

## **Named Data Networking Consortium Membership Agreement**

This Agreement (“Agreement”) is made and entered into by and between **The Regents of the University of California** on behalf of its Los Angeles campus (“University”) and **Members** identified as signatories to this agreement (hereinafter “Member” or “Members”) and is effective as the date of the first signature (“Effective Date”). This Agreement will govern the terms and conditions of Member’s membership in the Named Data Networking Consortium (“NDNC”).

### **1. Background and Research Areas**

Named Data Networking (“NDN”) is a Future Internet Architecture research program supported by the National Science Foundation, which has received over \$15M in funding from NSF over 2010-2016. UCLA Professor and Jonathan B. Postel Chair in Computer Science Lixia Zhang leads the project along with Internet Hall of Fame inductee and UCLA adjunct professor Van Jacobson. The NDN project is developing a new fundamental architecture for the global Internet that leverages thirty years of empirical evidence of what has worked (and what has not). It aims to provide a practically deployable set of protocols replacing TCP/IP that increases network trustworthiness and security, addresses the growing bandwidth requirements of modern content, and simplifies the creation of sophisticated distributed applications.

The project team believes that NDN, as a proposed Future Internet Architecture, must adhere to the same philosophy of openness that has made the existing Internet architecture both wildly successful and a fundamental advance of our lifetimes. By openness, the NDN team means that the standard protocols and algorithms that are the common language or “thin waist” of the future internet must be unencumbered by intellectual property claims, as has been the case for the TCP/IP protocols, HTTP, HTML, and other key components on the current Internet. The research team’s approach emphasizes an open source ethos for the architecture and key mechanisms, as well as the research process, but does not intend to restrict the commercialization of innovation by the project team or others.

### **2. Purpose of consortium**

To be a viable next generation architecture for the Internet, NDN must be the subject of widespread experimentation by many organizations across the world. As the success of the current Internet is widely attributed to the openness of its core protocols, so must NDN-related research be conducted within an open innovation model and in a coordinated, community-focused manner. The NDN consortium aims to provide a single point of collaborative participation for industry and others interested in NDN to be connected to and participate in NDN research; an opportunity to provide general support of the NDN effort, especially for outreach, communication, open source development support, and legal efforts of value to members but not typically funded through sponsored research; evidence of the project’s increasing maturity and research activity in industry, which is critical for continued engagement by government agencies and other funders; an opportunity to provide academic partners with an umbrella for coordination independent of individual sponsored research projects.

### **3. Term and Termination**

This Agreement will remain in effect for two (2) years from the Effective Date (“Term”) or until terminated by all Members, whichever occurs first. Any Member may terminate their participation in the NDNC for convenience by providing written notice of such termination (“Notice of Termination”). Termination will be effective (“Effective Date of Termination”) thirty (30) days from receipt of Notice of Termination. The terminating Member shall pay Annual Membership Fees up to but not beyond Effective Date of Termination and shall be released from paying Annual Membership Fees in subsequent years. The provisions of Article 7, Confidentiality, will continue to be binding following termination.

### **4. Annual Membership Fee**

#### **Voting Members**

During the Term, any voting member will provide to University a yearly payment of \$25,000 for its membership in NDNC (“Annual Membership Fee”). For clarification, Voting Members include all for-profit members, and any Non-Profit/Academic Members who elect to pay the Annual Membership Fee. From time to time, during the Term, NDNC may increase its membership fees. However, Member’s Annual Membership Fee will not be increased during the Term. Any change to Member’s Annual Membership Fee will not apply to previous membership periods, and can only be made by written amendment to this Agreement by duly authorized representatives of University and Member. See Section 5 for a description of the management structure and role of voting members.

#### **Non-Voting Non-Profit/Academic Member**

During the Term, any non-voting non-profit/Academic Member will be provided membership in NDNC at no cost. From time to time, during the Term, NDNC may increase its membership fees. However, Member’s Annual Membership Fee will not be increased during the Term. Any change to Member’s Annual Membership Fee will not apply to previous membership periods, and can only be made by written amendment to this Agreement by duly authorized representatives of University and Member.

#### **Voting Founding Academic Member**

Academic Members, listed below, who are a part of the National Science Foundation agreement which funded the Named Data Networking research program under Agreement Nos. CNS-1345286, 1345236, 1345282, 1345254, 1345318, 1345142, 1344495, and 1345266 will receive a voting membership in NDNC for no-cost (“Founder Annual Membership Fee”).

The Founding Academic Members are: University of California, Los Angeles; University of California, San Diego; Colorado State University; Washington University; University of Arizona; University of Memphis; University of Illinois Urbana-Champaign; and the University of Michigan.

The Annual Membership Fee for Member shall be due annually based on the anniversary of the Effective Date. Checks shall be made payable to UC Regents, indicating the purpose of the payment (“NDNC Membership”), should be sent to:

UCLA Payment Solutions and Compliance  
Box 957089, 1125 Murphy Hall  
405 Hilgard Avenue  
Los Angeles, California 90095-9000

Or by wire transfer to the following account:

Bank of America  
Client Fulfillment & Service  
CA4-704-05-41, Building D  
2000 Clayton Road  
Concord, California 94520

ABA Routing No.: 026009593  
Bank Account Name: UC Regents  
Bank Account No: 1499650103  
Swift Code (for international transfers): BOFAUS3N

In addition to the banking information, to ensure that the money is properly routing within the University, Sponsor shall provide their bank with the following information in connection with each wire transfer hereunder:

Purpose of Wire Transfer: NDNC Membership

UCLA Point of Contact: Karissa Grasty  
Director of Development  
UCLA Henry Samueli School of Engineering & Applied Science  
Telephone: 310-825-8392  
Email: kgrasty@support.ucla.edu

In the event that Member opts to submit any payment required hereunder via wire transfer, Member shall notify University at least three (3) business days prior to an impending transfer and shall pay all banking fees and/or other costs associated with such transfer.

University will provide an annual financial summary report of expenditures and appropriations of funds to Member.

## **5. Program Management**

- a. NDNC shall be directed by the NDN management team as proposed to and acknowledged by the National Science Foundation, consisting of faculty co-directors ("Management Team") and steered by an Advisory Board ("Board"). Representation on the Board is limited to two representatives (one primary and one alternate) of each voting Member.
- b. Members shall have the opportunity to influence the research topics, community outreach, and open source management of NDNC through representation on the Board.
- c. Priorities for the use of funds will be set by the Management Team in consultation with the Advisory Board. The Management Team will be the PIs for funds managed at UCLA under this agreement.

- d. The management team is currently: Lixia Zhang (UCLA), Van Jacobson (UCLA), Kimberly Claffy (CAIDA/UCSD), Jeff Burke (UCLA).

## **6. Membership Eligibility and Benefits**

- a. All institutions and individuals with interest in NDN research areas are eligible for membership. The NDNC Management Team may, subject to U.S. and State of California law and University of California policy, change or make exceptions to the eligibility criteria.
- b. Member will receive the following benefits in consideration of its support. These benefits will extend, upon Effective Date of this Agreement through the Term unless terminated earlier, to related companies of Member who agree to be bound by the terms of this Participation Agreement and who relate through at least 50% ownership-in-common with the Member:
  - i. Each Member will receive all new and electronically archived NDN technical reports, including theses and papers appearing in peer reviewed literature, as they are published, either by electronic means, or upon request, via hardcopy or physical electronic storage media.
  - ii. Invitation to attend semi-annual research review meetings to review, assess, critique, and advise on recent, not yet published or publishable, research results.
  - iii. Opportunity to influence the activities of NDNC through representation on the Board.
  - iv. The right to use and disclose, subject to University's valid copyright and patent rights, all reports, data, and information made available by NDNC, so long as NDNC is acknowledged as the source of this information, and Confidential Information is protected according to Article 7.
  - v. To the extent permitted by funding agencies, the right to propose and participate in joint research programs, with NDN researchers, funded by agencies of the U.S. Government.
  - vi. The opportunity to sponsor and fund separate projects with NDN researchers after mutual agreement. Any joint or collaborative research conducted between the parties shall be defined and governed by such separate Sponsored Research Agreements. Intellectual property rights to inventions arising under such sponsorship will be defined by such separate agreement.
  - vii. The opportunity to send a Visiting Scientist ("Visitor") to NDN for in-residence research, sponsored and advised by a specific NDN researcher at one of the Founding Academic Members, with a separate agreement and fees to be negotiated by the site. A Visitor is a full-time employee of the Member, paid by the Member, with health insurance and other benefits provided by the Member, who participates in research projects under the direction of an NDN principal investigator from one of the Founding Academic Members.

## **7. Confidentiality**

- a. Proprietary materials and information will not be exchanged under this Agreement. All information exchanges will be deemed non-confidential. If needed, confidential information

may be exchanged under separate a Confidential Disclosure Agreement between applicable parties.

- b. For the purposes of this Article 7, and subject to the terms of a separate Confidential Disclosure Agreement between the applicable parties, if Confidential Information is exchanged, "Confidential Information" means all information of a confidential nature disclosed in writing and designated as confidential with a clear and conspicuous legend by one party ("the Disclosing Party") to the other party ("the Receiving Party") during the Term of this Agreement. The Disclosing Party will notify the Receiving Party in advance and in writing of such disclosure, and shall notify the Receiving Party if any of the information is controlled by export regulations. The Receiving Party will inform the Disclosing Party whether receipt of such Confidential Information is approved prior to disclosure. If information is inadvertently orally disclosed which is deemed or desired to be confidential, such confidential information must be reduced to writing by the Disclosing Party within thirty (30) days of oral disclosure and provided to the Receiving Party. If the Receiving Party agrees to hold such inadvertently disclosed information in confidence, it shall be so held thenceforth. During the term of this Agreement and for three (3) years following the expiration or termination of this Agreement the Receiving Party shall keep the Confidential Information confidential, shall not disclose the Confidential Information to any third party without the prior written consent of the Disclosing Party. The Receiving Party may disclose Confidential Information of the Disclosing Party to its Affiliates provided that the Receiving Party ensures that such Affiliates are aware of the confidentiality terms of this Agreement and agree to be bound by them. The Receiving Party shall be liable for any breach by any of its Affiliates of the confidentiality terms of this Agreement. "Affiliate" as used herein is any corporation, company or other entity which (i) is controlled by a party; (ii) Controls a party; or (iii) is under common Control with a party. "Control" as used herein shall mean that more than fifty percent (50%) of the controlled entity's shares or ownership interest representing the right to make decisions for such entity are now or hereafter owned or controlled, directly or indirectly, by the controlling entity. An entity is considered to be an Affiliate only so long as such Control exists.
- c. The Receiving Party's obligations of confidentiality and non-use shall not apply to any information that (i) is shown by contemporaneous documentation of the Receiving Party to have been in its rightful possession prior to receipt from the Disclosing Party; (ii) is or becomes, through no fault of the Receiving Party, publicly known; (iii) is furnished to the Receiving Party by a third party without breach of a duty to the Disclosing Party; (iv) is independently developed by the Receiving Party without access to the Disclosing Party's Confidential Information; or (v) the Receiving Party is required to disclose information by law, order or regulation of a governmental agency or a court of competent jurisdiction or international authority (after providing the Disclosing Party with reasonable notice of such requirement to divulge and, to the extent that time allows, with an opportunity to obtain a protective order) where available.

## **8. Publication**

Publications of the consortium are expected to include meeting documentation, interoperability recommendations, summaries of research, etc. Members shall have the right to copyright, publish, disclose, disseminate and use, in whole and in part, any data and information developed under this

Agreement. Copies of any proposed publication developed under this Agreement will be provided to all Members thirty (30) days prior to submission for review, comment, and identification of any of any Member's Confidential Information which has inadvertently been included and which, if publishing Member and other Member(s) with Confidential Information agree it is Member's Confidential Information, publishing Member will delete the Confidential Information. During this review period, a Member may also identify patentable inventions for which it wishes to file for patent protection. In such case, the publishing Member will delay publication up to an additional sixty (60) days in order to file such patent application.

#### **9. Use of Names**

Members agree that they will not use the name of any other Member or its employees in any advertisement, press release or publicity with reference to this Agreement or any product or service resulting from this Agreement, without prior written approval of the other party.

#### **10. Notices**

Any notice to be given hereunder will be in writing and sent to authorized institutional representative identified by the party in the signature block.

#### **11. Integration**

This Agreement states the entire contract between the parties in respect to the subject matter of the Agreement and supersedes any other written or oral representations, statements, negotiations, or agreements. This Agreement may be modified only by written amendment executed by authorized representatives of both parties. The parties may sign this Agreement in one or more counterparts, each of which constitutes an original and all of which together constitute the Agreement. Facsimile and signatures shall constitute original signatures for all purposes.

**IN WITNESS WHEREOF**, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

**THE REGENTS OF THE UNIVERSITY OF CALIFORNIA**

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Notice Provided to:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Tel: \_\_\_\_\_

Email: \_\_\_\_\_

**MEMBER:** \_\_\_\_\_

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Notice Provided to:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Tel: \_\_\_\_\_

Email: \_\_\_\_\_