

National Spectrum Consortium Executive Committee Resolution

Non-Traditional Government Contractor

Date: January 15, 2016

Resolution Number: 001

Meeting: NSC Executive Committee monthly teleconference held January 15, 2016

Executive Committee Present: Vanu Bose, Teresa Smith, Gary Nadler, Tom McDermott, Josh Gladden, David Debrecht, Sal D'Itri, Jim Gigrich, Mark McHenry, Apurva Moody, and Jerry Park

Committee Action: During the above cited discussions and other correspondence, the following resolution was proposed, discussed and subsequently approved by the National Spectrum Consortium (NSC) Executive Committee, hereinafter referred to as "the NSC Executive Committee":

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to make the definition of a Non-traditional Government Contractor, as defined in the National Spectrum Consortium Articles of Collaboration dated November 7, 2014, consistent with the definition of current government legislation;

WHEREAS, current government legislation defines a Non-traditional Government Contractor or Non-traditional Defense Contractor as the following:

"A nontraditional defense contractor means an entity that is not currently performing and has not performed, for at least one-year prior to the date of application, any contract or subcontract for the Department of Defense that is subject to full coverage under the cost accounting standards prescribed pursuant to section 1502 of title 41 and the regulations implementing such section;"

NOW, THEREFORE, BE IT RESOLVED that the NSC Executive Committee directs the Consortium Management Firm to modify the Membership Agreement and Application to reflect such change and to ensure the Spectrum Articles of Collaboration reflect this updated legislation upon the next modification to the articles;

BE IT FURTHER RESOLVED that this resolution shall remain in place until superseded by a change to the Spectrum Articles of Collaboration.

ADOPTED, SIGNED AND APPROVED this 15th day of January, 2016.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Vanu Bose, Ph.D.
Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

Request for Membership Dues Waiver

Date: May 27, 2016

Resolution Number: 002

Meeting: NSC Executive Committee monthly teleconference held May 27, 2016

Executive Committee Present: Vanu Bose, Teresa Smith, Gary Nadler, Tom McDermott, Josh Gladden, David Debrecht, Sal D'Itri, Jim Gigrich, Mark McHenry, Apurva Moody, and Jerry Park

Committee Action: During the above cited discussions and other correspondence, the following resolution was proposed, discussed and subsequently approved by the National Spectrum Consortium (NSC) Executive Committee, hereinafter referred to as "the NSC Executive Committee":

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to remove "On a case-by-case basis, the Executive Committee may consider a request to waive all or part of the dues for very small, innovative organizations, particularly those that qualify as non-traditional government contractors.", as stated in the Annual Dues section of the NSC Articles of Collaboration dated November 7, 2014;

WHEREAS, the NSC Executive Committee believes the waiver should be removed for the following reasons:

- The NSC dues structure was established as to not be a barrier for entry into the consortium and is consistent with other consortia.
- The dues were established to assist in covering NSC administrative and management costs, and as a mechanism to help ensure that only serious applicants apply.
- Administrative and management costs are associated with providing our members with information and services so that they might be able to compete equitably and fairly for projects that government chooses to bring to the NSC – information and services are not designed to help companies get into the business of spectrum-related technology development.
- Allowing any company that is not a "member in good standing" to participate fully in consortium activities (e.g. compete for projects; receive funding) creates an inequality to the other members.
- A waiver conflicts with the statement in the NSC Articles of Collaboration under Membership as follows: "Any Member, regardless of when they join the National Spectrum Consortium, shall enjoy the same rights and incur the same obligations as any other Member hereunder."

NOW, THEREFORE, BE IT RESOLVED that the NSC Executive Committee directs the Consortium Management Firm to modify the Membership Agreement and Application to reflect such change and to ensure the Spectrum Articles of Collaboration reflect this updated legislation upon the next modification to the articles;

BE IT FURTHER RESOLVED that this resolution shall remain in place until superseded by a change to the Spectrum Articles of Collaboration.

ADOPTED, SIGNED AND APPROVED this 27th day of May, 2016.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Vanu Bose, Ph.D.
Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

NSC Trade Show and Conference Participation

Date: July 7, 2016

Resolution Number: 003

Meeting: NSC Executive Committee monthly teleconference held June 24, 2016

Executive Committee Present: Vanu Bose, David Debrecht, Sal D'Itri, Jim Gigrich, Tom McDermott, Mark McHenry, Apurva Moody, and Jerry Park

Committee Action: During the above cited discussions and other correspondence, the following resolution was proposed, discussed and subsequently approved by the National Spectrum Consortium (NSC) Executive Committee, hereinafter referred to as "the NSC Executive Committee":

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to establish near-term policy on sponsoring and participating in spectrum-related trade shows and conferences.

Due to the fact that the NSC is still in its infancy and has yet to start its first Research and Development effort by a member organization, the NSC Executive Committee has determined that the NSC, as an organization, is not in a position to sponsor or participate in spectrum-related trade shows or conferences until the NSC is more established and financially stable.

NOW, THEREFORE, BE IT RESOLVED that the NSC Executive Committee has determined that the NSC, as an organization, will not sponsor or participate in any spectrum-related trade shows or conferences;

BE IT FURTHER RESOLVED that NSC Executive Committee will consider, on a case by case basis, requests for individual members of the NSC Executive Committee to participate in Spectrum-related trade shows or conferences as a speaker, panel member or panel chair representing the NSC.

BE IT FURTHER RESOLVED that this resolution will be revisited in one year from the date of approval and shall remain in place until superseded.

ADOPTED, SIGNED AND APPROVED this 7th day of July, 2016.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Vanu Bose, Ph.D.
Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

NSC Executive Committee Selection Process

Date: August 26, 2016

Resolution Number: 004

Meeting: NSC Executive Committee Meeting on August 26, 2016

Executive Committee Present: Vanu Bose, David Debrecht, Sal D'Itri, Josh Gladden, Jim Gigrich, Tom McDermott, Mark McHenry, Apurva Moody, Gary Nadler and Jerry Park

Committee Action: Establish the National Spectrum Consortium (NSC) Executive Committee Selection Process as an approved Resolution:

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to establish the National Spectrum Consortium (NSC) Executive Committee Selection Process as an approved Executive Committee Resolution.

NOW, THEREFORE, BE IT RESOLVED that the attached National Spectrum Consortium (NSC) Executive Committee Selection Process is the approved process for selection of the National Spectrum Consortium Executive Committee;

BE IT FURTHER RESOLVED that this resolution will remain in effect until such time that the process is incorporated into the National Spectrum Consortium Articles of Collaboration or until superseded.

ADOPTED, SIGNED AND APPROVED this 7th day of September, 2016.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Vanu Bose, Ph.D.
Chairman, NSC Executive Committee

Attachment 1: NATIONAL SPECTRUM CONSORTIUM (NSC) Executive Committee Selection Process

ATTACHEMENT 1

NATIONAL SPECTRUM CONSORTIUM (NSC) EXECUTIVE COMMITTEE SELECTION PROCESS

NSC Executive Committee

Executive Committee Purpose, Responsibilities and Authority

The affairs of the National Spectrum Consortium (NSC) shall be governed by an Executive Committee. The Executive Committee is the NSC leadership and governance body authorized to oversee the activities of the Consortium and to exercise all the powers and authority in managing the business and other affairs of the consortium to the extent provided in the Articles of Collaboration or in resolutions of the Executive Committee. The Executive Committee's specific responsibilities include:

- implement firewalls or such other measures to protect competitively sensitive information of the Members;
- avoid and mitigate potential organizational conflicts of interest;
- approval and disapproval of membership applications;
- removal of Members that do not maintain Member in Good Standing status;
- organization of the general membership meetings;
- formation and management of other standing or temporary consortium subcommittees as needed;
- dispute resolution between individual Members, between Members and the Government, and/or the NSC Consortium Management Firm relating to matters arising under the Other Transactions (OT) Agreement or in connection with other consortium business; and
- fulfillment of the specific administrative and supervisory functions delineated in the Articles of Collaboration and the OT Agreement.

The oversight of such duties may be transferred to the Consortium Management Firm; however, the responsibility and authority remains with the Executive Committee.

Executive Committee Elections

Executive Committee Composition

The Executive Committee shall consist of eleven (11) elected representatives from Member organizations, each to serve for a term of two (2) years. The Executive Committee shall be composed of four (4) Members from small businesses (as defined by SBA), three (3) Members from large businesses, two (2) Members from academia, one (1) Member from a non-profit or not-for-profit organization, and one (1) at large Member. Six (6) of the initial roster of Executive Committee Members will have a one-time three (3) year term to provide continuity during National Spectrum Consortium startup, after which the Executive Committee will establish an annual rotation cycle of approximately one-half of the committee Members. Executive Committee Officers shall include a Chairperson, a Vice-Chairperson, and a Treasurer, and shall be elected by the sitting Executive Committee in accordance with the Articles of Collaboration.

For the purposes of establishing the NSC Executive Committee demographic representation outlined above, the Member Organization definitions found in the NSC Articles of Collaboration will be used. For the "academia" demographic the following definition shall apply: an NSC Member Organization in good standing that is an accredited institution (college, university or other educational institution) of higher learning in the United States.

Should there be an insufficient number of nominations in one or more election categories to fill the available number of seats, additional “at large” members will be selected from those nominees missing selection by the fewest number of votes within their own demographic group.

Although specific participation on the Executive Committee by “non-traditional” government contractors is not prescribed formally in the Articles of Collaboration, the critical role these organizations will fulfill in executing projects supports the conclusion that this demographic group also should have a voice within the Executive Committee. Accordingly, the following policy will be used to promote the nomination and election of members who represent non-traditional government contractors:

- At the time of the nomination request, the number of non-traditional government contractor representatives elected to the Executive Committee shall be such that the total representation of non-traditional government contractors on the committee shall be an equivalent percentage (± 10) to that of the actual percentage of non-traditional government contractors within the consortium.
- All nominees from non-traditional government contractor members will have their organization’s “non-traditional” status flagged on the election ballot so voting members are aware of this designation when casting their ballots. The non-traditional status of an organization will be self-certified and validated to the extent possible by the consortium management firm.
- The individual(s) from the pool of non-traditional government contractor nominees who receives the highest number of votes during an election cycle will fill the seat(s) available to the demographic category of that nominee’s organization (i.e., large organization, small organization, non-profit/not-for-profit, or academia), even if that nominee’s vote total would not otherwise have resulted in his/her election within that demographic category. Members so elected will serve the full term, even if subsequent contracts awarded to their organization cause that organization to lose its “non-traditional” designation.

Elections to replace the Executive Committee Members whose terms are expiring generally will be held one time per year in advance of the General Membership Meeting which most closely precedes the expiration of the Executive Committee Members’ terms of office. The Consortium Management Firm (CMF), under direction from the Executive Committee, shall preside over the elections.

Executive Committee Candidate Qualifications

The NSC is committed to holding fair and open elections that will enable the membership to select freely from among themselves those candidates who best can represent the interests of the consortium and guide it to collective success. Keeping in mind the national purpose and importance of this endeavor, and the significant investment by business and Government, it is important that leadership of the consortium be composed of dedicated and knowledgeable individuals, representing committed organizations, who have the time, resources and acumen to contribute to this important endeavor. Member organizations are encouraged to nominate those individuals who have the time, experience, energy and creativity to guide the Consortium to success.

Executive Committee Members should anticipate weekly demands on time and occasional travel to meet their Consortium responsibilities. While the CMF will support the administrative and daily operational demands of the enterprise, the Executive Committee is expected to establish policy and make decisions that will guide its relationship with the client and generate fair business opportunity

for the membership. From among their own members, the Executive Committee is expected to elect all Executive Committee officers, deepening the commitment of those selected.

Using the experience of the NSC Steering Committee as a bench mark, the Executive Committee can anticipate frequent telephonic interaction with standing and special sub-committees and regular, recurring teleconferences with the CMF. Once Request for Prototype Proposals (RPPs) are issued and technology initiatives awarded, additional interactions with the client, perhaps as frequently as weekly, should be anticipated. Travel and associated costs will be incurred by the Executive Committee Member's organization for participating in Executive Committee meetings and other activities. Communications and interactions with the membership also will be time intensive, although the CMF can be expected to deal with matters of administration allowing Executive Committee Members to focus on policy issues.

Consortium Members who are confident that they and their organizations can meet these commitments, and who have the interest and experience to serve both Consortium and National interests, are encouraged to seek nomination and election to the Executive Committee.

Executive Committee candidates must:

- Be a senior employee working exclusively for a Member Organization suited to represent the Consortium in peer-level engagements with Government decision-makers;
- Represent a Member Organization having business opportunities as a developer or supplier of EM Spectrum technology;
- Be a U.S. citizen;
- Commit to devoting the time and attention needed to meet the expectations described herein; and
- Be willing to act with the best interests of the consortium, rather than those of any particular Member Organization, at heart.

Executive Committee Nomination Process

The CMF will be responsible for overseeing the nomination of individuals from Member entities to stand for election to the Executive Committee. All Member Organizations in good standing shall be given at least two (2) weeks' notice of any such open positions and provided an opportunity to nominate one or more individuals who meet the qualifications described herein. Nominations shall include candidate names, qualifications, organizational affiliations and type designation (e.g., large business, small business, non-profit/not-for-profit organization or academic institution), and other information that the Executive Committee may require. A sample nomination form is provided as Appendix A.

The CMF shall form a slate of candidates and make all relevant information regarding the open positions and each nominee available to the membership at least three (3) calendar days before an election is held. Except for election of the initial Executive Committee members and other special conditions, elections normally shall be held in advance of the next General Membership meeting.

Executive Committee Election Process

Except as noted above, elections will be conducted in advance of General Membership Meetings using electronic ballots. The election results will be announced prior to the General Membership Meetings. Each Member Organization may cast a single ballot. The candidate(s) in each category (e.g., large business, small business, non-profit/not-for-profit organization, academic institution)

receiving the most votes will be elected as Executive Committee members, consistent with the provisions described above pertaining to representation by non-traditional government contractor nominees. The Executive Committee may choose to conduct subsequent elections at a time other than in advance of the General Membership Meeting.

Executive Committee Member Resignation

Any Executive Committee member may resign at any time by giving written notice of such resignation to the remainder of the Executive Committee via the Chairperson. Such resignation shall take effect at the time specified in the notice; provided, however, that if the resignation is not to be effective upon receipt of the notice by the Executive Committee, the Executive Committee must accept the effective date specified.

Executive Committee members from a Member Organization that withdraws or is removed from membership in the Consortium shall be considered as terminated from their positions as of the effective date of such entity's resignation or removal from the Consortium.

Executive Committee Member Removal

Executive Committee members are expected to attend meetings and participate actively in the work of the committee. Failure to do so as determined by a consensus of the other committee members shall result in a request to the non-participatory committee member to either re-engage in the work of the committee or resign his/her position. A recurring or continued failure to do so thereafter shall result in a recommendation by the other committee members to the Executive Committee that the non-participatory committee member be terminated from his/her position, which shall become effective upon the approval of the Executive Committee.

Any Executive Committee member may be removed, and the member's position declared vacant with or without cause, by the affirmative vote of a supermajority (2/3) of votes represented and voting at a duly held meeting at which a quorum of the Executive Committee is present.

Executive Committee Vacancies

Following the Executive Committee election process, the candidate(s) in each category (e.g., large business, small business, non-profit/not-for-profit organization, academic institution) receiving the second most votes will serve as an alternate for the Executive Committee, consistent with the required member demographic representation. Should an Executive Committee member resign or be removed, the alternate from the departing Executive Committee member's category will be asked to serve the remainder of the individual's term. Should the alternate choose not to fill the remainder of the term, the Executive Committee will determine if the remaining term is sufficient to hold a special election or if the position will remain open until the next scheduled election.

Executive Committee Special Elections

When deemed appropriate by consensus of the Executive Committee, a special election may be held. In these cases, a call for nominations will be sent to all member organizations by the CMF. Once all nominations are received, voting generally will follow the procedures provided above.

Executive Committee Officer Positions

The Executive Committee will be governed by officers including a Chairperson, Vice-Chairperson and Treasurer, whose responsibilities are outlined in the Consortium's Articles of Collaboration. Once elected and constituted, Executive Committee members shall set all policies not delineated

within the Articles of Collaboration by which their officers are selected, including their term of office and procedures for succession.

The Executive Committee will elect the Chairperson, Vice-Chairperson and Treasurer positions as a vacancy arises due to Executive Committee rotation or expiration of the Officer term. Officer terms for the Chairperson, Vice-Chairperson and Treasurer positions shall be for 2 years. The Leadership term may cross over Executive Committee terms, assuming the individual is re-elected to an Executive Committee position. Officers may serve multiple and/or consecutive terms, except for the Chairperson, who may not serve consecutive terms as dictated by the Articles of Collaboration. He or she may serve multiple Chairperson terms, but not consecutively. Any person serving in an Executive Committee Officer position may be relieved of his/her position at any time for cause by a super-majority that shall consist of three-quarters (3/4) vote of the National Spectrum Consortium Executive Committee Members.

National Spectrum Consortium Executive Committee Resolution

NSC Non-Technically Contributing Member Category

Date: January 6, 2017

Resolution Number: 005

Meeting: NSC Executive Committee Meeting on November 4, 2016

Executive Committee Present: Vanu Bose, Josh Gladden, Tom McDermott, Mike Robinson, David Debrecht, Sal D'Itri, Jim Gigrich, Mark McHenry, Apurva Moody, Jerry Park and Howard Watson

Committee Action: Establish a Non-Technically Contributing Member Category as an approved Resolution:

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to establish a Non-Technically Contributing Member Category within the National Spectrum Consortium (NSC).

NOW, THEREFORE, BE IT RESOLVED that the National Spectrum Consortium (NSC) Executive Committee establishes a Non-Technically Contributing Member Category with the following guidance:

- *Category for those organizations seeking National Spectrum Consortium membership that are not capable of making a technical contribution, but are able to increase the overall value proposition of the National Spectrum Consortium (the ability to increase the overall value proposition of the NSC will be determined and approved by the Executive Director, denied by the Executive Committee)*
 - *Membership dues will be based on organization size and type, the same as that of a technically contributing member*
 - *Member will be able to participate in consortium General Membership Meetings*
 - *Member will have access to information available on the Member's Only site, but will not be allowed to participate in solicitations as a prime or sub-contractor*
 - *Member will not be allowed to vote or represent the National Spectrum Consortium as a member of the Executive Committee or a member of any technical sub-committee*

BE IT FURTHER RESOLVED that this resolution will remain in effect until such time that the process is incorporated into the National Spectrum Consortium Articles of Collaboration or until superseded.

ADOPTED, SIGNED AND APPROVED this 6th day of January, 2017.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Vanu Bose, Ph.D.
Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

NSC Federal Communications Commission Technical Advisory Council (FCC TAC)

Date: January 24, 2017

Resolution Number: 006

Meeting: NSC Executive Committee Meeting on January 19, 2016

Executive Committee Present: Vanu Bose, Tom McDermott, Mike Robinson, David Debrecht, Sal D'Itri, Jim Gigrich, Mark McHenry, Jerry Park and Howard Watson

Committee Action: Establish an NSC representative on the Federal Communications Commission Technical Advisory Council (FCC TAC):

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the National Spectrum Consortium (NSC) Executive Committee wishes to establish a representative on the FCC TAC.

NOW, THEREFORE, BE IT RESOLVED that Dr. John Chapin will represent the NSC as a member of the Federal Communications Commission Technical Advisory Council:

BE IT FURTHER RESOLVED that this resolution will remain in effect until such time that NSC representation is no longer needed or desired or a member of the NSC no longer employs Dr. Chapin.

ADOPTED, SIGNED AND APPROVED this 24th day of January 2017.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Vanu Bose, Ph.D.
Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

NSC Executive Committee Travel Expense Reimbursement

Date: July 20, 2018

Resolution Number: 007

Meeting: NSC Executive Committee Meeting on July 20, 2018

Executive Committee Present: Apurva Mody, David Debrecht, Sal D'Itri, Jim Gigrich, Ed Ackerman, Jeff Evans, Mark McHenry, Jerry Park, James Gigrich and Howard Watson

Committee Action: Establish a policy to pay for certain Executive Committee Member expenses associated with travel outside of normal membership events, when the member travels for the sole purpose of representing the NSC.

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, An NSC Executive Committee Member travels for official NSC business, to receive reimbursement for travel, said member shall notify the NSC Executive Director of official Executive Committee travel and the intent to charge the NSC at least one week prior to travel

NOW, THEREFORE, BE IT RESOLVED that Executive Committee Member shall submit invoices and any necessary supporting documentation to 'Advanced Technology International' via email at afgforms@ati.org. Invoices shall be submitted within thirty days of travel

BE IT FURTHER RESOLVED that Executive Committee Member shall submit invoices that contain the following information:

- Date of invoice
- Brief description of the work performed during the travel
- Costs for Travel and other ODC's shall be included as separate line items on the invoice.
- Invoices shall include the following written certification:
 - "I certify that the amounts invoiced are for travel incurred in accordance with approved NSC Executive Committee Travel Procedures and prior payment has not been received."
 - Authorized Signature _____
- Invoices that include charges for travel, subsistence, and/or lodging shall be supported with attached copies of receipts or other substantiating document(s) for all expenses in excess of \$75.00. All travel costs associated with a particular trip shall be invoiced at the same time.

ADOPTED, SIGNED AND APPROVED this 20th day of July 2018.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Apurva Mody, Ph.D.
Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

NSC Annual Dues Adjustment

Date: June 25, 2019

Resolution Number: 008

Meeting: NSC Executive Committee Meeting on June 25, 2019

Executive Committee Present: David Debrecht, Sal D'Itri, Jeff Evans, David Love, Kamran Mahbobi, Apurva Mody, Sumit Roy, Tony Triolo, and Howard Watson

Committee Action: During the above cited discussions and other correspondence, the following resolution was proposed, discussed and subsequently approved by the National Spectrum Consortium (NSC) Executive Committee, hereinafter referred to as "the NSC Executive Committee".

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to Vote to reduce the large business dues to \$500 annually; down from \$1,500 annually. This action will create a flat dues structure, where all companies, regardless of size, will pay \$500 in dues annually. The reduced dues are to go into effect on October 1, 2019.

NOW, THEREFORE, BE IT RESOLVED that NSC Executive Committee directs the Consortium Management Firm to modify the Spectrum Articles of Collaboration to reflect this updated legislation;

BE IT FURTHER RESOLVED that this resolution shall remain in place until superseded by a change to the Spectrum Articles of Collaboration or future resolution.

ADOPTED, SIGNED AND APPROVED this 11th day of September 2019.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Sal D'Itri
Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

Updates to Multiple Sections of the AOCs

Date: March 25, 2020

Resolution Number: 009

Meeting: NSC Executive Committee Meeting on March 25, 2020

Executive Committee Present: Randy Clark, Brian Daly, David Debrecht, Sal D'Itri, Jeff Evans, David Love, Kamran Mahbobi, Apurva Mody, Lizy Paul, Brian Regan, Sumit Roy

Committee Action: 1. Create a cleaner copy of the AOCs by incorporating Resolutions 1-9 into the document. 2. Update outdated references within the AOCs (non-material changes). 3. Update terms.

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to update the Non-Technically Contributing Member Category within the National Spectrum Consortium (NSC).

NOW, THEREFORE, BE IT RESOLVED that the National Spectrum Consortium (NSC) Executive Committee is making the following updates to the AOCs:

- The material content of Resolutions 1-9 is being incorporated into the AOCs; providing a cleaner copy. New members joining after the date of this resolution will be presented with a consolidated version of the AOCs, and will not need to review the resolutions. The resolutions will remain available on the NSC website however for those interested in reviewing.
- The following reference is being removed: “Section 845”.
- The following statement is being removed:
 - *The Management Services Agreement would require the Consortium Management Firm, among other things, to serve as a third party to help mitigate the risk of potential antitrust violations among the Members of the National Spectrum Consortium.*
- The prorated dues, section (d) “June through September” is being corrected to read “July through September”.
- The Project Award Assessment clause is replaced with the following:
 - Project Award Assessment. In addition to any initial and annual dues that all Members of the National Spectrum Consortium are required to pay, all recipients of Spectrum Technology Project Agreement funding shall pay an assessment on all Government funds awarded under such Spectrum Technology Project Agreement to the National Spectrum Consortium via the designated Consortium Management Firm. These funds are collected to supplement the revenue generated from initial pro-rated and annual Member dues to provide sufficient resources for conducting the required business affairs of the National Spectrum Consortium. The “per project award” assessment percentage will be established annually by the Executive Committee based on changes in membership numbers, the volume of Government funds that flow through the OTA between the National Spectrum Consortium and the Government, and/or the needs of the National Spectrum Consortium.
- The following article is being removed in its entirety:
 - “Article 19: Tax Status”. Subsequent article numbering has been adjusted accordingly.
- The following statement is being added:

- “**Compliance with Antitrust Laws.** The Members shall comply with all applicable U.S. antitrust laws.”
- The following article is being amended to include the Technology Areas and Technology Objectives associated with the Spectrum Forward solicitation, W15QKN-20-R-08JI.
 - *the National Spectrum Consortium Members wish to define programs and obtain program funding that is focused on the development, demonstration and transition of key technologies that will result in current spectrum system improvements or the fielding of new systems. **These technologies include but are not limited to:***
 - Electromagnetic spectrum sharing, use, and awareness;
 - Massive Multiple Input, Multiple Output
 - 3D Beam-Forming
 - Waveform diversity
 - Multi-Function Radio Frequency
 - Cognitive Spectrum Sharing
 - Machine Learning
 - Cognitive Sensing
 - “Smart” Technologies
 - Virtual Reality
 - Augmented Reality
 - Mixed Reality
 - Digital Twin
 - Narrow Band Internet of Things
 - Massive Internet of Things
 - Critical Internet of Things
 - Device-to-Device Communications
 - Vehicular Ad-Hoc Networks
 - Vehicular Ad-Hoc Network Cloud
 - Autonomous Navigation
 - Wireless Software Defined Network
 - Network Function Virtualization
 - Heterogeneous Networks
 - Network Ultra-Densification
 - Next Generation Radio Access Networks
 - 5G
 - Cyber-Physical Systems
- Article 2 is being amended to adjust the term limits from two years to three years,
- Article 2 is being amended to remove language about the startup of the consortium since that has already taken place. The following sentence is being removed:
 - *Six (6) of the initial roster of Executive Committee Members will have a one-time three (3) year term to provide continuity during National Spectrum Consortium startup, after which the Executive Committee will establish an annual rotation cycle of approximately one-half of the committee Members.*
- The current project award assessment for the existing Spectrum OTA is 1%.

BE IT FURTHER RESOLVED that this resolution will remain in effect until such time that the process is incorporated into the National Spectrum Consortium Articles of Collaboration or until superseded.

ADOPTED, SIGNED AND APPROVED this 25th day of March, 2020.

EXECUTIVE COMMITTEE
National Spectrum Consortium
 By:

Sal D'Itri
 Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

Updated NSC Non-Technically Contributing Member Category

Date: June 11, 2020

Resolution Number: 010

Meeting: NSC Executive Committee Vote on June 11, 2020

Executive Committee Present: Randy Clark, Brian Daly, David Debrecht, Sal D'Itri, Jeff Evans, David Love, Kamran Mahbobi, Apurva Mody, Lizy Paul, Brian Regan, Sumit Roy

Committee Action: Update the terms of the Non-Technically Contributing Member Category as an approved Resolution:

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to update the Non-Technically Contributing Member Category within the National Spectrum Consortium (NSC).

NOW, THEREFORE, BE IT RESOLVED that the National Spectrum Consortium (NSC) Executive Committee establishes a Non-Technically Contributing Member Category with the following guidance:

- *Category for those organizations seeking National Spectrum Consortium membership that are not capable of making a technical contribution, but are able to increase the overall value proposition of the National Spectrum Consortium (the ability to increase the overall value proposition of the NSC will be determined and approved by the Executive Director)*
 - *Member must be able to meet all other membership requirements, including an approved DD 2345.*
 - *Membership dues will be the same as that of a technically contributing member*
 - *Member will be able to participate in consortium General Membership Meetings, the NSC distribution list, Industry Day events (excluding one-on-ones), and other activities approved by the Executive Director or Executive Committee.*
 - *Member will not have access to information available on the Member's Only site, and will not be allowed to participate in solicitations as a prime or sub-contractor*
 - *Member will not be allowed to vote or represent the National Spectrum Consortium as a member of the Executive Committee or a member of any technical sub-committee*

BE IT FURTHER RESOLVED that this resolution will remain in effect until such time that the process is incorporated into the National Spectrum Consortium Articles of Collaboration or until superseded.

ADOPTED, SIGNED AND APPROVED this 11th day of June, 2020.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Sal D'Itri
Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

Extended Officer Positions

Date: December 7, 2020

Resolution Number: 011

Meeting: NSC Executive Committee Vote on December 7, 2020

Executive Committee Present: Randy Clark, Brian Daly, Sal D'Itri, Jeff Evans, David Love, Apurva Mody, Lizy Paul, Brian Regan

Committee Action: Extend the terms of the Chairperson and Treasurer positions through February 2021 as an approved Resolution:

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to extend the terms of the Chairperson and Treasurer positions through February 2021 within the National Spectrum Consortium (NSC).

NOW, THEREFORE, BE IT RESOLVED that the National Spectrum Consortium (NSC) Executive Committee extends the terms of the Chairperson and Treasurer positions through February 2021 based on the following:

- *The Chairperson and Treasurer positions are two-year terms and both were up for re-election on December 31, 2020.*
- *Due to the significance of ongoing activities associated with the pending award of Spectrum Forward and the hiring of a full-time NSC Executive Director, the ExCom believes it is in the best interest to extend the current officer terms for two months to provide continuity.*

BE IT FURTHER RESOLVED that this resolution will remain in effect until such time that the process is incorporated into the National Spectrum Consortium Articles of Collaboration or until superseded.

ADOPTED, SIGNED AND APPROVED this 7th day of December, 2020.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Sal D'Itri
Chairman, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

Rescind Resolution 003

Date: April 23, 2021

Resolution Number: 012

Meeting: NSC Executive Committee Vote on April 23, 2021

Executive Committee Present: Randy Clark, Brian Daly, David Debrecht, Sal D'Itri, Kamran Mahbobi, Jeff Evans, Apurva Mody, Lizy Paul, Brian Regan

Committee Action: Rescind Resolution 003 to allow for participation and sponsorship of conferences:

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to rescind Resolution 003 in its entirety.

NOW, THEREFORE, BE IT RESOLVED that the National Spectrum Consortium (NSC) Executive Committee rescinds Resolution 003 based on the following:

- *the NSC, as an organization, is now in a position where it can sponsor or participate in spectrum-related trade shows or conferences when approved by the Executive Director or the Executive Committee.*

BE IT FURTHER RESOLVED that this resolution will remain in effect until such time that the process is incorporated into the National Spectrum Consortium Articles of Collaboration or until superseded.

ADOPTED, SIGNED AND APPROVED this 23rd day of April 2021.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Lizy Paul
Chair, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

EXCOM Term Length Adjustments

Date: July 27, 2021

Resolution Number: 013

Meeting: NSC Executive Committee Vote on July 27, 2021

Executive Committee Present: Brian Daly, Sal D'Itri, Jeff Evans, Kamran Mahbobi, Apurva Mody, Lizy Paul, Brian Regan

Committee Action: To provide greater continuity during COVID, in March 2020 the Executive Committee (EXCOM) extended current and future EXCOM terms from two to three years. In order to return to a consistent annual turnover rate, in August 2021 the EXCOM decided to modify the term length for the positions up for election in 2021 and 2022 to a mix of two and three years.

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to have a stable annual turnover rate, and therefore proposes to modify Article 2 of the NSC Articles of Collaboration to establish the term length of positions up for election in 2021 and 2022 to a mix of two and three years.

NOW, THEREFORE, BE IT RESOLVED that the National Spectrum Consortium (NSC) Executive Committee, in order to remain consistent with the NSC's original objective of an even annual turnover rate, hereby modifies Article 2 of the NSC Articles of Collaboration to establish the term length of positions up for election in 2021 and 2022 to a mix of two and three years, as follows:

2021 Election	2022 Election
<i>One small company (2 year term)</i>	<i>One small company (2 year term)</i>
One small company (3 year term), no change	One small company (3 year term), no change
<i>One large company (2 year term)</i>	One large company (3 year term), no change
One large company (3 year term), no change	One non-profit company (3 year term), no change
<i>One academic institution (2 year term)</i>	One academic institution (3 year term); no change
One "at large" (i.e., any type of organization) (3 year term), no change	

This change results in the following number of EXCOM positions up for election each subsequent year (and an annual turnover rate of approximately 1/3):

2023	2024	2025
Three 3-year Terms	Four 3-year Terms	Four 3-year Terms

BE IT FURTHER RESOLVED that this resolution will remain in effect until such time that the process is incorporated into the National Spectrum Consortium Articles of Collaboration or until superseded.

ADOPTED, SIGNED AND APPROVED this 27th day of July, 2021.

EXECUTIVE COMMITTEE
National Spectrum Consortium
 By:



Lizy Paul
 Chair, NSC Executive Committee

National Spectrum Consortium Executive Committee Resolution

Updates to Multiple Sections of the AOCs

Date: February 4, 2022

Resolution Number: 014

Meeting: NSC Executive Committee Vote on February 4, 2022

Executive Committee Present: Brian Daly, Sal D'Itri, Jeff Evans, Sheryl Genco, Lingjia Liu, Kamran Mahbobi, Apurva Mody, Erik Perrins, Brian Regan, Paul Steinberg

Committee Action: 1. Incorporate several revisions to Article 11: Intellectual Property and Exhibit B: Proprietary Information Exchange Agreement of the NSC Articles of Collaboration.

EXECUTIVE COMMITTEE RESOLUTION

WHEREAS, the NSC Executive Committee wishes to adopt minor revisions to the NSC Articles of Collaboration.

NOW, THEREFORE, BE IT RESOLVED that the National Spectrum Consortium (NSC) Executive Committee is making the following updates to the AOCs:

- Modified Article 11 (changes in red):

Article 11: Intellectual Property

Except and to the extent specifically set forth herein, nothing in these Articles shall be construed as conferring by implication, estoppel or otherwise any license or right under any patent, copyright, trade secret, trademark or other proprietary right of any Member.

With respect to any collaboration between Members through their participation in the National Spectrum Consortium including any collaboration pursuant to individual Member-to-Member agreements, intellectual property shall be treated in accordance with the following principles:

- (a) Intellectual Property developed or otherwise acquired by a Member prior to or outside the scope of any collaboration with other Member(s) through its participation in the National Spectrum Consortium including any collaboration pursuant to an individual Member-to-Member agreement ("Background Intellectual Property"), and any Intellectual Property Rights therein, shall be owned by the Member that developed or otherwise acquired the Background Intellectual Property and associated rights.
- (b) Intellectual Property developed solely by employee(s) of one Member in performance of any collaboration with other Member(s) through its participation in the National Spectrum Consortium including any collaboration pursuant to an individual Member-to-Member agreement ("Foreground Intellectual Property"), and any Intellectual Property Rights therein, shall be solely owned by the Member whose employee(s) developed the Foreground Intellectual Property.
- (c) Intellectual Property developed jointly by employees of both Members in performance of any collaboration with other Member(s) through its participation in the National Spectrum Consortium including any collaboration pursuant to an individual Member-to-Member agreement ("Jointly Developed Intellectual Property"), and any Intellectual Property Rights therein, shall be jointly owned by the Members. Each Member shall have an equal undivided one-half interest in Jointly Developed Intellectual Property and any Intellectual Property Rights therein. Each Member agrees to use reasonable efforts to maintain Jointly Developed Intellectual Property as confidential and proprietary in the same manner it treats its own Intellectual Property of a similar character. Each Member shall be free to make, use, sell and import/export products or processes incorporating Jointly Developed Intellectual Property without the consent of, or accounting to, the other Member, unless such Jointly Developed Intellectual Property incorporates the other Member's Background Intellectual Property or Foreground Intellectual Property or use thereof would constitute an infringement of the other Member's solely-owned Intellectual Property Rights. The Members also agree to use good faith

efforts to collaborate with respect to the filing, prosecution, maintenance, licensing, and enforcement of any Intellectual Property Rights in Jointly Developed Intellectual Property.

(d) The Consortium itself will not receive any rights to any Member's intellectual property.

Regarding agreements between the National Spectrum Consortium and/or individual Members, and the Government, rights to intellectual property will be treated in accordance with the terms of any applicable other transaction agreement and any follow-on production contracts resulting from such other transaction agreement.

- Added Paragraph 4 to Exhibit B: Proprietary Information Exchange Agreement

4. For the avoidance of doubt, each Member acknowledges and agrees that any Confidential Information disclosed by another Member, in whatever form, is and will be the sole property of the Member disclosing the Confidential Information, and the Member disclosing the Confidential Information retains and own all right, title and interest in and to any Confidential Information, including all intellectual property and proprietary rights therein, whether currently existing or arising in the future. No present or future intellectual property rights or licenses are offered, granted or implied by the disclosure by a Member of any Confidential Information to other Members. Each Members agrees that upon the request of, and as directed by, a Member disclosing any Confidential Information, it will immediately either return such Confidential Information to the party disclosing such Confidential Information or destroy such Confidential Information, as so directed. The return or destruction of Confidential Information does not relieve a Member of its obligations set forth in this Agreement.

BE IT FURTHER RESOLVED that this resolution will remain in effect until such time that the process is incorporated into the National Spectrum Consortium Articles of Collaboration or until superseded.

ADOPTED, SIGNED AND APPROVED this 4th day of February 2022.

EXECUTIVE COMMITTEE
National Spectrum Consortium
By:

Sal D'Itri
Chairman, NSC Executive Committee