

BYLAWS OF THE IEEE INDUSTRY STANDARDS AND TECHNOLOGY ORGANIZATION (IEEE-ISTO)

**Fourth Amendment
July 1, 2012**

ARTICLE 1 PURPOSES AND PROGRAMS

Section 1.01. PURPOSES. IEEE Industry Standards and Technology Organization (“the Corporation”) is organized and shall be operated for the development of industry standards, requirements documents and guidelines, and for research and development, technology development, including the creation of intellectual property, development of programs for certification and conformance with standards, accreditation, and education. The Corporation shall also undertake additional purposes and activities which may be undertaken by an organization described in Section 501(c)(6) of the Internal Revenue Code of 1986, as the same may be amended or modified or replaced by any future United States internal revenue law (the “Code”).

Section 1.02. PROGRAMS. The programs of the Corporation shall be developed by Participant Groups (defined in Section 5.01), including, but not limited to:

- A. Providing resources to assist in the development of technologies and publication of industry standards and requirements guidelines.
- B. Introducing documents developed by Participant Groups into the consensus standards program of The Institute of Electrical and Electronics Engineers, Incorporated, Standards Association (“IEEE-SA”).
- C. Entering into joint research projects in accordance with the National Cooperative Research and Production Act of 1993 (the “NCRPA”).
- D. Obtaining certification and conformance to standards sponsored by the Corporation or other organizations.

ARTICLE 2 MEMBERSHIP

Section 2.01. MEMBERSHIP; CLASSES, QUALIFICATIONS.

(a) Voting Members. The corporation shall have Voting Members, each of whom shall be entitled to one vote on all matters submitted to the Members of the corporation. Specifically, Voting Members shall have the right to elect the members of the Board of Directors of the Corporation and to vote on such other matters and in such manner as determined by the Board of Directors from time to time in accordance with the Member's Participant Group agreement or Bylaws.

The Voting Members shall be composed of two (2) classes of Voting Members: a Founding Member and Participant Group Voting Members. All references to "Members" in these Bylaws and in any resolutions or minutes of this corporation shall mean only Voting Members unless expressly stated otherwise.

(i) Founding Member. The Institute of Electrical and Electronics Engineers, Incorporated, a New York not-for-profit corporation (the "IEEE") is the sole founding member of the Corporation ("Founding Member")

(ii) Participant Group Voting Members. Each Participant Group Member having voting rights in the Member's respective Participant Group shall be classified as a Voting Member of the Corporation. A Participant Group Member who ceases to be a Participant Group Member with voting rights shall automatically cease to be a Voting Member of the Corporation.

(b) Nonvoting Members: The corporation shall have Non-Voting Members who shall not be entitled to vote on any matters submitted to the Members of the corporation and shall have only such rights as are expressly stated by resolution of the Board of Directors to apply to Non-Voting Members. A Participant Group Member that does not have voting rights in the Member's respective Participant Group shall be classified as a Non-Voting Member of the Corporation. A Participant Group Member that does not have voting rights in the Member's respective Participant Group and ceases to be a Participant Group Member shall automatically cease to be a Non-Voting Member of the Corporation.

(i) Affiliate. An incorporated not for profit 501(c)(3) or (c)(6) association desiring to affiliate with the Corporation in accordance with the rights provided by the Board of Directors in a Resolution of Membership agreed to by such association. Membership fees in the Corporation shall be the same as Participant Group Members.

Section 2.02. REPRESENTATIVES OF THE FOUNDING MEMBER. The Founding Member may appoint an individual to represent its interests (the "Representative of IEEE"), and act on its behalf, as evidenced by a certificate signed and delivered to this corporation by any officer of the IEEE. The Representative of IEEE shall serve as the primary Member contact for the Corporation and shall exercise the voting rights of the Founding Member. The IEEE Standards Association (the "IEEE-SA"), serving as the "IEEE interface on standards-related matters with all external bodies" (IEEE Bylaw I-304.6), may appoint a representative (the "Representative of the IEEE-SA") to serve in a liaison role on its behalf. Both the Representative of IEEE and the Representative of the IEEE-SA may attend Board of Directors meetings as observers and shall receive all materials provided to the Directors of the Corporation.

ARTICLE 3 BOARD OF DIRECTORS

Section 3.01. GENERAL POWERS. The business and affairs of the Corporation shall be managed by a Board of Directors.

Section 3.02. NUMBER, QUALIFICATIONS, DUTIES, TERM OF OFFICE, AND APPOINTMENT.

(a) *Number.* The number of Directors shall be no fewer than four and no more than eight. Subject to the further provisions of this Section 3.02, the Board of Directors shall consist of at least four persons, one of whom shall be the President of the Corporation, the remaining Directors shall be elected by the Voting Members, in a manner described in Section 3.02(e). The Directors may, from time to time, increase the number of Directors up to a total of eight Directors. The Directors may decrease the number of Directors to no fewer than four Directors.

(b) *Qualifications.* Except for the President, each Director shall have extensive experience in industry, preferably as a senior manager and have experience with the development of standards or in research and development in such industry and shall be authorized by his or her employer, if applicable, to commit the necessary financial and time resources to serve on the Board of Directors. A person in industry with experience in the development of standards or in research and development in such industry, employed in other than a senior management capacity may also be eligible to serve as a Director, provided that he or she has demonstrated management and organizational skills commensurate with those expected of a person serving as a Director.

(c) *Duties.* The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. In furtherance of the foregoing, the Board of Directors shall have full power and authority with respect to the following: Approval of Participant Group applications and agreements; Providing financial oversight for the Corporation; Serving as an industry representative to promote the use of the Corporation by organizations in their industry; Review of output and products of the Corporation.

(d) *Term.* Except for the President, the term of the Directors shall be two years, unless otherwise approved by a special election authorized by the Board of Directors, which term shall commence on the first of January of the year following their election or appointment. The Directors shall hold office through the January 1 after the meeting at which their successors are elected and qualified, or until their earlier death, resignation or removal.

(e) *Election.* The Board of Directors shall request the President to appoint a nominating committee each year to nominate a slate of candidates to fill the expiring terms of Directors. The Board of Directors may also

request the President to form a nominating committee, if none exists, for a special election authorized by the Board of Directors. The nominating committee shall consist of the Representative of the Founding Member and one representative of each Participant Group in good standing, selected by the respective Participant Group Voting Members as set forth in Section 5.08. The nominating committee shall propose a slate of qualified candidates to fill vacancies on the Board of Directors. The President shall submit the slate to the Voting Members for affirmation on a candidate-by-candidate basis, by majority of the Voting Members present at a meeting called by the President for such vote. The meeting for affirmation by the Voting Members shall be in the fourth quarter of the year and shall be called, noticed and conducted in the same manner as set forth in Sections 3.07 and 3.08 for the annual meeting of the Board. The meeting may be held by conference call as set forth in Section 3.10 for the Board or by submission of electronic ballots.

Section 3.03. RESIGNATION. A Director may resign at any time upon written notice to the Corporation. The resignation of a Director is effective without acceptance when the notice is given to the Corporation, unless a later effective time is specified in the notice.

Section 3.04. REMOVAL. Any Director may be removed, with or without cause, by the affirmative vote of a majority of the Participant Group Voting Members and the approval of the Founding Member.

Section 3.05. VACANCIES. Any vacancy among the Board of Directors, except for that of the President, may be filled for the unexpired term by appointment of a Director by the Chairman of the Board of Directors, with the consent of the Board of Directors or by a special election authorized by the Board of Directors. If there is a vacancy in the position of President, it is filled in accordance with Section 4.02.

Section 3.06. COMMITTEES OF DIRECTORS. The Board of Directors may, by resolution adopted by a majority of the total number of Directors, designate one or more committees to be comprised solely of Directors, which to the extent provided in the resolution, may exercise the powers and authority of the Board in the management of the business and affairs of the Corporation; provided, that no such committee shall have the power or authority of the Board with regard to amending the Certificate of Incorporation or the Bylaws, adopting an agreement of merger or consolidation, or recommending to the members the sale, lease or exchange of all or substantially all of the Corporation's property and assets or the dissolution of the Corporation or a revocation of dissolution. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. The Board may similarly designate

one or more advisory committees, which shall not have any of the power or authority of the Board. Each committee shall keep regular minutes of its proceedings and report the same to the Board. Directors who are not members of a committee may attend meetings thereof but shall have no vote.

Section 3.07. MEETINGS. Meetings of the Board of Directors and committees may be held at any place within or outside the State of Delaware as the Board may from time to time determine or authorize. An annual meeting of the Board shall be held on such date as the Board may from time to time establish, and additional regular meetings of the Board shall be scheduled by the Board. Special meetings of the Board shall be held whenever called by the Secretary, or in his or her absence by any officer, and shall be held at such time and place as shall be fixed by the individuals requesting the meeting, subject to any limitations established by the Board as to the place of meeting.

Section 3.08. NOTICE OF MEETINGS. Notice of the time and place of each meeting of the Board of Directors or a committee, and in the case of a special meeting the purpose thereof, shall be mailed to each director or committee member, as the case may be, by first class mail, postage prepaid, addressed to such person at his or her residence or usual place of business (or at such other address as he or she may have designated in a written request filed with the Secretary), at least ten days before the day on which the meeting is to be held, or shall be delivered personally, by telephone, facsimile transmission, or e-mail at least five days before the day on which the meeting is to be held. Notice of a special telephone meeting may be given in person or by telephone at least 48 hours prior to the meeting. Notice of a meeting need not be given to any director or committee member who submits a signed waiver of notice, whether before, at, or after the meeting, or who attends the meeting without protesting, prior thereto or at its commencement, that the meeting is not lawfully called or convened.

Section 3.09. QUORUM AND VOTING. A majority of the total number of Directors or committee members shall constitute a quorum for the transaction of business. The vote of a majority of the Directors or committee members present at a meeting at which a quorum is present shall be the act of the Board of Directors or the committee, except where these Bylaws require, or in the case of a committee the Board requires, the vote of a greater number. In the absence of a quorum, a majority of the directors or committee members present may adjourn a meeting to another time or place. Notice of any adjourned meeting need not be given, other than by announcement at the meeting at which adjournment is taken.

Section 3.10. CONFERENCE COMMUNICATIONS. Directors or committee members may participate in any meeting of the Board of Directors, or of any duly constituted committee thereof, as the case may be, by means of a conference telephone conversation or other similar communications equipment whereby all persons participating in the meeting can hear each other. Participation in a meeting by such means shall constitute presence in person at the meeting.

Section 3.11. WRITTEN ACTION. Any action required or permitted to be taken by the Board of Directors or any committee thereof may be taken without a meeting if all Directors or committee members consent thereto in writing and the writing is filed with the minutes of proceedings of the Board or committee.

ARTICLE 4 OFFICERS

Section 4.01. NUMBER AND QUALIFICATIONS. The officers of the Corporation shall be a Chair, elected by majority vote of the total number of Directors, a President, a Secretary/Treasurer, and such other officers as may be required and appointed pursuant to Section 4.08. Any officer may hold more than one office.

Section 4.02. ELECTION AND TERM OF OFFICE. The Board of Directors shall elect the Chair who shall serve until his or her resignation, death or removal as set forth in Section 4.03. Upon the recommendation of the IEEE-ISTO Board of Directors, the Founding Member, acting through the IEEE Executive Director, shall appoint the President, Secretary, Treasurer, and any other Officer considered necessary. Each Officer shall serve until their resignation, death or removal as set forth in Section 4.03.

Section 4.03. REMOVAL AND RESIGNATION. An officer may be removed with or without cause by a vote of the majority of the total number of Directors. An officer may resign at any time upon written notice to the Corporation. The resignation of an officer is effective without acceptance when the notice is given to the Corporation, unless a later effective time is specified in the notice.

Section 4.04. VACANCIES. In case of a vacancy in any office it shall be filled pursuant to Section 4.02.

Section 4.05. CHAIR. The Chair shall, when present, preside at meetings of the Board of Directors, and shall perform such other duties as may from time to time be prescribed by the Board.

Section 4.06. PRESIDENT. The President shall be the chief executive officer of the Corporation and as such shall: (a) have general active management of all the property, business, and affairs of the Corporation; (b) carry out the policies, programs, orders, and resolutions adopted or approved by the Board of Directors; (c) sign and deliver in the name of the Corporation deeds, mortgages, bonds, contracts or other instruments pertaining to

the business of the Corporation, except in cases in which the authority to sign and deliver is required by law to be exercised by another person or is expressly delegated by the Board to another officer or agent of the Corporation; (d) preside at all meetings of the Board of Directors that the Chair is unable to attend and call and preside at the annual meeting of the Participant Groups to elect the Director who represents the Participant Groups as described in Section 5.08; (e) appoint such committees and their chairs as may be deemed necessary; and (f) to perform such other duties as may from time to time be prescribed by the Board.

The President shall also conduct the Board of Directors appointment process in accordance with Section 3.02(e).

Section 4.07. SECRETARY/TREASURER. A single individual may be appointed as a Secretary/Treasurer or alternately, one individual may be appointed as Secretary and one individual may be appointed as Treasurer.

(a) The Secretary shall: (1) maintain records of and, when necessary, certify proceedings of the Board of Directors and the Participant Groups; (2) when directed to do so, give proper notice of meetings of the Board and the Participant Groups; and (3) perform such other duties as may from time to time be prescribed by the Board or by the President.

(b) The Treasurer shall: (1) keep accurate financial records for the Corporation; (2) deposit money, drafts, and checks in the name of and to the credit of the Corporation in the banks and depositories designated by the Board of Directors; (3) endorse for deposit, notes, checks, and drafts received by the Corporation as ordered by the Board, making proper vouchers for the deposit; (4) disburse corporate funds and issue checks and drafts in the name of the Corporation, as ordered by the Board; (5) upon request, provide the President and the Board an account of transactions by the Treasurer and of the financial condition of the Corporation and (6) perform such other duties as may from time to time be prescribed by the Board or by the President.

Section 4.08. OTHER OFFICERS. This Corporation may have such other officers and agents as the IEEE-ISTO Board of Directors considers necessary for the operation and management of the Corporation as set forth in Section 4.02.

Section 4.09. DELEGATION. Unless prohibited by a resolution adopted by the Board of Directors, an officer may, without the approval of the Board, delegate some or all of the duties and powers of an office to other persons, with no further delegation.

ARTICLE 5 PARTICIPANT GROUPS

Section 5.01. PARTICIPANT GROUPS. The Corporation encourages the formation of participant groups that have identifiable goals that promote the purposes and programs set forth in Section 1.01 and Section 1.02. Participant Groups shall have only such rights as are expressly set forth in these bylaws, in a resolution of the Board of Directors or in an agreement approved by the Board of Directors between this Corporation and a Participant Group.

Section 5.02. PARTICIPANT GROUP MEMBERS. Each Participant Group shall consist of more than one persons who (i) are interested in developing standards in the electronics, electrical, telecommunications, software, information technologies, medical appliances or power industries and who (ii) meet such other membership criteria adopted by the Participant Group, subject to the Corporation's approval (each person in the Participant Group shall be referred to herein as a "Participant Group Member"). For the purpose of this Section, a "person" means any individual, proprietorship, partnership, firm, association, corporation, division of a corporation or other business or legal entity organized under the laws of the United States or another country, including not-for-profit associations, societies, or research institutes. Each Participant Group and each Participant Group Member shall identify one person who shall exercise the power of the Participant Group and Participant Group Member, respectively, and those names shall be provided to the Secretary/Treasurer of the Corporation, together with the names of the alternate to serve as the representative of the Participant Group (the "Participant Group Representative") and the Participant Group Member (the "Participant Group Member Representative"), respectively, in all matters of the Corporation in which the Participant Group or Participant Group Member is authorized by these bylaws to participate.

Section 5.03. APPLICATION. Persons interested in forming a Participant Group shall submit an application in the form prescribed by the Board of Directors to the Secretary/Treasurer along with an application fee, if required. The Board of Directors shall approve or disapprove such application, in its sole discretion, and shall notify the Participant Group of its decision.

Section 5.04. RULES OF OPERATION. Each Participant Group, in conjunction with the President of the Corporation or his or her designee, shall establish rules of operation, including criteria for membership, the internal governance of the Participant Group, dues and fee structure, and obligations of members, all of which shall be consistent with the rules established by the Corporation. Such rules shall be effective upon approval of

the Participant Group, subject to the review of the Board of Directors. Each Participant Group Member shall be obligated to affirm its or his or her understanding of, and agreement to, the rules and policies of the Corporation, its antitrust guidelines and tax-exempt status and shall agree to indemnify the Corporation against any liability arising out of any breach of such understanding or agreement. The Corporation shall have the right to have a representative involved as a liaison or observer during document development and to review issues arising with a Participant Group.

Section 5.05. INTELLECTUAL PROPERTY. The Board of Directors will normally comply with the direction of the Participating Group as to the disposition of the intellectual property unless it believes in good faith that such disposition would create antitrust or adverse tax consequences to the Corporation or Participant Group.

Unless otherwise agreed to before, or during the development process by the Board of Directors or in the Participant Group's Operating Procedures, and permitted under Section 501(c)(6) of the Code and the NCRPA, the Corporation shall own all work product, research and development, and intellectual property and products developed, created, or invented by a Participant Group in connection with activities undertaken under the aegis of the Corporation in pursuit of the goals of the Participant Group, including copyrights, trademarks and patents. In the event that the Participant Group is not incorporated, the Corporation will file all trademark applications and copyright registrations requested by a Participant Group in the name of the Corporation in trust for the Participant Group. Unless otherwise specified in the Participant Group's Operating Procedure with respect to patents, at the request of the Corporation at any time, including the resignation, suspension or expulsion of a Participant Group or Participant Group Member, the Participant Groups and Participant Group Members shall execute, acknowledge and deliver to the Corporation all papers, including assignments, as may be necessary to vest title in such intellectual property in the Corporation so that the Corporation can make the intellectual property available to the relevant industry the general public or as otherwise agreed to between the Board of Directors and the Participant Group. Upon the dissolution of the Participant Group or its withdrawal from the Corporation as a Program, the Corporation will deliver all rights, title and interests in and to any intellectual property held in trust for the Participant Group to parties to whom the asset distribution under its dissolution provides or to the Participant Group or its designee upon withdrawal. The Board of Directors shall be authorized to enter into agreements with Participant Groups relating to the disposition and licensing of technology and patents.

Section 5.06. RESIGNATION. A Participant Group Member may terminate the member's association with the Corporation by giving written notice to the President. The resignation of a Participant Group Member shall not affect the rights and obligations of the remaining members of a Participant Group. A Participant Group may terminate its association with the Corporation by giving written notice signed by the Participant Group Voting Members of the Participant Group in writing to the President. The resignation of a Participant Group Member or Participant Group is effective without acceptance when the notice is given to the Corporation, unless a later effective time is specified in the notice. The resignation of a Participant Group or Participant Group Member shall not relieve the Participant Group or Participant Group Member from obligations the Participant Group or Participant Group Member may have to the Corporation for dues, assessments, fees, charges for goods or services, or indemnification or other obligations.

Section 5.07. EXPULSION OR SUSPENSION.

(a) *Grounds.* The Board of Directors may, upon the affirmative vote of two-thirds of members of the Board of Directors, expel or suspend a Participant Group or Participant Group Member who, in the determination of the Board of Directors, has engaged in conduct that is not in the best interest of the Corporation, including but not limited to: (i) failing to conform with the provisions of the Certificate of Incorporation, Bylaws or other rules and policies of the Corporation, including antitrust guidelines, or (ii) failing to comply with the rules and regulations for the Participant Group provided, however, that the Board of Directors (i) shall deliver to such Participant Group Member written notice by certified mail, return receipt requested of such proposed expulsion or suspension not less than thirty (30) days prior to the effective date of such proposed expulsion or suspension, which notice shall set forth the reasons for such expulsion or suspension and (ii) shall provide an opportunity for such Participant Group Member to be heard, orally or in writing, not less than ten (10) days before the effective date of such expulsion or suspension by the Board of Directors or a committee of the Board of Directors that is authorized to decide that such proposed expulsion or suspension not take place. The decision of the Board of Directors or the authorized committee of the Board of Directors shall be final.

(b) *Suspension for Failure to Pay Dues.* In addition to the reasons specified above, the President, in his or her discretion, may suspend the right of any Participant Group Member or Participant Group to participate in the activities of the Corporation for failure to pay the general membership fee, any dues, assessments or other amounts due to the Corporation within the authority of the Certificate of Incorporation and the Bylaws of this Corporation

within thirty (30) days after the payment thereof shall be due. The President or Secretary/Treasurer shall notify Participant Group or Participant Group Member of the proposed suspension by certified mail, return receipt requested and the effective date of such expulsion shall be two (2) weeks after Participant Group or Participant Group Member has received such notice. Upon payment of all amounts that are due and payable to the Corporation, such Participant Group Member may be reinstated as a Participant Group Member upon approval of the Board of Directors.

(c) *Effect of expulsion or Suspension.* The expulsion or suspension of a Participant Group or Participant Group Member shall not relieve the Participant Group or Participant Group Member from obligations the Participant Group or Participant Group Member may have to the Corporation for dues, assessments, fees, charges for goods or services, arising out of an indemnification obligation or otherwise.

Section 5.08. ELECTION OF NOMINATING COMMITTEE REPRESENTATIVES FOR PARTICIPANT GROUPS.

Pursuant to Sections 3.02 through 3.05, and at such time as there is at least one Participant Group each Participant Group will select one representative to serve on the nominating committee for selection of candidates for the Board of Directors as follows:

(a) *Candidate.* Each Participant Group, by majority vote of its voting members present at a Participant Group Meeting, shall select one individual for inclusion on the nominating committee as described in Section 3.02(e).

(b) *Participant Group Meeting.* The President shall request each of the Participant Groups to select a Participant Group Representative to the Nominating Committee at least four (4) weeks prior to the time scheduled for a meeting of the nominating committee. The Participant Groups shall select the representative to serve on the nominating committee during a regularly scheduled meeting, or at a special meeting called for that purpose. Each Participant Group Member shall have one vote.

ARTICLE 6 OFFICE, RECORDS AND AUDIT

Section 6.01. OFFICE. The Corporation shall have a registered office and such other offices as the Board of Directors may determine from time to time.

Section 6.02. RECORDS. The Corporation shall keep correct and complete books and records of account, copies of its Certificate of Incorporation and Bylaws, minutes of the proceedings of its Participant Groups, the Board of Directors and committees thereof, and a list containing the names and addresses of all members.

Section 6.03. AUDIT. The Board of Directors shall cause the books and records of account to be audited at least annually.

ARTICLE 7 INDEMNIFICATION

The Corporation shall, to the fullest extent now or hereafter permitted by law, indemnify any person made, or threatened to be made, a party to any action or proceeding by reason of the fact that such person, or his or her testator or intestate, is or was a director, officer, employee or agent of the Corporation against judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees. The indemnification shall conform to the requirement set forth in the Corporation's Certificate of Incorporation.

ARTICLE 8 FEES AND ASSESSMENTS

Section 8.01. FEES AND ASSESSMENTS. The Board of Directors shall determine from time to time the fees to become and remain a Participant Group or Participant Group Member and the costs of services to be provided to Participant Group Members. Voting Members shall pay a general membership fee to the Corporation which may be assessed through the respective Voting Member's Participant Group.

Section 8.02. ANNUAL BUDGET. The Board of Directors shall submit to the IEEE or its designee an annual budget for the next year at or before the annual meeting.

Section 8.03. DELINQUENCY. The Secretary/Treasurer shall report to the President, on or before any regular or special meeting of the Corporation, the name of any Participant Group or Participant Group Member that is thirty days or more in arrears of its dues, assessments or other amounts due to the Corporation within the authority of the Certificate of Incorporation and the Bylaws of this Corporation.

**ARTICLE 9
AMENDMENTS**

These Bylaws may be amended, altered or repealed only by the affirmative vote of the Board of Directors, subject to the approval of the Founding Member.

Amended and Approved by IEEE-ISTO Board of Directors February 1, 2012; Approved IEEE Board of Directors July 1, 2012.