

# Open Geospatial Consortium

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## Compliance Testing Program Policies & Procedures

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# 1 Introduction

## 1.1 Overview Document

The compliance Testing Program provides the resources, procedures, and policies to certify products for compliance with OGC 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 for OGC specifications 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 feel confident that a compliant product will work with another compliant product based on the same OGC specification, regardless of which company developed the product.

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.

## 1.2 Revision History

Date	Version	Editor	Primary clauses modified	Description
2011-04-05	r4 . v1.1	Luis Bermudez	1,5, Annex G	<ul style="list-style-type: none"> <li>- Updated table of content</li> <li>- Updated Table G1 to match table in the TGAR and web site. For example changed "&gt;\$0M-\$2M" to be "\$0M-&lt;2M"</li> <li>- 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 testbed activity.</li> </ul>
2011-05-27	r4 v1.2	Luis Bermudez	1	<ul style="list-style-type: none"> <li>- Edited cover page to be correct OGC page.</li> <li>- Edited section 1. Created introduction. Moved Overview from 1 to 1.1 and created revision history in 1.2.</li> </ul>

## 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/catalogue/catalogue\\_tc/catalogue\\_detail.htm?csnumber=26010](http://www.iso.org/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 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.

**Executable Test Suite (ETS)** – A set of code (e.g. Java and CTL) that provides runtime tests for the assertions defined by the ATS.

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

**Implementation Standard** – A document or set of documents containing a technology specification created and approved by OGC.

**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.

**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.

**Reference Implementation (RI)** – An open source, fully functional, licensed copy of the tested, branded software that has passed the compliance tests for the associated 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 the compliance testing engine used at OGC.

### **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.
- Review and approve 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 Compliance Testing Engine.
- Propose candidate Compliance Test Packages to the CITE SC.
- Maintain guidelines and documentation of the Program.

- Select Reference Implementation(s) for a Compliance Test Package and coordinate with the Reference Implementation(s) 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:

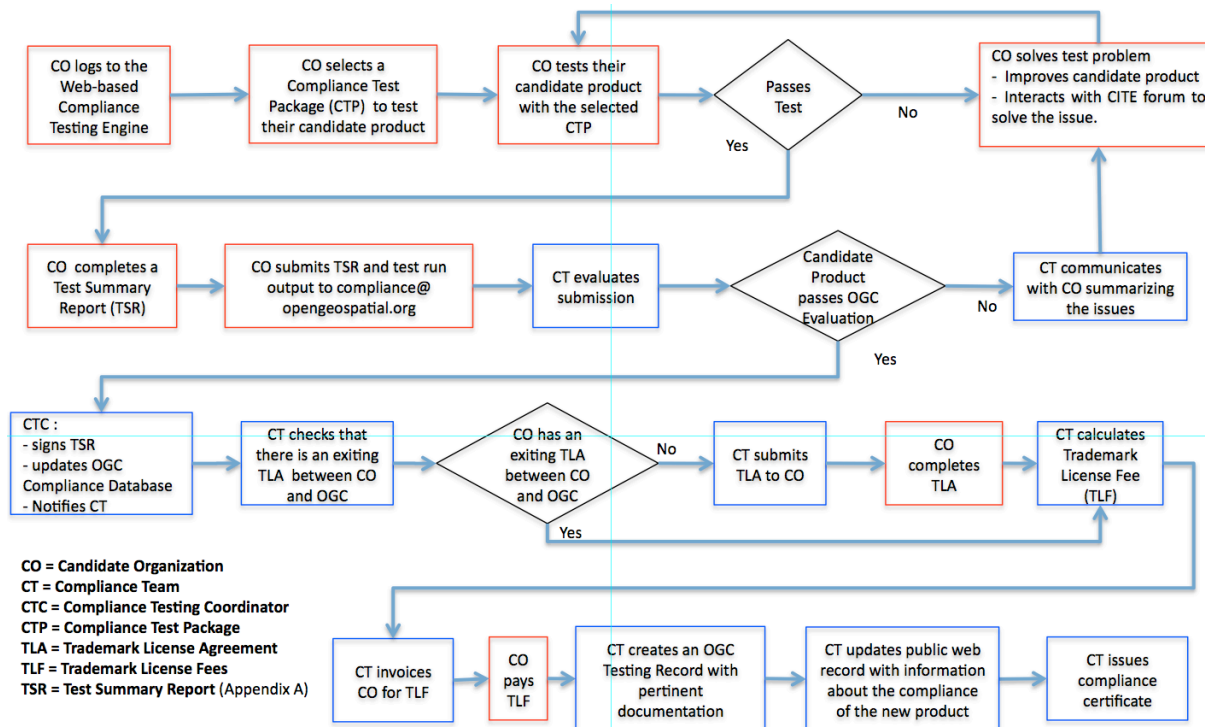
- Support the Compliance Testing Coordinator related to the Compliance Testing Program.
- Administer the certification process including invoice processing and fees.

## **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 detailed in Figure 1. A box indicates a process. A red box indicates a process that a Candidate Organization (CO) is responsible for. A blue box indicates a process that the Compliance Team (CT) is responsible for.

If a Candidate Organization is not using the web site facility it can download the test package and do the test locally. It also needs to submit, along with the Test Summary Report, output from a test run, and adapted tests (e.g. ETS and ATS).



**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 Revision, 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. Compliance Test Package software should indicate in the output the result of tests for each Compliance Item. However, in cases where this is not possible or is difficult, human analysis of test output may be required to determine compliance with particular Compliance Items.

#### 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**

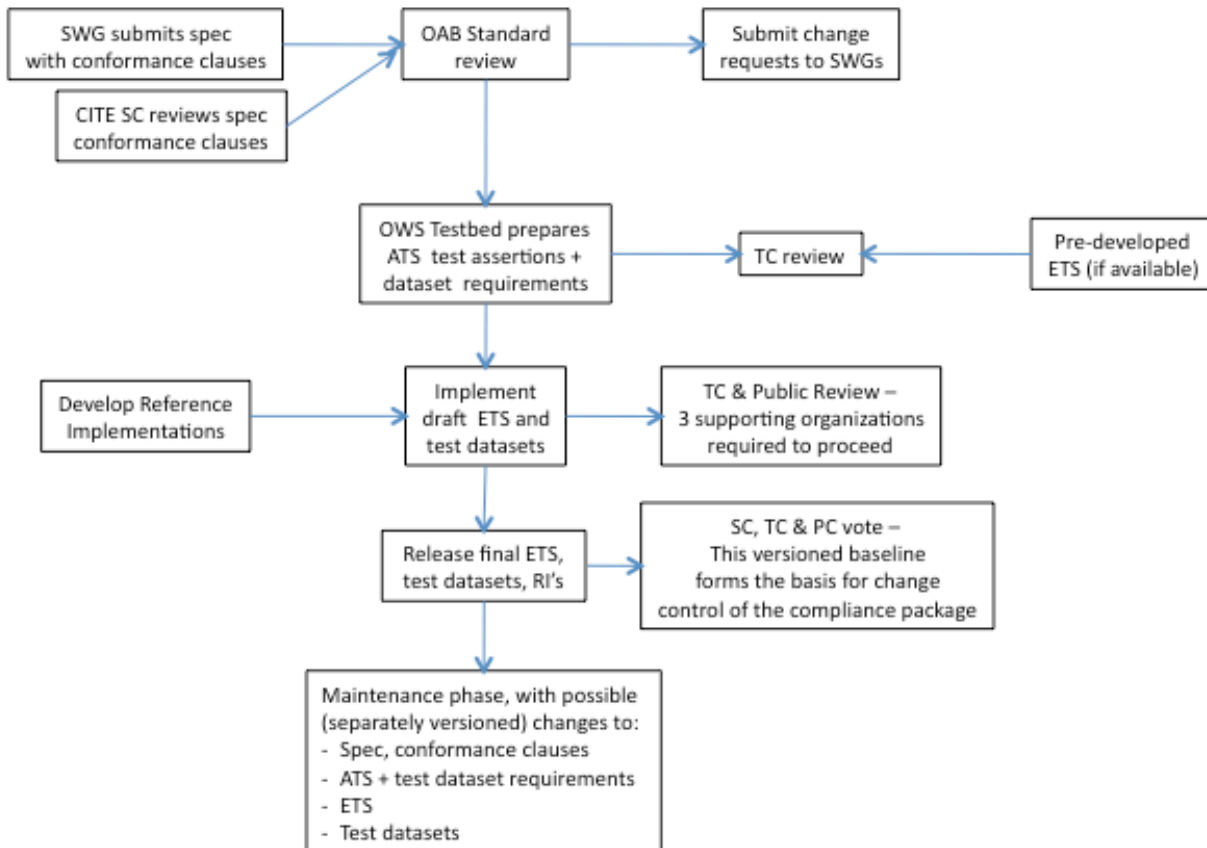
The Compliance team will create an OGC Testing Record with a copy of the Compliance Certificate and the supporting Test Summary Report. The Compliance Team will add any product that receives a Compliance Certificate to the Compliant Products Record (Appendix F). Products that are added to the Compliant 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 marketplace, 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.



## 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 OGC Implementation Standard. A common workflow for developing a package workflow is detailed in Figure 3.



**Figure 3 – Test Package Workflow**

Before compliance testing can begin for a particular Implementation Standard Revision, a Standards Package will be developed, reviewed by the CITE SC and the CTC, recommended to the TC by the CITE SC, and approved for use by the TC. The criteria for the review and approval are:

1. The Standards Package is complete with respect to the Abstract Test Suite (ATS) for that particular Implementation Standard Revision,
2. It is consistent with the wording and intent of the particular Implementation Standard Revision, and
3. It is consistent with established OGC policy and practice.

When the TC approves a Compliance Test Package, it will be filed in the OGC Test Record and posted on the public website ([cite.opengeospatial.org](http://cite.opengeospatial.org)). If the Compliance Test Package is made to

work with the OGC Web-based Compliance Testing Engine, then the test will be made available via the interface for the latest public release version of the Compliance Testing Engine. Organizations may then certify their products using the new Compliance Test Package as described in section 4:

### 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

In general, OGC testing staff will maintain Compliance Test Packages 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 6), or when the CTC, in his/her sole direction finds issues that require maintenance.

The Compliance Test Packages will be developed on an annual cycle, as shown in

Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	
Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2			
										Release Candidate v2	Release Candidate v2	
										Beta Release v3	Beta Release v3	Beta Release v3
												Stable Release v2

Table 1. The annual cycle will be comprised of three serial and overlapping versions of a test package for each of the standards: The Stable Release Test Package which is in force at that time, a

Beta Release CTP which is open for changes and updates and the Beta Release CTP which has been frozen from further change and is open for final member testing and examination.

Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	Stable Release v1	
Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2	Beta Release v2			
										Release Candidate v2	Release Candidate v2	
										Beta Release v3	Beta Release v3	Beta Release v3
												Stable Release v2

**Table 1. Cycle Compliance Test Package Development**

An existing CTP remains in effect for the period during which the Beta Release CTP and the Release Candidate CTP are in processing. When the Release Candidate is approved it becomes the Stable Release and the existing Stable Release package is retired.

When a Beta Release CTP for a given version is moved to Release Candidate status a new Beta Release CT for the next version is created.

It is possible for a new CTP to enter the matrix as a Release Candidate in which case the CTP was completed by the Standards Working Group that approved the standard, or as a Beta Release in the case where the SWG only provided an Abstract Test Suite. It would then work its way through the Beta Release status with the CTC having authority to advance it to Release Candidate status at any time.

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 5 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 Beta Testing impact on Certificates**

The first three implementations to pass 100% of the testing process while at the release candidate phase will have their Trademark License Fee waived through the end of their first complete annual licensing period.

The first implementation is usually the Reference Implementation (see Section 6). Two additional implementations — either commercial or open source — are needed to validate the Compliance Test Package before it becomes final and goes public to non-OGC members. During the beta testing period, issues may arise which require the tests to be changed. In such a situation, all implementers must continue to re-test their software against the latest tests until changes are no longer being made to the Compliance Test Package, and the package leaves beta.

### **5.4 Compliance Test Package Availability and Beta Testing**

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.

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.

## **6 Reference Implementations**

A Reference Implementation is an open source software component that implements a Compliance Test Package. There is a single Reference Implementation for each Compliance Test Package. The

selection of the Reference Implementation is at the discretion of the Compliance Test Coordinator. Usually is the first implementation to pass the compliance test when the test is in beta status (See section 5.3).

After development of the reference implementation, the OGC conducts an independent validation of the RI. The validation consists of installing the RI, loading test data, and executing the compliance test package on an OGC test environment. For all supported compliance test packages, the OGC maintains a baseline of tested reference implementation packages that work with the released compliance test. Changes to the released RI are accepted by the CTC when the RI independently passes the compliance test, with allowable adaptations as described in section 8.2.

## 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 reference implementation. 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](mailto: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 create an issue in the Compliance Issue a tracking system.

- 2) The CTC will provide clarification to the issue, if possible. If not 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 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. 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 software 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.

## Appendix A – Test Summary Report

<b>1. Test Completion Date</b>									
<b>2. TEAM Engine</b>									
2a. Username						2b. Session Numbers			
<b>3. Candidate Organization</b>									
3a. Name of Organization									
3b. Mailing Address									
3c. City				3d. State/ Province					
3e. Country				3f. Postal Code					
<b>4. Total Gross Annual Revenue of parent corporation (US)</b>				<input type="checkbox"/> \$0M-<\$2M <input type="checkbox"/> \$2M->\$3M <input type="checkbox"/> \$3M-<\$10M <input type="checkbox"/> \$10M-<\$20M <input type="checkbox"/> \$20M-<\$50M <input type="checkbox"/> \$50M-<\$100M <input type="checkbox"/> \$100M-<\$500M <input type="checkbox"/> \$500M +					
<b>5. Technical Point of Contact</b>									
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									
<b>6. Financial Point of Contact</b>									
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									
<b>7. Candidate Product Information</b>									
7a. Product Name									
7b. Product Version									
7c. Operating System Required									
7d. Hardware Required									
7e. Required Software									
<b>8. Implementation Standard</b>				(Please replace this text with the Implementation Standard and revision number)					
<b>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).</b>									
<b>9. Official Signature</b>		Signature				Date			
		Typed or Printed Name							
		Typed or Printed Title							
<b>THE REMAINING BOXES WILL BE COMPLETED BY THE COMPLIANCE TESTING COORDINATOR</b>									
<b>10. Product passed all Compliance Items?</b>				<input type="checkbox"/> —Yes <input type="checkbox"/> —No    Comment:					
<b>11. OGC CTC Signature</b>		Signature				Date			
		Typed or Printed Name							

**OGC TEST SUMMARY REPORT FORM DIRECTIONS:**

Please complete a **separate** form for **each** Candidate Product that is to undergo compliance review. Complete all of the required items; do not leave any item blank unless the item specific directions below indicate that they may be left blank.

**Item Specific Directions**

1. Test Completion Date—enter the date(s) that your self-test took place.
2. TEAM Engine – provide username used at the TEAM Engine web site for testing and the sessions numbers.
3. Candidate Organization—enter all of the requested data for your organization.
4. Total Gross Annual Revenue—check the box that includes the total gross annual revenue of your organization as of the most recent fiscal year-end financial statements. The numbers are in millions of US dollars. Please be aware that the Open Geospatial Consortium has determined that the Trademark Licensing Fee is based upon the ***Total Gross Annual Revenues of the Parent Corporation***. Fees are not based on the annual revenues of operating divisions or wholly owned subsidiaries, nor are they based upon the exclusively GIS or software-related revenues of the corporation.
5. Technical Point of Contact—enter all requested data for the duly authorized individual in your organization that will be responsible for dealing with technical and documentation matters.
6. Financial Point of Contact—enter all of the requested data for the duly authorized individual and department within your organization that will be responsible for dealing with payment of invoices, and other financial matters.
7. Candidate Product Information
  - a. Product Name—enter **the full name of the Candidate Product as it appears on packaging, documentation, and advertising. This will be the exact representation of your product on the Compliance Certificate**, should one be issued.
  - b. Product Version—enter the version number of the Candidate Product being tested.
  - c. Operating System Required—enter the operating system (maker, name, and version) on which the tested Candidate Product will run. Do not enter all operating systems, on which it runs, only the one that will be tested under the General Testing Procedure.
  - d. Hardware Required—enter the hardware (maker, name, and version) on which the tested Candidate Product will run. Do not enter all hardware on which it runs, only the one that will be tested under the General Testing Procedure.
  - e. Required Software—enter additional software (maker, name, and version) that the tested Candidate Product requires to run (e.g., Database Management Systems, Object Request Brokers, etc.). Do not enter all software that your product requires in all cases, only the ones that will be tested under the General Testing Procedure.
8. Implementation Standard—Indicate the Implementation Standard revision and alternative (if applicable) that your product was tested against. . Please complete a Test Summary Report for each Implementation Standard your Candidate Product was tested against.
9. Official Signature—the signature, printed name and title of an individual authorized by the Candidate Organization to sign legal documents on their behalf (usually an officer of the organization).
10. LEAVE BLANK.
11. LEAVE BLANK.



### Additional Instructions

An electronic version of the report, and test run output should be sent as attachments to [compliance@opengeospatial.org](mailto:compliance@opengeospatial.org). If not using the OGC Web compliance-testing engine, a adapted Compliance Test Package should be enclosed as well.

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

[compliance@opengeospatial.org](mailto: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](mailto:bsherman@opengeospatial.org)

### Report Checklist

We provide the following checklist to remind you of the required items for an acceptable application:

- All information requested on the Test Summary Report Form is completed and correct, the report has been sent electronically to [compliance@opengeospatial.org](mailto:compliance@opengeospatial.org).
- The adapted Compliance Test Package used for your pre-report testing has been sent electronically to [compliance@opengeospatial.org](mailto:compliance@opengeospatial.org). THIS ELEMENT DOES NOT APPLY TO TESTS USING THE OGC WEB-BASED COMPLIANCE TESTING ENGINE.
- The output from a test run using the adapted Compliance Test Package against your Candidate Product has been sent electronically to [compliance@opengeospatial.org](mailto:compliance@opengeospatial.org). THIS ELEMENT DOES NOT APPLY TO TESTS USING THE OGC WEB-BASED COMPLIANCE TESTING ENGINE.
- The output from a test run using the Compliance Test Package against your Candidate Product has been submitted via the OGC Web-based Compliance Testing Engine. THIS ELEMENT DOES APPLY TO TESTS USING A DOWNLOADED COMPLIANCE TEST PACKAGE.

**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.

<p style="text-align: center;"><b>Open Geospatial Consortium, Inc.</b> <b>Compliance Certificate</b></p> <p style="text-align: center;"><i>This Compliance Certificate is awarded to</i></p> <p style="text-align: center;"><b>[Company Name]</b></p> <p style="text-align: center;"><i>In recognition that</i></p> <p style="text-align: center;"><b>[Product Name and Version]</b></p> <p style="text-align: center;"><i>Meets all Compliance Items and therefore complies with</i></p> <p style="text-align: center;"><b>[Full Specification Name and Version]</b></p> <p style="text-align: center;"><i>Awarded the [date] day of [Month Year]</i></p> <p>_____ Jeffrey S. Burnett, Vice President</p>
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## 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](mailto: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](mailto: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			
<b>1. Certificate Award Date</b>			
<b>2. Organization</b>			
<b>3. Point of Contact (from Compliance Application)</b>			
3a. Name			
3b. Mailing Address			
3c. City		3d. State/ Province	
3e. Country		3f. Postal Code	
3f. Telephone			
3g. Facsimile			
3h. Electronic Mail			
<b>4. Product Information (from Test Summary Report)</b>			
4a. Product Name			
4b. Product Version			
4c. Operating System Required			
4d. Hardware Required			
4e. Required Software			
<b>5. Implementation Standard for which product has been determined to be compliant</b>		(Please replace this text with the Implementation Standard and revision number) (If a test alternative was used please indicate here.)	

## 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.

**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 compliant 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**

<b>Maximum Annual License Fee Payments per Membership Type and TGAR</b>				
<b>Licensee Total Gross Annual Revenue</b>	<b>Associate</b>	<b>Technical</b>	<b>Principal</b>	<b>Strategic</b>
	<b>No Cap</b>	<b>(4X Cap)</b>	<b>(2X Cap)</b>	<b>(1X Cap)</b>
\$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.

**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 our Copyright FAQ for common questions about using materials from our site. Other questions about this notice can be directed to [compliance@opengeospatial.org](mailto:compliance@opengeospatial.org).