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Property Description

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First Party

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SUBIN-DLDL77610377412755658690Q

: SAMSUNG INDIA ELECTRONICS PRIVATE LIMITED

Article 5 General Agreement

Not Applicable

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(Zero)

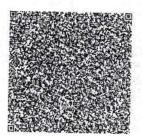
: SAMSUNG INDIA ELECTRONICS PRIVATE LIMITED

Not Applicable

: SAMSUNG INDIA ELECTRONICS PRIVATE LIMITED

: 50

(Fifty only)



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This e-stamp is an integral part of Master Service Agreement and is entered on this 28th December, 2018 by and between M/s. Samsung India Electronics Private Limited and Indian Institute of Technology - Roorkee



Statutory Alert:

- The authenticity of this Stamp Certificate should be verified at "www.shoilestamp.com". Any discrepancy in the details on this Certificate and as
- The onus of checking the legitimacy is on the users of the certificate.In case of any discrepancy please inform the Competent Authority.

MASTER SERVICE AGREEMENT

This Master Service Agreement (hereinafter referred to as "Agreement") is made on this 28th day of December 2018

BY AND BETWEEN

M/s. Samsung India Electronics Private Limited, a company incorporated under the provisions of the Companies Act, 1956 and having its registered office at 6th Floor, DLF Centre, Sansad Marg, New Delhi – 110001, for its Mobile Research & Development Division – Noida ("SRI-N") through its authorized signatory, Mr. Youngbae Kim (CFO – Mobile Research & Development Division, Noida) (hereinafter referred to as "SIEL") which expression shall unless repugnant to the context or meaning thereof include its successors and assigns of the One Part;

AND

Indian Institute of Technology Roorkee, having its office at Hobbies Club Road, Roorkee, Uttarakhand-247667, India, through its Dean, SRIC, IIT Roorkee (hereinafter referred to as "IIT-R", which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its successors, legal representatives, heirs, executors, nominees and assigns) of the Other Part.

WHEREAS

- A. SIEL is engaged in the business of manufacture and sale of consumer electronics, IT Products, hand held phones and home appliances (hereinafter referred to as "Products") under the brand name "Samsung".
- B. IIT-R has represented to SIEL that it enables innovations and technology transfer and harness IIT-R research results and academic expertise for societal absorption including addressing Industry needs through various programs (services).
- C. Relying on such representations, SIEL has agreed to accept the services of the IIT-R subject to and on the terms and conditions set-out herein below.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH AS UNDER:

ARTICLE 1. SCOPE OF SERVICES

- a. "Services" means all of those services relating to carrying out Research & Development including but not limited to reports, updates, commentaries, outputs, other written documents etc. more particularly described in Appendix A annexed hereto to be provided by the IIT-R pursuant to this Agreement.
- b. All works to be performed under this Agreement including providing reports, updates, commentaries, outputs and other written documents ("Deliverables") shall form an integral part of Services, and shall be produced, provided and delivered to SIEL on time as required by the timelines specified in Appendix A. Time is of the essence.
- c. "Commercialization": The term Commercialization shall mean and include but will not limit to, a process by which a new product or service, under the instant Agreement shall be introduced in the general market. It shall also include production, distribution, marketing, sales and customer support required to achieve commercial success/profitability in respect to such new product or services.

ARTICLE 2. OBLIGATIONS OF IIT-R

- 2.1 The IIT-R shall carry out the Services with due diligence, efficiently and in a workman like manner according to the highest standards acceptable in the industry and to the complete satisfaction of SIEL.
- 2.2 The IIT-R shall, when requested, keep SIEL informed of the progress and status of the Services by submitting review reports in the desired format requested for by SIEL.
- 2.3 The IIT-R agrees that the Services as contemplated in this Agreement shall be performed by its designated personnel (hereinafter referred to as "Designated Personnel") as agreed between IIT-R and SIEL, and as listed in Appendix A. Use of any substitute personnel shall be made only with the written approval of SIEL.

ARTICLE 3. TERM, TERMINATION & TERMINATION CONSEQUENCE

- 3.1 This Agreement will commence from 28th December, 2018 and shall be valid for a period of one (1) year till 27th December, 2019 and may be extended thereafter for such further period(s) as may be mutually agreed by the Parties in writing to this Agreement.
- 3.2 SIEL or IIT-R may at any time terminate this Agreement by giving thirty (30) days' notice to the other Party of their intention to do so.
- 3.3 SIEL shall also be entitled to forthwith terminate this Agreement by a notice in writing upon the occurrence of the following events:
 - a) Insolvency of IIT-R; or
 - b) IIT-R ceasing to function as a concern; or
 - c) IIT-R being declared bankrupt in liquidation, whether compulsory or voluntarily; or
 - d) Any change in the ownership or control of IIT-R; or
 - e) Any breach by ITT-R of any obligations under this Agreement; or
 - f) If the appointment or continuance of IIT-R under this Agreement is likely to result in loss of goodwill or reputation of SIEL or any of its directors or officers; or
 - g) Failure to conform to, or breach by IIT-R of any applicable law.
- 3.4 All SIEL property in the possession or control of IIT-R including, but not limited to specifications, documentation, source code, magnetic media, and building entry keys and cards, as well as all material developed or derived by IIT-R in performing its duties under this Agreement shall be the property of SIEL and shall be returned, or provided to, SIEL on demand, or at the termination of this Agreement whichever shall come first.

ARTICLE 4. COMPENSATION FOR THE SERVICES

- 4.1 SIEL will pay to the IIT-R a total fee based on the project (hereinafter referred to as "Project Cost") as a composite fee for research project as mentioned in Scope of Service in Appendix A for the Services to be rendered under this Agreement, upon receipt of proper invoice subject to deduction of tax as applicable. The amount of fee shall be inclusive of all other charges otherwise assessable by any authority other than applicable tax. Above cost includes (but does not limits to) the student's fellowship amount as indicated in Appendix A.
- 4.2 IIT-R will raise invoices to SIEL as per the schedule mentioned in Appendix A. There shall be a credit period of thirty (30) days from the date of undisputed invoice and payment will be made by SIEL within seven (7) days after expiry of the said credit period. In case the invoice

is not received by SIEL as mentioned above, then the thirty (30) days' credit period shall, at the SIEL's option, commence from the date of receipt of undisputed invoice by SIEL and SIEL shall not be liable for any delay in payment. With respect to disputed invoices, 30 days credit period shall commence from the date of resolution of dispute as per this Agreement.

4.3 SIEL will reward members from IIT-R for IP contributions to SIEL as co-inventors in a patent generated from the research project.

4.3.1 IIT-R designated personnel(s) involved in patent are entitled to a total basic reward based on the grade secured, in the evaluation done by SIEL. The decision of SIEL regarding evaluation shall be final and binding. The Reward money will be distributed amongst the inventor(s) as per patent incentive policy of SRI-Noida, a division of SIEL.

4.3.2 A basic reward for patent shall be given to the inventor(s) only upon assignment of complete ownership rights of the invention by the inventor(s) to SIEL and/or to any other Samsung entity designated by SIEL. Both parties to this Agreement agree that only employees of SIEL who would be working on the Project and/or designated personnel of IIT-R who contributed to the claims and/or core concept of the invention can be the inventor(s). Notwithstanding the fact that who is/are the inventor(s), ownership rights in respect to patents if any, as mentioned above, shall always be with SIEL and/or any other Samsung entity designated by SIEL.

4.3.3 In case of multiple inventors, the amount will be distributed between the inventors declared by SIEL, which shall be in consonance with the terms of clause no4.3.1 of this Agreement.

ARTICLE 5. GOVERNING LAW, DISPUTE RESOLUTION & JURISDICTION

- The laws of India govern this Agreement. The parties shall attempt in good faith to resolve any dispute arising out of or relating to this Agreement promptly by negotiation between executives. If the matter has not been resolved within 30 days of a party's request for negotiation, either party may initiate arbitration as provided hereinafter. If such attempts at negotiation fail, the parties agree that any disputes arising from this Agreement shall be decided by arbitration by a sole arbitrator (appointed by the mutual consent of the parties) which shall be conducted, upon request by either party, in New Delhi, in English, in accordance with the provisions of the Arbitration and Conciliation Act, 1996. The cost and expenses of the arbitration proceedings shall be borne equally by the parties. Notwithstanding anything herein to the contrary, either party may proceed to courts of New Delhi to obtain injunctive or other equitable relief at any time.
- None of the parties shall be entitled to commence or maintain any action in a court of law upon any matter in dispute arising from or in relation to this Agreement except for the enforcement of an arbitral award granted pursuant to this clause.
- 5.3 During the period of submission of arbitration and thereafter until the granting of the award, the parties shall, except in the event of termination, continue to perform all their obligations under this Agreement without prejudice to a final adjustment in accordance with such award.
- Neither of the parties shall disclose the existence, content, or results of any arbitration hereunder without the prior written consent of each of the others.
- 5.5 The Courts at New Delhi shall have exclusive jurisdiction over any dispute that may arise out of the aforementioned Arbitration.

ARTICLE 6. GENERAL



1 Independent Contractor

- 6.1.1 In carrying out the Services under this Agreement, IIT-R is an independent contractor and shall control and direct the performance of the Services.
- 6.1.2 Nothing in the Agreement shall imply a relationship of employment, association of persons, partnership or joint venture between SIEL and IIT-R or between any persons engaged, respectively, by SIEL or IIT-R.

6.2 Representation

- 6.2.1 IIT-R hereby represents that it has all the requisite licenses registrations and approvals and shall carry out the Services in strict compliance with all relevant laws and regulations of the State or Territory within India where the Services are being rendered and in accordance with the conditions of any permit, license or concession relating to any part of the Services.
- 6.2.2 IIT-R warrants and represents that IIT-R shall not use, divulge, share any and all confidential information which belongs to any third party for the purpose of rendering the Services under this Agreement. IIT-R further warrants and represents that any and all technical information or knowledge it possesses, uses or will use for the purpose of rendering the Services under this Agreement is/shall be IIT-R's own, and the use of such knowledge or information shall not infringe any third party's rights.

6.3 Confidential Information

- 6.3.1 IIT-R shall hold and maintain the Information as may be provided or gathered under this Agreement as strictest confidential and trust for the sole and exclusive benefit of SIEL. IIT-R may disclose the Confidential Information only to those officers, directors and employees who absolutely need the information to assist IIT-R in fulfilling the Services under this Agreement. Further such persons are strictly prohibited from making any use, benefit, publication, disclosure, or permitting others to use for their benefit or to the detriment of SIEL, any of the Confidential Information.
- 6.3.2 Confidential Information shall be defined to include all information whether technical or business which comes into IIT-R's possession or is observed by, IIT-R during the course of performing the Services hereunder which is of a confidential or proprietary nature or which IIT-R has reason to believe should be treated as such including, but not limited to, financial data, processes, trade secrets, policies and procedures, business plans, marketing plans or analyses, pricing, customer data and surveys and the like, the existence and the terms and conditions of this Agreement, and all Deliverables and any and all information and materials developed in connection with the performance of the Services hereunder including but not limited to Copyrightable Works, whether such information is delivered or obtained in oral, written, machine readable form or is otherwise transmitted to or obtained by IIT-R in the course of IIT-R's performance hereunder.
- 6.3.3 IIT-R's confidentiality obligation shall continue in full force and effect for five (5) years subsequent to the expiration of this Agreement and shall survive the early termination, cancellation or repudiation of this Agreement.

6.4 Indemnification

IIT-R shall indemnify and hold SIEL harmless from and against any liability, penalty, cost or expense, whatsoever, suffered or incurred as a result of IIT-R failing to comply with any law or regulation, or any condition of permit or license relating to any part of the services provided hereunder or breach of any terms and conditions of this Agreement.

6.5 Force Majeure

Each party's obligations under this Agreement shall be suspended upon the occurrence of force majeure event such as act of God, flood, earthquake, fire, explosion, act of government,

war, civil commotion, insurrection, embargo, riots, lockouts, labour disputes affecting such party, for such period as such force majeure event may subsist.

6.6 Assignment

- 6.6.1 IIT-R shall not assign or subcontract its rights or obligations under this Agreement or any part thereof without the prior written consent of SIEL.
- 6.6.2 SIEL may assign its rights or obligations under this Agreement in whole or in part to any of its group companies or associated companies without the consent of IIT-R.
- 6.6.3 IIT-R shall be responsible for the acts, defaults and neglect of any assignee or any subcontractor performing any part or parts of the Services and also for the acts, defaults and neglect of the servants, agents, workmen and subcontractors of the assignee or subcontractor as if the said acts, defaults, and neglect were those of IIT-R.

6.7 Waiver

The rights and powers of SIEL under this Agreement shall not be prejudiced or affected by reason of any failure, neglect, forbearance or delay in the exercise of enforcement thereof and SIEL will not be deemed to have waived any of its rights and powers under any part of this Agreement unless such waiver is in writing.

6.8 Ownership of Intellectual Property and Other Rights

- 6.8.1 IIT-R shall verify any property rights (including but not limited to Intellectual Property Rights) of other parties which shall be used in Service provided by IIT-R prior to rendering Service under this Agreement. IIT-R represents and warrants that IIT-R is the owner or has the right to share, divulge or provide any and all information and technologies which may be provided by IIT-R during the Term under terms and conditions of this Agreement.
- 6.8.2. Any and all rights to the developments, improvements or good and valuable suggestions provided by IIT-R during the term of this Agreement shall belong to SIEL or its parent company i.e. Samsung Electronics Co. Ltd. IIT-R understands and agrees that the nature of this Agreement is work for hire, and any and all interests including ownership of such developments, improvements or good and valuable suggestions shall be vested in SIEL and/or any other Samsung entity designated by SIEL.
- 6.8.3 SIEL shall have the right to supervise IIT-R and to direct IIT-R as to all aspects of the Services, it being the intent of this Agreement to vest full and exclusive ownership rights in SIEL including, but not limited to, the exclusive right to copy and prepare derivative works. IIT-R can use the derivative works for further research work(s) only.
- 6.8.4 All inventions, discoveries, patents, improvements, developments, plans recommendations etc. made or conceived by IIT-R, either solely or in collaboration with SIEL during the Term of this Agreement and pertaining to the Service, shall become the sole and absolute property of SIEL or its parent company i.e. Samsung Electronics Co. Ltd.. IIT-R shall disclose to SIEL all such inventions, discoveries, improvements, developments, plans recommendations etc.. If property not exploited within a time period of fifteen (15) years and if IIT-R wants to use the technology commercially, this can be done after mutual written consent between SIEL and IIT-R.
- 6.8.5 For every research, first the patentability will be checked by SIEL within two (2) months from the date when all relevant documents/clarifications/information etc. in respect to relevant research work will be submitted by IIT-R to SIEL. IIT-R can publish the papers only when the research is rejected to be filed as patent by SIEL or any other Samsung entity designated by SIEL or the patent is revoked. Subject to what has been mentioned above, both parties agree that if after checking the patentability of a research work, as mentioned above, SIEL decides that the research work can be filed as Patent, then IIT-R shall not publish research papers before the patent application is published. Once the patent application is published, IIT-R shall be allowed to publish



relevant research work only after a joint review is conducted by SIEL and IIT-R but only in international conference papers or journals, selected and approved by SIEL in writing. SIEL Project members will remain co-authors of the papers.

6.9 Publicity

Both SIEL and IIT-R agrees that neither shall use the name of the other, either expressed or implied, in any of its advertising or sales promotional material without obtaining written approval of the other.

6.10 Severability

If any provision or part of this agreement is rendered void, illegal or unenforceable in any respect, provision or part of this Agreement under any enactment or rule of law, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

6.11 Notice

Any notice or other communication pursuant to this Agreement shall be in writing and shall be deemed to have been fully given or made when personally delivered or three (3) days after being mailed via commercially reputable overnight delivery service, or by confirmed fax, to the following addresses or such other addresses as the parties may provide in writing to the other from time to time:

IF TO SIEL:

Samsung India Electronics Pvt. Ltd.

Ground to 10th Floor Tower D and 7th Floor Tower C

Logix Cyber Park, C-28&29, Sector-62

Noida-201301, Uttar Pradesh

IF TO IIT-R:

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE ROORKEE, UTTARAKHAND – 247667

6.12 Entire Agreement

6.12.1 This Agreement constitutes the entirety of understanding between the Parties hereto and supersedes all previous agreements / arrangement/ terms and understanding, if any, whether oral or written between SIEL (SRI-N) and IIT-R.

5.12.2 The terms and conditions of this Agreement cannot be changed/amended except

through written instrument.

6.13 Anti-Bribery & Anti-Corruption:

6.13.1 IIT-R (which includes its vendors/consultants/suppliers contractors etc.) will comply with all applicable laws, statutes, regulations and codes relating to Anti-bribery and Anti-corruption and will not take any action or fail to take any action that would cause SIEL or any of its affiliates to fail to comply with any applicable Anti-corruption legislation.

6.13.2 IIT-R shall maintain in place its own policies and procedures which will be equal or better than reasonable Anti - Bribery and Anti - Corruption Policy, considering

applicable legislations in that regard.

6.13.3 IIT-R will comply with its above mentioned Policy, in all respect and shall ensure that no gratuities (in the form of entertainment, gifts or otherwise) or kickbacks shall be offered or given by it or any of its directors, senior executives, officers or other employees, consultants, contractors or agents to any of SIEL's executive or members of their immediate families with a view toward securing a favorable or preferential treatment from SIEL.

- 6.13.4 IIT-R will promptly report to SIEL (HR-Head/Management) in case any request or demand for any undue financial or other advantage of any kind is received by it or its executive from any of SIEL's executive.
- 6.13.5 IIT-R will ensure that persons associated with it (viz subcontractors, supplier or IIT-R) in performing services or providing goods in connection with this Agreement shall also have Anti-Bribery and Anti-Corruption Policy as are imposed on the IIT-R and as mentioned herein above.
- 6.13.6 Failure to comply with these provisions shall constitute a material breach of the Agreement and notwithstanding any other provisions of the Agreement, SIEL shall have right to terminate the Agreement. Further, in the aforementioned circumstances, IIT-R shall also be liable to indemnify SIEL for the losses suffered by it.

IIT-R shall ensure that it conducts itself in an ethical and transparent manner in all its dealings with SIEL and that all information pertaining to its invoicing and supporting documents submitted to SIEL are true, correct, accurate and complete in all respect. In the event any inaccuracy, falsity or discrepancy is identified in the Invoice or supporting documents furnished by the IIT-R on account of incorrect or overcharged amount or rate, quantity or wrong items etc. or any fraudulent act/ attempt, SIEL shall have the right to recover or set-off the over-claimed amount from any payable Invoice. In addition in case the IIT-R is found of deliberately committing/ overcharging or attempted fraud invoices/claims/documents to support inaccurate figures, SIEL reserves the right at its sole discretion to claim penalty in the form of liquidated damages equivalent to the value of the excessive amount so charged/loss caused or attempted to be caused by the IIT-R, which may extend upto two times of such excessive amount, without prejudice to any other legal action, civil or criminal that may be initiated by SIEL against the IIT-R and its Director(s)/Partners/Proprietor(s). The decision of SIEL in this regard shall be final and binding on the IIT-R.

6.14 Headings

Headings contained in this Agreement are for convenience and for reference only and are not intended to have any substantive significance in interpreting this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement the day and year first herein before written.

For Samsung India Electronics Pvt. Ltd.	For HT-R
SELECTRONICS SUPER TO THE SERVICE SUPER TO THE SERV	Dean A magned Research & Industrial Consultancy Indian Institute of Pechaology Roomse Restable 247 (257 (NIDIA)
Mr. Youngbae Kim - CFO - Mobile R&D division - Noida	Dean, SRIC, IIT Roorkee

(Dr. P. Sateesh Kumar)

2. Rona Baneijee (Dr. RONA BANERJEE)

APPENDIX A SCOPE OF SERVICES

- Samsung Research Institute, Noida a division of SIEL and IIT-R have collaborated to leverage research capabilities. SIEL has shared the problem statement detailing the research areas to IIT-R and as mentioned in this Appendix A. IIT-R has submitted its proposals based on the problem statement and research areas, which was shared by SIEL. Proposal has been reviewed by the open innovation team of SIEL. For the Approved proposals, as mentioned below, SIEL employees and designated personnel(s) will work together on the research Project as per the deadlines of the Project and as mentioned below. Outcome will be evaluated after a fixed period as specified in the Project plan. Expected outcome of the research Projects are the Android SW solution for Smartphone, Patents, Technical papers and Technological solutions.
- 2. For the purpose of carrying out Research & Development, SIEL has shared project details with IIT-R. The parties shall work together on the Project. If at the end of the Research & Development completed by the parties the end result is such that SIEL intends to use the end product so developed the same shall for all purposes and intent be owned by SIEL exclusively and IIT-R shall have no ownership on it whatsoever. IIT-R shall charge some consideration for the product so owned by SIEL and such consideration shall be decided by mutual consent of the parties and in such a case the arties shall enter in to a Definitive Agreement.
- 3. IIT-R shall submit a report at end of each phase for SIEL's review & confirmation. The phase will not be considered as completed until confirmed by the SIEL in writing.
- 4. Project Duration: 28th December, 2018 27th December, 2019
- 5. Invoicing terms:

Payment	% of Payment
After Agreement	65%
3 Months after agreement	15%
6 Months after agreement	10%
9 Months after agreement	10%

6. Rate:

Budget Head	Total
Scholarship (1 Post Ph.D., 4 M.Tech.)	11,52,000
Equipment	8,50,000
Travel	1,50,000
Consumables	30,000
Contingencies	20,000
Institute Overhead (20%)	4,40,400
Total	26,42,400
GST @ 18%	4,75,632



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(Details
Project:

Target	Action Item	Review Item	Duranion
	1. Study of current State of the Art and implementations. Research along dynamic detection using Sensors, API call graphs, User Behavior and other relevant works. Detailed analysis of the strengths and drawbacks as seen in different implementations and their reproducibility.	Comparative analysis of possible methodologies and some possible approach that can be undertaken, maybe a hybrid of these.	A CALLES AND A CALLES
Phase 1	2. Development of Data Collection tools after identification of the kind of data that will be required. Tools to gather low-level API logs, to perform sensor probing and data collection etc.	2. Data collection tools that are ready to be mass deployed.	3 months
	3. Collection of malware samples to be run on devices involved in data collection, to obtain labeled datasets. Data could be logged both in the presence of and without malwares.		
	1. Begin collecting data. Ready devices with developed tools and obtain volunteers for the study.	1. By the end of Q2, at least enough data should be in-hand to thoroughly test out the methodologies.	
Phase 2	2. Development of training methodology and infrastructure and some proof of concept.	2. Interpretation and visualizations from the collected data to validate whether training is possible, before going forward with full-fledged training.	3 months
	1. Data collection continues.	1. Working model capable of detecting a variety of malware real-time in actual user devices.	
Phase 3	2. Fine tuning and complete training of the intelligent model over different representative subsets and full data as a whole. 3. Development of models with intermediate results like action detection, device state detection etc.	2. A satisfactory accuracy over popular malware datasets.	3 months
	1. Continuation and conclusion of tasks in Q3.	1. A full-fledged solution which is consumer ready.	Annual Control of Cont
Phase 4	2. Developing a deployable pilot.	2. Published work.	3 months
	3. Documentation, reporting, IP filing etc.		