

MEMBERSHIP AGREEMENT

CLEMSON UNIVERSITY CENTER FOR RESEARCH IN WIRELESS COMMUNICATIONS

This Membership Agreement (hereinafter called AGREEMENT) is made on this _____ day of _____, by and between Clemson University (hereinafter called CU) and _____ (hereinafter called MEMBER).

WHEREAS, the parties to this AGREEMENT intend to join together in a cooperative effort to support the Center for Research in Wireless Communications (hereinafter called CRWC) at Clemson University to establish a mechanism whereby the educational and research environment can be used to advance knowledge and practice of wireless telecommunications systems and to stimulate industrial innovation.

NOW, THEREFORE, for the mutual promises and covenants contained herein, the parties hereto agree as follows:

1 DEFINITIONS

1.1 "Affiliate" means any company, corporation, or business in which MEMBER owns or controls at least fifty percent (50%) of the voting stock or other ownership.

1.2 "Confidential Information" means information that is confidential and in which the parties may have vested valuable proprietary interests. Confidential Information shall be marked "Confidential" in writing. If confidential information is communicated orally, the delivering Party shall clearly advise representatives of the other Party as to which portions of the oral communication are considered confidential and shall document the communication in a written summary within ten business days.

1.3 "Exclusive License" means a license that is granted to a MEMBER to the exclusion of all other MEMBERS and all other third parties.

1.4 "Intellectual Property" means data, technical know-how, and Registered Copyrights and Patents.

1.5 "Non-Exclusive License" means a license which is granted to MEMBER which may also be granted to one or more other MEMBERS or one or more other third parties.

1.6 "Parent entity" means any company, corporation, or business which owns or controls at least fifty percent (50%) of the voting stock or other ownership of the MEMBER.

1.7 "Patent" or "Patents" means all patent applications and patents throughout the world (including, but not limited to, design patents, utility patents, certificates of addition, utility models, and patent registrations, as well as divisionals, reissues, reexaminations, continuations, renewals and extensions of the foregoing, and all rights therein provided by law, multinational treaties or conventions) directed to inventions conceived and documented in the course of performance of this AGREEMENT.

1.8 "Registered Copyright" or "Registered Copyrights" means any copyrightable material that is made in the course of performance of this AGREEMENT and that is registered with the appropriate government agency.

1.9 "Technical Information" means any information developed in the course of performance of this AGREEMENT including, but not limited to, research and development information, ideas, unpatented inventions, unregistered copyrights, know-how, and technical data.

1.10 Undesignated Funds are funds provided by Members to cover their membership fees and any additional funds above those fees which might be provided from time to time to support the Center.

1.11 Designated Funds are funds provided by Members over and above the Membership fee and directed to a specific research effort (Directed Research) requested by the Member and agreed to by the Center.

2 MEMBERSHIP

2.1 *Eligibility* – Any corporation, company, partnership, or any other legally recognized business entity, or any agency, or government organization duly authorized by the United States Government or the government of any State may become a MEMBER of CRWC.

2.2 *Classifications* – MEMBERS are classified based on their level of support as Sponsoring Member, Regular Member or Observer Member.

2.3 *Fee Structure* – The annual fee for a MEMBER is made up of designated and undesignated funds assigned as follows:

	CRWC Total Commitment=	Undesignated
Sponsoring Member	≥\$35,000	\$35,000 minimum
Regular Member	≥\$ 15,000	\$15,000 minimum
Observer Member	≥\$ 5,000	\$ 5,000 minimum

The staff of CRWC are actively pursuing the support of the National Science Foundation to establish an Engineering Research Center for the Full Utilization of the Radio Spectrum at Clemson University. Should this come to pass, it is forecast that the quantity of resources that would be assembled in faculty, graduate students, administration support, and laboratory facilities would be significantly increased. This higher level of activity will offer greater support to our industrial partners and will, no doubt, see an increase in the fees for the various membership levels outlined above. As an incentive for support to be provided very early in this endeavor, Clemson University will not increase the fees for the different memberships already in force when the larger fees are introduced. The current fees will not be increased for a minimum of 3 years for those members who have supported the effort for at least one year prior to the increase and the members stay current during this 3 year period. Any member who opts out of the agreement after the fees are increased will be required to pay the increased amount if that member chooses to re-join the effort.

Designated funds are directed to individual research projects specified by MEMBER. Undesignated funds become part of the pooled resources used to conduct CRWC programs and administrative activity.

2.4 *Payment of Fees* – Payments shall be made annually, with the first payment being due within thirty days of the execution of this AGREEMENT. The initial term of the membership will be from the execution of this AGREEMENT through the following twelve months with subsequent terms continuing for twelve months thereafter. CRWC faculty and research associates (those who participate in the Center’s core research) are prohibited from accepting MEMBER-proposed research

projects relating to telecommunications systems that are outside of the scope of this AGREEMENT. Payments shall be made as follows:

Checks shall be made payable to: Clemson University Research Foundation

Checks shall be mailed to: Clemson University Research Foundation
ATTN: Accounting Office
P.O. Box 946
Clemson, SC 29633-0946

2.5 *Membership Responsibilities -*

2.5.1 *Participation in CRWC Programs* – MEMBERS are expected to play important roles in the research, education, and technology transfer goals of CRWC. MEMBER representatives participate in CRWC programs as researchers, student mentors and advisors, and in other capacities such as serving as guest lecturers, tour coordinators, etc.

2.5.2 *Service on Industrial Advisory Board* - MEMBERS provide representatives to serve on the Industrial Advisory Board (IAB). The IAB recommends priorities of research programs and evaluates progress towards the goals and objectives of CRWC. The IAB meets annually and the costs of attendance must be borne by the MEMBERS. Voting rights are based on membership classification:

- (i) Each Observer Member has one vote;
- (ii) Each Regular Member has two votes; and
- (iii) Each Sponsoring Member has five votes.

2.6 *Membership Benefits –*

2.6.1 *Observer Member Benefits –*

2.6.1.1 Each Observer Member shall have facilitated access to graduate students in the CRWC.

2.6.1.2 Each Observer Member shall have access to advice with respect to use of the full resources of CU.

2.6.1.3 Each Observer Member shall be informed of and asked to attend all meetings and industrial reviews of the CRWC programs.

2.6.1.4 Each Observer Member shall receive an annual report of the CRWC' research and activities.

2.6.1.5 Each Observer Member shall be invited to attend various CRWC workshops.

2.6.1.6 Each Observer Member shall have discounted access to test beds and other instrumentation in the CRWC.

2.6.2 *Regular Member Benefits* – Each Regular Member shall enjoy all of the benefits of Observer Membership as set forth in subsections 2.6.1.1 – 2.6.1.6 of Section 2.6.1. Further:

2.6.2.1 Each Regular Member shall enjoy collaboration on research projects of that Member's interest.

2.6.2.2 Each Regular Member shall receive preprints of all nonproprietary CRWC research reports.

2.6.2.3 Each Regular Member shall receive reports on directed research projects.

2.6.2.4 Each Regular Member shall have priority in placing a research scientist or engineer at CRWC.

2.6.3 *Sponsoring Member Benefits* – Each Sponsoring Member shall enjoy all of the benefits of Observer Membership as set forth in all subsections of Section 2.6.1 and all of the benefits of Regular Membership as set forth in all subsections of Section 2.6.2. Further:

2.6.3.1 Each Sponsoring Member shall receive an option for a nonexclusive, royalty-free grant of rights to otherwise unlicensed Intellectual Property as provided in Section 3.3.3.

3 INTELLECTUAL PROPERTY –

3.1 *Ownership of Intellectual Property* - CU shall own all information, including, but not limited to, all Intellectual Property, developed by its faculty and/or students in the course of performance of this AGREEMENT. Each MEMBER shall own all information including, but not limited to, any Intellectual Property developed by its representatives in the course of performance of this AGREEMENT. Any information including, but not limited to, any Intellectual Property developed jointly by the faculty and/or students of CU and representatives of MEMBER in the course of performance of this AGREEMENT shall be jointly owned by CU and MEMBER.

3.2 *Rights of Members Providing Designated Funds (Regular Members and Sponsoring Members) to Intellectual Property* – Each Member who provides designated funds has the following rights:

3.2.1 *Disclosure of Potential Intellectual Property* – CRWC faculty and students are required by CU to submit invention disclosures and disclosures for copyright registration to CU through the CRWC in a timely fashion. When the disclosure arises from one or more research projects supported by the designated funds of an individual MEMBER, then CU will (a) forward a copy of the disclosure to that MEMBER for review and (b) delay discussing the disclosure with any party for a period of 90 days after the mailing date of the forwarded disclosure copy. If, within 90 days, that MEMBER does not instruct CU to file for patent or copyright protection pursuant to Section 3.2.2 of this AGREEMENT, then CU will forward a copy to all Sponsoring Members for their review.

3.2.2 *Option to Exclusive License of Intellectual Property which Arises from a Research Project Supported by the Designated Funds of a Single Member* – Subject to the rights reserved in Section 3.5, CU grants each Regular Member and each Sponsoring Member an option to receive a worldwide exclusive license to the Intellectual Property which is solely owned by CU and which arises from a research project solely supported by the designated funds of that MEMBER. If a MEMBER exercises its option to such an exclusive license then the following general conditions shall apply:

3.2.2.1 MEMBER shall instruct CU to file for patent or copyright protection within 90 days of the mailing date of the disclosure by CU to MEMBER pursuant to Section 3.2.1. CU will select the patent attorney.

3.2.2.2 CU and MEMBER shall agree on which countries CU will file corresponding patent applications and/or copyright registrations.

3.2.2.3 CU shall invoice MEMBER, and MEMBER shall reimburse CU, for costs to file, prosecute and maintain such patent applications and patents and/or to register and maintain such copyrights.

3.2.2.5 CU shall notify MEMBER of the issuance of any patent and shall provide a copy of any issued patent to MEMBER. CU and the MEMBER shall establish in a good-faith negotiation a running royalty to be paid to CU by the MEMBER on the net product sales for any patent applicable to a unit-price product. For patents not associated with a unit-price product, a use fee shall be negotiated. Thereafter, MEMBER shall pay CU within 60 days after each calendar quarter the royalty or use fee negotiated. In the event that any quantity of product subject to fee hereunder is used in the manufacture of another product subject to fee hereunder, or is sold to a sub-licensee or an affiliate of MEMBER, or if rights under more than one patent are used, only one fee, namely, the fee applicable to the ultimate product subject to fee hereunder, shall be paid to CU, in order that duplication of fees be avoided. The Member is responsible for procuring all export control licenses associated with any non-U.S. transmittal of the subject intellectual property.

3.2.2.6 In those cases involving the licensing of copyrighted material, such as copyrighted software, CU and the MEMBER shall establish through good-faith negotiation a license fee for the use of the software. This license fee may be defined on a per-unit-sold basis, a recurring license fee for unlimited use in the MEMBER organization, or as a one-time lump-sum license fee. The fee structure is to be negotiated appropriate to the circumstances of the particular licensed article.

3.3 *Rights to Intellectual Property Afforded to Sponsoring Members Only* – In addition to all of the rights to Intellectual Property granted to Sponsoring Members in Section 3.2, each Sponsoring Member has the following rights:

3.3.1 Pursuant to Section 3.2.1, each Member who provides designated funds for a research project is provided a copy of any disclosure of an invention or of copyrightable material which is developed through that research project and is given a period of 90 days within which to instruct CU to file for patent or copyright protection as provided in Section 3.2.2. If that Member does not exercise its option to an exclusive license then CU will forward a copy of the disclosure to all Sponsoring Members for their review. CU agrees to a delay in discussing or licensing the subject matter of the disclosure to parties that are not Sponsoring Members for a period of 90 days after the mailing date of the disclosure to all Sponsoring Members. During that 90-day period, any Sponsoring Member may choose to request and negotiate for a license to the potential Intellectual Property, subject to the rights reserved in Section 3.5.

3.3.2 In the event that a disclosure of an invention or process or of copyrightable material arises from activity that is not supported by the designated funds of an individual Member, then CU will forward a copy of the disclosure to all Sponsoring Members for their review. CU agrees to a delay in discussing or licensing the subject matter of the disclosure to parties that are not Sponsoring Members for a period of 90 days after the mailing date of the disclosure to all Sponsoring Members. During that 90-day period any Sponsoring Member may choose to request and negotiate for a license to the potential Intellectual Property, subject to the rights reserved in Section 3.5.

3.3.3 Subject to the rights reserved in Section 3.5 and any license granted in Sections 3.2, 3.3.1, 3.3.2, or 3.4, CU grants each Sponsoring Member an option to receive a license to any Intellectual Property developed by CRWC that is otherwise unlicensed. The royalty and fee terms and negotiation defined in Section 3.2.2.5 shall apply.

3.4 *Rights of All Members for Negotiation of Exclusive License under Intellectual Property* – Subject to the rights reserved in Section 3.5 and any license granted pursuant to Sections 3.2, 3.3.1, or 3.3.2, any MEMBER may request and negotiate for an exclusive, or exclusive for a defined field of use, royalty-bearing license to Intellectual Property which is solely or jointly owned by CU.

3.5 *Reservation of Rights* –

3.5.1 *Use of Intellectual Property by CU for Educational and Research Purposes* – CU shall be free at all times to use the Intellectual Property which is solely owned by CU and which is jointly owned by CU and any MEMBER for educational and University research purposes.

3.5.2 *Publication of Research Results* – CU reserves the right to publish in scientific journals the results of all research performed at the CRWC, excluding confidential information received from MEMBERS, giving due consideration to the scheduling of such publications in order to allow time for obtaining appropriate Intellectual Property protection.

3.5.3 At the time a conference or journal publication is submitted for review by CRWC students or faculty, a copy of the manuscript will be transmitted to the MEMBER to apprise them of the content of the paper and of the timetable of the impending publication. Normally, the publication cycle provides adequate time to allow the MEMBER to establish patent protection prior to publication. If unusual circumstances related to a particular paper jeopardize the publication of the paper, then the MEMBER may request that the authors withdraw the paper prior to publication.

3.5.4 *Publication of a Student Thesis or Dissertation* – Time sensitivity of the publication of content of a thesis or dissertation shall in no case be a reason to delay a student's meeting graduation requirements. CU agrees to delay library shelving of the thesis or dissertation in question for up to six months upon a MEMBER's request, based on time-sensitivity of the document's content.

3.5.4 *Conversion of Exclusive License to Non-Exclusive License* – Because of the public interest that pervades CU research programs, CU reserves the right to convert any exclusive license granted under Sections 3.2, 3.3 or 3.4 to a non-exclusive license if reasonable commercial use of the licensed Intellectual Property is not being made or diligently attempted by the licensee MEMBER.

3.6 *U.S. Government Rights* - Any exclusive licenses granted under this AGREEMENT are subject to any rights which may be claimed by the U.S. federal government for a worldwide, non-exclusive, paid-up license to practice or have practiced on behalf of the U.S.

4 NONDISCLOSURE OF CONFIDENTIAL INFORMATION – CU and MEMBER recognize that the success of this AGREEMENT may require them to exchange Confidential Information. The exchange of such information will be controlled by the terms of the Clemson University Non-Disclosure Form, which is attached and hereby incorporated into this agreement. Such forms will be prepared and signed by each party as needed.

5. ADVERTISING AND PROMOTIONAL MATERIAL - MEMBER shall not use the name of Clemson University, College of Engineering and Science, or Center for Research in Wireless Communications in any advertising or promotional material without the specific written consent of CU. CU shall not use the name of MEMBER in any advertising or promotional material without the specific written consent of MEMBER. A general exception is hereby granted to MEMBER to use the name of CRWC and to cite the fact that CRWC is operated by CU in written advertising and other promotional materials provided that:

- (i) the use is limited to describing the MEMBER relationship to CRWC as defined by this AGREEMENT;
- (ii) no endorsements by CRWC, CU, or the College of Engineering and Science of MEMBER products or other commercial activities may be reasonably inferred from such use; and
- (iii) the use does not represent that a partnership or other legal entity has been formed between and among the parties of this AGREEMENT.

6 LIABILITY – The relationship between MEMBER and CU shall be that of independent contractors. As an independent contractor, MEMBER assumes all risk and liability for injury to person or damage to property caused by acts of its employees during the period of this AGREEMENT while they are using facilities or equipment owned and/or controlled by CU. CU assumes all risks and liabilities for injury to persons or damage to property occurring during the period of this AGREEMENT and caused by acts of its employees and students while performing work at MEMBER’s facility under the terms of this AGREEMENT. This AGREEMENT shall not constitute either CU or CRWC as agents or legal representatives of MEMBER. The obligations of CU and MEMBERs hereunder shall not apply to liability arising from use of information furnished pursuant to this AGREEMENT.

7 DISPUTE RESOLUTION – In the event of any dispute concerning the terms, conditions, or interpretation of this AGREEMENT, prior to the initiation of litigation, the parties agree to engage in good faith mediation to resolve such differences. In the event of litigation, disputes will be resolved under the laws of the State of South Carolina.

8 RENEWAL – This AGREEMENT will be renewable annually. Either party to this AGREEMENT may terminate annual continuation of the AGREEMENT by providing the other party with written notice at least three months prior to the anniversary date of this AGREEMENT. Upon termination, each party retains the right to use information received prior to termination subject to the conditions of this AGREEMENT, but is no longer entitled to future information or rights to use future information from the other party. All notices shall be in writing, sent first class, registered or certified mail, postage prepaid, and addressed as follows or at such other address as may be designated by a party in writing:

For CU: Director
 Center for Research in Wireless Communications
 301 Fluor Daniel Building
 Clemson University
 Clemson, SC 29634-0915

For MEMBER:

9 AVAILABILITY OF RESOURCES – CU agrees that the personnel and facilities required for CRWC will be available for research, education and service as needed to fulfill the purpose of this AGREEMENT.

10 PRIMACY OF THIS AGREEMENT – The provisions contained herein constitute the entire AGREEMENT between the parties and supersede all previous communications or representations, either verbal or written, between the parties hereto with respect to the subject material hereof. This AGREEMENT may not be changed, altered, or supplemented except by written amendment hereto, signed by both parties. It is further agreed that nothing contained in the AGREEMENT shall modify,

amend, or supersede any prior or subsequent arrangement between MEMBER and CU with respect to activities outside the scope of this AGREEMENT.

11 TRANSFER OF INTEREST – Unless otherwise agreed to in writing by both parties, MEMBER only may assign its rights under this AGREEMENT and/or delegate its duties under this AGREEMENT to affiliates, wholly owned subsidiaries, or a parent entity.

IN WITNESS WHEREOF, this AGREEMENT is effective as of the last date of signing set forth herein below, which day and month in subsequent years in which MEMBER adheres to the terms of this AGREEMENT shall be called the anniversary date of this AGREEMENT.

CLEMSON UNIVERSITY
Acknowledged:

MEMBER
Authorized Signature

James H. Jones
Industrial Liaison, CRWC

Date

Date

L. Wilson Pearson
Director, CRWC

Membership Category:

Please initial to indicate choice:
Sponsoring Member: _____
Regular Member: _____
Observer Member: _____

Date

Authorized Signature:

C.E.G. Przirembel
Vice President for Research
and Chief Research Officer, CU

Date