UCA International User's Group
OpenSG Conformity (SG Conformity) Working Group
Scope and Charter

Abstract

The UCAIug SG Conformity Working Group (WG) has been formed under the auspices of OpenSG Technical Committee (TC). This document represents scope, charter, guiding principles, policies and procedures for this group and defines the scope of work for that charter.

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Chapter 1:   Document Control

1.1   Change Record

Date	Author	Version	Change Reference
10/21/09	Zahra Makoui	0.1	Initial daft based on Knoxville F2F meetings
10/22/09	Zahra Makoui	0.2	Changes to voting rights based on OpenSG F2F meeting on 10/22/09
11/24/09	Bruce Muschlitz	0.3	Minor formatting and review comment insertions
11/30/09	Zahra Makoui	0.4-0.6	Edited based on action items from the call
11/30/09	Zahra Makoui	0.7	Accepted all changes in the document
12/9/09	Zahra Makoui	0.75	Edited task force responsibilities so that they are more flexible and can be maintained by the task force. Also changed the word Task Force to task force.
12/9/09	Zahra Makoui	0.8	Accepted all changes in the document

Chapter 2:   SG Conformity Working Group Scope, Charter and Responsibilities

2.1   Charter

The SG Conformity Working Group is constituted to operate under the OpenSG Technical Committee.   The charter of the SG Conformity Working Group is a deriviative of the OpenSG TC charter.

The SG Conformity Working Group will focus on deriving certification requirements for Smart Grid Systems. Specifically we are chartered to accomplish the following:

- Develop a quality assurance plan (QAP) addendum to the UCAIug QAP
  http://www.ucaiug.org/org/TechnicalO/Testing/UCAIug%20Testing%20Quality%20Assurance%20Program/Current%20IEC%2061850%20Testing%20Procedures/8Mar2007QAPVer2_6.doc

  and

  http://www.ucaiug.org/org/TechnicalO/Testing/UCAIug%20Testing%20Quality%20Assurance%20Program/Current%20IEC%2061850%20Testing%20Procedures/2008_July_15_QAP_IEC61850_Addendum_V1_3.pdf

- Explore creation of a brand [similar to the UL brand] and a document that states how one gets to be compliant with that brand.
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- Create a repository to discuss shared best practices, test tools and abstract test procedures based on results from various industry labs.
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- Explore economical models around certification (white paper)
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- Instantiate Task Forces as appropriate appoint chairs and review/approve their work products.
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- Provide overall coordination between Task Forces of OpenSG TC as well as the 61850 and the CIMIug testing groups
- Explore accreditation (tester qualification plan)

2.2   Scope

The activities of the SG Conformity Working Group and all their Task Forces shall be limited in scope in order to support proper division of labor with respect to the other Working Groups and to provide boundaries for the task at hand. Specifically:

- Provide overall certification guidelines, best practices and requirements across smart grid systems. We define the scope of what needs to be tested.

- Scope of certification is comprehensive. Includes conformance, interoperability and some performance testing. Involves all layers of the OSI stack. Interoperability is

pairwise (Device Interoperability Testing) and across the enterprise (end-to-end aka Network Interoperability Testing).

- End to end system testing is bound at the Enterprise Service Bus (ESB) at the outer boundary and one-hop away from a registered end-device at the inner boundary. Each Task Force can define a more restricted boundary [within the confines of the greater WG boundary] subject to WG approval.

Chapter 3:   Task Forces and Their Responsibilities

3.1   Current Task Forces

SG Conformity currently has instantiated the following Task Forces. As a general guideline we strongly recommend each Task Force to be co-chaired by one utility representative and one non-utility representative. Each Task Force chair may also choose to elect secretary, technical editors, and other focus groups as needed. SG Conformity has described some initial tasks for each Task Force below. The Task Force can add, change, and remove tasks as appropriate. The detailed tasks will be tracked by the Task Force and reported to the working group periodically.

3.1.1   Edge Conformance

This Task Force defines certification requirements guidelines for OpenADE, OpenHAN and OpenADR.
The Edge Conformance Task Force has been asked to address the following issues:

- Conformance
- Interoperability
  - Golden units
- Hierarchical Certification: modules vs. devices
- Firmware upgrades
- Performance Testing
  - Radiated performance testing: antenna integration, etc.
  - Conducted and radiated emissions tests
  - Other plc performance testing
- End-to-end system interoperability testing
- Optional features and certification: if a spec contains optional feature and a manufacturer decides to implement it, needs to be tested so it doesn't break interoperability. But the details are much more complex.
- Self certification: Do we allow it or will it cause interoperability issues?

3.1.2   SG Security Conformance

The purpose of this group is to establish requirements for laboratories wishing to certify smart grid components and systems. This is recognized to be a complicated domain, and the leadership will be expected to quickly guide the Task Force to establish clear scoping boundaries, perform research to identify existing models, and propose a high-level philosophy of approach.

3.1.3   AMI Enterprise Conformance

[Description to follow]

3.2   Task Force responsibilities

Each Task Force shall deliver the following to SG Conformity WG for approval:

- A scope and charter document
- A comprehensive Certification Process Reference Manual (CPRM)
- Each Task Force develops detailed test procedures

In addition all Task Forces will create, distirbute and maintain a schedule and roadmap detailing the tasks and milestones that comprise the group's work.

All Task Force work products are subject to SG Conformity working group and OpenSG TC approval.

Chapter 4: Membership, Voting, Policies and Procedures

SG Conformity and its Task Forces shall adopt the OpenSG TC policies and procedures
http://osgug.ucaiug.org/Shared%20Documents/Operating%20Procedures%20for%20OpenSG_1.5.pdf which currently defines membership, voting rights,quorum, policies and procedures in the following manner:

4.1   Membership

Membership is by entity. A company, consulting firm, or individual is an entity.

All entities must state their representation and accurately reflect their representation. If a consulting entity is representing a company then the company entity must be the represented entity.

A member entity shall be a member of the UCAIug.

A member entity shall have one Designated Representative (DR) and may have more than one alternate (DRA) participating in the working group. The assignment of a DR/DRA can change throughout the life of the working group. It is the entity's responsibility to notify the Working Group Secretary of changes to the DR/DRA assignment.
Voting privileges are contingent upon membership and meeting the attendance requirements.

The entity (members) within a subcommittee, committee, working group or Task Force must ensure that their representatives have a material knowledge of the project scope.

4.2   Voting

All group officers shall track participation for group meetings as this allows participants to obtain/lose voting rights.

Each designated and alternate voting representative can vote for only one entity; no one individual can be the voting representative for more than one entity.

An entity can begin to earn voting rights only if hey are a UCA member. At the inception of the working group and a Task Force, the members attending the first meeting automatically receceive voting rights. Voting privileges are given to new members after the third consecutive working group or Task Force meeting that the entity attends, as member.

Voting privileges are maintained through consistent entity participation at meetings, through maintenance of membership, and through participation in votes. If a working group member does not maintain participation in 3 of 5 consecutive meetings, its voting privilege shall be revoked.

Voting privileges shall be reinstated by attendance at three consecutive meetings of the working group or 3 out of 5 consecutive meetings. All voting privileges and rights shall be restored after the third meeting.

A member who has lost its voting privileges by failing to maintain its membership shall have its voting privileges reinstated immediately after the payment of its dues, assuming the attendance requirement is met.

All working group participants must be UCAIug members.

In the event that, through merger or acquisition or other similar event, an entity member of the UCAIug has its assets totally or substantially transferred to another entity, membership in the working group may be transferred to the new entity, provided that the new entity is not already a member of the working group.

• More than four (4) votes are needed to ratify work products up to OpenSG Technical Committee (TC)
• Work product ballot period shall be a minimum of three (3) calendar days and a maximum of
fourteen (14) calendar days
• Quorum for valid vote is fifty percent (50%) of current eligible voters
• Majority voting shall be used for all OpenSG TC sub-group business
• Two-thirds (2/3) approval is required for all OpenSG TC sub-group work products
• At inception, all founding members of a OpenSG TC sub-group shall have voting rights
• At first application of these rules, all attendees of an OpenSG TC sub-group have voting rights.
• Valid work product ballot votes are "yes", "yes with comment", "no with comment", "abstain with
comment"; no and abstain votes require a valid comment; no and abstain votes without valid
comments are not counted, nor are they considered toward the necessary votes for passage; the
entity submitting a no vote is allowed to change their vote upon response to the valid comment; if
the vote fails, a re-ballot is required

4.3   Quorum

Working Group and Task Force quorum must be identified before the initiation of working group business. A quorum shall be defined as 50% of eligible voters for on going business and two-thirds for approval of work products. A vote requires the presence of a quorum.

4.4   Task Forces of the Working Group

The working group may from time to time form Task Forces for the conduct of its business and determine the eligibility of working group members and observers to vote on questions within such Task Forces. At the time of formation, the working group

shall determine the scope and duties delegated to the Task Force. Any changes to its scope and duties will require the approval of the working group. Any resolution of a Task Force shall be subject to confirmation by the working group.

The chair of the subgroup shall be appointed by the Chair(s) of the working group.

4.5   Working Group and Task Force Process

4.5.1   Document Review period 7 days

Upon development and distribution of an OpenSG developed or sponsored document, members will have 7 calendar days to provide written feedback to the disseminating party.

4.5.2   Revision control

Each Task Force, Working Group, Steering Committee shall be responsible for ensuring accurate revision control and traceability of working documents. Final format documents, once approved, shall be stored on the OpenSG SharePoint.

4.5.3   Document Process Flow

Committees work on document drafts internally. When the documents are final, they are processed according to 4.5.2

4.6   Meetings

Meetings shall be held, as decided by working group or Task Force, the Chair(s), or by petition of 25% or more of the members, to conduct business, such as making assignments, receiving reports of work, considering draft standards, and considering views and objections from any source.

A face to face meeting shall be announced no less than14 days in advance to all members and observers. An agenda shall be distributed at least 7 days in advance of a meeting. However, as a best practice we recommend face to face meetings be announced at least 30 days in advance.

The group may charge a meeting fee to cover services needed for the conduct of the meeting. The fee shall not be used to restrict participation by any interested parties.

Members attending meetings via web or teleconference will receive full credit towards voting rights for that meeting. It is the responsibility of the members to ensure their attendance is captured by the leader.

It is expected that participants in a working group or a Task Force behave in a professional manner at all times. Participants should demonstrate respect and courtesy towards officers and each other, while allowing participants a fair and equal opportunity to contribute to the meeting.

Chapter 5:   Guiding Principles

- **Detailed Tests are defined by UCAlug**

- **Testers shall adhere to the defined tests**

- **Equivalence of testers (no easy testers)**

    - **It shall not matter WHO performs the test**

    - **Tests shall be auditable and repeatable**

- **Tester shall produce "full" test results**

    - **"Inconclusive" is a valid test result**

    - **"Pass" means all tester would agree with result**

- **Testers are free to script the tests**

- **Allows hierarchical/module-level testing (risky)**