

# **MultiSpeak® Technical Committee Process**

Issued 10/23/2012

VERSION 1.0

MultiSpeak® Initiative  
National Rural Electric Cooperative Association  
Cooperative Energy Services  
4301 Wilson Boulevard  
Arlington, VA 22203

**This Version:**

*MultiSpeak® Technical Committee Process, Version 0.5*  
Date: October 23, 2012

**Previous Version:**

None.

**Technical Committee:**

MultiSpeak® Initiative Technical Committee

**Technical Coordinator:**

Mr. Gary McNaughton, Cornice Engineering, Inc.

**Standard Prepared By:**

Cornice Engineering, Inc.  
MultiSpeak Advisory Board

**Related Work:**

*Software Integration Initiative Operating Guidelines*, NRECA, January 12, 2012.  
*Software Integration Initiative Policy on Intellectual Property*, NRECA.

**Abstract:**

The MultiSpeak® Specification provides a common basis for the exchange of data in utility enterprise software systems. This document describes the process by which the MultiSpeak Technical Committee and its Technical Subcommittees perform their work.

**Status:**

This document was last revised or approved by the MultiSpeak Advisory Board on the above date. This document is available to the public at <http://www.multispeak.org> and is available to MultiSpeak members at the same location in a separate SharePoint site. Both members of the public and MultiSpeak members may check those locations for possible later revisions of this document. Fee-based membership in the MultiSpeak Initiative is open to any individual or organization.

Comments on or corrections to this document should be sent to [GMcNaughton@MultiSpeak.org](mailto:GMcNaughton@MultiSpeak.org)

## Notices

Copyright © 2012 by Cooperative Energy Services. All rights reserved.

This document has been developed by the National Rural Electric Cooperative Association (NRECA) acting through its subsidiary Cooperative Energy Services (CES), the MultiSpeak® Initiative Advisory Board and Cornice Engineering, Inc.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to NRECA, CES, the MultiSpeak® Initiative, or the MultiSpeak® Technical Committee or its various Subcommittees, except as needed for the purpose of developing any document or deliverable produced by the MultiSpeak® Technical Committee (in which case the rules applicable to copyrights, as set forth in the MultiSpeak® Intellectual Property Policy, *Software Integration Initiative: Policy on Intellectual Property*, must be followed), or as required to translate it into languages other than English.

THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS PROVIDED ON AN “AS IS” BASIS AND WHILE THE INFORMATION IN THIS PUBLICATION IS BELIEVED TO BE ACCURATE, NEITHER NRECA, CES, NOR CORNICE ENGINEERING, INC., NOR ANY PARTICIPANTS IN THE MULTISPEAK® TECHNICAL COMMITTEE OR ITS SUBCOMMITTEES MAKE ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, WITH REGARD TO THIS MATERIAL INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE IS NO WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS.

NEITHER NRECA, CES, CORNICE ENGINEERING, INC., NOR ANY PARTICIPANTS IN THE MULTISPEAK® TECHNICAL COMMITTEE OR ITS SUBCOMMITTEES SHALL BE LIABLE FOR ERRORS CONTAINED HEREIN OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, PERFORMANCE OR USE OF THIS MATERIAL. THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

NRECA, CES, Cornice Engineering, Inc. and the MultiSpeak® Technical Committee and its Subcommittees take no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither do they represent that they have made any effort to identify any such rights.

The name “MultiSpeak” is a registered trademark of NRECA and CES, the owner of the specification. There are strict limits on the use of the trademark MultiSpeak®, the various MultiSpeak logos, and designations such as MultiSpeak®-compliant in regard to commercial software meeting the requirements of this specification. Those limits are delineated in the *MultiSpeak Trademark Usage Guide* which can be found at <http://www.multispeak.org/vendors/TrademarkUsage/UsageGuide/Pages/default.aspx> which should be referred to for guidance.

## Table of Contents

Topic	Page
<b>1.0 Preface</b>	6
1.1 Background and Purpose	6
1.2 Definitions	6
1.3 Abbreviations	7
1.4 References	8
<b>2.0 General Considerations</b>	10
2.1 Due Process	10
2.2 Openness	10
2.2.1 Membership in the MultiSpeak Initiative	10
2.2.2 Public website	11
2.2.3 Publically available documents	11
2.2.4 Integrator training	11
2.2.5 Member access openness	11
2.2.6 Summary of openness in member activities	12
2.3 Balance of Interests and Lack of Dominance	12
2.4 Consensus	12
2.5 Coordination and Harmonization	13
2.5.1 Standards that are a part of the MultiSpeak Specification.	14
2.5.2 Standards in domains other than the utility enterprise.	15
2.5.3 Other standards in the utility domain.	15
<b>3.0 Formation and Participation in the MultiSpeak Committees</b>	15
3.1 Formation of the MultiSpeak Technical Committee	15
3.2 Formation of MultiSpeak Technical Subcommittees	15
3.3 Oversight by the MultiSpeak Advisory Board	15
<b>4.0 Rules for Conduct of Technical Committee Business</b>	16
4.1 Open Meetings	16
4.2 Notification of Meetings	16
4.3 Setting Technical Committee and Subcommittee Meeting Agendas	16
4.4 Distribution of Meeting Agendas	16
4.5 Consideration of Views	16
4.6 Minutes	16
<b>5.0 Balloting</b>	17
5.1 Actions Requiring Committee Ballot	17
5.2 Who Else Can Call for a Ballot	17
5.3 Eligibility for Balloting	17
5.4 Balloting Procedures	17
<b>6.0 Dispute Resolution and Appeals</b>	18
6.1 Dispute Resolution	18
6.2 Appeals	18
<b>7.0 Intellectual Property Rights</b>	18
<b>8.0 Anti-Trust Policy</b>	18

## **Table of Figures**

This document contains no figures.

## **Table of Tables**

<b>Table No.</b>	<b>Title</b>	<b>Page</b>
1	MultiSpeak Technical Committee Due Process Summary	10

## **Document Revision History**

<b>Version</b>	<b>Modification(s)</b>	<b>Date</b>	<b>Author(s)</b>
0.5	Initial draft document	10/15/12	Cornice Engineering
1.0	Approved by Advisory Board	10/23/2012	Cornice Engineering

## **1.0 Preface**

### **1.1 Background and Purpose**

This document describes the processes by which the MultiSpeak® Technical Committee and its Subcommittees function. The MultiSpeak Technical Committee develops and enhances the MultiSpeak Specification, a specification that defines standardized interfaces among enterprise software applications commonly used by utilities.

### **1.2 Definitions**

The following definitions are specific terminology pertinent to this document.

**Active member** – An Active Member is any current MultiSpeak member who has participated in one or more of the following within the previous 12 months: (i) a MultiSpeak Technical Committee meeting, (ii) a MultiSpeak Technical Subcommittee meeting, (iii) MultiSpeak Technical Committee or Subcommittee webinar meeting, or (iv) a MultiSpeak Advisory Board meeting

**Advisory board** – The MultiSpeak Advisory Board. This group provides overall guidance and direction to the MultiSpeak effort. At the current time, the Advisory Board consists of nine members. Four members are qualified employees of Vendor Members of the Initiative and are elected annually by Vendor and Auditing MultiSpeak members. Four members are qualified employees of MultiSpeak Utility Members and are elected annually by Utility and Sponsoring MultiSpeak Members. One at-large Advisory Board member is appointed by the Chief Executive Officer of NRECA. More detail about the Advisory Board is available in [CES, 2012].

**Balance** – Participants from diverse interest categories (stakeholders) are sought to participate in the specification development process with the objective of achieving balance in the process [adopted from NIST, 2010].

**Collaborative tools** – Means by which information is transmitted to and among MultiSpeak members for the distribution of such items as draft documents, proposals for new specification parts, meeting agendas and meeting notes. Such tools currently include a MultiSpeak members'-only website (SharePoint site) and e-mail list servers. Access to these sources of information is open to any MultiSpeak member.

**Consensus** – General agreement, but not necessarily unanimity, and includes a process for attempting to resolve objections by interested parties, as long as all comments have been fairly considered, each objector is advised of the disposition of his or her objection(s) and the reasons why, and the consensus body members are given an opportunity to change their votes after reviewing the comments. [OMB, 1998]

**Due process** – Any organization, company, government agency or individual with a direct and material interest has a right to participate by expressing a position and its basis, having that position considered, and appealing if adversely affected. [NIST, 2010].

**Harmonized standards** – Equivalent standards on the same subject approved by different standardization bodies, which allow for establishment of interchangeability of

products, processes and services, and for mutual understanding of test results or information provided according to these standards. [NIST, 2010]

**Interoperability** – Ability of a system or a product to work with other systems or products without special effort on the part of the customer. Interoperability is made possible by the implementation of standards. [NIST, 2010].

**Member** – An individual or organization that subscribes to the purposes of the MultiSpeak Initiative and pays the required annual administrative fee.

**Openness** – Participation in the standard development process shall be open to all persons who are directly and materially affected by the activity in question, and the committee’s activities are publicly available. [NIST, 2010]

**Software Integration Initiative** – An on-going program sponsored by Cooperative Energy Services (CES), a subsidiary of the National Rural Electric Cooperative Association (NRECA) to develop and maintain the MultiSpeak® Specification.

**Specification** - The MultiSpeak specification including, but not limited to: (i) a data model documented in Unified Modeling Language (UML) class model and Extensible Markup Language (XML) schema formats which includes data objects, interface definitions, and message structures, (ii) service definitions defined in Web Services Description Language (WSDL) contracts, (iii) schema documentation in hypertext markup language format which describes the schema, (iv) the specification document, (v) implementation guidelines documents, (vi) use cases describing selected business processes addressed by MultiSpeak, and (vii) security standards and requirements pertaining to MultiSpeak-enabled applications.

**Technical Committee** – The MultiSpeak Technical Committee. The Technical Committee is a group of technical subject matter experts who volunteer their time to draft and write the content of the MultiSpeak specification in specification development sessions. It is responsible for all technical aspects of the MultiSpeak specification. The activities of the Technical Committee may be periodically augmented by the formation of Technical Subcommittees which shall be assigned specific duties and shall exist as long as necessary to fulfill their original functions.

**Technical Coordinator** – The MultiSpeak Technical Coordinator. An individual who takes responsibility for the duties described in this document in order to convene, organize, and carry out the instructions of the MultiSpeak Technical Committee.

### **1.3 Abbreviations**

<b>Abbreviation</b>	<b>Meaning</b>
AMI-ENT	AMI Enterprise
ANSI	American National Standards Institute
CES	Cooperative Energy Services
CIM	Common Information Model
DEWG	Domain Expert Working Group
DNP	Distributed Network Protocol
GML	Geography Markup Language

IEC	International Electrotechnical Commission
HTTP	Hypertext Transfer Protocol
IPR	Intellectual Property Rights
ISO	International Organization for Standardization
NAESB	North American Energy Standards Board
NIST	National Institute of Standards and Technology
NRECA	National Rural Electric Cooperative Association
OASIS	Organization for the Advancement of Structured Information Standards
PAP	Priority Action Plan
SDO	Standards Developing Organization
SEP	Smart Energy Profile
SOAP	Simple Object Access Protocol
SSO	Standard Setting Organization
UDDI	Universal Description, Discovery and Integration
UML	Unified Modeling Language
WSDL	Web Services Description Language
XML	Extensible Markup Language

#### **1.4 References**

**[ANSI, 2010].** American National Standards Institute, *ANSI Essential Requirements: Due Process Requirements for American National Standards*, January, 2010. <http://publicaa.ansi.org/sites/apdl/Documents/Standards%20Activities/American%20National%20Standards/Procedures,%20Guides,%20and%20Forms/2010%20ANSI%20Essential%20Requirements%20and%20Related/2010%20ANSI%20Essential%20Requirements.pdf>

**[ANSI C12.19-2008].** American National Standards Institute (ANSI) Committee C12, Electricity Metering Standards Committee, *Standard for Utility Industry End Device Data Tables*, ANSI C12.19-2008, ANSI, Washington, D.C.: 2008. Standard is cross-referenced as Institute of Electrical and Electronics Engineers (IEEE) Standards Coordinating Committee 31 (Automatic Meter Reading and Energy Management), *IEEE Standard for Utility Industry End Device Data Tables*, IEEE 1377-1997, IEEE, New York, 1997.

**[BasicProfile, 2004].** Web Services Interoperability Organization, *Basic Profile Version 1.1 – Final*. August 24, 2004. (<http://www.ws-i.org/Profiles/BasicProfile-1.1-2004-08-24.html>). More information about WS-I and the Profile are available at [www.ws-i.org](http://www.ws-i.org).

**[CES, 2012].** Cooperative Energy Services, “Software Integration Initiative Operating Guidelines”, Arlington, VA., January, 2012. <http://www.multispeak.org/membership/MembershipDocuments/Documents/SoftwareIntegrationInitiativeOperatingGuidelines.pdf>

**[CES, nd.].** “Attachment A: Software Integration Initiative Policy on Intellectual Property”, Arlington, VA, no date.

**[IEC 61968-9, 2009].** International Electrotechnical Commission, *Application Integration at Electric Utilities – System Interfaces for Distribution Management – Part 9 – Interfaces*

for *Meter Reading and Control*, IEC 61968-9 Edition 1.0, IEC, Geneva, 2009. Ordering information: [http://webstore.iec.ch/Webstore/webstore.nsf/Artnum\\_PK/43378](http://webstore.iec.ch/Webstore/webstore.nsf/Artnum_PK/43378)

**[IEC 61968-11, 2010]**. International Electrotechnical Commission, *Application Integration at Electric Utilities – System Interfaces for Distribution Management – Part 11 Common Information Model (CIM) Extensions for Distribution*, IEC 61968-11 Edition 1.0, IEC, Geneva, 2010. Ordering information: [http://webstore.iec.ch/webstore/webstore.nsf/Artnum\\_PK/44294](http://webstore.iec.ch/webstore/webstore.nsf/Artnum_PK/44294)

**[ISO 4217:2008]**. International Organization for Standardization (ISO), *Codes for the Representation of Currencies and Funds*, ISO 4217:2008. Geneva, Switzerland. 2008.

**[ISO 8601:2004]**. International Organization for Standardization (ISO), *Data Elements and Interchange Formats – Information Interchange – Representation of Dates and Times*, ISO 8601:2004, Geneva, Switzerland. 2004.

**[NIST, 2010]**. National Institute of Standards and Technology, *NIST Key Terms in Standardization, Global Standards Information*, Gaithersburg, MD., April, 2010. <http://gsi.nist.gov/global/index.cfm/L1-5/L2-44/A-87>

**[NRECA, 2003]**. National Rural Electric Cooperative Association, “MultiSpeak® Initiative – Guidelines for Antitrust Compliance”, Arlington, VA., April, 2003. [http://www.multispeak.org/vendors/VendorDocuments/Documents/Antitrust\\_Meeting\\_Guidelines.pdf](http://www.multispeak.org/vendors/VendorDocuments/Documents/Antitrust_Meeting_Guidelines.pdf)

**[OMB, 1998]**. OMB, “Memorandum For Heads of Executive Departments and Agencies: Subject: Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities”, OMB Circular No. A-119, Revised, Washington, D.C., February, 1998. [http://standards.gov/standards\\_gov/a119.cfm](http://standards.gov/standards_gov/a119.cfm)

**[OpenGIS, 2002]**. Open GIS Consortium, Inc. The referenced standard is *OpenGIS® Geography Markup Language (GML) Implementation Specification, Version 2.1.2*. Copyright © 2002. [Open GIS Consortium, Inc.](http://www.opengeospatial.org/) All Rights Reserved. This standard and its associated extensible markup language (XML) schema are used with permission of the Open GIS Consortium, Inc. (See <http://www.opengeospatial.org/Legal/> for additional information about allowable use of GML).

Open GIS Consortium Legal Notice:

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION.

[W3C SOAP, 2000]. Worldwide Web Consortium (W3C), *Simple Object Access Protocol (SOAP) 1.1 – W3C Note 8*. May, 2000. <http://www.w3.org/TR/2000/NOTE-SOAP-20000508/>.

[W3C WSDL, 2001]. Worldwide Web Consortium (W3C), *Web Services Description Language (WSDL) 1.1 – W3C Note 15*. March, 2001. <http://www.w3.org/TR/wsdl.html>.

[W3C XML 1.0, 2004]. Worldwide Web Consortium (W3C), *Extensible Markup Language (XML) 1.0 – W3C Recommendation 04*, Third Edition. February, 2004. <http://www.w3.org/TR/REC-xml>.

## 2.0 General Considerations

This section describes the activities related to the development of consensus for developing, approval, and revising of the MultiSpeak Specification.

### 2.1 Due Process

According to ANSI [ANSI, 2010], due process “means that any person (organization, company, government agency, individual, etc.) with a direct and material interest has a right to participate [in the development of consensus standards] by: a) expressing a position and its basis, b) having that position considered, and c) having the right to appeal.” They further define ten requirements of due process as shown in Table 1. Also shown in the Table are the sections of this document that describe how MultiSpeak meets those ten requirements.

**Table 1**  
**MultiSpeak Technical Committee Due Process Summary**

<b>Due Process Requirement</b>	<b>Section(s)</b>
Openness	2.2
Lack of dominance	2.3
Balance of interests	2.3
Coordination and harmonization	2.5
Notification of standards development	2.2.2, 2.2.5, 4.2
Consideration of views and objections	4.0, 5.4
Consensus	2.4
Appeals	6.2
Written procedures	This document
Compliance with normative ANSI policies and administrative procedures	This applies to ANSI-Accredited Standards Developers (ASDs) only.

### 2.2 Openness

**2.2.1. Membership in the MultiSpeak Initiative.** Fee-based membership in the MultiSpeak Initiative is open to any individual or organization that subscribes to the purposes of the MultiSpeak Initiative and pays the required annual administrative fee. There are currently four classes of membership: vendor members, auditing members, sponsoring members and utility members.

**2.2.2 Public website.** The MultiSpeak Initiative believes in openly sharing information about its efforts. As a result, the MultiSpeak Initiative currently makes available a considerable amount of information openly to the public, without charge and without membership requirements. That information is periodically updated and can be found at <http://www.multispeak.org>. Currently available information from this source includes

- Extensive background information on using the MultiSpeak Specification
- List of all current MultiSpeak Members
- Benefits of membership, How to become a Member, Membership documents
- Software Integration Initiative Operating Guidelines
- MultiSpeak Intellectual Property Rights Policy
- MultiSpeak Anti-Trust Policy
- Description of compliance and interoperability testing procedures
- List of tested products
- Description of logos and their meaning for products and Trademark Usage
- List of integrators who are trained in the use of the MultiSpeak Specification

**2.2.3 Publicly-available documents.** In order to further foster the openness of the MultiSpeak effort, the MultiSpeak Advisory Board periodically makes publically available, at no cost, at <http://www.multispeak.org>, various MultiSpeak documents including:

- Past versions of the MultiSpeak specification, schema, and UML model.
- Users guides.
- Security documents.
- Keys to Interoperability documents detailing selected groups of MultiSpeak use case sequence diagrams.
- An extensive library of technical papers about MultiSpeak.
- An extensive library of demonstration and utility case studies using MultiSpeak.

Note that the most recent MultiSpeak specification, schema, UML model, and a use case library are available to any current MultiSpeak member. Any person or organization, member or not, may obtain the then-current specification on a one-time basis by paying the equivalent of 150% of one year's vendor member's dues.

**2.2.4 Integrator training.** The MultiSpeak Initiative offers training to individuals seeking to understand the MultiSpeak specification. These periodic Integrator Training sessions are open, on a fee-basis to any interested individual seeking to get more information about MultiSpeak. Integrator training is free to current MultiSpeak members; however, nonmembers can attend the training sessions with the payment of an appropriate fee as described at <http://www.multispeak.org>.

**2.2.5 Member access openness.** Essentially all activities of the MultiSpeak Technical Committee are available to current MultiSpeak members through a members' website. Information on that website currently includes the following types of information:

- Meeting guidelines and Intellectual Property Rights documents.
- Current and historic MultiSpeak Specifications.
- UML models.
- WSDL files.
- Schemas.

- Revision histories for Specification.
- Issue resolution documents – a list of all issues raised by Members and their resolution or current status if in process.
- Implementation guidelines.
- Use cases.
- Extensive library of other MultiSpeak and outside organizations' documents.
- Meeting minutes.
- Organizational agreements.
- Announcements, including upcoming meetings.
- Meeting folders containing meeting details, working agendas, documents or proposals to be discussed at upcoming meetings.

**2.2.6 Summary of openness in member activities.** As described in more detail in Section 4.0 "Rules for Conduct of Technical Committee Business" there are a number of open policies related to the Technical Committee and its activities. These include: (i) meetings open to all MultiSpeak members, (ii) there are no closed meetings, (iii) advanced notification is given of the holding of Technical Committee meetings, (iv) any member may propose an agenda item for meetings, (v) release of agendas in advance of all meetings, and (vi) preparation of detailed minutes following all meetings which are distributed by Member technical listserve and also available on the members' website thereafter.

### **2.3 Balance of Interests and Lack of Dominance**

The MultiSpeak Specification is a specification for the exchange of data among application software *within* the utility enterprise. Therefore, the stakeholders affected by developments in the specification are (i) primarily, those vendors who supply software or software contained in hardware to the utility market, (ii) secondly, those consultants who supply consulting services to enhance interoperability or functionality to utility software, and (iii) thirdly, utilities who write their own software or interfaces between existing software in their utility. The MultiSpeak Initiative seeks members from diverse interest categories among those organizations and individuals who might be interested in the exchange of information among enterprise software applications. At the present time, MultiSpeak has representatives from the following interest categories as members:

- **Domestic and international software and hardware vendors supplying the utility industry.** MultiSpeak has specifically strove to make sure that no one vendor group or no single vendor within a product type has dominated or will dominate the development of the specification. Therefore, the following vendor groups are currently represented. Within each group there are multiple MultiSpeak current members:
  - Advanced metering infrastructure (AMI) vendors.
  - Automated vehicle location (AVL) vendors
  - Customer engagement software (CE) vendors
  - Customer information system (CIS) vendors.
  - Data historian (DH) vendors
  - Demand response (DR) vendors
  - Distribution management system (DMS) vendors
  - Engineering analysis (EA) vendors
  - Enterprise service bus (ESB) vendors

- Field design (FD) vendors
  - Finance and accounting (FA) software vendors
  - Geographic information systems (GIS) vendors
  - Geographic information systems viewer (GV) vendors
  - Meter data management (MDM) vendors
  - Outage management system (OMS) vendors
  - Pre-paid metering (PPM) vendors
  - Supervisory Control and Data Acquisition (SCADA) vendors
  - Work management system (WMS) vendors.
- **Domestic and international electric utilities.** The MultiSpeak specification is a product of the National Rural Electric Cooperative Association. However, membership is strongly encouraged among all types and sizes of utilities. To date, the following utility groups are among MultiSpeak members:
    - Distribution electric cooperatives.
    - Generation and transmission electric cooperatives.
    - Investor-owned utilities.
    - Municipal utilities.
    - Trade associations of electric utilities
  - **Domestic gas utilities.**
  - **Domestic water utilities.**
  - **Consultants.** Consultants providing a range of service to the utilities industry are represented among MultiSpeak members.
  - **Research organizations.** Industry organizations such as EPRI are MultiSpeak members.
  - **Members that sit on the technical committees of other SSOs.** MultiSpeak Technical Committee members include individuals that serve on other standards setting organization technical committees such the IEC 61968. [IEC 61968-11, 2010].

## **2.4 Consensus**

The conduct of activities of the Technical Committee have always been performed with careful attention to minority opinions throughout the specification development process. Compromise has been a necessary but valuable part of the specification development process. To be successful, the consensus process depends on the ability of members to work together with an attitude of collaboration and collegiality. Each member is expected to participate and contribute in good faith to the standardization activities undertaken by the committee(s) to which they belong.

The consensus reached is documented carefully in minutes from all MultiSpeak Technical Committee, Technical Subcommittee and webinar minutes. Those minutes are distributed to all interested current members by listserve and posted to the members' website.

If there is disagreement that cannot be handled by negotiation during the meeting, then any member, at any time, may either (i) submit a request in writing for the Technical Coordinator to address the issue with all interested parties, (ii) submit a request for review of the issue by the MultiSpeak Advisory Board and/or (iii) call for a ballot either in a meeting or by making use of the balloting process (see Section 5.0). Additional information on dispute resolution and the appeal process is provided in Section 6.0.

## **2.5 Coordination and Harmonization**

The MultiSpeak Initiative has a strong commitment to the use and/or harmonization with well understood and widely-adopted standards and protocols. Considerable recent efforts have been to investigate existing standards and interfaces that might play a role during the development and refinement of MultiSpeak interface designs. MultiSpeak personnel are in constant contact with (i) representatives of other Standards Development Organizations (SDOs), (ii) Priority Action Plan (PAP) committees, (iii) the Transmission and Distribution Domain Expert Working Group (DEWG), (iv) the NIST Smart Grid Interoperability Panel, and (v) other sources of standards development activities in order to coordinate and harmonize the MultiSpeak Specification with other standards.

It is MultiSpeak policy to consider support for a standard only after it has been released publically in its final form.

The MultiSpeak Initiative Technical Committee harmonizes with other standards in three modes: (i) standards that become a part of the MultiSpeak Specification itself, (ii) standards in domains other than the utility enterprise with which MultiSpeak-enabled products need to harmonize, and (iii) other standards in the utility domain.

**2.5.1 Standards that are a part of the MultiSpeak Specification.** The MultiSpeak Technical Committee harmonizes with the requirements of a number of standards by incorporating those requirements within the MultiSpeak specification itself. These include:

- WS-Basic Profile 1.1. [Basic Profile, 2004]. This standard was developed by the Web Services Interoperability Organization. The Profile is a set of non-proprietary Web service specifications along with clarifications, refinements, interpretations, and amplifications of those specifications, which is designed to promote interoperable Web implementations. MultiSpeak uses all of the standards and protocols that are included in the Profile, except for Universal Description, Discovery, and Integration (UDDI). UDDI is a standard of the Organization for the Advancement of Structured Information Standards (OASIS), which is designed to facilitate the discovery of Web services across distributed, unrelated networks, such as the Internet. The use of UDDI is optional in MultiSpeak.
- Simple Object Access Protocol V1.1 (SOAP) [W3C SOAP, 2000]
- Web Services Description Language V1.1 [W3C WSDL, 2001]
- Hypertext Transfer Protocol (HTTP) V1.1
- Extensible Markup Language (XML) [W3C XML 1.0, 2004]

Within the standard itself, MultiSpeak has also incorporated:

- ANSI C12.19/MC19 for revenue metering end device tables. [ANSI C12.19, 2008].
- The Open Geospatial Consortium GML for exchange of location-based information addressing geographic data requirements. [OpenGIS, 2002].
- ISO 8601 - Data elements and interchange formats, specifically timestamps with durations but does not support the duration designation as specified in ISO 8601 [ISO 8601, 2004].
- ISO 4217 - Codes for representation of currencies and funds. [ISO 4217, 2008].

**2.5.2 Standards in domains other than the utility enterprise.** It is MultiSpeak policy that the Specification needs to contain sufficient semantic content so that a server on the edge of the MultiSpeak domain (utility enterprise) could communicate outward to external standards in other domains. Examples of these interfaces are:

- Smart Energy Profile (SEP 2.0)
- Open Automated Demand Response (OpenADR)
- Distributed Network Protocol Version 3 (DNP3)
- AMI-Enterprise (AMI-ENT)
- NAESB PAP 10

**2.5.3 Other standards in the utility domain.** The MultiSpeak Technical Committee is also actively harmonizing with standards that overlap its coverage within the utility domain. Most notable among these are IEC 61968-9 [IEC 61968-9, 2009] and IEC 61968-11 the Common Information Model (CIM) [IEC 61968-11, 2010].

## **3.0 Formation and Participation in MultiSpeak Committees**

### **3.1 Participation in the MultiSpeak Technical Committee**

The MultiSpeak Initiative supports the opportunity for all affected parties to participate in the deliberations, discussions, and decisions concerned with both procedural and substantive matters affecting the specification. As a result, all meetings of the MultiSpeak Technical Committee whether conducted in person, by telephone or by internet webinar are open to all current MultiSpeak members.

### **3.2 Formation and Participation in MultiSpeak Technical Subcommittees**

The activities of the Technical Committee may be periodically augmented by the formation of Technical Subcommittees which shall be assigned specific duties and shall exist as long as necessary to fulfill their original functions. Any MultiSpeak member can request the formation of a Technical Subcommittee, although in practice the MultiSpeak Technical Coordinator generally initiates the assignment of a new Technical Subcommittee. As with the MultiSpeak Technical Committee, any member may serve on a Technical Subcommittee by requesting to be a participant.

### **3.3 Oversight by the MultiSpeak Advisory Board**

The MultiSpeak Advisory Board provides the following functions vis-à-vis the Technical Committee:

- Provides strategic direction for the Technical Committee.
- Provides oversight of all Technical Committee activities.
- Consults with NRECA in the appointment of the Technical Coordinator.
- Provides a dispute resolution and appeal function if resolution is not reached by other means.

## **4.0 Rules for the Conduct of Technical Committee Meetings**

These rules apply to all MultiSpeak Technical Committee and Subcommittee meetings. Meetings may be conducted face-to-face or via telephone conference or other electronic media that allow participation of all interested MultiSpeak Members. Meetings shall be called periodically by the MultiSpeak Technical Coordinator.

### **4.1 Open Meetings**

MultiSpeak Technical Committee and Subcommittee meetings must be properly called and scheduled in advance using the MultiSpeak collaborative tools. Meetings scheduled or conducted in such a manner as to exclude the participation of any MultiSpeak Member are subject to appeal. In order to enable the openness of MultiSpeak proceedings, meetings are scheduled and conducted so as to permit the presence of as many MultiSpeak members as is logistically feasible. Any MultiSpeak member may attend any MultiSpeak Technical Committee or Technical Subcommittee meeting.

### **4.2 Notification of Meetings**

Notice of any meeting of the MultiSpeak Technical Committee or its Subcommittee must be given in a timely and adequate manner.

### **4.3 Setting Technical Committee and Subcommittee Meeting Agendas**

The MultiSpeak Technical Coordinator is responsible for setting the meeting agendas. However, any MultiSpeak member may propose an agenda item by sending it, in advance, to the MultiSpeak Technical Coordinator. The Technical Coordinator maintains an Issues Resolution document which contains a list of all issues that have been raised by MultiSpeak members and subsequently resolved, or in process of resolution. This document is available to all Members on the members' website.

### **4.4 Distribution of Meeting Agendas**

The agenda for any MultiSpeak Technical Committee or Subcommittee meeting must be distributed to all MultiSpeak members who have chosen to receive such announcements through the MultiSpeak Member collaborative tools.

#### **4.5 Consideration of Views**

During meetings all views are considered. By consensus a direction is developed and documented in written meeting minutes that are distributed to all members who have chosen to receive such announcements through the MultiSpeak Member collaborative tools. Subsequent to the decision any MultiSpeak member may, at any time, file a written comment regarding the decision reached. The MultiSpeak Technical Coordinator shall make a decision regarding the concern, convening additional meetings or conference calls as necessary. If the member is dissatisfied with the decision thus reached, that member may appeal the decision, in writing to the MultiSpeak Advisory Board which will make the final decision.

#### **4.6 Minutes**

The MultiSpeak Initiative maintains extensive records of discussions and decisions accumulated in the specification development. All such records, in the form of meeting minutes are distributed to all members via the technical e-mail list server and subsequently are made available to all MultiSpeak Members, active or inactive, on the member's SharePoint site. Minutes shall include such topics as: (i) a list of attendees, (ii) topics that were discussed, (iii) decisions reached, (iv) open issues, and (v) action items for various parties.

### **5.0 Balloting**

#### **5.1 Actions Requiring Committee Ballot**

The primary responsibility for determining what documents, procedures, or decisions require balloting by the MultiSpeak Technical Committee rests with the MultiSpeak Technical Coordinator.

#### **5.2 Who Else Can Call for a Ballot**

In addition to the requirements outlined in Section 5.1, any MultiSpeak member, at any time, may call for a ballot either (i) during a meeting of the Technical Committee or one of its Subcommittees or (ii) through the balloting procedure described in this section.

#### **5.3 Eligibility for Balloting**

Any MultiSpeak Active Member is eligible to participate in a ballot. Each MultiSpeak Active Member is entitled to one vote.

#### **5.4 Balloting Procedures**

1) A document or other work product that is released for ballot will be marked "Release for Ballot" and issued by e-mail to the member e-mail list servers with the phrase "Release for Ballot" in the e-mail subject. A party wishing to participate in the balloting process must be an Active Member of the MultiSpeak Initiative and have at least one e-mail address that has an active subscription to one of the member e-mail list servers.

- 2) The e-mail that releases a document or other work product for balloting shall be clearly marked with a deadline after which no further ballots will be accepted. The deadline shall be a minimum of ten working days after the release for ballot.
- 3) Ballots may be returned with “YES”, “YES with Comments”, “NO with Comments”, or “ABSTAIN”. “YES with Comments” will be counted as a “YES” vote. “NO” ballots must be accompanied by a detailed explanation of why the ballot was voted in that matter, and detailed suggestions for how the perceived shortcomings can be remedied. Ballots marked “NO” without comments will be discarded.
- 4) No more than one ballot will be counted for each MultiSpeak member. If more than one ballot is received from any member, the ballot last received chronologically will be counted. Eligible voters may change their vote up until the end of the voting period.
- 5) A simple majority of votes received marked either “YES” or “YES with Comments” will result in the standard being adopted.
- 6) Ballots will be submitted to the MultiSpeak Technical Coordinator, who will tally the ballots and notify the membership of the ballot count and the result of the ballot.
- 7) If substantive comments are received as a part of the balloting procedure, the Technical Coordinator may hold meetings, either in person or by conference call to resolve the comments. Those in attendance at the meeting to resolve the comments will vote to determine whether or not the changes resulting from the comment resolution are sufficiently significant to require re-balloting the standard.

## **6.0 Dispute Resolution and Appeals**

### **6.1 Dispute Resolution**

Any MultiSpeak member, at any time, can request the resolution of a problem with the Specification or its interpretation. That request should be made in writing to the Technical Coordinator. The Technical Coordinator is responsible for trying to resolve disputes as they arise. The first level of resolution is to review applicable portions of (i) prior Technical Committee, Technical Subcommittee and webinar meeting minutes, (ii) the Specification itself or (iii) artifacts of the Specification to determine whether an interpretation of the current specification can resolve the dispute. If the dispute has arisen due to an issue that is not sufficiently defined in the specification, the Technical Coordinator may choose to refer the topic for discussion by the Technical Committee or one of its subcommittees. If the parties involved continue to be unsatisfied with the proposed resolution, then they may submit the details of the dispute, in writing, to the Advisory Board for resolution.

### **6.2 Appeals**

Any MultiSpeak member, at any time, can appeal any action or inaction of a committee, first in writing to the Technical Coordinator and then, if the issue is not sufficiently resolved, to the Advisory Board.

## **7.0 Intellectual Property Rights**

The MultiSpeak Technical Committee and its Subcommittees operate in accordance with MultiSpeak Initiative Intellectual Property Rights (IPR) contained in [CES, nd].

MultiSpeak members are reminded of the requirements of the MultiSpeak IPR at the beginning of each meeting of the Technical Committee or its subcommittees.

## **8.0 Anti-Trust Policy**

The MultiSpeak Initiative is committed to full compliance with all federal and state antitrust laws, and as participants in the MultiSpeak Initiative, all members are responsible for assuring that they abide by this policy. NRECA provides all members with a brief set of guidelines (“MultiSpeak® Initiative – Guidelines for Antitrust Compliance”) [NRECA, 2003]. These guidelines are also posted to the members’ SharePoint website. MultiSpeak Members are reminded of the requirements of the Anti-Trust Policy at the beginning of each meeting of the Technical Committee or its subcommittees.