

BY-LAWS OF
DYNAMIC SPECTRUM ALLIANCE, INC.

ARTICLE I

NAME, PURPOSE AND OFFICES

Section 1.1 Name

The name of the corporation is “Dynamic Spectrum Alliance, Inc.” and the corporation is referred to in these By-laws as the “Alliance”.

Section 1.2 Principal Office

The principal office of the Alliance shall be located at 3855 SW 153rd Drive, Beaverton, OR 97003, USA. The Board of Directors of the Alliance (the “**Board**”) is hereby granted full power and authority to change its principal office from one location to another both within and without said state.

Section 1.3 Other Offices

Branch or subordinate offices may at any time be established by the Board at any place or places.

Section 1.4 Purpose

The nature of the business or purposes to be conducted or promoted by the Alliance is to engage in any lawful act or activity for which corporations organized not for profit may be organized under the General Corporation Law of Delaware. The primary purpose of the Alliance is to promote the adoption of laws and regulations that increase dynamic access to unused radio spectrum and undertake such other activities as may from time to time be appropriate to further the purposes and achieve the goals set forth above.

In order to achieve the foregoing, the Alliance intends to engage in some or all of the following activities: (a) support efforts to gain a better understanding of spectrum use around the world; (b) be technology-neutral and support regulations allowing for the coexistence of a variety of technology platforms; (c) support making unused spectrum available for dynamic spectrum access in licensed, license-exempt (unlicensed), and lightly licensed spectrum bands; (d) support dynamic spectrum access across a variety of complementary spectrum bands; (e) support the use of geolocation databases and other interference protection mechanisms; (f) support globally harmonized dynamic access to unused spectrum; and (g) support long-term efforts to develop regulations making dynamic spectrum access the default mode of access to radio spectrum, with technical rules that address legitimate interference concerns.

Section 1.5 Nonprofit Status

(a) The Alliance is organized and shall be operated as a non-stock membership operating not for profit and organized under the General Corporation Law of the State of Delaware.

(b) The Board may, in its sole discretion, elect to seek exemption from Federal taxation for the Alliance pursuant to Section 501(a) of the Internal Revenue Code of 1986, as amended (hereinafter, the “Code”). In the event that such exemption is sought and until such time, if ever, as such exemption is denied or lost, the Alliance shall not knowingly engage directly or indirectly in any activity that it believes would be likely to invalidate its status as an organization exempt from federal income taxation under Section 501(a) of the Code as an organization described in Section 501(c)(6) of the Code. All references to the Code contained herein are deemed to include corresponding provisions of any future United States Internal Revenue Law.

Section 1.6 Joint Research and Development Venture

In working toward the achievement of its stated purpose, the Alliance and its Members intend to comply with the National Cooperative Research and Production Act, 15 U.S.C.A. §4301 et seq., and to engage in a “joint research and development venture” as defined therein.

ARTICLE II

MEMBERS

Section 2.1 Classes of Membership

The Alliance shall initially have four classes of membership: Charter Members, Promoter Members, Advisor Members and Observer Members. Additional classes of voting and non-voting members may be created in the future, and the rights of existing classes of members may be amended, in each case pursuant to Sections 2.9 and 4.10 of these By-laws. Charter Members and Promoter Members, Advisor Members, and any future classes of members that are entitled to voting rights (other than rights to vote on the election of members of the Board (each a “**Director**”) shall be collectively referred to as “**Voting Members**.” All Voting and non-voting memberships in the Alliance are collectively referred to in these By-laws as “Memberships”, and a person or entity holding Membership is referred to in these By-laws as a “**Member**”.

Section 2.2 General Conditions of Membership

Any association, partnership, organization, governmental agency, company, corporation, academic entity or nonprofit entity shall be admitted to Membership upon: (a) Board acceptance of its written application for Alliance Membership (each a “**Membership Application**”) (which acceptance shall be based on eligibility requirements set forth in this Section) and execution by the applicant and Alliance of the written Alliance membership agreement for the applicable Membership class (each a “**Member Agreement**”), in each case, on such forms as from time to time may be required by the Alliance, (b) delivery of such evidence as the Board may reasonably require in order to establish the applicant’s satisfaction of applicable eligibility requirements for the applicable class of Membership and ability to be legally bound by the terms of such application and agreement, and in the case of an Observer Member, that the applicant does not represent

commercial enterprises and is either a not-for-profit corporation or a public sector organization, and (c) unless otherwise provided by the Board, payment of such application fees, assessments, initiation fees (if any), annual dues or other fees for such class of Membership as may from time to time be established by the Board (collectively, “**Fees**”). A Member shall remain in “**good standing**” as a Member provided such Member (i) meets all applicable eligibility requirements (if any) for such Member’s class of Membership, (ii) is in compliance with its Membership Application and Member Agreement, (iii) is in compliance with the terms and conditions of the Alliance’s Certificate of Incorporation, By-laws, and such rules and policies as the Board and/or any committees thereof (each a “**Board Committee**”) may from time to time adopt, including without limitation, timely payment of all Fees and penalties for late payment as may be determined by the Board (such Fees and penalties are collectively referred to in the By-laws as “**Financial Obligations**”, and all of the foregoing good standing requirements are collectively referred to in the By-laws as “**Membership Obligations**”).

Notwithstanding the foregoing: (a) the Board may limit the number of Members that may be admitted to any particular class of Membership; (b) the Board may establish or modify the conditions, eligibility requirements, restrictions, benefits or privileges of any class of Membership in accordance with Section 4.10(b) hereof, and (c) an applicant is ineligible for Membership, and the Alliance may reject any Membership application, if (i) the Board determines that the applicant’s membership would be detrimental to the Alliance, and/or (ii) the applicant is prohibited by treaty, law or regulation from participating as a Member of the Alliance or abiding by the terms of these Bylaws, the Certificate of Incorporation, the Member Application, the Member Agreement or the IPR Policy.

Section 2.3 Privileges of Charter Membership

Each Charter Member, while in good standing, shall be entitled to:

- (a) appoint one representative to serve as a Charter Director as provided in Section 4.3(a);
- (b) nominate one representative to run for election as chair of any Work Group (defined in Section 5.5(b)) and any Task Group (defined in Section 5.5(c));
- (c) priority opportunities to participate at industry conferences sponsored by the Alliance; and
- (d) review all official Alliance press releases and statements prior to public release;
- (e) listing as a Charter Member in all Alliance overview materials; and
- (f) all rights of the Promoter Members other than those set forth in Sections 2.4(a), 2.4(b), 2.6(d) and 2.6(e).

Section 2.4 Privileges of Promoter Membership

Each Promoter Member, while in good standing, shall be entitled to:

- (a) nominate a representative to serve as a Promoter Director as provided in Section 4.3(b);
- (b) participate in the election of Directors as provided in Section 4.3(b);
- (c) appoint one voting representative, on a one vote per Member basis, to each Work Group and Task Group; and, subject to any limitations on attendance imposed by the chair of such Work Groups or Task Groups, appoint non-voting representatives to such Work Groups or Task Groups;
- (d) access to Alliance resources repositories;
- (e) be listed as a Member of the Alliance in press releases and promotional materials published by the Alliance if the issuer identifies Members in the materials (subject to the Member's right to inform the Alliance by a notice to the Secretary or Executive Director that its name should not be used in connection with specified materials or publications); and
- (f) all rights of the Advisor Members other than those set forth in Sections 2.5(a), 2.5(b) and 2.5(c).

Section 2.5 Privileges of Advisor Membership

Each Advisor Member, while in good standing, shall be entitled to:

- (a) nominate a representative for the non-voting Advisor Director as provided in Section 4.3(c);
- (b) participate in the election of the Advisor Director as provided in Section 4.3(c);
- (c) appoint one representative, on a non-voting basis, to each Work Group and Task Group; and, subject to any limitations on attendance imposed by the chair of such Work Groups or Task Groups, appoint other non-voting representatives to such Work Groups or Task Groups;
- (d) attend all general and special meetings of the Membership provided for in Article III of these By-laws;
- (e) submit topics and contributions and participate in drafting Alliance sponsored publications;
- (f) vote on each matter submitted to a vote of the Voting Members;
- (g) access to all Alliance programs, including global summits;
- (h) participate in the promotional activities of the Alliance at Member rates; and
- (i) all rights of the Observer Members other than those set forth in Section 2.6(a) and 2.6(b).

Section 2.6 Privileges of Observer Membership

Each Observer Member, while in good standing, shall be entitled to:

- (a) attend, on a non-voting basis, all general and special meetings of the Membership provided for in Article III of these By-laws;
- (b) appoint one non-voting representative to each Work Group and Task Group to which it has been invited by the applicable chair;
- (c) provide feedback regarding draft Alliance publications if offered for comment to such Member's Membership class;
- (d) nominate one representative for appointment by the Board, to serve as chair of any Work Group for which no representative of a Charter Member has been nominated for election as chair of that Work Group;
- (e) nominate one representative for appointment by the chair of the applicable Work Group, to serve as chair of any Task Group under such Work Group for which no representative of a Charter Member has been nominated for election as chair of that Task Group;
- (f) access Alliance materials as approved by the Board for such Member's Membership class;
- (g) access the general Member portions of the Alliance's website;
- (h) listing on the Alliance website by applicable Membership class;
- (i) attend Alliance conferences and events as designated by the Board, with each Member responsible for its own fees and expenses unless otherwise provided by these Bylaws, the applicable Member Agreement, or the Board;
- (j) the rights, privileges, restrictions and conditions of the applicable class of Membership as set forth in the such Member's Member Agreement; and
- (k) such other benefits, rights and privileges applicable to such Member's Membership class as may be approved by Super Majority Vote (defined in Section 4.10(b) below) of the Board.

Section 2.7 Rights in Intellectual Property

All intellectual property submitted to or owned, adopted or created by the Alliance, including without limitation, any of the same which may be represented by any guidelines, policies, procedures, standards, specifications or tests (collectively, "**Intellectual Property**"), shall be subject to such policies and procedures, including the Dynamic Spectrum Alliance Intellectual Property Rights Policy, as from time to time amended and in effect (the "**IPR Policy**"). Any such rules or policies may be adopted, amended or repealed only by Super Majority Vote of the Board and shall control all rights of ownership and publication relating to such Intellectual Property, the specific license rights which Members may be entitled to therein, and the fees (if

any) which the Alliance may charge Members and third parties for access to and use of such Intellectual Property. A Super Majority Vote of the Board is required in order to amend any section of the Membership Application or Member Agreement that contains provisions relating to intellectual property rights or confidentiality obligations.

Section 2.8 Subsidiaries, Etc.

(a) Only the legal entity which has been accepted as a Member of the Alliance, and not any parent, subsidiary or affiliate of such entity, shall be entitled to enjoy the rights and privileges of such Membership.

(b) Only one Member which is part of a Related Group shall be entitled to have a representative on the Board at one time. For purposes of these By-laws, the term “**Related Group**” shall mean, in relation to any person or entity (“that person”), the group comprising the following: (i) any entity controlled by that person; (ii) any person or entity that controls that person, (iii) any entity under common control with that person by a third party; and (iv) any entity controlled by any person and a member of the Related Group of that person, in each case where such control results from ownership, either directly or indirectly, of more than fifty percent of the voting securities or membership interests of the entity in question; and “**Related Group Members**” are entities that are each a member of a Related Group.

(c) If a Member is itself a consortium, membership organization, user group or other entity that has members or sponsors, then the rights and privileges granted to such Member shall extend only to the paid representatives (employees and individuals serving on a contractor basis) of such Member, and not to its members or sponsors, unless otherwise approved by the Board in a specific case from time to time.

(d) A Member may not transfer, sell, assign or otherwise convey any Membership unless approved by Super Majority Vote of the Board, and any purported assignment without such written approval is null and void. If a transfer of Membership has been so approved by the Board, a Member may transfer such Membership, provided that the transferee fulfils the Membership criteria for such Membership set out in these Bylaws or elsewhere, sign an instrument of transfer in a form approved by the Board, and agrees to be bound by these By-laws, the Certificate of Incorporation and such policies and procedures as the Board may from time to time adopt.

Section 2.9 Additional Classes of Members

The conditions, privileges, powers, and voting rights (if any) of any class of Members may be changed, and one or more additional classes of Membership may be created, and the conditions, voting rights (if any), powers and privileges of each such class may be prescribed, by adoption of an amendment to these By-laws pursuant to Article XIV of the By-laws.

Section 2.10 Termination or Suspension of Membership

(a) Any Member may be suspended from Membership or have its Membership terminated as set forth in this Section. Financial Obligations already paid shall not be refundable upon any such termination or suspension, and all Financial Obligations of such Member which

may be accrued and unpaid as of the date of any termination of Membership shall remain due and payable.

(b) If a Member fails to pay any of its Financial Obligations on or before their due date (as set forth in the applicable Member Agreement), its Membership shall automatically terminate effective 30 days after notice of delinquency is given to the Member. A Member may avoid such termination by paying all Financial Obligations then payable within 30 days after delivery of such notice of delinquency to the Member.

(c) If a Member is alleged to have violated any material provision of these Bylaws, its Member Agreement, or other policies and procedures duly approved by the Board (a "Violation"), including but not limited to by failing to comply with any Membership Obligation (other than non-payment of Financial Obligations) or engaging in any conduct, either within or without the Alliance, that is contrary to the interests of the Alliance (in either case, other than conduct or actions taken in good faith reliance on Section 13 of these By-laws), then pursuant to a majority vote of the Board, the Alliance may send notice to the Member in accordance with Article VII, specifying the Violation, stating the period for cure, and providing the Member an opportunity to be heard by the Board on the issue, either orally at a meeting of the Board (and represented by counsel if the Member so desires, at its sole cost and expense) or in writing, not less than five days before the effective date of the proposed termination or suspension. If the Board determines that the Violation occurred, and the Member could have but failed to cure the Violation within the period specified, the Member's Membership may be terminated upon the Unanimous Vote of the Board.

(d) Notwithstanding the foregoing, in the event that the Board determines in good faith that (i) a Member is engaging in willful misconduct to the material detriment of the best interests of the Alliance and its Members, or (ii) continued Membership of a Member would cause the Alliance to be in violation of any applicable treaty, law, regulation, order or other requirement of any governmental authority, then in either case, the Board may suspend such Member's Membership immediately, provided that in the case of termination, such Member is otherwise afforded the protections provided for in Section 2.10(c) to the extent legally permitted.

Section 2.11 Resignation by Member

A Member may resign as a Member at any time, effective upon notice to the Executive Director or Secretary or such later date as may be specified in such notice. Any Financial Obligations already paid by such Member shall not be refundable in such event, and all such Financial Obligations of such Member which may be accrued and unpaid as of such date shall remain due and payable; provided, however, that if such resignation was in direct response to a substantive change in these Bylaws or the IPR Policy that the Member reasonably deems to be unacceptable and the Member provided notice of termination (identifying the substantive change and basis for objection) with the effective date of termination prior to the effective date of the change, the pro rata balance of the Member's previously paid annual Membership fees shall be refunded.

Section 2.12 Membership Book

The name and address of each Member shall be contained in a record to be maintained at the principal office of the Alliance (the “**Membership Book**”). Termination of any Membership shall be recorded in such record together with the date of such termination. Each Member shall be responsible for apprising the Alliance in writing of all changes to its name and address, and of the names and addresses of all representatives of such Member appointed to be members of Work Groups and Task Groups designated by such Member in its application for Membership or to receive notices or to vote on behalf of such Member.

Section 2.13 Levy of Dues, Assessments or Fees

The Alliance may levy dues, assessments or fees upon its Members in such amounts as may be approved from time to time by the Board, but a Member upon learning of any increase in dues, or of any levy of any assessments or fees, may avoid liability therefor by resigning from Membership prior to the date such dues, assessments or fees are due and payable, except where the Member is, by contract with the Alliance or otherwise, independently and explicitly liable for such dues, assessments or fees. No provision of the Certificate of Incorporation or By-Laws of the Alliance authorizing such dues, assessments or fees shall, of itself, create such liability. In no event shall the failure of a Member to pay any dues or assessments give rise to any claim in favor of the Alliance for indirect or consequential damages.

Section 2.14 Use of Names

Neither the Alliance nor any Member shall use the name of the other in any form of publicity without the written permission of the other, provided that the Alliance and any Member may each disclose and publicize such Member’s Membership in the Alliance. Notwithstanding the foregoing, if the Alliance has not made a filing under the National Cooperative Research and Production Act of 1993, as amended, a Member may request that its Membership not be disclosed if it makes a written request to such effect at the time of application to the Alliance for Membership.

ARTICLE III

MEETINGS OF MEMBERS

Section 3.1 Place of Meetings

All meetings of the Members shall physically be held at such place within or without the State of Delaware, or as may otherwise be permitted by law, and at such time as may be fixed from time to time by the Board or President of the Alliance (the “**President**”), or if not so designated, at the registered office of the Alliance.

Section 3.2 Annual Meeting

Annual meetings of Members ordinarily shall be held by written consent pursuant to Section 3.10. Notwithstanding the foregoing, however, the Board may call any annual meeting to be held in person at such date and time as shall be designated from time to time by the Board or

the Chairperson of the Board (the “**Chair**”) (if any). Pursuant to such written consent, or at such meeting, as applicable, the Voting Members shall elect a Board in accordance with Section 4.3 and shall transact such other business as may properly be addressed by written consent, or at such meeting, as applicable.

Section 3.3 Special Meetings

Special meetings of the Members, for any purpose or purposes, may, unless otherwise prescribed by statute or by the Certificate of Incorporation, be called by the Board, the President or the Secretary at the request in writing of a majority of the Directors then in office, or at the request in writing of Voting Members entitled to vote at least ten percent of the aggregate votes of all Voting Members. Such request shall state the purpose or purposes of the proposed meeting. Business transacted at any special meeting shall be limited to matters relating to the purpose or purposes stated in the notice of meeting.

Upon request by any person or persons entitled to call a special meeting of the Voting Members, the President, the Chair (if any), any Vice-President or the Secretary shall, within thirty days after receipt of the request, cause notice to be given to the Voting Members entitled to vote at such meeting that a special meeting will be held at a time chosen by the Board, but not less than thirty-five nor more than ninety days after receipt of such request.

Section 3.4 Notice of Meetings

Except as otherwise provided by law or these By-laws, written notice of each meeting of the Members, annual or special, stating the place, date and hour of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called, and such other information as may be required by law shall be given not less than ten nor more than sixty days before the date of the meeting, to each Member entitled to attend such meeting.

Section 3.5 Voting List

The officer of the Alliance (each an “**Officer**”) who has charge of the Membership Book of the Alliance shall prepare and make a complete list of the Members entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each such Member. Nothing contained in this Section shall require the Alliance to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any Member, for any purpose germane to the meeting, for a period of at least ten days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the Alliance. In the event that the Alliance determines to make the list available on an electronic network, the Alliance may take reasonable steps to ensure that such information is available only to Members of the Alliance. The list shall be produced and kept at the time and place of the meeting during the whole time thereof and may be inspected by any Member who is present.

Section 3.6 Quorum

Except as otherwise provided by statute, the Certificate of Incorporation or these By-laws, Voting Members entitled to vote more than fifty percent of the aggregate votes of all Voting Members (or such higher percentage of Voting Members as may be required by law, these By-laws or the Certificate of Incorporation to approve any action to be taken at such meeting), present in person or represented by proxy, shall constitute a quorum at all meetings of the Members for the transaction of business. Work Groups and Task Groups shall have the same rules relating to quorum requirements and voting majorities as provided for in these By-laws, unless otherwise approved by the affirmative vote of the Board or in the applicable Work Group or Task Group charter (as applicable).

Section 3.7 Adjournments

Any meeting of Members may be adjourned from time to time without notice to any other time and to any other place at which a meeting of Members may be held under these By-laws or by law if the time and place of such adjourned meeting, the means of remote communications, if any, by which Members may be deemed to be present in person and vote at such adjourned meeting and such other information as may be required by law are announced at the meeting at which the adjournment is taken. Such adjournment shall be approved by a majority of the Voting Members present in person or represented by proxy and entitled to vote at such meeting (regardless of whether a quorum is present), or, if no Voting Member is present or represented by proxy, by any Officer entitled to preside at or to act as Secretary of such meeting. At any reconvened meeting following such an adjournment the Alliance may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to all Members.

Section 3.8 Action at Meetings

(a) Unless the question is one upon which, by express provision of law, the Certificate of Incorporation or these By-laws, a different vote is required (in which case such express provision shall govern and control the decision of such question), when a quorum is present at any meeting of Members, the vote of more than fifty percent of the aggregate votes of all Voting Members, present in person or represented by proxy and entitled to vote on the question, shall decide any question brought before such meeting.

(b) Notwithstanding Section 3.8(a), in the event that any vote is to be taken of a single class of Voting Members, then a quorum for such vote shall be not less than fifty percent of the Voting Members of that class, and when such quorum is present, the vote of more than fifty percent of the aggregate votes of the Voting Members of that class present in person or represented by proxy and entitled to vote on the question, shall decide such question.

(c) In the event that the Voting Members shall desire to take any action that they are permitted to take by these By-laws, the Certificate of Incorporation or applicable law, and such action would, by provision of these By-laws or any resolution adopted by the Board, require a Super Majority Vote of the Board were such action to be taken by the Board, then the taking of

such action by the Voting Members shall require the affirmative vote of at least two thirds (2/3) of the total number of all Voting Members then in good standing, present in person or represented by proxy and entitled to vote on the question.

Section 3.9 Proxies

Each Member entitled to vote with respect to any corporate action at a meeting of Members, or to express consent or dissent to any corporate action in writing without a meeting, may authorize another person or persons to act for him or her by proxy, provided that: (i) notice and a copy of the grant of proxy is delivered to the President or Secretary (A) not less than 48 hours before the appointed time for holding the meeting or adjourned meeting or undertaking the consent or ballot with respect to which the right to vote under such proxy is to be first exercised and (B) in accordance with any instructions contained in the notice of the meeting (or adjourned meeting) to which they relate; (ii) a proxy notice which is not delivered in such manner is invalid unless the Board, in its discretion, accepts such notice at any time before such appointed time, and (iii) no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. Without otherwise limiting the manner in which a Member may authorize another person or persons to act for such Member as proxy pursuant to this Section, the following shall constitute valid means by which a Member may grant such authority:

(a) A Member may execute a writing authorizing another person or persons to act for such Member as proxy. Execution may be accomplished by the Member or such Member 's authorized officer, director, employee or agent signing such writing or causing such person's signature to be affixed to such writing by any reasonable means including, but not limited to, by facsimile signature.

(b) A Member may authorize another person or persons to act for such Member as proxy by transmitting or authorizing the transmission of a telegram, cablegram, or other means of electronic transmission to the person who will be the holder of the proxy or to a proxy solicitation firm, proxy support service organization or like agent duly authorized by the person who will be the holder of the proxy to receive such transmission, provided that any such telegram, cablegram or other means of electronic transmission must either set forth or be submitted with information from which it can be determined that the telegram, cablegram or other electronic transmission was authorized by the Member. If it is determined that such telegrams, cablegrams or other electronic transmissions are valid, the inspectors or, if there are no inspectors, such other persons making that determination shall specify the information upon which they relied.

Section 3.10 Action Without Meeting

Any action required or permitted to be taken at any annual or special meeting of Members, or at any meeting of a Work Group or Task Group (unless otherwise specified in the applicable Work Group charter or Task Group charter) or other group of Members or subset of Members, may be taken without prior notice and without a vote, if a consent in writing, setting forth the action to be taken, shall be signed by Members (or all members of a class of Members, as the case may be) making up not less than that percentage of all Members as would be necessary to authorize or take such action at a meeting at which all Members (or class of Members, as the case may be) entitled to vote thereon were present and voted. Prompt notice of the taking of any corporate action

without a meeting by less than unanimous written consent shall be given to those otherwise entitled to vote thereon who have not consented in writing. An electronic transmission consenting to an action to be taken (including but not limited to by electronic ballot) and transmitted by a Member or proxyholder, or by a person or persons authorized to act for a Member or proxyholder, shall be deemed to be written, signed and dated for the purposes of this Section, provided that any such electronic transmission sets forth or is delivered with information from which the Alliance can determine (A) that the electronic transmission was transmitted by the Member or proxyholder or by a person or persons authorized to act for the Member or proxyholder and (B) the date on which such Member or proxyholder or authorized person or persons transmitted such electronic transmission. The date on which such electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the Alliance by delivery to its registered office in Delaware, its principal place of business or an Officer or agent of the Alliance having custody of the book in which proceedings of meetings of Members are recorded. Delivery made to the Alliance's registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by electronic transmission may be otherwise delivered to the principal place of business of the Alliance or to an Officer or agent of the Alliance having custody of the book in which proceedings of meetings of Members are recorded if, to the extent and in the manner provided by resolution of the Board of the Alliance.

Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

Section 3.11 Nomination and Election Procedures

Subject to the provisions of Section 4.3, the Board shall establish reasonable nomination and election procedures given the nature, size, and operations of the Alliance, including a reasonable means for Members of appropriate classes to nominate a person for election as a Director, a reasonable opportunity for a nominee to communicate to the Members the nominee's qualifications and the reasons for the nominee's candidacy (if requested by such nominee), a reasonable opportunity for all nominees to solicit votes (if requested by any such nominee), and a reasonable opportunity for all Members entitled to vote thereon to choose among the nominees.

Section 3.12 Order of Business

The order of business at all meetings of Members shall be as determined by the presiding Officer, but the order of business to be followed at any meeting at which a quorum is present may be changed by a vote of the Voting Members.

ARTICLE IV

DIRECTORS

Section 4.1 Powers; Voting

The business and affairs of the Alliance shall be managed by its Board, which shall be, and shall possess all of the powers of, the “Governing Body” of the Alliance as a non-stock membership corporation under Delaware General Corporation Law. The Board may exercise all powers of the Alliance and do all such lawful acts and things as are not by statute or by the Certificate of Incorporation or by these By-laws directed or required to be exercised or done by the Members.

Section 4.2 Number of Directors

Subject to Section 4.4, the total number of Directors shall be at least three and not more than eighteen.

Section 4.3 Nomination, Election and Term of Office of Directors

(a) *Charter Directors.* Each Charter Member in good standing shall be entitled to nominate and individually appoint one Director (each, a “**Charter Director**”), each to serve until the next annual meeting of the Members.

(b) *Promoter Directors.* The Promoter Members, voting together as a class, shall elect a number of Directors equal to the lesser of five or the number of Promoter Members in good standing (each, a “**Promoter Director**”), each to serve until the next annual meeting of the Members.

(c) *Advisor Director.* The Advisor Members, voting together as a class, shall elect one non-voting Director (the “**Advisor Director**”), to serve until the next annual meeting of the Members.

(d) *Eligibility and Term.* Each Director must be an employee of a Voting Member. Directors are elected to serve until the next annual meeting of Members and may, but shall not automatically, be nominated and elected (or appointed, as applicable) for additional one-year terms. Each Director shall hold office until the earliest to occur of (i) the expiration of the term for which such Director was elected (or appointed, as the case may be) and such Director’s successor is duly elected and qualified, (ii) the expiration or termination of Membership of the Member that designated such Director (if so designated), (iii) the death, resignation or removal of such Director, (iv) the combination, by merger, acquisition or otherwise, of two Members that each have representatives on the Board, upon which event one of the two representatives, as designated by the surviving Member, shall be deemed to have resigned or (v) upon the termination of the employment of such Director with the Member represented by such Director. In addition, during such times as the Membership of any Member that has a representative serving as a Director is suspended pursuant to Section 2.10 above, the attendance and voting rights of such Director representative shall also be suspended until such time, if ever, as such suspension is lifted. At no time shall any Member or Related Group of any Member be represented by more than one Director,

unless necessary to ensure that the Board includes the minimum number of directors required by Section 4.2.

(e) *Alternates.* Each Director (or the Member that designated or is the employer of such Director) may designate in writing at any time (which designation may be withdrawn in writing at any time by such Director or Member) an individual to act as a Director in his or her stead, whether for a single meeting or as a standing alternate. Any such alternate Director shall be entitled to (i) attend and vote at all meetings which the designating Director does not attend, (ii) sign all written consents in lieu of the designating Director, and (iii) otherwise exercise the duties and enjoy the privileges of the designating Director in the absence or unavailability of the designating Director.

(f) *Attendance Requirements.* The Board may approve from time to time such reasonable attendance and other requirements as it shall deem to be advisable to ensure that seats on the Board are held by active, contributing individuals. Such rules may provide that in the event that such requirements have not been met, any Member which has appointed a Director may be asked to replace such Director, and that any Member that has nominated an individual that has been elected to the Board may lose its ability to be represented on the Board in the event that such requirements have not been met, and/or that a Director who fails to meet such requirements shall automatically be deemed to have resigned from the Board, but no such rule may be imposed retroactively.

Section 4.4 Enlargement or Reduction

Subject to Section 2.9 above, the number of Directors, the persons eligible to become Directors and the classes of Members eligible to elect and/or nominate Directors may be amended at any time by a vote of the Board or the Voting Members to amend these By-laws in accordance with Article XIV hereof.

Section 4.5 Resignation and Removal

Any Director may resign at any time upon notice to the Alliance in writing or by electronic transmission at the principal place of business of the Alliance or to the President or Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event. Any Director who is employed by a Member may be removed and replaced by that Member. Any or all of the Directors who were elected by a class of Members voting as a class or by the Board may be removed by a majority vote of such class of Members or Board, respectively. Unless otherwise specified by law or the Certificate of Incorporation, any Director may be removed by a majority of the other Directors then in office for engaging in any conduct, either within or without the Alliance, that is contrary to the interests of the Alliance; provided, however, that the Member or class of Members that designated and elected or nominated and elected (as the case may be) such removed Director shall be entitled to designate and elect or nominate and elect (as the case may be) a replacement for such removed Director to serve for the balance of such removed Director's term.

Section 4.6 Vacancies

(a) Vacancies on the Board occurring as a result of the death, resignation, incapacity, or removal of a Director, or the termination of employment of a Director by the Member employing such Director (each a “**Departure**”), shall be filled by the Member employing such Director immediately prior to such Departure, with another employee of such Member, by providing notice to the Secretary or Executive Director within 30 days after the effective date of such Departure. The term of the Director filling such vacancy shall be the unexpired portion of the term of the Director subject to the Departure. All other vacancies shall be filled in accordance with Section 4.3.

(b) In the event of a vacancy in the Board, the remaining Directors, except as otherwise provided by law or these By-laws, may exercise the powers of the full Board until the vacancy is filled.

Section 4.7 Place of Meetings

The Board may hold meetings, both regular and special, either within or without the State of Delaware.

Section 4.8 Regular Meetings

Regular meetings of the Board may be held without notice at such time and at such place as shall from time to time be determined by the Board; provided that any Director who is absent when such a determination is made shall be given prompt notice of such determination. A regular meeting of the Board may be held without notice immediately after and at the same place as the annual meeting of Members.

Section 4.9 Special Meetings

Special meetings of the Board may be called by the Chair, President, Secretary, or on the written request of any Director. Two business days’ notice to each Director, either personally or by telecopy, commercial delivery service, electronic transmission, or similar means sent to his or her business or home address, or three business days’ notice by written notice deposited in the mail, shall be given to each Director by the Secretary or by the Officer or one of the Directors calling the meeting. A notice or waiver of notice or any waiver by electronic transmission of a meeting of the Board need not specify the purposes of the meeting.

Section 4.10 Quorum, Action at Meeting, Adjournments

(a) Except where a Unanimous Vote is required under these By-laws, at all meetings of the Board two thirds of the Directors then in office shall constitute a quorum for the transaction of business, and except where a Super Majority Vote or Unanimous Vote of the Board is required under these Bylaws, the act of a majority of such Directors present at any meeting at which there is a quorum shall be the act of the Board, except as may be otherwise specifically provided by law, the Certificate of Incorporation.

(b) In order to pass a “**Super Majority Vote**”, a resolution must be taken at a meeting of the Board at which a quorum is present and participating (whether in person, by proxy or otherwise), and in support of which at least two-thirds of the Directors then in office have voted affirmatively, or by an equivalent number of Directors acting by written consent in the manner described in Section 4.11 below. A Super Majority Vote of the Board shall be required with respect to the following matters:

(i) Termination of Membership for violation of policies or duties (requires prior determination by majority vote of the Board that the violation could be cured);

(ii) Creation of any additional class of Membership;

(iii) Amendment or modification of the Membership Application, Member Agreement, Fees, conditions, eligibility requirements, restrictions, benefits, privileges, powers, or rights for any class of Members;

(iv) Adoption of any trademark;

(v) Amendment or repeal of any provision of these By-laws, the Certificate of Incorporation or the IPR Policy;

(vi) Notwithstanding Section 1.6, approval or recommendation to the Members of the dissolution, liquidation or winding up of the Alliance or a revocation of any such dissolution, liquidation or winding up;

(vii) Adoption or recommendation to the Members of any agreement of merger or consolidation;

(viii) Approval or recommendation to the Members of the sale, lease or exchange of all or substantially all of the Alliance’s property and assets;

(ix) Enlargement of the maximum size of the Board;

Member;

(x) Approval of an applicant’s membership as a Charter Member or a Promoter

Agreement;

(xi) Approval of the transfer of any Membership or assignment of any Member

(xii) Election of the Chair;

(xiii) Removal of any Officer;

(xiv) Approval of a transaction described in Section 10.1;

(xv) Approval or modification of any Policy Position (defined in Section 5.5(a));

and

(xvi) Any other matter specifically requiring a Super Majority Vote of the Board pursuant to these By-laws.

(c) No Director whose attendance and voting rights have been suspended shall be counted for purposes of determining quorum, the number of Directors then in office or the number of Directors required for voting purposes, unless otherwise required by law, these By-laws or the Certificate of Incorporation. If a quorum shall not be present at any meeting of the Board, a majority of the Directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present. In the event that one or more of the Directors shall be disqualified from voting at any meeting upon any matter, then the required quorum as it relates to the consideration of such matter shall be reduced by one for each such Director so disqualified.

Section 4.11 Action by Consent

(a) Unless otherwise restricted by the Certificate of Incorporation or these By-Laws, any action required or permitted to be taken by the Board may be taken without a meeting and without prior notice if a majority of Directors then in office (or such greater number of Directors as may be required by law or the By-laws of the Alliance for the taking of any such action at a meeting) consent thereto in writing or by electronic transmission, and the writing or writings, or electronic transmission or transmissions, are filed with the minutes of proceedings of the Board, provided that:

(i) such written consent shall have been sent simultaneously to all Directors then in office for their consideration;

(ii) prompt written notice of any action so taken is given to those Directors who have not consented in writing or by electronic transmission; and

(iii) two or more such Directors have not objected to the taking of any such action by written notice delivered to the Alliance within ten business days following the date that written notice of the Directors action is mailed or otherwise delivered to such Directors.

Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

(b) Notwithstanding the foregoing, the ability of two or more non-consenting Directors to prevent the taking of an action by written consent under clause 4.11(a)(iii) above shall not prevent any such action from being taken at a later date at an actual meeting of the Board.

(c) Unless otherwise restricted by the Certificate of Incorporation or these By-Laws, any action required or permitted to be taken at any meeting of any Board Committee may be taken in the manner set forth in the preceding clauses 4.11(a) and (b).

Section 4.12 Telephonic Meetings

Unless otherwise restricted by the Certificate of Incorporation or these By-laws, members of the Board or of any Board Committee may participate in a meeting of the Board or of any Board

Committee, as the case may be, by means of conference telephone, video conference equipment, or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

Section 4.13 Inspection Rights

Every Director shall have the absolute right at any time to inspect, copy and make extracts of, in person or by agent or attorney, all books, records and documents of every kind, and to inspect the physical properties of the Alliance.

Section 4.14 Fees and Compensation

Directors shall not receive any stated salary or reimbursements for their services as Directors; provided that, by resolution of a majority of the Board, the Alliance may reimburse Directors for expenses incurred while acting on behalf of the Alliance and/or expenses incurred in attending meetings of the Board, in such amounts as the Board may determine to be appropriate. Nothing herein contained shall be construed to preclude any Director from serving the Alliance in any other capacity as an Officer, agent, employee or otherwise, and receiving compensation therefor. The Directors may also approve reimbursement of expenses for members of Board Committees in connection with their service on such Board Committees.

ARTICLE V

EXECUTIVE COMMITTEE; OTHER BOARD COMMITTEES; POLICY POSITIONS; WORK GROUPS

Section 5.1 Executive Committee

The Board may (but shall not be required), by resolution adopted by a majority of the Directors then in office (provided a quorum is present), create an Executive Committee, consisting of one or more Directors. The Board may designate one or more Directors as alternate members of such Executive Committee, who may replace any absent member at any meeting of such Executive Committee. The Executive Committee, subject to any limitations imposed by the Certificate of Incorporation, these By-laws, statute and/or resolution adopted by the Board, shall have and may exercise all of the powers of the Board which are delegated to the Executive Committee from time to time by the Board; provided, however, that the Executive Committee shall have no authority with respect to:

- (a) Approving any action which requires approval of the Voting Members;
- (b) Filling vacancies on the Board;
- (c) Fixing compensation of the Directors for serving on the Board or on any Board Committee;
- (d) Amending or repealing any resolution of the Board which by its express terms is not so amendable or repealable; and

(e) Adopting any resolution or approving any action that requires a Super Majority Vote or Unanimous Vote of the Board under these By-Laws.

Section 5.2 Other Board Committees

The Board may, by resolution adopted by a majority of the Directors then in office (provided a quorum is present), create such nominating, audit, compensation and other Board Committees, each consisting of one or more Directors appointed by the Board, as the Board may from time to time deem advisable, to perform such general or special duties as may from time to time be delegated to any such Board Committees by the Board, subject to the limitations imposed by the Certificate of Incorporation or by these By-laws. No such Committee shall have the power or authority to take any action prohibited by Section 5.1 above to be taken by the Executive Committee. The Board may designate one or more Directors as alternate members of any Board Committees, who may replace any absent member at any meeting of such Board Committees. Any such Board Committee or Board Committees shall have such powers, duties and name or names as may be determined from time to time by resolution adopted by the Board. Each Board Committee shall keep regular minutes of its meetings and make such reports to the Board as the Board may request.

Section 5.3 Meetings of Board Committees

Except as otherwise provided in these By-laws or by resolution of the Board, each Board Committee may adopt its own rules governing the time and place of holding and the method of calling its meetings and the conduct of its proceedings and shall meet as provided by such rules, but unless otherwise provided by resolution of the Board or in such rules, its business shall be conducted as nearly as possible in the same manner as is provided in these By-laws for the conduct of the business of the Board.

Section 5.4 Term of Office of Members of Board Committees

Each member of a Board Committee shall serve for such term as shall be established at the time of his or her election.

Section 5.5 Policy Positions; Work Groups

(a) *Policy Positions.* From time to time, the Executive Director or any Director may propose a substantive public position the Alliance intends to take in furtherance of the purposes set forth in Section 1.4 (each a “**Policy Position**”). Each such proposal (i) must be directed to the Board for consideration at a duly called meeting of the Board and must identify which of the purposes set forth in Section 1.4 the proposed Policy Position supports; and (b) may also identify specific activities to be undertaken in connection with the Policy Position. A proposed Policy Position may be modified or amended upon the motion of any Director; and a Policy Position may be adopted, established, modified or amended only upon Super Majority Vote of the Board.

(b) *Work Groups.* From time to time, the Board may approve formation of one or more work groups of the members (each a “**Work Group**”) to carry out activities in support of the Policy Positions. Each Work Group shall have a specific charter of activities or deliverables, be chaired by a person elected in accordance with Section 2.3 or appointed by the Board in accordance

with Section 2.6, and operate in accordance with such procedures as shall be adopted and amended, from time to time, by the Board for such Work Group (“**Work Group Procedures**”). Each participant in a Work Group must be an employee or designated representative of a Member; provided, that the applicable Member must identify each of its non-employee representatives participating in Work Groups by name and affiliation sufficient to identify any potential conflicts of interest. The output of a Work Group need not be reviewed by the Board unless the Work Group charter so requires. Any Director may propose by notice in accordance with Article VII that such output be reviewed without a meeting by the Board, and in the event of such notice, such output may be publicly disseminated only if a majority of the Directors responding within one week after such notice, regardless of quorum, concur that such output should be publicly disseminated.

(c) *Task Groups.* From time to time, the Board may approve formation of one or more task groups or other groups of the members (each a “**Task Group**”) to focus on special projects, long- term strategy planning, educational/research-based projects, or other specific areas of interest. Each Task Group shall have a specific charter of activities or deliverables, be chaired by a person elected in accordance with Section 2.3 or appointed by the chair of the applicable Work Group in accordance with Section 2.6, and operate in accordance with such procedures as shall be adopted and amended, from time to time, by the applicable Work Group for such Task Group (“**Task Group Procedures**”). Each participant in a Task Group must be an employee or designated representative of a Member; provided, that the applicable Member must identify each of its non-employee representatives participating in Task Groups by name and affiliation sufficient to identify any potential conflicts of interest. The output of a Task Group need not be reviewed by the applicable Work Group unless the Task Group charter so requires. Any Director may propose by notice in accordance with Article VII that such output be reviewed without a meeting by the Board, as applicable, and in the event of such notice, such output may be publicly disseminated only if a majority of the Directors responding within one week after such notice, regardless of quorum, concur that such output should be publicly disseminated.

(d) *Draft Documents.* Draft versions of Policy Positions, Work Group or Task Group drafts, and other draft Alliance documents may not be disseminated outside of the Alliance until they have been adopted in accordance with these Bylaws or the applicable Alliance policies. Nothing in these Bylaws or any Work Group Procedures or Task Group Procedures limits a Member’s right to use or disclose its own contributions to (i) any draft document or (ii) other output of the Alliance or a Work Group or Task Group.

(e) *Participation.* Participation in Work Groups and Task Groups is open to all Members, provided that Task Groups focused on special projects or long-term strategy planning are open only to Voting Members. Voting participation in Work Groups and Task Groups is limited to Charter Members and Promoter Members. Work Groups and Task Group may be chaired only by Charter Members.

(f) *Meetings and Minutes.* Each Work Group and Task Group must hold regular meetings on a schedule determined by the applicable Work Group Procedures or Task Group Procedures. The noticing of meetings of Work Groups and Task Groups, and the governance thereof, is subject to the applicable Work Group Procedures or Task Group Procedures. Each Work Group and Task Group must elect a secretary or other person to document and record the

minutes its meetings. The then- current Work Group Procedures or Task Group Procedures govern the removal of any member of a Work Group or Task Group (as applicable).

ARTICLE VI

OFFICERS

Section 6.1 Officers

The Officers of the Alliance shall be a President, a Treasurer and a Secretary, none of whom need be a Director. The Alliance may also have, at the discretion of the Board, a Chair (who must be a Director), an Executive Director (who must not be a Director), one or more Vice-Presidents, one or more Assistant Secretaries and/or Assistant Treasurers, and such other Officers with such titles, terms of office and duties as may be elected in accordance with the provisions of Section 6.3. No Officer other than the Chair must be a Director or an employee of a Member. Each Officer that is not a Director must satisfy such eligibility requirements as the Board from time to time may determine in its sole discretion. Any one person may hold two or more offices unless the Certificate of Incorporation or these By-laws otherwise provide. The Board may entrust to and confer upon any Officer any of the powers exercisable by any Director upon such terms and conditions and with such restrictions as the Board deems fit, and either collaterally with or to the exclusion of the Board's own powers. The Board may from time to time revoke, withdraw, alter or vary all or any of such powers.

Section 6.2 Vacancies

A vacancy in any office because of death, resignation, removal, disqualification or any other cause shall be filled in the manner prescribed in these By-laws for regular elections to such office and may be filled by the Board, at its discretion.

Section 6.3 Election

The Board at its first meeting after each annual meeting of Members shall choose a President, a Chair, a Secretary and a Treasurer. Other Officers may be elected by the Board at such meeting, and any or all Officers may be replaced, at any other meeting of, or by written consent of, the Board.

Section 6.4 Tenure

Each Officer of the Alliance shall hold office until his or her successor is chosen and qualifies, unless a different term is specified in the vote choosing or electing him, or until his or her earlier death, resignation or removal. Any Officer elected by the Board may be removed at any time by the Board or a Board Committee duly authorized to do so. Any Officer may resign by delivering his or her written resignation to the Alliance at its principal place of business or to the Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

Section 6.5 President

The President shall have all the powers normally associated with the role of chief executive officer and shall preside at all meetings of the Board and the Members. In the absence of the President, the Chair (if any), then the Secretary, then the Treasurer, shall preside at such meetings. The President shall oversee the management of the business of the Alliance and see that all orders and resolutions of the Board are carried into effect. Without limiting the foregoing, the President shall:

- (a) Execute bonds, mortgages, and other contracts requiring a seal, under the seal of the Alliance, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board to some other Officer or agent of the Alliance; and
- (b) Oversee the Executive Director (if any).

Section 6.6 Executive Director

The Executive Director (if any) shall preside over the day-to-day affairs of the Alliance under the direction of the Board and the President and perform such other duties and have such other powers as the Board or the President may from time to time prescribe.

Section 6.7 Chair

When the Alliance has a Chair, that individual shall have such powers and duties as may be designated from time to time by the Board, but may not serve simultaneously as the President of the Alliance. The Board (by a vote of a majority of all Directors then in office) shall elect the Chair (and any replacement) for a period of one year, commencing with the first meeting of the Board. Except as set forth elsewhere in these Bylaws, any removal of a Member's Director from the Chair position does not limit the Director's rights as a member of the Board. In the event that the Chair shall cease to be a Director for any reason before the appointed term as Chair has expired, such term as Chair shall be deemed to have automatically expired.

Section 6.8 Secretary

The Secretary shall have such powers and perform such duties as are incident to the office of Secretary, and shall:

- (a) Prepare and maintain lists of Members and their addresses as required;
- (b) Attend all meetings of the Board and all meetings of the Members and record all the proceedings of the meetings of the Alliance and of the Board in a book to be kept for that purpose and perform like duties for the standing Board Committees when required;
- (c) Give, or cause to be given, notice of all meetings of the Members and special meetings of the Board, and perform such other duties as may be from time to time prescribed by the Board, and be under their supervision; and

(d) Have custody of the corporate seal of the Alliance and the Secretary, or an Assistant Secretary, have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by signature of the Secretary or by the signature of such Assistant Secretary. The Board may give general authority to any other Officer to affix the seal of the Alliance and to attest the affixing by such Officer's signature.

Section 6.9 Treasurer

The Treasurer shall perform such duties and shall have such powers as may be assigned to him or her by the Board or the President. In addition, the Treasurer shall perform such duties and have such powers as are incident to the office of Treasurer. The Treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Alliance and shall deposit all moneys and other valuable effects in the name and to the credit of the Alliance in such depositories as may be designated by the Board, taking proper vouchers for such disbursements, and shall render to the President and the Board, when the President or Board so requires, an account of all his or her transactions as Treasurer and of the financial condition of the Alliance. Notwithstanding the foregoing, upon prior notice to the Board, the Treasurer may delegate and supervise any or all of the foregoing duties and actions to a person or service provider retained by the Alliance.

Section 6.10 Compensation

The compensation, if any, of the Officers shall be fixed from time to time by the Board, and no Officer shall be prevented from receiving such compensation by reason of the fact that the Officer is also a Director of the Alliance.

ARTICLE VII

NOTICES

Section 7.1 Delivery

(a) Whenever, under the provisions of law, or of the Certificate of Incorporation or these By-laws, written notice is required to be given to any Director or Member, such notice may be given by mail, addressed to such Director or Member, at his, her or its address as it appears on the records of the Alliance, with postage thereon prepaid. Unless written notice by mail is required by law, the Certificate of Incorporation or another provision of these By-laws, and subject to the provisions below relating to notice by electronic transmission to Members, written notice may also be given by electronic mail, telecopy, commercial delivery service, or similar means, addressed to such Director or Member at his, her or its address as it appears on the records of the Alliance. Without limiting the manner by which notice otherwise may be given effectively to Members, any notice to Members given by the Alliance under any provision of law, the Certificate of Incorporation, or the By-laws, unless written notice by mail is required by law, the Certificate of Incorporation or another provision of these By-laws, shall be effective if given by a form of electronic transmission consented to by the Member to whom the notice is given. Any consent by a Member to receive notice by electronic transmission shall be revocable by that Member by written notice to the Alliance. Any such consent shall be deemed revoked if (1) the Alliance is unable to deliver by electronic transmission two consecutive notices given by the Alliance in

accordance with such consent and (2) such inability becomes known to the Secretary or an Assistant Secretary of the Alliance or to the transfer agent, or other person responsible for the giving of notice; provided, however, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

(b) Notice given pursuant to this Section shall be deemed given: (1) if by facsimile telecommunication (A) to a Member, when directed to a number at which the Member has consented to receive notice and (B) to a Director, when directed to the number for such Director as it appears on the records of the Alliance; (2) if by electronic mail to (A) a Member, when directed to an electronic mail address at which the Member has consented to receive notice and (B) to a Director, when directed to the electronic mail address for such Director as it appears on the records of the Alliance; (3) if by a posting on an electronic network together with separate notice to the Member or Director of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; (4) if by any other form of electronic transmission, when directed to the Member or Director; (5) if by in-hand delivery or oral notice, at the time it is actually given; (6) if by mail, at the time when the same shall be deposited in the United States mail; and (7) if by commercial delivery carrier or similar means, at the time when the same shall be deposited with the carrier, in each case the transmission charge to be paid by the Alliance or the person sending such notice and not by the addressee. An affidavit of the Secretary or an Assistant Secretary or of the transfer agent or other agent of the Alliance that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

(c) For purposes of these By-laws, “**electronic transmission**” means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

(d) Without limiting the foregoing, the Alliance adopts electronic mail as its principal source of communication with its Members. Each Member acknowledges and agrees that the Alliance shall not be under any obligation (except as required by law or these By-laws) to send any notice to any Member by any means other than electronic mail, and it is therefore the responsibility of each Member to avail itself of and make such arrangements as may be necessary to receive notice in such fashion.

Section 7.2 Waiver of Notice

Whenever any notice is required to be given under the provisions of law or of the Certificate of Incorporation or of these By-laws, a waiver thereof in writing, signed by the person or persons entitled to said notice, whether before or after the time stated therein, or a waiver by electronic transmission by the person entitled to notice, shall be deemed equivalent thereto.

ARTICLE VIII

INDEMNIFICATION

Section 8.1 Actions other than by or in the Right of the Alliance

The Alliance shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Alliance) by reason of the fact that he or she is or was a Director, Officer, employee or agent of the Alliance, or is or was serving at the request of the Alliance as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action, suit or proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Alliance, and, with respect to any criminal action or proceedings, had no reasonable cause to believe this conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Alliance, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.

Section 8.2 Actions by or in the Right of the Alliance

The Alliance shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Alliance to procure a judgment in its favor by reason of the fact that he or she is or was a Director, Officer, employee or agent of the Alliance, or is or was serving at the request of the Alliance as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Alliance; provided, however, that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable unless, and only to the extent that, the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery of the State of Delaware or such other court shall deem proper.

Section 8.3 Success on the Merits

To the extent that any person described in Section 8.1 or 8.2 of this Article VIII has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in

said Sections, or in defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith.

Section 8.4 Specific Authorization

Any indemnification under Section 8.1 or 8.2 of this Article VIII (unless ordered by a court) shall be made by the Alliance only as authorized in the specific case upon a determination that indemnification of any person described in said Sections is proper in the circumstances because he or she has met the applicable standard of conduct set forth in said Sections. Such determination shall be made (1) by a majority vote of a such Directors who were not parties to such action, suit or proceeding, even though less than a quorum or (2) by the Members of the Alliance.

Section 8.5 Advance Payment

Expenses incurred in defending a civil or criminal action, suit or proceeding may be paid by the Alliance in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of any person described in said Section to repay such amount if it shall ultimately be determined that he or she is not entitled to indemnification by the Alliance as authorized in this Article VIII.

Section 8.6 Non-Exclusivity

The indemnification and advancement of expenses provided by, or granted pursuant to, the other Sections of this Article VIII shall not be deemed exclusive of any other rights to which those provided indemnification or advancement of expenses may be entitled under any By-law, agreement, vote of Voting Members or disinterested Directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding such office.

Section 8.7 Jurisdiction of Delaware Court of Chancery

The Delaware Court of Chancery is vested with exclusive jurisdiction to hear and determine all actions for advancement of expenses or indemnification. The Delaware Court of Chancery may summarily determine the Alliance's obligation to advance expenses (including attorney's fees).

Section 8.8 Insurance

The Board may authorize the Alliance to purchase and maintain insurance on behalf of any person who is or was a Director, Officer, employee or agent of the Alliance, or is or was serving at the request of the Alliance as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the Alliance would have the power to indemnify him or her against such liability under the provisions of this Article VIII.

Section 8.9 Continuation of Indemnification and Advancement of Expenses

The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VIII shall continue as to a person who has ceased to be a Director, Officer, employee or agent of the Alliance and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 8.10 Severability

If any word, clause or provision of this Article VIII or any award made hereunder shall for any reason be determined to be invalid, the provisions hereof shall not otherwise be affected thereby but shall remain in full force and effect.

Section 8.11 Intent of Article

The intent of this Article VIII is to provide for indemnification and advancement of expenses to the fullest extent permitted by Section 145 of the General Corporation Law of Delaware. To the extent that such Section or any successor section may be amended or supplemented from time to time, this Article VIII shall be amended automatically and construed so as to permit indemnification and advancement of expenses to the fullest extent from time to time permitted by law.

ARTICLE IX

BOOKS AND RECORDS

Section 9.1 Books and Records

The Alliance shall keep adequate and correct books and records of account, minutes of the proceedings of the Members, the Board and Board Committees, and a record of the Members giving their names and addresses and the class of Membership held by each.

Section 9.2 Form of Records

Minutes shall be kept in written form. Other books and records shall be kept either in written form or in any other form capable of being converted into written form.

Section 9.3 Reports to Directors, Members and Others

The Board shall cause such reports to be prepared, filed and/or distributed as may be required.

Section 9.4 Record Date

In order that the Alliance may determine the Members entitled to notice of or Voting Members entitled to vote at any meeting of Members or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any distribution, if any, permitted by law and the Alliance's then current federal and state tax status,

or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of Membership or for the purpose of any other lawful action, the Board may fix, in advance, a record date, which shall not be more than sixty days nor fewer than ten days before the date of such meeting, nor prior to the adoption of the resolution by the Board fixing such record date. A determination of Members of record entitled to notice of or Voting Members entitled to vote at a meeting of Members shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for the adjourned meeting. If no record date is fixed, the record date for determining Members entitled to notice of or Voting Members entitled to vote at a meeting of Members shall be at the close of business on the day before the day on which notice is given or, if notice is waived, at the close of business on the day before the day on which the meeting is held. The record date for determining Members entitled to express consent to corporate action in writing without a meeting, when no prior action by the Board is necessary, shall be the day on which the first written consent is delivered to the Alliance. The record date for determining Members entitled to express consent to corporate action in writing without a meeting, when prior action by the Board is necessary, shall be at the close of business on the day on which the Board adopts the resolution taking such prior action.

Section 9.5 Registered Members

The Alliance shall be entitled to recognize the exclusive right of a person registered on its books as a Member or a representative of a Member to receive distributions, if any, and to vote, if such records indicate that such person is a Voting Member or a representative of a Voting Member, and to hold liable for Financial Obligations each Member registered on its books, and shall not be bound to recognize any equitable or other claim to or interest in Membership on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the Delaware General Corporation Law.

ARTICLE X

CERTAIN TRANSACTIONS

Section 10.1 Transactions with Interested Parties

No contract or transaction between the Alliance and one or more of its Directors or Officers, or between the Alliance and any other corporation, partnership, association, or other organization in which one or more of its directors or officers are directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because such Director or Officer (or other director or officer) is present at or participates in the meeting of the Board or Board Committee which authorizes the contract or transaction or solely because his, her or their votes are counted for such purpose, if:

(a) The material facts as to his or her relationship or interest and as to the contract or transaction are disclosed or are known to the Board or such Board Committee, and the Board or such Board Committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested Directors, even though the disinterested Directors be less than a quorum; or

(b) The material facts as to his or her relationship or interest and as to the contract or transaction are disclosed or are known to the Voting Members entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the Voting Members; or

(c) The contract or transaction is fair as to the Alliance as of the time it is authorized, approved or ratified, by the Board, a Board Committee, or the Voting Members.

Common or interested Directors may be counted in determining the presence of a quorum at a meeting of the Board or Board Committee that authorizes the contract or transaction.

ARTICLE XI

GRANTS, CONTRACTS, LOANS, ETC.

Section 11.1 Grants

The making of grants and contributions, and otherwise rendering financial assistance for the purposes of the Alliance, may be authorized by the Board. The Board may authorize any Officer or Officers, agent or agents, in the name of and on behalf of the Alliance to make any such grants, contributions or assistance.

Section 11.2 Execution of Contracts

The Board may authorize any Officer, employee or agent of the Alliance, in the name and on behalf of the Alliance, to enter into any contract or execute and satisfy any instrument, and any such authority may be general or confined to specific instances, or otherwise limited. In the absence of any action by the Board to the contrary, the President shall be authorized to execute such contracts and instruments on behalf of the Alliance but must inform the Board of any such actions. Board may from time to time establish such policies regarding financial or other contracts and authority to execute the same as it may so desire.

Section 11.3 Checks, Drafts, Etc.

All checks, drafts and other orders for the payment of money out of the funds of the Alliance, and all notes or other evidences of indebtedness of the Alliance, shall be signed on behalf of the Alliance in such manner as shall from time to time be determined by resolution of the Board.

Section 11.4 Deposits

The funds of the Alliance not otherwise employed shall be deposited from time to time to the order of the Alliance in such banks, trust companies, or other depositories, or shall be otherwise invested, as the Board may select or direct, or as may be selected or directed by an Officer, employee or agent of the Alliance to whom such power may from time to time be specifically delegated by the Board.

ARTICLE XII

GENERAL PROVISIONS

Section 12.1 Fiscal Year

The fiscal year of the Alliance shall be determined, and may be changed, by resolution of the Board.

Section 12.2 Reserves

The Directors may set apart out of any funds of the Alliance a reserve or reserves for any proper purpose and may abolish any such reserve.

Section 12.3 Seal

The Board may, by resolution, adopt a corporate seal. The corporate seal shall have inscribed thereon the name of the Alliance, the year of its organization and the word "Delaware". The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise. The seal may be altered from time to time by the Board.

Section 12.4 Proprietary Rights

(a) Except as otherwise specified in these Bylaws, the IPR Policy or the Member Agreement, or as otherwise specifically provided to the contrary in such policies and procedures as may from time to time be approved by the Board, all information disclosed by any participant during any official meeting or activity of the Alliance, including but not limited to Member meetings, Work Group and Task Group meetings, Board meetings, meetings of Board Committees and sub-committees thereof, electronic mail or the like, shall be deemed to have been disclosed on a non-confidential basis, but without waiver of any rights represented by valid patents, patent applications, and Federal and international statutory copyrights.

(b) No express or implied right, whether by implication, estoppel, or otherwise, to any patent, copyright, trademark, trade secret, or other intellectual property right of any Member is or shall be deemed to be granted to the Alliance or to any other Member solely by reason of its Membership in or participation in the activities of the Alliance, except as may be provided in a separate written agreement or the IPR Policy.

(c) No Member shall at any time be required to exchange proprietary information with any other Member solely by reason of its being a Member of the Alliance.

ARTICLE XIII

ANTITRUST COMPLIANCE

Section 13.1 General

The Alliance will conduct all of its activities in conformance with all international, U.S. federal and state antitrust laws, including the Sherman Act, the Clayton Act, the Robinson-Patman Act and the Federal Trade Commission Act. The Board and the President shall consult legal counsel and seek legal review whenever necessary to insure that the activities of the Alliance are conducted in conformance with such laws.

Section 13.2 Availability of Intellectual Property

It is the good faith objective of the Alliance (i) to make all Intellectual Property available as soon as its development and adoption by the Alliance is complete on the same terms to all Members who have not participated in the development or determination of such Intellectual Property as well as to all those Members who have participated, (ii) to make all such Intellectual Property available at the same point in time to all Members, and (iii) to make all such Intellectual Property available to all non-Members on fair and reasonable terms and conditions.

Section 13.3 No Obligation to Endorse

No Member shall, by reason of its Membership or participation in the Alliance or otherwise, be obligated to license from the Alliance, use or endorse any Intellectual Property (as defined in Section 2.7) developed or endorsed by the Alliance, or to conform any of its products or services to any work product developed or adopted by the Alliance, nor shall any such Member be precluded from independently licensing, using or endorsing similar intellectual property, materials, documentation, software or other work product developed by it or by others.

ARTICLE XIV

AMENDMENTS

Except where such power is expressly limited by law, the Certificate of Incorporation or these By-laws as to any specific action, these By-laws may be altered, amended or repealed, and new By-laws may be adopted, in each case only upon (i) Super Majority Vote of the Board or (ii) affirmative vote of at least two thirds (2/3) of the total number of Voting Members then in good standing at an annual or special meeting of the Voting Members, provided that notice of such alteration, amendment, repeal or adoption of new By-laws is contained in the notice of such meeting. Unless otherwise unanimously agreed by the Board or the Members in writing, a vote, resolution or consent of the Board or Members to alter, amend or repeal these Bylaws, or adopt new Bylaws, shall take effect 45 days after such vote, resolution or consent is passed or on such later date as may be specified in such vote, resolution or consent.

Amendments to the IPR Policy will take effect 45 days after the Board approves the amendment in accordance with Section 4.10(b) or on such later date as may be specified in the vote, resolution or consent approving the amendment.

Register of Amendments to the By-laws

| <u>Date</u> | <u>Section Affected</u> | <u>Change</u> |
|-------------------|-------------------------|---|
| September 1, 2021 | Section 2.2 | Established eligibility requirements pertaining to applicants' detrimental impact on the Alliance's mission |