

9/2025

# Accelerating EU-India Critical Tech Cooperation: Drivers for Digital Synergy

Simmi Saini & Harry Björklund



PUBLISHED BY THE SWEDISH INSTITUTE OF INTERNATIONAL AFFAIRS | UI.SE



#### Summary

Critical and emerging technologies are becoming increasingly central to both international economic and political cooperation and competition. The European Union and India have both stated intentions to strengthening their positions in critical tech domains, and identified their bilateral cooperation as a means to achieve this. This brief outlines the state of EU-India technology collaboration, and particularly examines bilateral cooperation between India and individual EU Member States in sectors of critical technologies. Drawing on annual reports from various Indian ministries and departments, the brief maps levels of Member State engagements highlighting where partnerships are already strong and where more collaboration is possible. Based on this analysis, the brief offers three key proposals to advance India-EU tech cooperation: (1) the creation of a "coalition of the willing" comprising Member States with higher levels of interaction; (2) the establishment of an EU-India Tech Hub to coordinate and scale joint initiatives; and (3) the launch of an EU-India Talent Exchange Program to support mobility and skill-sharing in key sectors. Together, these initiatives aim to build a more structured andstrategic partnership between India and the EU in various domains of critical technologies.



Simmi Saini

Affiliated with the project for Nordic-India Relations at the Swedish Institute of International Affairs.



Harry Björklund

Intern at the Asia Programme at the Swedish Institute of International Affairs.





#### Introduction

The European Union (EU) stands at a critical crossroads in its effort to remain competitive on the global stage. In September 2024, former Italian Prime Minister and European Central Bank President Mario Draghi released a detailed report on the future of European competitiveness.<sup>1</sup> The 400-page document highlights the urgent need for to strengthen its Europe economic foundations, including a focus on boosting innovation and technological capabilities. Draghi warns that without decisive action, Europe risks falling further behind global leaders like the United States (US) and China, particularly in emerging technologies and the digital sector.

At the same time, the global tech landscape is evolving quickly. Rising geopolitical reshaping tensions are international competition in key technologies. In response, the EU and other global players are working to strengthen their positions in innovation, digital industries and secure access to critical materials for emerging technologies. However, Europe faces several challenges, including a fragmented venture capital market and complex regulatory frameworks. For instance, starting and scaling a business in Europe requires navigating different rules and regulations across Member States, such as company registration, tax, compliance and (in case of failure) bankruptcy procedures. As a result, it has led startups to seek investment and expansion opportunities abroad, notably in the US.<sup>2</sup> This trend raises concerns about Europe's long-term competitiveness, as well as its strategic autonomy.

То advance its leadership in global technology, the EU needs to strengthen its international partnerships in innovation, technology industrial base, digital security and supply chain resilience. India, with its rapidly growing digital economy, vast talent pool, and emerging role in areas such as artificial intelligence (AI), semiconductors cybersecurity, offers a valuable and opportunity. Yet, despite shared interests, the EU-India technology cooperation has been slow in the making, and individual Member States have been pursuing their own and uncoordinated initiatives.

This policy brief maps existing intergovernmental cooperation between the EU and India, on both Member State level and EU-institutional levels. Given the results it suggests that those Member States most engaged with India in technology should, in a coordinated effort, take the lead to drive a broader EU-India partnership within the technological sphere. These countries already have strong bilateral ties in digital trade, research collaboration, and regulatory alignment, positioning them well to guide a more coordinated and strategic EU effort. The following sections will explore India's role as a technology partner, assess its current engagement with the EU and its Member States, and propose a framework to deepen EU-India cooperation.

## India's positioning in the global landscape of emerging tech

India is quickly becoming a significant player in the global technology landscape, driven by its economic growth, digital transformation, access to talent, and commitment to cost efficient innovation. India's strategic objective is to foster self-reliance by

<sup>&</sup>lt;sup>1</sup> European Commission (2024) <u>The Draghi report on</u> <u>EU competitiveness</u>

<sup>&</sup>lt;sup>2</sup> European Commission (2025) <u>52025DC0030 - EN -</u> <u>EUR-Lex</u> | European Investment Bank <u>The scale-up</u>

gap: Financial market constraints holding back innovative firms in the European Union



enhancing its manufacturing and technological capabilities, reducing reliance on foreign imports, and diversifying key value and supply chains that are currently dependent on China.<sup>3</sup> This approach aims to position India as a more resilient and competitive actor globally. To support this vision, the Indian government has launched several key initiatives. Make in India aims to establish India as a global manufacturing powerhouse by improving infrastructure, encouraging foreign investment, and facilitating easier business operations.4 Meanwhile, Atmanirbhar Bharat (self-reliant India) drives the country's ambitions of strengthening local industries and making Indian products more competitive in international markets.<sup>5</sup>

The government has also launched and allocated significant funds to other programs designed to further enhance India''s position as a global tech hub. For example, Digital India focuses on improving digital infrastructure and promoting e-governance,<sup>6</sup> while Startup India fosters innovation and entrepreneurship through regulatory simplifications and funding support.<sup>7</sup> The India Semiconductor Mission aims to build domestic semiconductor manufacturing capabilities and reduce reliance on foreign suppliers.<sup>8</sup> In April 2023, the government approved the National Quantum Mission, a key initiative backed by USD 730 million in funding from 2023-2031, to advance India's leadership in quantum science and technology.9 Furthermore, in March 2024, the government also approved the India AI Mission, with a budget of approximately USD 1.2 billion, aimed to advance AI research, improve computing infrastructure, support Al-driven startups, and enhance digital skills within the public sector.<sup>10</sup> India's focus on tech diplomacy is further evident through the creation of specialised divisions such as the New Emerging and Strategic Technologies (NEST) Division,<sup>11</sup> which ensures that India's technological interests align with its broader diplomatic and economic goals.

India's technological development is also supported by its international partnerships, such as through the Quad – comprising the US, Australia, Japan and India – as well as through bilateral collaborations. For example, the Quad Emerging Technologies Working Group, established in 2021, focuses on advancing collaboration in key areas such computing, as AI, quantum and semiconductors.<sup>12</sup> The group has set for responsible technology principles development, emphasising transparency, security, and alignment with democratic values.<sup>13</sup> Additionally, India's participation in Partnership the Global on Artificial Intelligence (GPAI)<sup>14</sup> allows the country to contribute to shape global AI standards.

<u>Transforming India into a Global Manufacturing</u> <u>Powerhouse</u> 5 Judie Dreed Faulte Foundation (a.d.) Calf seliced

<sup>5</sup> India Brand Equity Foundation (n.d) <u>Self-reliant India</u> (Aatm Nirbhar Bharat Abhiyan) | IBEF

<sup>6</sup> India Brand Equity Foundation (n.d) <u>The Digital India</u> <u>Programme Transforming Nation | IBEF</u>

<sup>7</sup> Indian Ministry of Commerce and Industry (2016) <u>About Startup India Initiative</u> Crore for IndiaAl Mission, will Empower Al Startups and Expand Compute Infrastructure Access <sup>11</sup> The Observer Research Foundation (2020) <u>The</u> <u>NEST: A pragmatic addition to India's external affairs</u> <u>ministry</u>

<sup>&</sup>lt;sup>3</sup> Clingendael (2023) <u>Strategic tech cooperation</u> <u>between the EU and India | Clingendael</u> <sup>4</sup> Ministry of Commerce and Industry (2024)

<sup>&</sup>lt;sup>8</sup> Indian Ministry of Electronics and Information Technology (n.d) <u>Overview | About ISM</u>

 <sup>&</sup>lt;sup>9</sup> Indian Ministry of Science and Technology (n.d) <u>https://dst.gov.in/national-quantum-mission-nqm</u>
<sup>10</sup> Indian Ministry of Electronics and Information Technology (2024) <u>Cabinet Approves Over Rs 10,300</u>

 <sup>&</sup>lt;sup>12</sup> Observer Research Foundation (2021) <u>A Quad 2.0</u>
<u>Agenda for Critical and Emerging Technologies</u>
<sup>13</sup> Australian Government, Department of the Prime Minister and Cabinet (2023) <u>Quad Principles on</u> <u>Critical and Emerging Technology Standards | PM&C</u>
<sup>14</sup> Ministry of Electronics and Information Technology (n.d) <u>GPAI is a multi-stakeholder initiative of global</u> experts bridging AI theory and practice, promoting research and practical efforts across science, industry, civil society, and governments.

The India-US tech partnership has also made significant progress with initiatives like the Initiative on Critical and Emerging Technologies (iCET), which focuses on advancing ioint research, enhancing infrastructure, and supporting startups in high-tech sectors.<sup>15</sup> Similarly, in July 2023, India-Japan the partnership on semiconductors and supply chain resilience fostered closer cooperation in semiconductor design, manufacturing, and talent development.<sup>16</sup> Additionally, the UK-India Technology Security Initiative (TSI), launched in July 2024, aims to deepen cooperation in critical technologies such as telecoms, AI, quantum technology, and biotechnology.<sup>17</sup> These initiatives and partnerships have allowed India to establish itself as an emerging global tech leader and a key player in shaping the future of global technology.

Furthermore, India's young demographic, with more than half of its people under the age 30,<sup>18</sup> presents several opportunities. As the world's most populous country, India's demographic advantage is expanding innovation, particularly in sectors like ecommerce, fintech, and tech startups. According to KPMG's "Exploring India's Dynamic Start-up Ecosystem" report, published in December 2024, India is home to over 100 unicorns, making it one of the world's top startup hubs.<sup>19</sup> Additionally, as the number of active internet users in India is projected to exceed 900 million by 2025,<sup>20</sup> the country's digital landscape is set for

<sup>15</sup> The US Embassy and Consulates in India (2023) FACT SHEET: United States and India Elevate Strategic Partnership with the initiative on Critical and Emerging Technology (iCET) further expansion. With this foundation, India is positioned to accelerate its rise as a global leader in technology and innovation, leveraging its young workforce to shape the future of the digital economy.

However, despite its growing digital rise and innovation potential, India faces several challenges that could hinder its long-term competitiveness. One of the key obstacles is India's limited integration into global supply chains, which restricts its ability to scale manufacturing and fully engage with the international innovation landscape. This is evident in the Production Linked Incentive scheme, under the Make in India programme, which is reportedly set to lapse after failing to meet its targets.<sup>21</sup> Furthermore, low investment in Research and Development (R&D), and heavy dependence on critical raw materials and advanced technologies continue to hold back progress.<sup>22</sup> These dependencies make international partnerships essential as India works to build a more self-reliant and resilient innovation ecosystem.

#### **Existing India-EU Partnership**

In 2020, the two jointly announced a roadmap for their Strategic Partnership through the years 2021-2025.<sup>23</sup> It set out objectives to work together in areas such as, digitalisation, sustainable modernisation and research and innovation.

<sup>&</sup>lt;sup>16</sup> Ministry of Electronics and IT (2023) <u>Cabinet</u> approves Memorandum of Cooperation between India and Japan on Japan-India Semiconductor Supply Chain Partnership

<sup>&</sup>lt;sup>17</sup> Indian Ministry of External Affairs (2024) <u>The UK-</u> India Technology Security Initiative

<sup>&</sup>lt;sup>18</sup> World Economic Forum (2024) <u>https://www.weforum.org/stories/2024/09/india-</u> role-in-the-intelligent-age/

 <sup>&</sup>lt;sup>19</sup> KPMG (2024) <u>Indian Startup Ecosystem Continues to</u> <u>Be on the Rise According to New Report</u>
<sup>20</sup> European Commission (2025) <u>Indian Startup</u> <u>Ecosystem - European Commission</u>
<sup>21</sup> Reuters (2025) <u>Exclusive: India's \$23 bln plan to rival</u> <u>China factories to lapse after it disappoints | Reuters</u>
<sup>22</sup> Clingendael (2023) <u>Strategic tech cooperation</u> <u>between the EU and India | Clingendael</u>
<sup>23</sup> European External Action Service (2020), EU-India Strategic Partnership: A Roadmap to 2025 <u>https://www.eeas.europa.eu/eeas/eu-india-strategicpartnership-roadmap-2025 en.</u>

In May of 2021, the EU-India Connectivity Partnership was announced in which digital and energy connectivity along with advancement of scientific cooperation with a focus on innovation, technology and skills.<sup>24</sup> The partnership also established a EU-India Digital Investment Forum, which aims to lower thresholds for private actors investing in respective markets. Against the backdrop of the 2021-2025 roadmap and the Connectivity Partnership, the two announced that a Trade and Technology Council (TTC) would be established in 2023.<sup>25</sup> The council is made up of three working groups: 1) strategic technologies, digital governance and digital connectivity, 2) green and clean energy technologies, and 3) resilient value chains, trade and investment.<sup>26</sup> The most significant outcome from the TTC to date is the Memorandum of Understanding (MoU) November 2023 signed in on semiconductors,<sup>27</sup> and a joint start-up collaboration on electric vehicle battery recycling.<sup>28</sup> In February 2025, the EU and India held the second ministerial meeting of the TTC in New Delhi, where both sides reaffirmed their commitment to strengthening their partnership through key

https://www.consilium.europa.eu/media/49522/euindia connectivity-factsheet 2021-05-final.pdf. <sup>25</sup> EU-India Trade and Technology Council (2024),<u>EU-India Trade and Technology Council | Epthinktank | European Parliament</u> initiatives in digital transformation, green energy, and resilient supply chains.<sup>29</sup>

Before the establishment of the TTC, EU-India digital cooperation had mainly been conducted between the Directorate-General for Communications Networks, Content and Technology (DG CONNECT) of the European Commission and India's Ministry of Electronics and IT (MeitY) and its Department of Telecommunications (DoT). There exists a Joint Working Group (JWG) between these parties on information and communications technologies. An intent of cooperation was also signed in November 2022 on High Performance Computing, Weather Extremes Climate Modelling and & Quantum Technologies.<sup>30</sup> The TTC shows growing recognition of mutual benefits from cooperation, untapped potential yet remains.

## India-EU Member States Bilateral Engagement

Much of the EU-India cooperation in emerging tech is occurring bilaterally with individual EU Member States. Reviewing Indian ministerial engagements with EU Member States in relevant sectors,<sup>31</sup> it

under Trade and Technology Council, Press Release, EU-India join forces to promote start-up collaboration on E-Vehicles Batteries under Trade and Technology Council - European Commission <sup>29</sup> European Commission (2025) Joint statement on the second meeting of the EU-India Trade and Technology Council <sup>30</sup> European Commission (2022) India and EU sign Intent for Cooperation agreement in high performance computing and quantum technologies

Shaping Europe's digital future <sup>31</sup> Ministry of Renewable Energy, Ministry of Electronics and IT, Ministry of External Affairs, Department of Biotechnology, Department of Telecommunications, Department of Scientific and

<sup>&</sup>lt;sup>24</sup> Council of the European Union (2021), EU-India Connectivity Partnership

<sup>&</sup>lt;sup>26</sup> Ibid

<sup>&</sup>lt;sup>27</sup> European Commission (2023), EU-India Connectivity Partnership: New Initiatives to Strengthen Bilateral Ties. Press Release IP/23/4380

https://ec.europa.eu/commission/presscorner/detail/ en/ip 23 4380.

<sup>&</sup>lt;sup>28</sup> European Commission (2024), *EU-India join forces to promote start-up collaboration on E-Vehicles Batteries* 

becomes clear that some type of cooperation is present with the majority of EU countries. In the review presented below, we list mechanisms and areas of engagement between India and EU Member States. The different mechanisms are grouped into larger "overarching mechanisms" involving largescale collaboration, such as partnerships or strategic roadmaps. Smaller mechanisms, such as joint working groups, joint centres, MoUs etc, have been labelled "specific mechanisms".

The tech areas in which the mechanisms are active are structured around a taxonomy from the Swedish Agency for Innovation (Vinnova). In its report on *Strategic* Techniques for Sweden, published in 2024, the agency has identified six key areas in critical technology: (1) Artificial intelligence and autonomous systems for societal transformation, (2) Advanced digital technology for productivity and security, (3) Quantum technology for security and industrial applications, (4) Energy technology for fossil-free electrification, (5) Materials and production technology for transformation, (6) Biotechnology for health and climate transition.<sup>32</sup>

The table below shows the mechanisms and areas of cooperation between India and EU Member States as mentioned by relevant ministries and departments annual reports from the years 2020-21 to 2023-24.

The table shows that there is some degree of cooperation and joint mechanisms with the majority of EU countries. The most common form takes shape through joint calls for research. The areas in which these joint research projects are generally not defined but often mentioned as "Science & Technology" (S&T). It should be noted that student exchanges have not been found in these reports. We have assumed that countries that are only mentioned once or rarely have a lower level of tech engagement with India. For example, Bulgaria, Czech Republic and Hungary are examples of countries mentioned, but where cooperation can be assumed at a rather low level and where joint research is the only noticeable collaboration.

The review however shows that out of the 17 countries mentioned, a few countries stand out. Denmark, Finland, France, Germany, Netherlands and Sweden all engage on a larger scale than the other countries in the table, although the areas of focus do vary. Indo-Danish cooperation focuses largely on green technology and sustainable development. Finland is viewed by the Indian side as a major partner in terms of S&T, where cooperation exists within quantum computing and telecom. France and Germany have bilateral joint S&T research centres (CEFIPRA and IGSTC) with India. With France, emphasis of cooperation lies on digital technology, such as cybersecurity and information technology, and more recently AI. German cooperation has mainly come in the area of green tech and sustainable development. The Netherlands is one of India's most significant partners in emerging

Industrial Research, Department of Science and Technology

<sup>&</sup>lt;sup>32</sup> VINNOVA (2024) Strategic Techniques for Sweden Strategically important areas within technology and innovation for Sweden | Vinnova



#### Table 1. Areas and mechanisms of engagement

Country Austria	Area Undefined	Overarching mechanismS Bilateral sustainable economic and technology partnership	Specific mechanisms Joint research
Belgium	2		Indo-Belgium Research and Tech Cooperation, JWGs, Joint research, MoUs
Bulgaria	Undefined		Joint research
Czech Republic	Undefined		Joint research
Denmark	4, 6	Green Strategic Partnership	Joint Action Plan 2021-2026, JWGs, PoC, Joint Centre of Excellence
Estonia	2		MoUs in Cybersecurity
Finland	2, 3, 4		Joint Centres, Joint S&T Committee, MoUs
France	2, 4, 6	Indo-French Roadmap on Cybersecurity and Digital Tech	Joint S&T Centres, MoUs, JWGs, InFinity
Germany	2, 4	Indo-German S&T Program, Partnership for Green & Sustainable Development	Joint S&T Centre, Task Force on Green Hydrogen, MoUs, JDI on Renewable Energy
Hungary	Undefined		Joint research
Italy	Undefined		Ss&T cooperation, Joint Action Plan 2024-2029
Netherlands	2, 3, 5, 6		S&T cooperation, Mission on Digital Key Enabling Tech, JWGs, PoC, MoUs, Indo-Dutch Semicon Opportunities, Indo-Dutch Quantum Landscape Study
Poland	Undefined		Joint research
portugal	Undefined		Joint tech-summit, MoU in S&T
Slovenia	4		Joint Committee on Technical & Economic cooperation, MoU in Renewable Energy, Joint research
Spain	4, 6		PoCs, Joint research
Sweden	2, 4, 6	Strategic Partnership (with VINNOVA)	Joint research, Innovation Day, MoUs, MoC, PoC

Source: author's own compilation of annual reports from India's Ministry of Renewable Energy, Ministry of Electronics and IT, Ministry of External Affairs, Department of Biotechnology, Department of Telecommunications, Department of Scientific & Industrial Research and Department of Science & Technology.

technologies. Besides substantial green cooperation, digital technologies are prominent in their partnerships. Cooperation in semiconductors and quantum is being explored, which is one of relatively few cases. Lastly of these six most prominent partners is Sweden. India's cooperation with Sweden comes widely in the form of cooperation between Sweden's agency for innovation (VINNOVA) and India's Department of Biotechnology and Science and Technology. This, for instance, materialises through the annual Indo-Swedish Innovation Day.

Belgium is a special case, as there are not a significant number of mechanisms found in the examined reports, yet MeitY has signed a substantial MoU with the Belgian semiconductor research and development organisation Interuniversity Microelectronics Centre (IMEC). It agreed, in 2022, to provide technical support in India's ambitions to create a semiconductor ecosystem. As this is a partnership with a private sector Belgian actor and public-public cooperation between India and Belgium was less developed, Belgium will be placed between the two circles of engagement. Additionally, India



and Poland initiated a Strategic Partnership after the latest examined report, with

emerging tech mentioned as a focus, thus not acknowledged in the analysis.



#### Figure 1. Circles of tech engagement

Source: Author's own compilation | Aspengren, H. C., Lidén, E. & Nordenstam, A. (2021 February). Circles of EU-India Engagement: How Member States Cooperate with India on Global Issues. UI Paper no. 1 <u>Circles of EU-India</u> <u>Engagement: How Member States Cooperate with India on Global Issues | Utrikespolitiska institutet</u>

#### Area focus

There are certain areas where cooperation is deeper than others. Advanced digital technology for productivity and security (area 2) shows widespread cooperation. This includes i.e. semiconductor cooperation (such as the MoU with Belgian-based IMEC or the Indo-Dutch Semicon Opportunities Study). It also includes the field of cybersecurity, prominent in Indo-French and Indo-Estonian cooperation. In addition, areas four and six show significant engagement. This is particularly stressed through the Indo-Danish Green Strategic Partnership and the Indo-German Partnership for Green and Sustainable Development. Moreover, a large proportion of the JWGs mentioned in the table above are related to these fields and renewable energy in particular. In quantum **U** brief

technology, the only documented collaborations were with the Netherlands and Finland, both involving joint centres or missions. It could be argued that these areas of focus are also represented through the Trade and Technology Council's working group where the first one focuses on strategic technologies, digital governance and digital connectivity and second one on green and clean energy technologies.

Cooperation within the field of AI remains limited. There are, however, some existing notable cases. For instance, one key aspect of the India-Italian Joint Strategic Action Plan 2025-2029,<sup>33</sup> announced in November 2024, aims to expand cooperation on critical and emerging technology and to foster a closer partnership on technology value chains in sectors including AI. In addition, following the AI Action Summit in Paris in February 2025, co-chaired by France and India, Prime Minister Modi and President Macron launched a roadmap for AI, aimed at developing safe and trustworthy AI. The India-France Declaration on AI highlights both nations' shared commitment to establishing global AI standards that uphold democratic values and foster technological progress for the benefit of society.<sup>34</sup> Despite the initiatives with Italy and France, there is a noticeable lack of substantial projects or joint initiatives observed. The rather shallow AIcooperation that exists could partly be explained by the different legislation that the EU and India have on the field of AI.

In May 2024, the EU passed the EU AI Act, which classifies AI systems into four risk levels: unacceptable, high, limited, and minimal. AI posing unacceptable risks, such as manipulative technologies and social scoring, is prohibited. Regulation eases as risk decreases, with minimal-risk AI largely unregulated.<sup>35</sup> Most regulatory obligations fall on developers of high-risk AI, a framework some argue may hinder innovation. In contrast, India has yet to implement comprehensive AI regulations, reflecting concerns that strict regulations might create issues.<sup>36</sup> However, with the lack of a clear regulation it seems as though largescale cooperation between the EU and India will continue to be small.

## The Way Ahead: Key Drivers for Enhanced Cooperation

The partnership between the EU and India in the technology sectors has the potential to transform global technological landscapes, strengthen supply chains, and spark innovation. For the EU, India offers a dynamic market and an opportunity to diversify supply chains, reducing dependency on China while tapping into India's growing talent pool and technological advancements. In turn, India stands to gain access to cutting-edge technologies, investment, and the regulatory expertise needed to develop a self-reliant tech landscape.

Yet, challenges remain. India is often seen as a challenging market for international companies, marked by a complex regulatory environment, high tariffs, inconsistent procurement policies, and overlapping standards from various authorities. These factors make it difficult for companies outside India to enter the market.<sup>37</sup> Moreover, different governance approaches, particularly around data privacy and technology transfer, highlight the need for greater alignment in regulatory frameworks.

<sup>&</sup>lt;sup>33</sup> Indian Ministry of External Affairs (2024) <u>Italy-India</u> Joint Strategic Action Plan 2025-2029

<sup>&</sup>lt;sup>34</sup> Indian Ministry of External Affairs (2025) <u>India-</u> <u>France Declaration on Artificial Intelligence (February</u> <u>12, 2025)</u>

 <sup>&</sup>lt;sup>35</sup> EU AI Act (2024) <u>High-level summary of the AI Act |</u>
<u>EU Artificial Intelligence Act</u>
<sup>36</sup> <u>India's Advance on AI Regulation | Carnegie</u>
<u>Endowment for International Peace</u>
<sup>37</sup> Clingendael (2023) <u>Strategic tech cooperation</u>
<u>between the EU and India | Clingendael</u>

For instance, the EU's emphasis on user rights and privacy contrasts with India's state-driven focus accelerating on technological growth, a difference that could progress.<sup>38</sup> Nevertheless, delay the complementarities between India's growing tech landscape and the EU's advanced technological expertise create a strong foundation for deeper cooperation. Moving forward, both sides must overcome these barriers by aligning their priorities. The EU and India must focus on building a more coordinated partnership that leverages their strengths to accelerate innovation, reduce dependencies on external actors, and establish a resilient technological landscape. With the right approach, this collaboration can not only benefit both sides but also advance global progress in vital technological fields.

To make the most of these opportunities and drive meaningful change, the following recommendations are put forward:

## (1) Establish an EU Coalition of the Willing

A group of six EU Member States, notably Germany. Sweden. Finland. France. Denmark, and the Netherlands, should take the lead in forming an EU Coalition of the Willing to drive EU-India cooperation in areas where strong partnerships already exist, such as semiconductors, cybersecurity and green technologies. These countries maintain a strong engagement with India across several critical technology domains, particularly on advanced digital and quantum technologies, energy and production technologies, and biotechnology.. Their mix of shared and distinct strengths creates a complementary and dynamic partnership, positioning them

well to lead more coordinated а collaboration with India.

The coalition could be established under the EU-India TTC framework, which offers a strategic and practical foundation for its creation. Areas of cooperation between these six countries and India align closely with the TTC's Working Groups, particularly Working Groups 1 and 2, which focus on digital governance, connectivity, and green technologies. This thematic alignment offers a natural path to elevate bilateral initiatives into a unified European approach, helping to enhance the EU engagement with India in critical sectors. It could also build on activities under the EU-India Digital Policy Dialogue, further linking the coalition's work to existing initiatives within the TTC. To strengthen coordination between Working Groups 1 and 2, the coalition could establish a crossworking task force, or a stakeholder platform, to integrate digital solutions with clean energy priorities, supporting the Free Trade Agreements (FTA) goals for digitalisation and sustainability.

The coalition should promote regular dialogue within the TTC framework to align and advance regulatory cooperation on key priorities such as digital governance, connectivity, and green technologies. This would help both sides address emerging challenges, align policies, and identify joint initiatives. This collaborative approach would allow the EU to leverage its technological strengths, supporting a more focused and effective partnership with India. In turn, the coalition could accelerate the India-EU relationship, fostering deeper cooperation, and delivering outcomes that benefit both partners.

While led by these six core Member States, the coalition should remain open to

<sup>&</sup>lt;sup>38</sup> European Union Institute for Security Studies (2024) EU-India relations - Gaining strategic traction? | **European Union Institute for Security Studies** 



participation from other EU Member States. To maintain transparency and inclusiveness, regular dialogue and reporting through the COASI platform would foster broader collaboration. This approach would further connect national-level initiatives with EU structures, ensuring impactful outcomes that deepen EU-India cooperation in key critical technology areas.

## (2) EU-India Innovation and Technology Dialogue / An EU-India Tech Hub

A dedicated EU-India Innovation and Technology Dialogue (EU-India Tech Hub) should be established as a platform for direct engagement with businesses, startups, and industry experts from both regions. This initiative would facilitate the exchange of ideas, insights, and practical solutions to address real-world challenges such as market access and regulatory barriers. Ensuring that the voices of the market actors are heard would foster a more grounded and effective collaboration. The Tech Hub would deepen mutual understanding of each region's technological capabilities, market dynamics and regulatory frameworks. This environment would enable business leaders innovators to identify common and challenges and explore solutions that accelerate growth, competitiveness, and innovation in the EU and Indian markets.

Partnering with BusinessEurope and the Federation of European Business in India (FEBI) would bring strong business representation, given their role as leading voices of European enterprises in EU and India. Their involvement would ensure industry needs and opportunities remain central to the dialogue which would strengthen the connection between the two markets. The Tech Hub would also collaborate with Horizon Europe, drawing on its support for research and innovation to drive joint projects that address shared priorities and global challenges. The inclusion of academia and research institutions would further strengthen this effort, connecting research with market needs. To ensure these practical insights reach key decision-makers, the active involvement of EU permanent representations would provide structured feedback directly back to the EU institutions and government officials. Together, these partnerships would help the Tech Hub reflect real-world priorities and strengthen EU-India innovation ties. The tech hub would connect market actors with governments, allowing them to play an active role in shaping the dialogue, decisions and direction of EU-India tech cooperation.

## (3) EU-India Talent and Innovation Exchange Program (TIEP)

A talent exchange initiative could be set up to create more opportunities for young professionals, experts, and businesses in the tech sector to move between the EU and India. This program would allow people at different stages of their careers, from graduates to experienced professionals, to gain valuable international experience by working in both regions. Through joint training, internships and research projects, participants would have the chance to learn from each other, exchange skills, and stay ahead in a rapidly evolving tech landscape.

By bringing together companies and universities from both regions, this exchange would offer participants the chance to work on real-world projects that have a direct impact on the tech industry. It would help them gain exposure to different business environments, technology trends, and innovation practices. Along the way, they would benefit from mentorship and handson experience, giving them the guidance they need to navigate challenges and



opportunities in both the EU and India's tech sectors. To ensure the effectiveness of the initiative, mapping the specific skills required in both regions and focusing on areas of significant potential for cooperation, such as AI and clean energy, would be key.

The initiative would also build on the mobility agreements already in place between India and EU Member States, such as Denmark's labor mobility deal<sup>39</sup>, Finland's MoU on talent mobility,<sup>40</sup> and the India-France Young Professionals Scheme<sup>41</sup>. These agreements already make it easier for people to move between the two regions, providing a foundation to expand this talent exchange. By combining India's growing talent pool with the EU's expertise in regulations, this program could create a highly skilled workforce, opening up new opportunities for innovation and strengthening the EU-India tech partnership for the long term. Feedback from participants, institutions, and businesses would ensure that the program stays relevant and effective, helping both regions grow their innovation capabilities and deepening their collaboration in the tech world.

To conclude, this brief has outlined current Indo-EU engagements in critical technologies, identified of areas convergence, and proposed actions to deepen cooperation. Key recommendations include forming a "coalition of the willing," establishing an EU-India Tech Hub, and launching a talent exchange program. Together, these initiatives aim to build a resilient, forward-looking partnership capable of shaping the global tech landscape.

<sup>41</sup> India Ministry of External Affairs (2025) <u>France Joint</u> <u>Statement on the visit of Shri Narendra Modi, Hon'ble</u> <u>Prime Minister of India to France (10-12 February</u> 2025)

<sup>&</sup>lt;sup>39</sup> European Commission (2024) <u>Denmark: New deal</u> with India on mobility and migration - European <u>Commission</u>

<sup>&</sup>lt;sup>40</sup> Business Finland (2023) <u>Finland Encourages Indian</u> <u>Tech Talent to Find a Home in the World's Happiest</u> <u>Country</u>



### About UI

Established in 1938, the Swedish Institute of International Affairs (UI) is an independent research institute on foreign affairs and international relations. Any views expressed in this publication are those of the author. They should not be interpreted as reflecting the views of the Swedish Institute of International Affairs. All manuscripts are reviewed by at least two other experts in the field. Copyright of this publication is held by UI. You may not copy, reproduce, republish or circulate in any way the content from this publication except for your own personal and non-commercial use. Any other use requires the prior written permission of UI.

The Swedish Institute of International Affairs Visiting Address: Amiralitetsbacken 1, 111 49 Stockholm Postal Address: Box 3163, 103 63 Stockholm Phone: +46 8 511 768 00 www.ui.se info@ui.se X: @UISweden