## MEMORANDUM OF UNDERSTANDING (MoU)



# SCIENTIFIC ANALYSIS GROUP, DRDO Metcalfe House, Delhi

And



NATIONAL INSTITUTE OF TECHNOLOGY DELHI Plot No. FA7, Zone P1, GT Karnal Road, Delhi - 110036

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### This MoU is made and entered on this $26^{h}$ day of <u>November</u> in the year 2024.

#### Between

The President of India, acting through and represented by the Director, **Scientific Analysis Group** located at Metcalfe House, Civil Lines, New Delhi, 110054, India (hereinafter called **SAG**, which shall, unless the context does not admit, include its successors and assigns), on the ONE PART.

#### and

**National Institute of Technology Delhi** a premier academic Institution of national importance and having its registered office at Plot No. FA7, Zone P1, GT Karnal Road, Delhi-110036, (hereinafter referred to as **NIT Delhi**, which term shall unless repugnant to context mean and include its successors in interest, office and permitted assigns) of the OTHER Part.

This **MoU** sets down the mutually agreed broad framework for joint R&D and academic activities in various fields of interest. It also incorporates the modalities for collaboration. For the purpose of this MoU, **SAG** and **NIT Delhi** shall be collectively referred to as "**parties**" and the term "**party**" refers to either of them as the context permits.

#### PREAMBLE

Scientific Analysis Group, Delhi is one of the pioneer laboratories of the MED & CoS Cluster working under the Defence Research & Development Organization. Currently, SAG has its administrative wing at Delhi. The work domain is divided into several technical areas which are equipped with highly specialized equipment and analysis facilities, generating critical inputs for the analysis of security systems. SAG has carried out pioneering research in the field of Cryptology & Information Security.

**NIT DELHI** is a premier academic institution of the country, possessing a team of highly competent, motivated scientists/ engineers and experts in their respective domains who are engaged in teaching and carrying out research of significance to develop cutting edge technologies. **NIT DELHI** is actively engaged with defence and security forces through its various departments facilitating different research projects.

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#### 1. PROPOSAL

Both parties desire to implement various collaborative R&D activities, in areas of mutual interest, which would address multidisciplinary scientific and technological issues of national relevance. SAG and NIT Delhi agree to cooperate in the following areas through (a) Exchange of scientific and teaching materials (b) Joint research projects and (c) Internships and manpower training;

- a. Cyber & Network Security
- b. Machine Learning/ AI Systems
- c. Big Data Analytics
- d. Quantum Communication and Networking
- e. Post Quantum Cryptography
- f. Quantum Computing & Quantum Cryptography
- g. Blockchain Technology
- h. Secure Communication
- i. Multimedia Encryption Schemes, Secret Sharing and Steganalysis
- j. Wireless Communication and Security
- k. IoT/Smart Device Security
- I. Software & Hardware Security and Vulnerabilities Analysis
- m. Advanced Mathematics and Cryptology
- n. Formal Methods for Security Analysis
- o. Satellite Communication
- p. Cloud Computing

#### 2. RIGHTS AND OBLIGATIONS OF PARTIES

2.1 All rights and obligations of the parties regarding their specific actions pursuing the objectives specified in clause 3 of the MoU, as well as those related to entering into and execution of any contracts required to implementation of such acts will be set forth in "relevant definitive agreement" specifying the scope, terms and conditions of their engagement, obligations and deliverables after arriving at mutually acceptable arrangement.

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2.2 However, it is clarified that execution of this MoU shall not oblige the parties to conclude definitive agreement between them or pursue any further business relationships.

#### 3. TERMS AND TERMINATION

This MoU shall be valid for period of 5 years and will terminate, except for the clauses regarding proprietary information, the Non-Disclosure Agreement and dispute resolution which shall survive such termination as provided in the Non-Disclosure Agreement, without which liability of either of the Parties hereto, upon mutual written agreement between the Parties.

#### 4. COOPERATION

- 4.1 The parties shall respectively co-operate with each other to ensure that all information necessary or desirable for the making of (or responding to any requests for further information consequent upon) any notifications or fillings made in respect of the MoU, or the transactions contemplated by this MoU, is supplied to the Party dealing with such notifications and filings and that they are properly accurately and promptly made.
- 4.2 This MoU shall act as a Generic/ Umbrella MoU. Further the parties shall decide the scope of co-operation by negotiating mutually agreeable work share and cost separately, for each joint activity undertaken.
- 4.3 Joint Supervision for PhD
  - a) Ph.D. students from NIT Delhi can be co-supervised by scientists of SAG.
  - b) Faculty from NIT Delhi can be doctoral committee members of SAG scientists pursuing Ph.D.
  - c) With due permission, students/faculty/scientists from either party can work in the other institute and use the facilities for collaborative projects. Either party will provide accommodation whenever possible to the visiting scientists/students/faculty at applicable charges.
- 4.4 Joint Academic Programs
  - a) Admission to Ph.D. and PG Programmes for SAG scientists/officials /employees would follow the admission rules and regulations of NIT Delhi, in

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areas of common interest. Waiver of entrance test to be considered for senior scientists having a research experience of equal to or more than 12 years.

- b) JRF/SRF at SAG with DRDO research fellowships, who are GATE/NET qualified shall be eligible for enrolment for Ph.D. at NIT Delhi subject to meet laid down admission procedures and qualifications.
- c) Fee structure at par with regular students may be considered for the scientists/officials from SAG taking admission to Ph.D. and PG Programmes.
- d) As per requirements of SAG, NIT Delhi may invite experts from India/Abroad for training, discussion and joint collaborations.

#### 5. CONFIDENTIALITY

During the term of the MoU it may be necessary for either Party to provide confidential information to other. In such event, the disclosure and use of all confidential information/proprietary information shall be in accordance with the respective particular event/project on a case-on-case basis, signed between the Parties.

#### 6. INTELLECTUAL PROPERTY RIGHTS

- 6.1 Nothing herein is intended to affect the rights of the Parties with respect to each Party's intellectual property right/knowledge, respectively held, owned or developed by such party. Any intellectual property rights, including information, data know-how, patent, patent applications, and trade secrets, will be governed by mutually agreed terms on case-to-case basis.
- 6.2 With respect to technology and/or technical data generated/developed jointly by the Parties ("Foreground Data"), it is agreed that such Foreground Data, shall be available for use and tech-transfer or commercialization to the Indian MOD as may be statutorily required by the terms & conditions drawn up by the MOD, under a separate agreement. Under no circumstances the technologies developed jointly shall be sold or exposed wholly or partly to any other agency in India or abroad without written mutual consent.

#### 7. COSTS

7.1 Both Parties have agreed that the expenditures shall be borne by each party shall be worked out separately after negotiations on commercial terms and conditions.

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7.2 Each party may set their own infrastructures at their work places including manpower, test rigs/tracks etc. at their own expenses without any obligation to each other.

#### 8. FORCE MAJEURE

Neither of the Parties shall be responsible for non-fulfilment of its respective obligations under this MoU due to the exigency of one or more of the Force Majeure events such as but not limited to floods, earthquakes, acts of God, war, strike, lockouts, epidemics, riots, civil commotion, server problem internet related issues, power problem, government restrictions, catastrophe, or disturbances in the country. If the Force Majeure condition continues beyond two months, the parties shall mutually decide about the future course of action.

#### 9. LEGAL COMPLIANCES

The parties shall take care of any legal compliance as may be required during the process of executing this transaction of their respective authorities. Further, the parties shall communicate and coordinate for compliance with the laws.

#### **10. LIMITATION OF LIABILITY**

The Parties (including for this purpose their respective Affiliates) shall not be liable for each other's incidental, indirect, special or consequential damages (including lost profits or lost revenues) under this MoU, regardless of whether such liability arises in tort, contract, breach of warranty, indemnification or otherwise.

#### **11. ANNOUNCEMENTS**

No release shall be made by any party to the news media or general public relating to the MoU and/or the subject matter thereof without prior written approval of the other party, which approval shall not be unreasonably withheld. The parties further agree that news releases made by either of them shall recognize the participation and contribution of the other party.

#### **12. SETTLEMENT OF DISPUTES**

The Parties shall use their best efforts to settle amicable all their disputes regarding the claim by one party against the other or regarding the implementation of the MoU by appointing One Senior person each who would make an effort to resolve the same.

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IN WITNESS WHEREOF, the undersigned, duly authorized thereto, have signed this MOU on this day,  $26^{n_1}$  November 2024 in two originals in the English language.

Signature: Signature: Nr. bort Illai Name: Dr N Rajesh Pillai Name: Dr. Ajay K. Sharma sulute ul Date: 26.11.2014 26.11.2024 Date: विश्लेषण ANAL Position: Director, NIT Delhi Position: OS & Director, SAG डॉ. एन. राजेश पिल्लै / Dr. N. RAJESH PILLAI डॉ अजय कुमार शर्मा रक्षा मंत्रालय उत्कृष्ट वैज्ञानिक एवं निदेशक / Outstanding Scientist & Director वैज्ञानिक विश्तेषण समूह / Scientific Analysis Group रक्षा मंत्रालय, डी०आर०डी०ओ० / Ministry of Defence, DRDO मेटकॉफ भवन परिसर, दिल्ली-110054 Dr. Ajay Kumar Sharma Director/जिदेशक राष्ट्रीय जोगोगिकी संस्थान दिल्ली Ministry of Defence Comple National Institute of Technology Delhi Seal: परिसर, Metcalfe House Complex, Delhi-110054 Seal: Signature (Witness 1) Signature (Witness 1) malle Kin. g. un Name: by SA 18 & KUMAR PAL Date: 26/11/2024 Position: Scienhst H Name: DR. JYOTEESH MALHOTRA Date: 26/11/24 Position: PROFESSOR & Dean(Rhc) Signature (Witness 2) Signature (Witness 2) Name: Phef. Gueta Sikka Date: 26/11/24 Position: Dean (ACADEMIC) Telepty Name: DRINDIVAR GUPTA Date: 26/11/2024 Position: Scientist 6