

AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER (this “**Agreement**”) dated as of September 25, 2020, by and between INCORPORATED RESEARCH INSTITUTIONS FOR SEISMOLOGY, a Delaware nonstock corporation (“**IRIS**”); and UNAVCO, INC., a Colorado nonprofit corporation (“**UNAVCO**”).

WHEREAS, IRIS and UNAVCO desire to combine all of their assets, liabilities, and intellectual property in order to expand the mission and vision of IRIS and UNAVCO and honor their history and legacy;

WHEREAS, the respective Boards of Directors of IRIS and UNAVCO have each approved and adopted this Agreement and the transactions contemplated by this Agreement, in each case after making a determination that this Agreement and such transactions are advisable and fair to, and in the best interests of, such corporation and its membership;

WHEREAS, pursuant to the transactions contemplated by this Agreement and on the terms and subject to the conditions set forth herein, UNAVCO, in accordance with the Delaware General Corporation Law (the “**DGCL**”) and the Colorado Corporations and Associations Act (the “**CCAA**”), will merge with and into IRIS, with IRIS as the surviving corporation (the “**Merger**”);

WHEREAS, IRIS and UNAVCO desire for the Merger to be a done in the spirit of that of two equals; and

WHEREAS, IRIS will change its name to the EarthScope Consortium Inc. and rebrand around the mission of the two merged organizations. The mission of the EarthScope Consortium will be: “*The EarthScope Consortium is a university consortium dedicated to transforming global geophysical research and education*”. The vision of the EarthScope Consortium will be: “*An engaged society, resilient to geohazards, informed by geophysical discovery and global collaboration*”.

NOW, THEREFORE, in consideration of the mutual covenants, terms and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **Merger**. Upon the terms and subject to the conditions set forth in this Agreement, and in accordance with Section 252 of the DGCL, UNAVCO shall be merged with and into IRIS at the Effective Time (as hereinafter defined). Following the Effective Time, the separate corporate existence of UNAVCO shall cease, and IRIS shall continue as the surviving corporation (the “**Surviving Corporation**”) and shall be called the **EarthScope Consortium Inc.** The effects and consequences of the Merger shall be as set forth in this Agreement, the DGCL, and the CCAA.

2. **Effective Time**. Subject to the provisions of this Agreement, and the approval of the membership of both IRIS and UNAVCO, the National Science Foundation (“**NSF**”) and an analysis of the requirements for transitioning UNAVCO’s and IRIS’s existing NSF grant activities,

the parties shall duly prepare, execute and file a certificate of merger (the “**Certificate of Merger**”) complying with Section 252(c) of the DGCL with the Secretary of State of the State of Delaware and a statement of merger (the “**Statement of Merger**”) with respect to the Merger and Section 203.3 of the CCAA with the Secretary of State of the State of Colorado. The Merger shall become effective upon the filing of the Certificate of Merger and the Statement of Merger (the “**Effective Time**”). It is anticipated that the Effective Time of the merger will be on or before October 1, 2023. EarthScope Consortium shall also comply with Section 204.5 of the CCAA, requiring that it maintain a registered agent in the State of Colorado.

3. Organizational Documents. Contemporaneously with the Merger, IRIS shall amend and restate its bylaws substantially in the form set forth in Exhibit A (the “**Bylaws**”), which contains provisions providing for the phase-in of the respective officers and directors of the parties.

4. Conversion of Membership. At the Effective Time, by virtue of the Merger, and without any action of IRIS and UNAVCO, the membership interests of IRIS and UNAVCO shall be converted as follows:

(a) all “voting members” of IRIS and UNAVCO, and all “Educational Affiliate” members of IRIS (previously non-voting) immediately prior to the Effective Time shall be Voting Members of the EarthScope Consortium. Voting Members shall have the rights and obligations provided for in the Bylaws.

(b) all “non-voting members” of UNAVCO and all “Associate Members” of IRIS shall be Associate Members of the EarthScope Consortium. Associate Members shall have the rights and obligations provided for in the Bylaws.

5. Initial Membership Fee. The EarthScope Consortium shall not assess any Voting Members or Associate Members an initial membership fee (as those terms are defined in the Bylaws).

6. Headquarters. Primary headquarters, instrumentation facilities, satellite offices, and remote offices will be determined prior to the Effective Time through a process jointly overseen by the UNAVCO and IRIS Boards of Directors.

7. Fiscal Year. The fiscal year of the EarthScope Consortium Inc. will begin July 1.

8. President/CEO. The EarthScope Consortium’s President/CEO will be selected prior to the Effective Time via a joint process approved by the IRIS and UNAVCO Boards of Directors and will begin employment on or shortly after the Effective Time.

9. Integration Planning Phase. It is anticipated that the following principles will inform the design of the management structure during the integration planning phase prior to the Effective Time:

(a) Focus on the mission and vision, with support for technical and scientific capabilities.

(b) Responsive connection between organizational management and community governance.

(c) Balance of President/CEO attention between programs and services, infrastructure, engagement of the geophysics community, and external advocacy/fundraising.

(d) A management structure that supports strong connectivity between programs and administration.

(e) Consideration of the breadth and depth of expertise needed to effectively lead each functional area, as well as the number of staff likely to be in each function.

10. Amendment and Restatement of Certificate of Incorporation. IRIS shall amend and restate its Certificate of Incorporation substantially in the form set forth in Exhibit B.

11. Employee Benefits. It is anticipated that NEWORG will consolidate employee benefits under guiding principles of equitable treatment, compensation, and working conditions for all employees.

12. Timeline. IRIS and UNAVCO shall create and appoint an Implementation Steering Committee to facilitate the Merger, which shall consist of the individuals identified in Exhibit C.

13. Abandonment of Merger. Notwithstanding anything contained in this Agreement to the contrary, at any time prior to the Effective Time, this Merger may be abandoned and this Agreement may be terminated by either IRIS or UNAVCO, with such abandonment to be effective immediately after the giving of written notice of abandonment to the other party. In the event of such abandonment and termination, this Agreement shall be deemed to be void and of no effect and there shall be no liability or obligation on the part of either IRIS or UNAVCO, or their officers, directors or employees arising from such termination.

14. Amendment. To the extent permitted by applicable law, the Boards of Directors of UNAVCO and IRIS may amend, modify, or supplement this Agreement by mutual consent in such manner as may be agreed upon by them in writing.

15. Governing Law. This Agreement shall be governed by and construed in accordance with the internal laws of the State of Delaware without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than those of the State of Delaware.

16. Expenses. Whether or not the merger between IRIS and UNAVCO is consummated, any costs and expenses incurred in connection with this Agreement or the transactions contemplated hereby shall be borne by the party incurring the same.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

INCORPORATED RESEARCH INSTITUTIONS
FOR SEISMOLOGY, a Delaware nonstock
corporation



By: _____
Name: Richard Aster
Title: Chair of the IRIS Board

UNAVCO, INC., a Colorado nonprofit corporation



By: _____
Name: Lucy Flesch
Title: Chair of the UNAVCO Board

Exhibit A

EarthScope Consortium Inc.
A Delaware Nonstock Corporation
Bylaws

Article I

Name

Section 1. Name: The name of the corporation is the EarthScope Consortium Inc. (the “Corporation”).

Article II

Member Institutions

Section 1. Voting Members: Educational and research institutions chartered in the United States, with a major commitment to research in geodesy or seismology and related fields, including single or multiple campuses of multi-campus university systems, may become voting members of the Corporation (“**Voting Members**”). An institution applying for voting membership in the Corporation must be qualified as an educational or research institution according to policies adopted by the Board of Directors. Qualified institutions may be admitted by the affirmative vote of two-thirds of the entire Board of Directors. The rights and privileges of Voting Members with respect to participation in the scientific activities of the Corporation will be according to policies established by the Board of Directors. Each Voting Member is required to appoint one individual as its designated representative (“**Member Representative**”) to represent the interests of that Member, to receive notices to Voting Members sent by the Corporation, and to vote on behalf of that Voting Member on each matter submitted to a vote of the Voting Members. Each Voting Member is also required to appoint another individual as its alternate representative (“**Alternate Member Representative**”) to so act and vote if the Member Representative is unable to do so. Each Member Representative and Alternate Member Representative must be the holder of an academic appointment, with major responsibilities for instruction and/or research in the earth sciences, in a department, program or other organizational unit of the Voting Member institution they are to represent. Appointment of the Member Representative and Alternate Member Representative shall be made by a senior officer of the Voting Member at or above the level of Department Head.

VOTING MEMBERSHIP TRANSITION PROVISION. As of the effective time of the merger (the “**Merger**”) of Incorporated Research Institutions for Seismology (“**IRIS**”) and UNAVCO, Inc. (“**UNAVCO**”), in accordance with the Agreement and Plan of Merger between IRIS and UNAVCO dated September 25, 2020 (the “**Agreement and Plan of Merger**”), all voting members of UNAVCO, and all educational affiliate members of IRIS (previously non-voting) immediately prior to the effective time of the Merger shall become Voting Members of the Corporation, and all Voting Members of IRIS shall continue to be Voting Members of the Corporation.

Section 2. Associate Members: Educational and research institutions in the United States that do not otherwise qualify for voting membership, government entities in the United States or foreign countries that are engaged in geodetic or seismological research and development, and educational and research institutions in foreign countries that are engaged in geodetic or seismological research and development, may be admitted as nonvoting Associate Members by the affirmative vote of two-thirds of the Board of Directors. Associate Members may appoint a representative to attend meetings of the Voting Members. The rights and privileges of Associate Members with respect to participation in the scientific activities of the Corporation will be according to policies established by the Board of Directors.

ASSOCIATE MEMBERSHIP TRANSITION PROVISION. As of the effective time of the Merger, in accordance with the Agreement and Plan of Merger, all non-voting members of UNAVCO immediately prior to the effective time of the Merger shall become Associate Members of the Corporation, and all Associate Members of IRIS shall continue to be Associate Members of the Corporation.

Section 3. Resignation: Any Voting Member or Associate Member may resign at any time by giving written notice to the Chair, President/CEO, or Secretary of the Corporation. Such resignation shall take effect at the time of receipt of the notice, or at any later time specified therein. Any resigning Voting Member or Associate Member shall remain liable for any unpaid portion of any membership fees, assessments, or charges levied before the effective date of the resignation. Membership fees, assessments, or charges previously paid shall not be refundable.

Section 4. Disciplinary Action: Any Voting Member or Associate Member may be placed on probation, or have its membership suspended or terminated by a two-thirds vote of the Board of Directors if such member fails in the judgment of the Board of Directors to participate sufficiently in the Corporation’s affairs or does anything deemed by the Board of Directors to be detrimental to the Corporation or its reputation. Voting Members and Associate Members that have been placed on probation or suspended must stay current on all membership fees, assessments, and charges. Voting Members and Associate Members whose memberships have been terminated shall remain liable for any unpaid portion of any membership fees, assessments, or charges levied before the effective date of the termination. Disciplined Voting Members or Associate Members may apply to the Board of Directors for reinstatement by a two-thirds vote of Board of Directors.

Article III

Meetings of the Members

Section 1. Place of Members' Meetings: Meetings of the members shall be held at such place, within or outside the State of Delaware, as the Board of Directors designates. If no designation is made by the Board of Directors, the place of meeting shall be the principal office of the Corporation. If authorized by the Board of Directors in its sole discretion, and subject to such guidelines and procedures as the Board of Directors may adopt, the Member Representatives and Alternate Member Representatives who are not physically present at a meeting of the Voting Members may, by means of remote communication, participate in a meeting and create a quorum of the Voting Members and be deemed present in person and vote at such meeting, whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (a) the Corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a Member Representative or Alternate Member Representative, (b) the Corporation shall implement reasonable measures to provide such Member Representatives and Alternate Member Representatives a reasonable opportunity to participate in the meeting and to vote on matters submitted to the Voting Members, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (c) if any Member Representative or Alternate Member Representative votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the Corporation.

Section 2. Annual Meeting: The annual meeting of the members shall be held at such date, place, and time as may be fixed by resolution of the Board of Directors.

Section 3. Special Meetings: A special meeting of the members may be called only by the President, the Chair, the Executive Committee, the Board of Directors, or at the request in writing of at least twenty-five percent (25%) of the Voting Members. No notice of a special meeting need be given to members if each Voting Member entitled to vote at such meeting waives notice thereof in writing in accordance with the requirements of Section 4 of this Article III.

Section 4. Notice or Waiver of Notice: Written or printed notice, stating the place, date, and time of the meeting, shall be prepared and delivered by the Corporation not less than ten days nor more than sixty days before the date of the meeting. Such notice shall be delivered, by first class mail (postage prepaid), or email or internet posting (provided that the Member has consented in writing to be notified by email or internet posting), to each Voting Member entitled to vote at such meeting. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail with postage thereon prepaid, addressed to the Voting Member at its address as it appears on the records of the Corporation. When emailed or posted, notices shall be deemed to be delivered when transmitted and addressed to the Voting Member in accordance with the instructions given by the Voting Member in

its consent. Whenever notice is required to be given under any provision of these Bylaws, a written waiver, signed by the Voting Member entitled to notice, or a waiver by electronic transmission by the Voting Member entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of the Member Representative or Alternate Member Representative of the Voting Member at a meeting shall constitute a waiver of notice of such meeting, except when the Member Representative or Alternate Member Representative of the Voting Member attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the Members need be specified in any written waiver of notice or any waiver of electronic transmission unless so required by law, the Certificate of Incorporation, or the Bylaws.

Section 5. Presiding Officer of Meetings: The Chair, or in the absence of the Chair, the Vice Chair, shall preside at all meetings of the members. In the absence of the Chair and the Vice Chair, the President/CEO shall preside at such meetings.

Section 6. Secretary of Meetings: The Secretary of the Corporation shall act as secretary of all meetings of the Members. In the absence of the Secretary, the presiding officer of the meeting shall appoint any other person to act as secretary of the meeting.

Section 7. Quorum and Adjournment: Except as otherwise provided by law or by the Certificate of Incorporation, a majority of the Voting Members, represented in person or by proxy, shall constitute a quorum at a meeting of Members. The chair of the meeting or a majority of the Voting Members so represented may adjourn the meeting from time to time, whether or not there is such a quorum. At any adjourned meeting at which a quorum is present any business may be transacted which might have been transacted at the original meeting.

Section 8. Proxies: Each Member Representative or Alternate Member Representative entitled to vote at a meeting of the Voting Members may authorize another person or persons to act for such Voting Member by proxy. Every proxy must be in writing and signed by the Member Representative or Alternate Member Representative or sent by email setting forth information from which it can be reasonably determined that the proxy was authorized by such Member Representative or Alternate Member Representative. No proxy shall be valid after the expiration of three (3) years from the date thereof unless otherwise provided in the proxy. Each such proxy is revocable at the pleasure of the Member Representative or Alternate Member Representative executing it, except as otherwise provided by law. For the purposes of conducting meetings, all proxies shall be delivered to the Secretary or, upon the absence of the Secretary, the person appointed to act as secretary of the meeting.

Section 9. Voting: Unless otherwise provided by law or by the Certificate of Incorporation, and subject to the other provisions of these Bylaws, each Voting Member shall be entitled to one vote on each matter. If authorized by the Board of Directors, any requirement of a written ballot shall be satisfied by a ballot submitted by electronic transmission, provided that any such electronic transmission must either set forth or be submitted with information

from which it can be determined that the electronic transmission was authorized by the Voting Member representative or proxyholder.

Section 10. Required Vote: Except as otherwise provided by law, the Certificate of Incorporation or these Bylaws, all matters other than the election of Directors submitted to the Voting Members at any meeting shall be decided by the affirmative vote of a majority of the Voting Members present in person or represented by proxy at the meeting and entitled to vote thereon. Voting Member votes with respect to extraordinary actions such as merger, consolidation, conversion, sale, lease or exchange of all or substantially all assets of the Corporation and dissolution shall be governed by the relevant provisions of the Delaware General Corporation Law.

Section 11. Election of Directors: Election of Directors shall occur at each annual meeting or may be initiated by the Board of Directors as an “Action Without a Meeting” under the provisions of Section 12 of this Article III. Election of Directors shall be by written ballot. Directors nominated by a Nominating Committee shall be elected by a plurality of the votes of the Voting Members entitled to vote on the election of Directors. For elections of Directors to be valid, ballots must be submitted by a majority of the Voting Members.

Section 12. Action Without a Meeting: Notwithstanding anything to the contrary contained in these Bylaws, whenever Voting Members are required or permitted to take any action by vote, such action may be taken without a meeting by use of a consent or consents, setting forth the action so taken, signed and dated by Voting Members. For such actions to be valid, such consents must constitute not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all Voting Members having a right to vote thereon were present and voted. Such consents must be received by the Secretary of the Corporation by certified or registered mail (return receipt requested), or other electronic transmission such as email within no fewer than ten and no more than sixty days (as determined by the Board) of the date the earliest dated consent is received by the Secretary. All Voting Members shall be promptly notified in writing of any action taken.

Article IV

Board of Directors

Section 1. Powers: Full power in the management of the affairs of the Corporation is vested in the Board of Directors. To this end and without limitation of the foregoing or of the powers expressly conferred by these Bylaws, the Board of Directors shall have power to authorize such action on behalf of the Corporation, make such rules or regulations for its management, create such additional offices or special committees and select, employ or remove such of its officers, agents or employees as it shall deem to be in the best interests of the Corporation. The Board of Directors shall have the power to fill vacancies in, and change the membership of, such committees as are constituted by it.

Section 2. Composition: There shall be twelve Directors, all of whom are elected by the Voting Members. At least nine of the Directors must be affiliated with a Voting Member but need not be Member Representatives or Alternate Member Representatives. The other three Directors may be from the scientific community at-large and need not be affiliated with a Member. There shall not be more than one Director on the Board from any member or non-member institution.

Section 3. Election and Term of Office: Directors shall be elected by the Voting Members at the annual meeting for staggered three-year terms. Four Directors shall be elected to three-year terms each year. No Director may be reelected to a second consecutive term; provided, however, that any current Director other than the current Chair or Chair-Elect may be elected as the next Chair-Elect, thus extending his or her continual service as a Director beyond the normal three-year term limit. The terms of newly elected Directors shall commence no later than sixty days after their election. Each Director shall continue in office until a successor is chosen and qualifies or until death, resignation or removal.

BOARD OF DIRECTORS TRANSITION PROVISION. In accordance with the Agreement and Plan of Merger, two Directors from each of the existing boards of IRIS and UNAVCO immediately prior to the merger shall be appointed by the Chairs of those Boards to one-year terms as Directors on the Board of Directors. The Voting Members shall elect the remaining eight Directors, four from the IRIS community and four from the UNAVCO community. Two from each community shall be elected to two-year terms and two from each community shall be elected to three-year terms. One of the two-year term Directors shall be the person elected by the Voting Members to be the Chair of the Board. One of the three-year term Directors shall be the person elected by the Voting Members to be the Chair-Elect of the Board. The Nominating Committee (see Article VII, Section 5) shall identify in its proposed slate which nominees are designated to fill the various terms and positions. Subsequent Boards of Directors need not consist of equal representation from the IRIS and UNAVCO communities.

Section 4. Resignation: Any Director may resign at any time by giving written notice to the Chair, President/CEO, or Secretary of the Corporation. Such resignation shall take effect at the time of receipt of the notice, or at any later time specified therein.

Section 5. Removal: Any Director may be removed with or without cause by a majority of the Voting Members. Any Director may be removed for cause by the affirmative vote of two-thirds of the Board of Directors with ratification by a majority of the Voting Member.

Section 6. Vacancies: Any vacancy occurring in the Board of Directors by reason of the death, resignation, removal or disqualification of a Director may be filled by the vote of a majority of the remaining Directors, though less than a quorum of the Board of Directors; provided, however, that the provisions of Section 2 of this Article IV must be satisfied. Any Director so elected shall serve on an interim basis only, until the next annual meeting of the Members. At the next annual meeting of the Members, the Voting Members shall elect someone to serve for the unexpired term of the vacating Director.

Article V

Meetings of the Board of Directors

Section 1. Regular Meetings: A regular meeting of the Board of Directors may be held immediately after the annual meeting of the members, and at the same place as, each annual meeting of members. The Board of Directors may, by resolution, provide the time and place for the holding of additional regular meetings without notice other than such resolution. It is expected that the Board of Directors will have least two additional regular meetings annually. These meetings may be held in accordance with Section 8 of this Article V.

Section 2. Special Meetings: Special meetings of the Board of Directors shall be called at the request of the Chair, the President/CEO, or a majority of the Directors.

Section 3. Place of Meetings: The Chair or the President/CEO shall designate the place and type (in-person or virtual) of any special meeting, which may be held either within or outside the State of Delaware and which shall be specified in the notice of meeting or waiver of notice thereof; provided, however, that the Board shall have at least two meetings each year.

Section 4. Notice of Meetings: Notice of any special meeting shall be given to each Director at least seven days before such meeting. Such notice shall be delivered by email or first class mail (postage prepaid). If mailed, such notice shall be deemed adequately delivered when deposited in the United States mail so addressed, with postage thereon prepaid. When emailed, notices shall be deemed to be delivered when transmitted and addressed to the Director in accordance with the instructions given by the Director. Neither the business to be transacted at, nor the purpose of, any annual, regular or special meeting of the Board of Directors need be specified in the notice of such meeting. A meeting may be held at any time without notice if all the Directors are present (except as otherwise provided by law) or if those not present waive notice of the meeting in writing, either before or after such meeting.

Section 5. Quorum: Except as may be otherwise expressly required by law, the Certificate of Incorporation or these Bylaws, at all meetings of the Board of Directors a majority of the Directors then serving shall constitute a quorum. At all meetings of any committee of the Board of Directors, or of any committee of the Corporation established by the Board of Directors, a majority of the members of that committee shall constitute a quorum. If a quorum is not present, a majority of the Directors or committee members present may adjourn the meeting without notice other than by announcement at said meeting, until a quorum is present. At any duly adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally called.

Section 6. Voting: Each Director shall be entitled to one vote. Except as otherwise expressly required by law, the Certificate of Incorporation or these Bylaws, all matters shall be

decided by the affirmative vote of a majority of the Directors present at the time of the vote, if a quorum is then present. Unless specified otherwise, all votes will be decided by a simple majority of the Directors present.

Section 7. Action Without a Meeting: Any action required or permitted to be taken by the Board of Directors, or any committee of the Board of Directors, may be taken without a meeting if all members of the Board of Directors or the committee consent in writing to the adoption of a resolution authorizing the action. The resolution and the written consents thereto shall be filed with the minutes of the proceedings of the Board of Directors or the applicable committee.

Section 8. Meeting by Remote Communication: Any one or more members of the Board or any committee thereof may participate in a meeting of the Board or such committee by means of a conference telephone, video conference, or similar communications equipment. Participation by such means shall constitute presence in person at a meeting provided that all persons participating in the meeting can hear each other at the same time and each director can participate in all matters before the board, including, without limitation, the ability to propose, object to, and vote upon a specific action to be taken by the board or committee.

Article VI

Officers

Section 1. Officers and Qualifications: The officers of the Corporation shall consist of a Chair, a Vice Chair, a Chair Elect, a President/CEO, a Secretary, a Treasurer, and such other officers as the Board of Directors may from time to time establish and appoint. At any time that the position of Chair Elect is filled, the Chair Elect shall also be an officer. All officers named above other than the President/CEO shall be Directors. The President/CEO will participate in meetings of the Directors (except executive sessions of the Board) but is not a Director elected by the Voting Members. Unless otherwise specified by Board action, other appointed officers need not be Directors. The Chair is elected by the Voting Members and serves as Chair Elect during their first year on the Board. All other officers of the Board of Directors are appointed by the Board of Directors.

Section 2. Chair: The Chair of the Board of Directors shall, when present, preside at all meetings of the Board of Directors and the Members and shall perform such other duties and exercise such other powers as shall from time to time be assigned by the Board of Directors.

Section 3. Vice Chair: The Vice Chair of the Board of Directors shall preside, in the absence of the Chair, at all meetings of the Board of Directors and the Members and shall perform such other duties and exercise such other powers as shall from time to time be assigned by the Board of Directors.

Section 4. President/CEO: Except as otherwise provided by the Board of Directors, the President/CEO shall be the chief executive officer of the Corporation, and unless authority is given by these Bylaws or the Board of Directors to other officers or agents to do so, the President/CEO shall execute all contracts and agreements on behalf of the Corporation. It shall be their duty, insofar as the facilities and funds furnished to them by the Corporation permit, to see that the orders and votes of the Board of Directors and the purposes of the Corporation are carried out. In the absence of the Chair or the Vice Chair of the Board of Directors, the President/CEO shall preside at meetings of the Board of Directors and the Members. The President/CEO may appoint advisory committees or panels to assist in carrying out the business of the Corporation. The President/CEO shall be hired by the Board of Directors.

Section 5. Secretary: The Secretary shall oversee the taking and keeping of the minutes of the meetings of the Members, the Board of Directors and the Executive Committee of the Board of Directors; see that all notices are duly given in accordance with the provisions of these Bylaws or as required by law; oversee the custody of the corporate records; and oversee the maintenance of a register of the address and other contact information of each Voting Member which shall be furnished to the Secretary or the Secretary's designee by such Voting Member. The Secretary shall have such other duties as are customary to the position of Secretary in a corporation of this type and as shall from time to time be assigned by the Board of Directors.

Section 6. Treasurer: The Treasurer, subject to the control of the Board of Directors, shall oversee the collection and receipt, and shall have charge and custody of, the funds and securities of the Corporation. The Treasurer shall work with and obtain the assistance of the Chief Financial Officer in carrying out these responsibilities. All books, records, and vouchers shall be open for the inspection of any Director or Voting Member, subject to federal law and regulations of competent federal authorities governing access to classified information. The Treasurer shall render to the Board of Directors such reports as it shall request. At least once a year, and whenever requested by vote of the Board of Directors, the Treasurer shall render a full and detailed account of all receipts and expenditures and submit a schedule showing all property and investments of the Corporation and the changes, if any, since the Treasurer's last report. The Treasurer shall have such other duties as are customary to the position of Treasurer in a corporation of this type and as shall from time to time be assigned by the Board of Directors.

Section 7. Chair Elect: The Chair Elect of the Board of Directors shall become the Chair of the Board of Directors at the conclusion of the Chair's term. The Chair Elect shall also perform such other duties and exercise such other powers as shall from time to time be assigned by the Board of Directors.

Section 8. Election and Term of Office: The Chair Elect of the Board of Directors shall be elected by the Voting Members in even-numbered years, and shall serve one year as Chair-Elect and then two years as Chair. The term of the Chair shall be two years. All other officers of the Corporation shall be elected by the Board of Directors for one-year terms. The Vice

Chair, Secretary and Treasurer may be elected to successive terms as long as their terms as Directors have not expired.

Section 9. Resignation: Any officer may resign at any time by giving written notice to the Chair, the Vice Chair, the President or Secretary of the Corporation. Such resignation shall take effect at the time of receipt of the notice, or at any later time specified therein.

Section 10. Vacancies: A vacancy in the office of Chair shall be automatically filled by the Chair-Elect then in office; or if there is no Chair-Elect then in office by the Vice Chair. Any vacancy in any other office may be filled for the unexpired portion of the term of such office by the Board of Directors.

Section 11. Removal: Any officer who is a Director and who is removed under Section 5 of Article IV above shall also cease to be an officer. Any officer other than the Chair or the Chair-Elect may be removed as an officer at any time with or without cause by a majority vote of the entire Board of Directors.

Article VII

Committees

Section 1. Board Committees in General: The Board of Directors may create such Board Committees as may be deemed desirable, the members of which shall be appointed, except as otherwise specifically provided otherwise in these Bylaws, by the Chair of the Board from among the Directors. Each such committee shall have only the lawful powers specifically delegated to it by these Bylaws or by the Board. The Board may at any time remove any Board Committee member with or without cause and/or fill any vacancy in any such committee.

Section 2. Executive Committee: The Executive Committee shall be a Board Committee and shall consist of the Chair, the Vice Chair, the Chair Elect, the Treasurer, and the Secretary, all of whom serve as ex officio voting members of the Executive Committee, and the President/CEO, who shall be a non-voting member of the Executive Committee. The Executive Committee will thus have four voting members in years in which there is no Chair Elect, and five voting members in years in which there is a Chair-Elect.

The Executive Committee shall meet as often as it may deem necessary. Meetings shall be called at the direction of the Chair, or upon the written request, filed with the Secretary, of two or more of the other members of the Executive Committee. A majority of the Executive Committee shall constitute a quorum and the vote of a majority of those present shall be required to decide any question and take any action which may properly come before the meeting. Notice of a meeting of the Executive Committee shall be given at least three days prior to the meeting and shall state the date, time and place of the meeting, but need not, unless otherwise required by law, state the purpose or purposes thereof. Notice may be given in person, by telephone, facsimile, electronic mail, or other form of wire or wireless

communication, or by overnight mail delivery.

The Executive Committee shall have and may exercise all the powers vested in the Board of Directors during the intervals between meetings of the Board of Directors to the extent permitted by law, and shall perform such other duties as may be directed from time to time by the Board of Directors. The Executive Committee is prohibited from (i) terminating an officer of the Corporation; (ii) filling vacancies in the Board of Directors or any committee thereof; (iii) amending the Bylaws; or (iv) making any recommendations to the Members with respect to extraordinary actions under the Delaware General Corporation Law.

Section 3. Budget and Finance Committee: The Budget and Finance Committee shall be composed only of Directors but shall be an advisory committee. It shall be responsible for overseeing corporate financial management functions, including the budget, investment and debt policies and transactions, and recommending to the Board of Directors changes in financial management policies. The Budget and Finance Committee shall not have authority to exercise any powers on behalf of the Board of Directors.

Section 4. Membership Committee: The Membership Committee shall be composed of Directors only, but shall be an advisory committee. It shall develop policies for recommendation to the Board for the recruitment and admission of new Members, for the suspension or expulsion of existing Members, and procedures for application for reinstatement of expelled Members. It shall review applications for admission of new Members and make recommendations to the Board of Directors as to whether a prospective new member should be admitted. The Membership Committee shall not have authority to exercise any powers on behalf of the Board of Directors.

Section 5. Nominating Committee: The Nominating Committee shall consist of five members. The Chair shall be an ex-officio member. The other four Nominating Committee members must be Member Representatives, and shall be appointed by the Board of Directors to staggered terms of two years each. The Nominating Committee shall prepare a slate of one or more nominees for each Director and Nominating Committee position to be filled. The Nominating Committee should strive to identify at least two nominees for each Director position. The slate must comply with the provisions of Section 2 of Article IV below. The Nominating Committee shall solicit the Directors and the Voting Members for the names of suggested nominees and may propose names of nominees themselves. Notwithstanding the above, a candidate shall be placed on the slate by the Nominating Committee upon receipt, at least 70 days before the election, of written nominations signed by at least ten percent of the Voting Members.

Section 6. Advisory Committees: The Board of Directors may designate one or more Advisory Committees for each major scientific, educational or research program to which the Corporation provides scientific counsel and advice or management direction, or for any other purpose. Advisory Committees may not act on behalf of the Board and recommendations from such committees must be approved by the Board. Each such committee shall serve at the pleasure of the Board. Advisory Committee members are appointed by the Board of Directors, typically for 3-year terms. Advisory Committee

members need not be Member Representatives or otherwise affiliated with Member institutions. Directors shall not be Advisory Committee members, but the Board will appoint a Director as liaison to each Advisory Committee. The Board may at any time remove any Advisory Committee member with or without cause and/or fill any vacancy in any such committee.

Article VIII

Non-Discrimination

Section 1. Non-Discrimination: In all of its dealings, neither the Corporation nor its duly authorized agents, shall discriminate against any individual or group for reasons of race, color, creed, sex, age, culture, national origin, marital status, sexual orientation, gender identity, mental or physical handicap, or any other category protected by state or federal law.

Article IX

Fees and Dues

Section 1. Initial Membership Fee: Each new Voting Member and Associate Member shall be required, at the discretion of the Board of Directors, to pay an initial membership fee. The initial membership fee may be set or changed from time to time and on a case-by-case basis by action of the Board of Directors without the requirement of amending this Bylaw.

INITIAL FEE TRANSITION PROVISION. Institutions that become new members of the Corporation by virtue of the provisions of the Agreement and Plan of Merger will not be assessed an initial membership fee.

Section 2. Fees and Assessments: In addition to the initial membership fee, every Voting Member and Associate Member shall pay such fees or assessments, annual or otherwise, as may be authorized from time to time by the Board of Directors; provided, however, that all such fees and assessments shall be levied equally on all of the members in each class. Any member that fails to pay any fees or assessments within sixty days after such fees or assessments are due shall be automatically removed from membership, but may be reinstated upon paying all overdue fees and assessments and meeting such other reinstatement requirements as may be required by the Board of Directors. No dues, fees or assessments already paid shall be refundable.

Article X

Compensation

Section 1. Compensation: The Board of Directors shall have the power to fix the compensation and fees payable to the President/CEO for services rendered to the Corporation. No Director shall be paid any compensation for serving as a Director. All Directors may be reimbursed for the actual expenses incurred in performing duties assigned to them by the Board of Directors.

Section 2. Dividends: The Corporation shall not pay dividends or distribute any part of its income or profit to its Members, Directors, or officers.

Article XI

Indemnification

Section 1. Indemnification: The Corporation shall indemnify anyone who is or was serving as a Director, officer, employee, or agent of the Corporation, or is or was serving at the request of the Corporation as a Director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, to the fullest extent allowed by the Delaware General Corporation Law. No indemnification may be made to or on behalf of any such person if (a) their acts were committed in bad faith or were the result of their active and deliberate dishonesty and were material to such action or proceeding, or (b) they personally gained in fact a financial profit or other advantage to which they were not legally entitled.

Section 2. Insurance: The Board shall cause the Corporation to purchase and maintain insurance on behalf of any person who is or was a Director, officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a Director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity or arising out of such status, whether or not the Corporation would have the power to indemnify such person.

Section 3. Non-exclusivity; Survival; Amendments: The rights conferred on any person by this Article XI shall not be exclusive of any other right that such person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of disinterested Directors, or otherwise, both as to action in the person's official capacity and as to action in another capacity while holding office. The Corporation is specifically authorized to enter into individual contracts with any or all of its Directors, officers, employees or agents respecting indemnification and advances to the fullest extent not prohibited by law. The rights conferred on any person by this Article XI shall continue as to a person who has ceased to be a Director, officer, employee or other agent and shall inure to the benefit of the heirs, executors and administrators of such a person. Any repeal or modification of this Article XI shall only be prospective, and no repeal or modification hereof shall adversely affect the rights in effect under this Article XI at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any Director, officer, employee or agent of the Corporation. If this Article XI or

any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, the Corporation shall indemnify each Director or officer or other agent to the fullest extent permitted (a) by any applicable portion of this Article XI that shall not have been invalidated or (b) by any other applicable law.

Section 4. Other Rights Preserved: The indemnification and advancement of expenses provided by this Article shall not be deemed exclusive of any other rights to which those persons involved may be entitled under any agreement, vote of Members or disinterested Directors, or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office.

Article XII

Fiscal Year

Section 1. Fiscal Year: The fiscal year of the Corporation shall begin on July 1 and end on the following June 30.

Article XIII

Books and Records

Section 1. Books and Records: The Corporation shall keep at the office of the Corporation correct and complete books and records of the activities and transactions of the Corporation, including the minute book, which shall contain a copy of the Certificate of Incorporation, a copy of these Bylaws, all resolutions of the Board of Directors, and all minutes of meetings of the members and meetings of the Board of Directors and committees thereof.

Article XIV

Amendments to the Bylaws

Section 1. Amendments: All Bylaws of the Corporation shall be subject to amendment or repeal and new Bylaws may be made by an affirmative vote of at least seven members of the Board of Directors. The Voting Members shall have the authority, by the affirmative vote of a majority of the Voting Members, to ratify, modify, or repeal in any respect any action taken by the Board of Directors under this Section.

Exhibit B

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF INCORPORATED RESEARCH INSTITUTIONS FOR SEISMOLOGY

Incorporated Research Institutions for Seismology, a “nonprofit nonstock corporation” organized and existing under the laws of the State of Delaware (the “Corporation”), hereby certifies as follows:

FIRST: The Corporation was incorporated under its present name by the filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware on May 8, 1984.

SECOND: This Amended and Restated Certificate of Incorporation was duly adopted in accordance with the Certificate of Merger and the provisions of Sections 242(b)(3), 256(b)(3) and 245 of the General Corporation Law of the State of Delaware.

THIRD: The Certificate of Incorporation of the Corporation is hereby amended, restated and integrated to read in its entirety as follows:

ARTICLE I--NAME

The name of the Corporation is the EarthScope Consortium Inc. (the “Corporation”).

ARTICLE II--REGISTERED AGENT

The address of the Corporation’s registered office in the State of Delaware is 1209 Orange Street, Wilmington, New Castle County, Delaware, 19801. The name of the Corporation’s registered agent at such address is The Corporation Trust Company.

ARTICLE III--PURPOSES

The Corporation shall be a “nonprofit nonstock corporation” as defined in Section 114(d)(3) of the General Corporation Law of the State of Delaware.

The purposes for which the Corporation is organized and operated are to engage exclusively in such charitable, educational, and scientific activities as may qualify it for exemption from federal income tax under Section 501(c)(3) of the Internal Revenue Code of 1986, as

amended (hereinafter, the “Code”; reference to a particular provision of the Code shall be deemed to refer to any corresponding successor provision of the Code or successor thereto). More specifically, such purposes include; but are not limited to the following:

A. To operate as a university consortium dedicated to transforming global geophysical research and education.; and

B. To do any and all lawful acts that may be necessary, useful, suitable, or proper for the furtherance of accomplishment of the foregoing purpose of the Corporation.

In furtherance of the above and other related purposes, the Corporation shall be empowered to exercise all power and authority granted to it under the General Corporation Law, including, but not limited to, the power to (i) accept donations of money or property, whether real or personal, or any interest therein, wherever situated, (ii) maintain control and discretion over the use of funds received by the Corporation, and (iii) monitor the use of funds made available by the Corporation to assure that the funds are used in conformity with the intended purposes.

ARTICLE IV--MEMBERSHIP

The Corporation shall have such class or classes of voting or non-voting members with rights, qualifications, conditions and benefits as are set forth in the Bylaws of the Corporation.

ARTICLE V--GOVERNING BODY

The Board of Directors shall manage and control the property, activities and affairs of the Corporation. All matters pertaining to directors and officers (including without limitation the exact number of directors and officers, their duties and terms, and the procedures for their election, resignation, removal and the filling of vacancies), and all other provisions for the regulation of the internal affairs of the Corporation, shall be set forth in the Bylaws of the Corporation to the extent that they are not set forth as follows or elsewhere in this Amended and Restated Certificate of Incorporation:

A. No directorship or officership of the Corporation shall be assignable, nor shall any directorship or officership of the Corporation pass to any personal representative, heir or devisee.

B. The private property of any director, officer or employee of the Corporation, or of any other person acting on the Corporation's behalf pursuant to an official election, appointment or direction, shall not be subject to payment of the liabilities, debts or obligations of the Corporation to any extent whatsoever, and they may be indemnified as provided in this Amended and Restated Certificate of Incorporation and the Bylaws.

ARTICLE VI--LIMITATIONS ON ACTIVITY

At all times, notwithstanding the merger, consolidation, reorganization, termination, liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary or by operation of law, or any other provision of this Certificate of Incorporation:

A. The Corporation shall not possess or exercise any power or authority, or engage directly or indirectly in any activity, that will or might prevent it at any time from qualifying and continuing to qualify as a corporation described in Sections 501(c)(3) and 170(c)(2) of the Code, contributions to which are deductible for federal income tax purposes under Section 170(a)(1) of the Code;

B. No part of the assets or net earnings of the Corporation shall be used, nor shall the Corporation be organized or operated, for purposes that are not exclusively charitable, educational, scientific, environmental, religious or literary within the meaning of Section 501(c)(3) of the Code;

C. No substantial part of the activities of the Corporation shall consist of the carrying on of propaganda or otherwise attempting to influence legislation, nor shall the Corporation in any manner or to the extent (including by publication or distribution of statements) participate or intervene in any political campaign on behalf of (or in opposition to) any candidate for public office; and

D. Pursuant to the prohibition contained in Section 501(c)(3) of the Code, no part of the net earnings of the Corporation shall ever inure to the benefit of or be distributable to its directors, officers, members or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in Article III above.

ARTICLE VII--LIMITATION ON PERSONAL LIABILITY

The personal liability of the directors of the Corporation is hereby eliminated to the fullest extent permitted by the General Corporation Law, as the same exists or may hereafter be amended. No amendment or repeal of this Article VII shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any act or omission on the part of such director occurring prior to such amendment or repeal.

The private property, both real and personal, of the members of the Corporation, of the directors or officers of the Corporation, shall not be subject to the payment of corporate debts to any extent whatsoever.

ARTICLE VIII-- INDEMNIFICATION

The Corporation shall indemnify its directors, officers, employees and agents to the fullest extent permitted by the Delaware General Corporation Law, as the same exists or may hereafter be amended.

ARTICLE IX--DISSOLUTION

Upon dissolution of the Corporation, the Board of Directors shall:

A. Pay or make provision for the payment of all the Corporation's liabilities;

B. Return, transfer or convey (or make provision therefor) all assets held by the Corporation upon condition requiring such return, transfer or conveyance in the event of dissolution of the Corporation; and

C. Dispose of the Corporation's remaining assets exclusively for the purposes of the Corporation or distribute the assets to a federal or state government or government agency for a public purpose or an organization or organizations organized and operated exclusively for charitable, educational, scientific, religious, or literary purposes as shall, at that time, qualify for exemption under Section 501(c)(3) of the Code, as the Directors shall determine; provided that none of such assets shall be distributed to any corporation, fund or foundation any part of whose net earnings inures to the benefit of or is distributable to any individual or any corporation for profit. Any such assets not so disposed of shall be disposed of by the circuit court of the city or county in which the principal office of the Corporation is then located, to be used exclusively for purposes that are charitable, educational, scientific, religious, or literary within the meaning of Section 501(c)(3) of the Code or to an organization or organizations organized and operated exclusively for such purposes.

Exhibit C

IMPLEMENTATION STEERING COMMITTEE

Rick Aster, IRIS Board Chair

Becks Bendick, UNAVCO President

Jerry Carter, IRIS Staff

Lucy Flesch, UNAVCO Board Chair

Ronni Grapenthin, UNAVCO Board Member

Glen Mattioli, UNAVCO staff

Brandon Schmandt, IRIS Board Member

Bob Woodward, IRIS President