# **IOS MCN Project**

Membership Agreement

Version 2.2 02 April 2024

# AGREEMENT TO BECOME A MEMBER OF IOS MCN PROJECT

This Agreement is made on and to be effective from (Effective Date) between

Member Company X (Company) on the first part

And

Foundation for Science Innovation and Development, a Section 8 Company promoted by the Indian Institute of Science, situated at the Innovation Centre, Indian Institute of Science, Bengaluru – 560 012, (hereinafter referred to as FSID, which expression shall, unless repugnant to the context or meaning thereof, include its affiliates, successors- in-interest, nominees, and assigns) of the second part.

(Hereinafter referred to, individually, as the "Party" and collectively, as the "Parties").

- 1. **Background: FSID** has, together with the Foundation for Innovation and Technology Transfer FIIT of Indian Institute of Technology, Delhi (IITD) and Centre for Development of Advanced Computing, Thiruvananthapuram (CDAC), been awarded the IOS MCN Open Source project, through the administrative approval letter dated 18/03/2023, by Government of India Ministry of Electronics and IT (MeitY). **FSID** has been designated by FITT, IITD and CDAC as the legal entity authorized to enter into such membership agreements on behalf of the IOS MCN project. FSID, FITT, and C-DAC are also contemplating the establishment of IOSMCN as an independent section 8 company subsequent to this Agreement. In the event IOSMCN is incorporated as a section 8 company, all the activities envisaged under this Agreement for the IOSMCN project will be transferred to that section 8 company including any unspent funds received by the Parties and the Parties will arrive at a separate Agreement as required.
- 2. **Joint work: Company** wishes to collaborate with other IOS MCN participants and contribute to the furtherance of IOS-MCN goals.
- 3. **Membership Agreement: Company** agrees to the IOS MCN membership agreement as set out in its entirety in Annexure 1.

By signing below, the **Company** acknowledges and agrees that when signed, this agreement represents a binding contract between the parties and commits the applicant to these terms and obligations.

Signed for and or	behalf of the FSID, IISc,
(Sign with date)	
Full Name:	
Designation:	
Email:	Phone:

# Signed for and on behalf of Company

(Sign with date)	
Full Name:	
Designation:	
Email:	Phone:

#### Annexure 1: Indian Open-Source Software for Mobile Communication Networks (IOS MCN)

#### 1. About IOS MCN Project

- This Open-Source Project, IOS MCN shall be a collaboration between industry, academia
  and the Government, with a governance process based on global best practices. The
  mission of this Project shall be to facilitate the telecom ecosystem by building a common
  platform for providing a commercial grade, common and open software base to enable
  stakeholders to rapidly use, customise, make derivative works from and thereby create
  Mobile Communication (5G and beyond) products and services
- This Project will engage the telecom ecosystem by building a membership-based partnership amongst start-ups, telecom operators, system integrators, equipment vendors, multinational corporations etc This Project will provide the institutional mechanism to sustain this effort for the future with support from the Government as well as other sponsors.

#### 2. Background and Origin

The Project is the outcome of a Whitepaper "Feasibility of Open Source for 5G" released by TSDSI (Telecom Standards Development Society of India) in November 2021, after extensive deliberations involving 40+ telecom experts - start-ups, operators, equipment vendors and academia. To enable the initiation of this Project, the Government of India has provided seed funding for a project, through the Administrative Approval letter dated 18/03/2023, (attached as Annexure 4) to be executed jointly by the Indian Institute of Science (IISc), Bengaluru, the Indian Institute of Technology Delhi (IITD), and the Centre for Development of Advanced Computing (CDAC), Thiruvananthapuram. The Project will include several members from industry who will contribute through funding, expertise, development skills, and code.

## 3. Objective of the Project

The objective is to:

- a. Create an Indian Open-Source Software platform for Mobile Communication Networks (IOS MCN).
  - Create an Open-Source, 3GPP, and ORAN Compliant Mobile Communication software platform (IOS-MCN)
  - Provide a commercial grade, common and open software platform to enable vendors to rapidly use, customise, make derivative works from and thereby create Mobile Communication (5G and beyond) products and services.
  - Provide deep technical support to the industry in using IOS-MCN platform.
- b. Onboard members to the Project to facilitate proliferation, usage, and enhancements to the IOS MCN platform.
- c. Evolve a sustainable model for the Project to consistently contribute to the open-source Telecom ecosystem.

This Project shall promote vendor diversification and allow start-ups and more established companies to focus on their unique innovation instead of replicating common software components, hence accelerating the development of 5G & beyond products and services.

#### 4. Roadmap for the IOS MCN Project

IOS MCN Software Platform Development The initial target spans 2 years. (Extension options are open).

Delivery Track-1: Developing production-grade open source end-to-end 5G software to enable

manufacturers to deliver 5G CN and 5G base station (gNB).

Delivery Track-2: Enhancing 5G RAN to comply with O-RAN architecture, providing the entire O-RAN framework to enable flexible differentiated features with xAPPs/rAPPs, and providing production-grade Open 5G software for O-RAN network elements, including the DU and CU.

#### 5. Membership

Membership is to raise structured and sustainable funds and support for IOS MCN Project based on mutual value engagement. Members will be an integral part of IOS MCN Project and will enjoy the privileges and perform the roles and responsibilities based on the governance model approved by the IOS MCN Governing Board (GB is a committee constituted by FSID, FITT, and C-DAC to monitor the Project and to provide the necessary approvals under the project) of IOS MCN. The Governing Board can update the governance model from time to time, and it will be communicated to all the members through email/written letters.

# a. Membership Benefits

By joining the IOS MCN consortium, the members will enjoy the following benefits.

- Industry Visibility & Recognition
- Trust and Credibility from Customers
- Build Technology competency
- Faster Product Development
- Ground for test and trials
- Technology Influence and leadership

## b. Types of membership

There are different types of membership based on the specific privileges listed below.

	Membership	Benefits	Fees (in cash /kind)
1	Platinum	Seat: 1	Annual Fee: INR 1 Crore
2	Gold		INR 25 lakhs
3	Silver	Governing Board Seat: 1/5[2] Technical Oversight Committee: 1/2[3]	INR 12 Lakhs

- ✓ The membership requires a two-year membership commitment.
- ✓ The membership fee can be paid in cash or in kind. If the payment is based on in-kind contributions, an "In-kind contribution valuation" document should be submitted to the governing board. The duly signed valuation document needs to be submitted along with this agreement document.
- ✓ For all types of membership, an initial full year's payment of fees is due upon

- receipt and acceptance of an executed membership agreement and payable within thirty days of the date of invoice from FSID. All Fee amounts are irrevocable and non-refundable. One year's fees are due upon acceptance as a member, and the second year's fees are due on the first anniversary of membership.
- ✓ The IOS MCN Governing Board shall assess the inkind contribution valuation and approve the same with modifications, if any as deemed fit. The IOS MCN Governing Board has the right to reject any membership application.
- ✔ Periodic assessment of the in kind contributions shall be made by the IOS MCN Governing Board or its authorised entities.

#### 6. Marketing

The membership information and the member organisation's logo shall be published through the IOS MCN website and other communication channels. In case of any reservations, the relevant details shall be attached along with this membership agreement.

•	not want IOS MCN to consider announcing your participation
via press release	
:	
Logo Usage: Please initial here if you	do not want IOS MCN to consider displaying your logo on IOS $$
MCN Website	
:	

#### 7. Contributions

The member organisations can contribute to IOS MCN project and subprojects through:

- a) Providing Hardware Products with respective licences
- b) Providing Software Products (tools or licences)
- c) Open-Source code previously developed by the member organization to be part of the IOS MCN code distribution. Any contributed code will have to be accompanied by a suitable open-source license and a certificate of code provenance.
- d) Employees or affiliates developing engineering artefacts like (but not limited to) specifications, project guides, source code, test scripts, test or development related documents etc. for the IOS MCN project.
  - All these contributions will be owned by the IOS MCN Project and can be licensed or distributed based on its licensing terms and conditions.
  - For hardware and software tools, if the same is on a returnable basis or any other constraints are applicable, the same needs to be documented and approved by the Governing Board of the IOS MCN.

The engineering contributions by the member organisation's employees or affiliates will be governed by the corporate contributor licence agreement (CCLA) by the IOS MCN Project. The source code and artefacts will be owned by the IOS MCN and can be licensed or distributed based on its licensing terms and conditions. There cannot be any IPR or ownership claim from the member organisation unless explicitly agreed by the IOS MCN governing board.

#### 8. Termination

The membership can be terminated by IOS MCN or the member organisation or mutually. The

membership fee will not be refunded in any circumstances. As the membership is subscribed annually, any dues of the year for which the membership is subscribed must be paid completely (even if the termination is initiated)

# a) Initiated by IOS MCN

If the governing board of IOS MCN initiates a termination for any legal or guideline violation, the member organisation will be served a written show-cause notice as the first step with a due date for response. Subsequently the governing board will review and finalise the decision. Once the termination is finalised by IOS MCN governing board, all the official roles and logo of the member organisation will be removed from all IOS MCN channels or committees. The advance notice time period will be decided by the governing board of IOS MCN based on the severity of the situation. The same will be intimated to the member organisation during the show-cause notice.

## b) Initiated by the member.

The member organisation can initiate the termination by writing a termination request letter to the governing board of IOS MCN. Based on the request, the governing board of the IOS MCN can approve the termination. Once the termination is finalised by IOS MCN governing board, all the official roles and logo of the member organisation will be removed from all IOS MCN channels or committees.

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# Annexure 2

Member	Organization Information
Name	
Registration Number (CIN)	
GST Number	
Type (Corporate/Academia/NPO/Start up/MSME/Government)	
Registered Address	
CEO or Chairman Name	
and Email  Number of Employees	
Latest Revenue	
(Year and Revenue in INR)	
Governing Board Representativ	e Nomination (CXOs or equivalent)
Name	
Designation	
Email	
Phone	
Note: The Governing Board rep notices and other general infor want to include, any other cont agreement.	resentative will be communicated with all the mation (including about the membership). If you fact information, please submit it along with this  Representative Nomination (CXOs or
Name	
Designation	

Email	
hone	
	Membership Payment:
	Is a Purchase Order required? $\square$
	Name of Contact to provide PO #:
	Title:
	Phone:
	Email:
	Please select a method for receiving invoices:
	PDF via email:
	Hard copy:
	Name of Billing Contact
	for your Participation in the Project:
	Title
	Title:
	Phone:
	Email:
	Billing Address:
	Do you have in-kind contribution for the membership free (part / full)? Yes $\Box$ No $\Box$
	If Yes, please submit IOS MCN Approved "In-kind evaluation document" along with all the
	details including items/resource with the cost mapping.
	details including items/resource with the cost mapping.

## Annexure 3

IOS MCN - Evaluation Sheet for IN KIND Contributions from Members in lieu of Membership Dues This is a template. The Members can use this template to provide details of their IN-KIND contributions and the criteria used to determine the value of the IN-KIND Contribution. We recommend that the Members should submit this as a separate document, since the IN-KIND Contributions and their value could change during the Membership tenure.

TYPE of Contribution		UNIT COST	Description	Commitment	Evaluation
Manpower	Architect/ Manager	Per annum rate (eg. 24 Lakhs)	Role	Hours/week (eg 25%)	eg.6 Lakhs pa
	Lead	Per annum rate (eg. 24 Lakhs)	Role	Hours/week (eg 25%)	eg.6 Lakhs pa
	Developer	Per annum rate ( eg 12 Lakhs)	Role	Hours/week (eg 50%)	Eg. 6 Lakhs pa
Hardware	Purchase	List Price +AMC	Specification including the age	Number of units	
	Lease	Rental per month	Specification including the age, Terms and Conditions	Number of hours per month/pa	
Software	One time Purchase	List Price + AMC	Specification	Number of units	
	Licencing	License pa	Specification, Terms and Conditions	Number of licenses	
	Pay per use	Rates per unit	Specification	Approx usage pa	

You may attach any additional information for the in-kind contribution which can help the IOS MCN Governing board for their final evaluation.