

AMENDMENT TO THE MEMORANDUM OF AGREEMENT

The amendment of Memorandum of Agreement dated 10-08-2021 (Agreement) is executed on this the 12th day of July 2024 (Amendment effective date) at Bengaluru:

BY AND BETWEEN

M/s Karnataka Innovation and Technology Society (KITS), a society registered under the Karnataka Societies Registration Act, 1960 having its registered office at BMTC building, 4th floor TTMC 'B' block above the BMTC bus stand, BTS Road, off K. H. Road, Shanthinagar, Bengaluru – 560027 and represented by its Managing Director, **Mr. Darshan H.V., IAS** (hereinafter referred to as the "First Party", which expression wherever the context means and requires will include its successors in interest and assigns) of the **One Part;**

AND

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY, BANGALORE a society duly registered under the Karnataka Societies Registration Act, 1960, having its offices at address at No.26/C, Electronic City, Bengaluru -560100 and represented by **Dr. Madhav Rao, Associate Professor**, hereinafter referred to as "IIIT-B" which expression shall, unless repugnant to or excluded by the context hereof, be deemed to mean and include its successors in interest and permitted assigns) of the **SECOND PARTY;**

AND

WORLD ECONOMIC FORUM, INDIA LIAISON OFFICE, with its office at Reliance Corporate IT Park Ltd (Building 1), 5 TTC Industrial Area, Thane Belapur Road, Ghansoli, Navi Mumbai, 400701 and represented by **Mr. Purushottam Kaushik, Head, C4IR** (Centre for the Fourth Industrial Revolution), (hereinafter referred to as "WEF" which expression shall, unless repugnant to or excluded by the context hereof, be deemed to mean and include its successors in interest and permitted assigns) of the **THIRD PARTY.**

In this agreement, **KITS, IIIT-B and WEF** are individually referred as **Party** and collectively referred as **Parties**

WHEREAS:

- A. The parties have executed a Memorandum on 10th August, 2021 for establishment of Center for Internet of Ethical Things(CIET) at IIIT-B, vide G.O no ITBT 48 ADM 2020,Bangaluru, Dated 17.12.2020, Bangalore.

- B.** The Parties are desirous of altering the terms of MoA as per the decision

taken in the 2nd Governing Council Meeting held on 8th May, 2024 and accordingly wish to execute this amendment to agreement to provide the terms of such alteration.

NOW, THEREFORE THE PARTIES, HEREBY AGREE AS FOLLOWS:

1. Amendment

1.1. All the 3 parties agrees to the revised deliverables.

ANNEXURE A: Revised Deliverables

2. Miscellaneous

2.1. This amendment shall be effective from the date of signing.

2.2. This amendment may be executive in counterparts, each of which shall be deemed an original, each party receiving one original for their use and records, but which together shall constitute one and the same instrument.

2.3. Except as modified by this Amendment, all terms and conditions of the MOA shall continue to remain in full force and effect.

IN WITNESS WHEREOF THE PARTIES THROUGH THEIR DULY AUTHORIZED RESPECTIVE REPRESENTATIVES, HAVE CAUSED

THIS AMENDMENT TO BE EXECUTED AS OF DAY AND YEAR FIRST ABOVE WRITTEN.

Signed and delivered:
For and behalf of KITS

For and behalf of IIIT-B

For and behalf of WEF

Mr. Darshan H.V.
Managing Director, KITS

Mr. Madhav Rao
Associate Professor, IIIT-B

Mr. Purushottam Kaushik,
Head, C4IR

Annexure A: Revised Deliverables:

WEF broad Suggestions:

- 1) Please develop a calendar of events, workshops, and publications for the year 2024
- 2) Include AI along with IOT for technologies
- 3) Landscape analysis and detailed gap analysis after research, discussions with startups/ industry leaders are an important element which should be included before launching any detailed track.
- 4) Start Up ecosystem mapping across all the 5 domains is important and we should be looking at how to enable them through co-innovation and validation of their solutions should be an objective.

Sl. No	Deliverable Area	Deliverable Year 3 (2024)	Deliverable Year 4 (2025)	Deliverable Year 5 (2026)	Suggestions by IT/Bt Dept/ WEF
1	Ethical Policy <ul style="list-style-type: none"> Research papers and policy briefs covering ethical dimensions and IoT technology components with specific application to each of the top five priority sectors First revision of the Overarching 	Work on policy paper for: Smart city, Healthcare (December 2024) Conduct one stakeholder consultation for each of the priority sectors and receive inputs before finalization. Stakeholder consultation to include	Work on Agriculture policy paper Publish one Research Paper and policy briefs in well-known journals or present the paper in one conference conferences	Work on policy paper Education and Manufacturing	<ul style="list-style-type: none"> After the first draft of the research paper and policy, conduct two stakeholder consultations: <ol style="list-style-type: none"> With the Academia members With representatives from industry, academia. Conduct consultations with 3-5 scaled up start-ups in each sector (Agriculture, Health, Urban, Manufacturing and Education) Focus on the core challenges for futuristic technologies ethical challenges of technologies in use cases (for example the issues

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	policy; Specific sector-level policy draft for the priority sector	<p>representatives from industry, academia and Govt(Urban Development, Health Dept, and relevant Govt. Departments) and startups.</p> <ul style="list-style-type: none"> • Publish one Research Paper and policy briefs in well-known journals or present the paper in one conference conferences • Publish Policy brief for every sector • Peer review of the policy. 			<p>around, safety and security, biases)</p> <ul style="list-style-type: none"> • Scope should be expanded to AI and IOT as was mentioned in the agreement document (IOT layer provides the dynamic data captured through sensors and AI will provide intelligence layers and applications). (However, the CIET center will focus on AI limited to IoT technologies and not outside the IoT relevance)

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2	Frameworks for Ethical Software <ul style="list-style-type: none"> Workshop for startups and IT companies on “How to develop ethical software” 	<ul style="list-style-type: none"> Conduct one workshop to discuss / present various software components 	<ul style="list-style-type: none"> Develop open-source reusable software components and framework to enable rapid application development Conduct one workshop 	<ul style="list-style-type: none"> Explore other features in the software framework. 	<ul style="list-style-type: none"> Collect feedback after the workshop to assess the outcome Participants to include startups, industry, and Academia. 10 startups/IT companies/academia in the workshop should be from Beyond Bengaluru region Collaborate with the IT/Bt Dept. Social media team for outreach of the workshop on official social media handles. Share the report of the workshop with IT/Bt Dept within five days of completion, this will include pre and post survey. Meet start-ups incubated and understand the challenges on ethical software- Please prepare a set of questionnaires beforehand through secondary research and have the 1-1 discussions with startup founders developing the software for applications – maintain diversity across domains

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3	Security for Ethical IoT <ul style="list-style-type: none"> Design of security aspect of software testing platform Design of Hardware testing platform Patent 	<ul style="list-style-type: none"> Validate the functionality of the IoT in Smart Agriculture. Explore avenues of collaboration with one existing CoE working on the technology domains, could consider working with startups incubated by them. Explore filing of 1 patent for smart agriculture 	<ul style="list-style-type: none"> Collaborate with one organization for applicability of IoT based healthcare. This deliverable will be merged with 5.1. Additionally for smart agriculture, we will follow 5.2 timelines as well. 	<ul style="list-style-type: none"> Publish reports/briefs/papers on the use-cases. For healthcare follow 5.1 – Patent filing, and timelines. Additionally for smart agriculture, we will follow 5.2 timelines as well. 	<ul style="list-style-type: none"> Explore avenues of collaboration with existing CoE working on the technology domains, could consider working with startups incubated by them. MNC cell of GoK will setup a workshop with leading tech companies for the CIET to present their proposed testing frameworks and seek inputs. (Meet some of the global technology companies like Cisco, Amazon, Microsoft, and Infosys, LTTS to understand how industry is leading the hardware testing and software testing.)

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4	Privacy for Ethical IoT <ul style="list-style-type: none"> Communicate work done on Privacy by design architectures Design framework on data minimization without reducing intelligence and efficiency of the system 	<ul style="list-style-type: none"> One consultation workshop with stakeholders in the ecosystem including industry, academia and startups. This will be part of Ethical framework Software mentioned in 2. 	<ul style="list-style-type: none"> Assess 1 use case scenario and provide a roadmap for implementation. 	<ul style="list-style-type: none"> Publish the work in one software engineering conference. 	
5	Testbeds 5.1. IoT device for treatment towards DVT syndrome considering safety	<ul style="list-style-type: none"> Explore collaborating with one healthcare organization for pre-clinical trials. Collaboration with CoE-Medtech/Healthtech 	<ul style="list-style-type: none"> Explore Collaborating with two healthcare organizations for pre-clinical trials. Explore filing of patent 	<ul style="list-style-type: none"> Explore collaboration of technology transfer through one/two startups. Explore potential partnership with Health Department, Government of Karnataka, can seek support of the IT/Bt Dept. for getting in 	

Sl. No	Deliverable Area	Deliverable Year 3 (2024)	Deliverable Year 4 (2025)	Deliverable Year 5 (2026)	Suggestions by IT/Bt Dept/ WEF
				touch with the Health Dept.	
	<p>5.2. IoT platform for post-harvest of fruits and vegetables during transportation</p> <p>5.3. IoT station for determining crop yield while growing</p>	<ul style="list-style-type: none"> Design, Develop and Validate the Prototype functionality. 	<ul style="list-style-type: none"> Conduct one workshop with Agriculture Universities/ Agriculture Organizations in different universities 	<ul style="list-style-type: none"> Conduct one workshop with Agriculture Universities/ Agriculture organizations in different universities Explore collaborating with one agri-tech startup Explore Partnership with Dept. of Agriculture, Government of Karnataka to test the platform, can seek support of the IT/Bt Dept, for getting in touch with the Agriculture Dept. 	<ul style="list-style-type: none"> Explore Collaborating with agri-tech startups. Dep to request WEF to facilitate workshops with scaleup/ startup in Agri. Sectors (and other sectors) Meet Cropin, Satsure, Agnext, Ninjakart, Skymet etc. and have detailed 1-1 discussions, these technologies are very well developed, and we should not be repeating what is already done and rather explore convergence for co- innovation platforms Recommend startups to connect with Krishi DSS Platform (3rd cat) or similar platforms of GoK
	5.4. Non camera based IoT in-cabin system for passenger	<ul style="list-style-type: none"> Validate the technology. 	<ul style="list-style-type: none"> Explore patent filing or publishing paper. 	<ul style="list-style-type: none"> Explore technology transfer avenues 	

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	safety without violating Privacy of passengers			<ul style="list-style-type: none"> Connect with Transport Department of GoK 	
	5.5. IoT device to track surgical procedures and analysis of novice surgeon without violating Privacy of surgeons	<ul style="list-style-type: none"> Validate the technology Collaboration with CoE-Medtech/Healthtech 	<ul style="list-style-type: none"> Publish a paper on the technology used. 	<ul style="list-style-type: none"> Explore technology transfer avenues 	<ul style="list-style-type: none"> Meet 5-6 start ups in this space and also meet NIMHANS and other large healthcare service providers. Connect with Microsoft Hololens platform (3rd cat).
	5.6. Integration of IoT device to Telemedicine platform and enable capturing of physiological signals	<ul style="list-style-type: none"> Development of technology Collaboration with CoE-Medtech/Healthtech 	<ul style="list-style-type: none"> Development of technology 	<ul style="list-style-type: none"> Explore Collaborating with two healthcare organizations and validate the functionality. Explore potential partnership with Health Department, Government of Karnataka, can seek support of the IT/Bt Dept. for getting in 	<ul style="list-style-type: none"> Explore Collaborating with healthcare organizations. Explore potential partnership with Health Department, Government of Karnataka, can seek support of the IT/Bt Dept. for getting in touch with the Health Dept.

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				touch with the Health Dept.	
6	Publication of Reports	<ul style="list-style-type: none"> Publish a comprehensive report on the research undertaken as of 2023 by 30th June 2024 	<ul style="list-style-type: none"> Publish a comprehensive report on the research undertaken as of 2023 by 30th June 2025 	<ul style="list-style-type: none"> Publish a comprehensive report on the research undertaken as of 2023 by 30th June 2026 	<ul style="list-style-type: none"> Publications should be reputed international and national journals
7	Translate Research into practice			<ul style="list-style-type: none"> Convert research conducted in the area of agriculture, and healthcare to practice. 	
8.	Pre Incubation program		<ul style="list-style-type: none"> Four startups to be pre incubated. 		
9.	Incubation program			<ul style="list-style-type: none"> Four startups to be incubated 	