



Press Release

27 July 2021

# Thales and IIIT-Delhi sign a Memorandum of Understanding on Open Hardware Research and Development

- The Memorandum of Understanding will enable co-development of complex microprocessor architectures and multi-core processing systems.
- These systems will bring value to applications in areas such as edge computing, smart manufacturing, defence and space.

Paris/New Delhi, 27 July 2021: Thales and IIIT-Delhi today signed an agreement for collaborative research and development in the field of Open Hardware and other allied subjects. The collaboration will enable co-development of complex microprocessor architectures and multi-core processing systems using configurations available with the RISC-V open ISA specification. These systems will bring value to applications in areas such as edge computing, smart manufacturing, defence and space.

The agreement was signed in the presence of Marko Erman, Chief Scientific Officer of Thales, Philippe Valery, VP Technical Operations - Research and Technology of Thales, Ashish Saraf, VP and Country Director of Thales in India, Satish Menon, Head of Thales' Engineering Competence Centre in Bengaluru, and Prof. Ranjan Bose, Director IIIT Delhi, Prof. Mukesh Mohania, Dean of IRD IIIT-Delhi, Dr. Sujay Deb, Associate Professor, IIIT-Delhi, who will also act as the principle investigator for the research project. Through this association, Thales and IIIT-Delhi will collaboratively address safety issues in designing processors and embedded software for critical applications using open source hardware approach. The activities will commence from August 2021 and will be carried out in phases.

"We are delighted to join hands with an esteemed institution such as IIIT-Delhi. This partnership comes at an opportune time when technological advancements are fast shaping the world around us. It will draw on the expertise of Thales and scientific talent of IIIT-Delhi to enhance research and development in the area of open hardware and related subjects, and contribute to the rich innovation eco-system in India," Ashish Saraf, VP and Country Director of Thales in India said.

While wishing success to the implementation of the MoU, the Director IIIT-Delhi, **Prof. Ranjan Bose** said, *"I am both happy and excited about the signing of the MoU* 





today and the potential it holds for a very productive collaboration between IIITD and Thales. This collaboration is unique because of the problem-first approach and will leverage complementary skill sets from both sides. This is a long-term strategic partnership and also a step towards strengthening Indo-French collaboration and cooperation."

Thales seeks to foster innovation and develop an ecosystem for scientific and industrial research by partnering with world-leading universities. In India, Thales has formed partnerships with the Indian Institute of Science Bangalore, the Indian Institute of Technology (IIT) Madras, Bombay and Delhi.

Each year Thales invests around 4 billion of euros in R&D including 1 billion of selffunded R&D to develop cutting-edge technologies to best serve its customers across the world.

## **About Thales**

Thales (Euronext Paris: HO) is a global leader in advanced technologies, investing in digital and "deep tech" innovations – connectivity, big data, artificial intelligence, cybersecurity and quantum computing – to build a confident future crucial for the development of our societies. The Group provides its customers – businesses, organisations and governments – in the defense, aeronautics, space, transport, and digital identity and security domains with solutions, services and products that help them fulfil their critical role, consideration for the individual being the driving force behind all decisions.

Thales has 81,000 employees in 68 countries. In 2020 the Group generated sales of €17 billion.

## About Thales in India

Present in India since 1953, Thales is headquartered in Noida and has other operational offices and sites spread across Delhi, Gurugram, Hyderabad, Bengaluru and Mumbai, among others. Over 1,800 employees are working with Thales and its joint ventures in India. Since the beginning, Thales has been playing an essential role in India's growth story by sharing its technologies and expertise in Defence, Transport, Aerospace and Digital Identity and Security markets. Thales has two engineering competence centres in India - one in Delhi NCR focused on digital identity and security business, while the one in Bengaluru focuses on hardware, software and systems engineering capabilities for both the civil and defence sectors, serving global needs.

## About IIIT-Delhi

Indraprastha Institute of Information Technology, Delhi (IIIT-Delhi) was created as a state university by an act of the Delhi Government in 2008 empowering it to do research and grant academic degrees. With world-class faculty and an environment that endeavors to nurture state-of-the-art research and innovation, and enables entrepreneurial activities that bring the gains of deep-tech to the society at large, IIIT-Delhi has grown to become one of the most promising young institutions in India. It is accredited 'A' grade by the National Assessment





and Accreditation Council (NAAC) and has been accorded 12-B status by the University Grants Commission. It is ranked #4 among all universities in India in the Times Higher Education world university rankings 2021 and also among all technical schools in India in the latest Dataquest T-School rankings 2021. The institute was awarded "Excellence in Faculty" in the 7th Higher Education Excellence Awards 2021 by the Federation of Indian Chambers of Commerce & Industry (FICCI).

IIIT-Delhi hosts the academic departments of Computer Science and Engineering, Electronics and Communication Engineering, Computational Biology, Human Centered Design, Mathematics, and Social Sciences & Humanities. Its research centres include the Infosys Centre for Artificial Intelligence, Centre for Computational Biology, Centre for Design and New Media - a TCS Foundation Initiative supported by Tata Consultancy Services, Center of Technology in Policing, Cybersecurity Education and Research Centre, Centre for Sustainable Mobility, Centre of Excellence for Lifi/VLC, and Center of Excellence in Healthcare funded by Delhi Knowledge Development Foundation (DKDF).

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