ☐ OGC Testing Contractors (under the direction of the CTC)

Candidate Compliance Test Packages must be submitted to the CTC for review and (potential) adoption.

5.2   Compliance Test Package Maintenance and Criteria for Review

In general, OGC testing staff will maintain CTP under the direction of the CTC. This maintenance responsibility may be delegated to an OGC member or OGC Staff by the CTC. Compliance Test Package maintenance is called for when a new Implementation Standard version is issued by OGC, when the dispute resolution process mandates such a change (see section 8), or when the CTC, in his/her sole discretion finds issues that require maintenance.

In any case, the CTC is responsible for the review of minor revisions to the Compliance Test Package. The resulting Compliance Test Package revision will then be made available to the OGC membership via the CITE SC mailing list for a minimum of five business days. The criteria for the CTC review and TC approval is that:

- ☐ The Compliance Test Package revision is complete with respect to the Compliance Testing Guideline for that particular Implementation Standard version.

- ☐ Consistency with the wording and intent of the particular Implementation Standard version.

- ☐ Consistency with OGC policy and practice.

- ☐ Versions of compliance test packages are maintained in the configuration management system and recorded with the compliance test execution.

Delivery, testing, configuration control of compliance test packages is described in the CITE Configuration Management Procedures.

Major revisions to a Compliance Test Package shall go through the same process as a new Compliance Test Package, as described in Section 5, Compliance Test Package Development.

A revision is considered major by the judgment of the CTC. However, any revision resulting in the change of greater than 20 percent of executable tests must be considered a major revision.

5.3   Compliance Test Package Availability

Compliance Test Packages will be provided in electronic form, when they are available, via OGC's public web site. The Compliance Test Package will be made available along with full documentation of the OGC Compliance Testing Program (this document) and Compliance Testing Guidelines.

5.4   Compliance Test Package Submitters

Compliance Test Package submitters must provide either 1) unrestricted ownership of the Compliance Test Package to OGC, or 2) an agreement to grant OGC a non-exclusive, royalty-free, paid-up, unrestricted worldwide license to copy and distribute their submission to the OGC

membership, and, if adopted by OGC, the unrestricted right to modify, enhance, and make derivative works from the materials and to copy and distribute the materials, modifications, enhancements, and derivative works both inside and outside of the OGC membership. Materials include software source code, documentation in multimedia or text formats, and in other resource part of the test package or required to perform the testing.

5.5   Beta Testing impact on Certificates

These first three implementations (can be reference implementations or not) to pass 100% of the compliance procedure, while the test is in beta, will have their Trademark License Fee waived through the annual licensing period for the product.

6   Reference Implementations

6.1   Definition and Determination

A fully functional, licensed copy of a tested, branded software that has passes the test for an associated conformance class in a version of an Implementation Standard and that is free and publicly available for testing via a web service or download. The Reference Implementation does not need to pass all the conformance classes within the standard. In most of the cases, the Reference Implementation will pass at least the core and possibly some number of extension conformance classes. Multiple reference implementations can exist for an associated version of an Implementation Standard. The coordinator after reviewing the results and checking the public interface of the software will determine if the implementation can be a reference implementation.

OGC will make its best effort to host Reference Implementations on an OGC server to help others in the community to develop compliant implementations.

6.2   Service Level Requirements

If the Reference Implementation is not hosted by OGC, it is expected the following from the organization providing the Reference Implementation

The Reference Implementation should

- be available in a reliable web server with 99% uptime.
- pass the test for every operational release of OGC Testing infraestructue (e.g. TEAM Engine)

If any of the aforementioned conditions fail the CITE coordinator can remove the Reference Implementation label of an existing implementation.

6.3   Fee Incentives for Reference Implementations

OGC will provide an incentive to the first two Reference Implementations that pass the test related to a conformance class within a version of an Implementation Standard. OGC will waive the license fee every year as long as the Reference Implementation passes again the conformance class test successfully.

7   Compliance Test Engine Maintenance

The OGC's accepted Compliance Test Engine is an open source product called the TEAM Engine. New contributions to the source are encouraged to enhance and extend the capability of compliance testing. Developers of the Compliance Test Engine Extent are responsible for ensuring the software is operational with existing compliance test packages and Reference Implementations.

A production and a beta version of TEAM engine are released by the CTC. After passing an acceptance period, the beta version is released into production.

When major changes are made to the TEAM engine, regression testing is performed with the latest released version of compliance tests for every specification version and OGC profile and Reference Implementation. If the results of the regression testing match the current compliance test and released TEAM Engine version, the new version of TEAM Engine is put into beta test. In some cases, the new version of TEAM Engine may be incompatible with previous compliance tests or reference implementations with an acceptable technical explanation. When incompatibilities cause differences in the test results, the CTC may require a change to the compliance test package or RI. A change in dependent software or obsolete reference implementations may deprecate past versions of compliance tests with the new versions of TEAM Engine.

Delivery, testing, and configuration control of compliance TEAM Engine is described in the CITE Configuration Management Procedures.

8   Processing Disputes/Challenges

8.1   Dispute Procedure

A "Compliance Issue" is defined as a problem identified from third party review or experience with a product after testing is completed and the product is available in the marketplace. The submitter of the issue should send an email to compliance@opengeospatial.org summarizing the problem.

The receipt of a Compliance Issue by CTC will set the following procedure in motion:

1) The CTC will coordinate that the issue is captured in the Compliance Issue a tracking system.

2) The CTC will provide clarification to the issue, if possible. If not, the CTC will suggest to use the CITE forum.

3) The CTC will notify the disputing organization of the resolution and record the dispute as resolved, closing the issue in the issue tracker. The disputing organization may appeal the decision by submitting another Compliance issue.

4) If issue submitter disagrees with the decision of the CTC, then CTC will forward the Compliance Issue to the OGC Review Board (CITE SC) for resolution along with proposed resolution alternatives and a recommendation. The issue will be opened again in the issue tracker.

5) The CTC will then notify the disputing agreement the decision of the OGC Review Board (CITE SC). And will follows step 3.

8.2   *Adaptation of Compliance Test Packages*

Organizations may have to adapt Compliance Test Packages to work with their products. OGC will provide guidance regarding allowable adaptations. In any case, OGC testing staff, in consultation with and under the approval authority of the CTC, must review the adaptation. The OGC testing staff review and CTC approval is to ensure that the original intent and functionality of the test suite is maintained. OGC testing staff must also document the adaptation, by inclusion of the adapted test suite, in the Compliance Test Summary Report (Appendix A). Candidate Organizations must submit adapted Compliance Test Packages at the time they submit a Self-Test Summary Report.

8.3   *Interpretation and Clarification of Standards*

Issues regarding the interpretation or clarification of Implementation Standards are the responsibility of the applicable Standards Working Group (SWG) of the OGC Technical Committee (specifically, the SWG that corresponds to the Implementation Standard in question). If no SWG is currently active, then the TC Chair will form an ad hoc committee (comprised of the last standing SWG membership, if possible) to process the interpretation/clarification. The TC Chair can also decide to submit the issue to the OGC Review Board.

9   Fees and Costs

OGC will not charge a fee for compliance **testing** under the Testing Procedure.

OGC will charge a fee for **trademark licensing** for Candidate Products that successfully pass a compliance test under the Testing Procedure; this fee is termed the Trademark Licensing Fee. This fee must be paid by organizations that wish to claim compliance with OGC Implementation Standards. This fee is not required to initiate and complete a test. The current fee structure is found in Appendix G of this document.

OGC will invoice a Candidate Organization that has submitted a Test Summary Report for the Trademark License Fee. This invoice must be paid before OGC will issue a Compliance Certificate and before OGC will deliver a countersigned Trademark License Agreement.

10   Revision History

Date	Version	Editor	Primary clauses modified	Description
2012-10-31	r10	Luis Bermudez	Sections 4 and 5 Appendix A	Clarified the current process for submission and developing a test package Removed need for TSR

			Appendix G	Clarified Fee Changes
2012-10-31	r9	Luis Bermudez	Section 5	Minor edits based on J Herring comments
2012-05-02	r9	Luis Bermudez	Section 1	Clarify how to deal with changes on this document. Removed revision history.
			Section 2,5,6	Clarified process to release a test package
				Clarified Reference Implementation definition and requirements
2012-03-21	r8	Luis Bermudez	Annex A,F, Section 2,5, and 6	
2012-03-01	r7	Luis Bermudez, Sam Bacharach, Paul Daisey	All	Merge changes from: Paul Daisey regarding wording for the Modular Specification; Sam Bacharach regarding consistency of terminology, and Lynne Janbergs TSR.
2012-02-22	r7	Luis Bermudez	Annex A, D and F	Updated to capture conformance classes
			Section 6	Clarification for reference implementations
			Section 5	Make more clear the process to develop new certifications
2011 -08-31	r6	Luis Bermudez	5.2 5.3 6 Annex A and 4.1	Removed repeated table Move to 5.4 Clarification of RI Added Web Link. Clarified when tests are not available on line
2011-05-27	r5	Luis Bermudez, Carl Reed	1,5, Annex G	- Edited cover page to be correct OGC page. - Edited section 1. Created introduction. Moved Overview from 1 to 1.1 and created revision history in 1.2. - Updated table of content - Updated Table G1 to match table in the TGAR and web site. For example changed ">$0M-$2M" to be "$0M-<2M" - Section 5 - replaced: "The workflow for developing a package workflow is detailed in Figure 3." to "A common The workflow for developing a package workflow is detailed in Figure 3". Since the image is not conveying the general workflow but an example that includes the creation of an ATS at an OGC IP tested activity.

Appendix A – Test Summary Report (TSR)
Submitters should now use the online test submission facility here

http://www.opengeospatial.org/resource/products/registration

The web testing facility will capture and maintain the following information

1. Test Completion Date	

2. Web Testing (if using online OGC testing facility)			
2a. Username		2b. Session Numbers	

3. Candidate Organization			
3a. Name of Organization			
3b. Mailing Address			
3c. City		3d. State/ Province	
3e. Country		3f. Postal Code	
3g. Web Link			

4. Total Gross Annual Revenue of parent corporation ($US)	☐ $0M-<$2M ☐ $2M-<$3M ☐ $3M-<$10M ☐ $10M-<$20M ☐ $20M-<$50M ☐ $50M-<$100M ☐ $100M-<$500M ☐ $500M +

5. Technical Point of Contact			
5a. Name of Individual			
5b. Mailing Address			
5c. City		5d. State/ Province	
5e. Country		5f. Postal Code	
5g. Telephone Number		5h. Facsimile Number	
5i. Email Address			

6. Financial Point of Contact			
6a. Name of Individual			
6b. Name of Department			
6c. Mailing Address			
6d. City		6e. State/ Province	
6f. Country		6g. Postal Code	
6h. Telephone Number		6j. Facsimile Number	
6j. Email Address			

7. Candidate Product Information			
7a. Product Name		7b. Product Version	
7c. Operating System Required		7d. Hardware Required	
7e. Required Software			

8. Implementation Standard Information			
8a. Standard Name		8b. Standard Version	
8c. **Conformance Classes**			

I, being duly authorized to sign legal documents on behalf of my organization, certify that the Candidate Product complies with the above-indicated Implementation Standard(s).

9. Official Signature	Signature		
		Date	
	Name	Title	

Additional Instructions

Questions concerning the technical content of summary reports or the Compliance Testing Program in general should be addressed to:

>   compliance@opengeospatial.org

Questions concerning payment should be addressed to the same address or contact Barbara Sherman at:

>   Tel: +1 508 655 5858
>   Fax: +1 508 655 2237
>   Email: bsherman@opengeospatial.org

Appendix B – Removed

Appendix C – Removed

Appendix D – Compliance Certificate Format

Compliance Certificates will have the following format, and will be available online on the OGC web site, http://www.opengeospatial.org. Hard copy of the certificate can be made available upon request.

Appendix E – Trademark License Agreement

A TLA is an agreement between OGC and an organization that desires to use the OGC Compliance Mark in association with successful OGC Compliance Testing Evaluations involving one or more product and one ore more standards. The TLA must be completed when a company passes the Compliance Evaluation of their first product and desires to be certified complaint, which will allow the organization to use the OGC Certified Compliant Mark (See Appendix H). The TLA will be sent by OGC to the organizations that have submitted a test report.

Questions concerning the TLA should be addressed to:
> compliance@opengeospatial.org

Questions concerning payment should be addressed to the same address or contact Barbara Sherman at:
> Tel: +1 508 655 5858
> Fax: +1 508 655 2237
> Email: bsherman@opengeospatial.org

Appendix F – Compliant Products Record

The following Compliant Products Record will be maintained on the OGC public Web site for every product that receives a Compliance Certificate.

Compliant Product Record			
1. Certificate Award Date			
2. Organization			
3. Point of Contact (from Compliance Application)			
3a. Name			
3b. Mailing Address			
3c. City		3d. State/ Province	
3e. Country		3f. Postal Code	
3f. Telephone			
3g. Facsimile			
3h. Electronic Mail			
4. Product Information (from Test Summary Report)			
4a. Product Name			
4b. Product Version			
4c. Operating System Required			
4d. Hardware Required			
4e. Required Software			
5. Implementation Standard for which the product has been determined to be compliant (including revision)			
6. Conformance Classes for which the product has been determined to be compliant.			

Appendix G – Trademark Licensing Fees

This appendix explains the license fees associated with the use of the Certified OGC Compliant Mark.

An organization that has a version of a product that has passed an OGC Compliance Testing Evaluation for a particular standard revision is required a license to use the "Certified OGC Compliant" Mark ("Certification Mark") in association with a specific product version and standard revision. This will allow, the organization to display in a web page the Certified OGC Compliant logo associated with an OGC specification. Appendix H provides further details about the usage of the Certification Mark.

The organization that is granted the license to use the Certification Mark (or Licensee) pays an annual Trademark License Fee per product version per implemented standard. The License Fee depends on the Total Gross Annual Revenue (TGAR) of the Licensee and the type of membership the Licensee has with OGC, if any. The TGAR of the licensee refers to the TGAR of the parent corporation. The TGAR is not based on the following: the annual gross revenue of an operating division or a wholly owned subsidiary, the geospatial related revenues, or the software-related revenues of a corporation.

The schedule (Table G-1) details the Annual Fee per Product Version, per Implemented Standard, based on the Total Gross Annual Revenue of the Licensee, as of September of 2013.

Table G.1

**Annual Fee per Product Version per
Implemented Standard Version**

Licensee Total Gross Annual Revenue	Non Member	Member
$0M - < $2M	$100	$80
$2M - < $3M	$250	$200
$3M - < $10M	$500	$400
$10M - < $20M	$750	$600
$20M - < $50M	$1,200	$960
$50M - < $100M	$2,000	$1,600
$100M - < $500M	$4,500	$3,600
$500M+	$7,000	$5,600

For example, assume Company "The Company" has a product "The Product" which version 5.0 has successfully completed an OGC Compliance Testing Evaluation for the OGC standard "WFS 3.0". The Company is not an OGC member and its TGAR is $2 M. The Fee to allow The Company to use the Certification Mark for stating that The Product version 5.0 is OGC complaint is $250 per year.

Maximum Annual Trademark License Fees for Members

OGC members not only pay less than a non member per product certified but they also benefit from a maximum ceiling on License Fee payments per year. The ceiling depends on the membership type. Table G-2 shows the maximum payment per membership type and also based on the TGAR.

Table G-2

Maximum Annual License Fee Payments per Membership Type and TGAR				
Licensee Total Gross Annual Revenue	**Associate**	**Technical**	**Principal**	**Strategic**
	No Cap	**(4X Cap)**	**(2X Cap)**	**(1X Cap)**
$0M - < $2M	no limit	$320	$160	$80
$2M - < $3M	no limit	$800	$400	$200
$3M - < $10M	no limit	$1,600	$800	$400
$10M - < $20M	no limit	$2,400	$1,200	$600
$20M - < $50M	no limit	$3,840	$1,920	$960
$50M - < $100M	no limit	$6,400	$3,200	$1,600
$100M - < $500M	no limit	$14,400	$7,200	$3,600
$500M+	no limit	$22,400	$11,200	$5,600

For example, assume that The Company is now a Technical OGC Member. The Company, based on the TGAR of $2M, will pay a maximum License Fee of $800 per year. The $800 per year is equivalent to 4 times (4x Cap) the Annual Fee for members per product per standard in Table G-1. Any additional products, which successfully complete OGC Compliance Testing Evaluation for any standards, will not require additional license fees to be paid.

Associate Member: The maximum annual Trademark License Fees that an Associate Member licensee will pay per Trademark License Year is equal to the total number of Product Version/Implementation Standard combinations being trademarked multiplied by the Associate Member fee from the table below.

Technical Member: The maximum annual Trademark License Fees a Technical Member licensee will pay per Trademark License Year is equal to four times (4X) the Trademark License Fee for its TGAR, even if the Technical Member licensee wishes the Trademark License to cover more than four Product Version/Implementation Standard combinations that have successfully passed compliance testing.

Principal Member: The maximum annual Trademark License Fees a Principal Member licensee will pay is equal to two times (2X) the Trademark License Fee for its TGAR, even if the Principal Member licensee wishes the Trademark License to cover more than two Product Version/Implementation Standard combinations that have successfully passed compliance testing.

Strategic Member: The maximum annual Trademark License Fees a Strategic Member licensee will pay is equal to one time (1X) the Trademark License Fee for its TGAR, even if the Strategic Member licensee wishes the Trademark License to cover more than one Product Version/Implementation Standard combination that has successfully passed compliance testing.

Adding Products to a Trademark License during a Licensee's Trademark License Year

When an existing licensee adds a Product that has successfully passed compliance testing during the Trademark License Year, the appropriate Trademark License Fee for each such Product is pro-rated for the balance of the Trademark License Year on a whole month basis. When the number of Products licensed during a licensee's Trademark License Year exceeds the cap for a licensee's OGC membership level, if applicable, no additional Trademark License Fee is assessed.

Fees Changes

Fees described in this schedule are subject to change without notice. The fees might change by the Board of Directors. The latest approved fees are available at the OGC web site.

New fees beginning March 1, 2013 are as follows:

	TGAR Range	Non Member	Member	Maximum under Member Caps			
	(USD)	License Fee per Product	License Fee per Product	Associate (No Cap)	Technical (4X Cap)	Principal (2X Cap)	Strategic (1X Cap)
A	$0-<$5M	$ 160	$ 80	na	$ 320	$ 160	$ 80
B	$5M-<$10M	$ 800	$ 400	na	$ 1,600	$ 800	$ 400
C	$10M-<$50M	$ 1,200	$ 600	na	$ 2,400	$ 1,200	$ 600
D	$50M-<$100M	$ 2,400	$ 1,200	na	$ 4,800	$ 2,400	$ 1,200
E	$100M-<$500M	$ 7,200	$ 3,600	na	$ 14,400	$ 7,200	$ 3,600
F	$500M+	$ 11,200	$ 5,600	na	$ 22,400	$ 11,200	$ 5,600

Maintaining the Certified Compliant status

Licensees will be notified 120 days prior to the TLA anniversary date. Within the next 30 days, the Licensee should update their TGAR score and their business and technical points of contact. 90 days prior to the TLA anniversary date, the Licensee will be invoiced for payment of their Trademark License Fee. The annual Trademark License Fee must be paid prior to that anniversary date in order to maintain certified compliant status.

Appendix H – Use of OGC Certification Mark

The "CERTIFIED OGC COMPLIANT" Certification Mark is only to be used with products that have been tested and approved by the OGC as "Compliant" to one or more OGC Implementation Standards. Further, this Certification Mark may only be used in conjunction with the appropriate logos listed below.

For products that are compliant to one or more OGC Implementation Standards, the appropriate logos listed below (or the full text description of the standard) should be used with the Certification Mark. In no case should any of the following logos be used separately from the Certification Mark.

The following statement must accompany all uses of the Certification Mark: "This product conforms to the **[Standard Name]**, Revision **[Revision Number]**, **[Alternative Name]** Alternative. OGC, OGC®, and CERTIFIED OGC COMPLIANT are trademarks or registered trademarks of the Open Geospatial Consortium, Inc. in the United States and other countries." Licensee may also use the OGC Implementation Standard logos listed below to graphically identify the Certification Mark with one or more OGC Standards.

The below images are samples and are herein for reference only.

CTS 1.0	OGC® Coordinate Transformation Services Implementation Specification, Version 1.0
CS 1.1.1	OGC® Catalog Services Implementation Specification, Version 1.1.1
GC 1.0	OGC® Grid Coverages Implementation Specification, Version 1.0
GML 3.0	OGC® Geography Markup Language Implementation Specification, Version 3.0
SF-CORBA 1.0	OGC® Simple Features Specification for CORBA, Version 1.0
SF-OLE/COM	OGC® Simple Features Specification for OLE/COM, Version 1.1
SF-SQL 1.1	OGC® Simple Features Specification for SQL, Version 1.1
WFS 1.0	OGC® Web Feature Service Implementation Specification, Version 1.0
WMS 1.1.1	OGC® Web Map Service Implementation Specification, Version 1.1.1

This formulation of OGC's notice and license became active on June 14, 2001. Please see OGC Copyright FAQ for common questions about using materials from OGC. Other questions about this notice can be directed to compliance@opengeopspatial.org.