Select list of science and technology policies

United States, Japan, South Korea, Taiwan, Australia, Singapore and India

(Compiled under direction of the authors by Nachiket Javali, Asia Society Policy Institute)

Criteria #1: Only the following types of policies have been included: 1) Legislations passed by parliament 2) Policy announced by the national government 3) Blueprints published by national governments (e.g. Roadmap, Strategy, Framework, Vision)

Criteria #2: Only policies published by the following ministries have been included: 1) Foreign Affairs/External Affairs 2) Commerce, Trade or Industry 4) Home Affairs/Internal Affairs 5) Science, Technology, Innovation, Electronics, Information Technology 6) President/Prime Minister/Cabinet Office

Criteria #3: Only the United States and the following Asian countries have been included: 1) Japan 2) South Korea 3) Taiwan 4) Australia 5) Singapore 6) India

Criteria #4: Only policies announced after January 1, 2020.

Criteria #5: Only policies related to the following domains of science and technology have been included 1) Cybersecurity 2) Data, 3) Quantum 4) Biotechnology 5) Artificial Intelligence 6) Digital Economy/Trade 7) Electronics 6) Internet 7) Telecommunications 8) Supercomputing 9) Space/Geospatial 10) Robotics 11) Green, Climate, Sustainable, Energy

United States of America

S.No.	Policy	Document	Year	Concerned Public Office
1.	IoT Cybersecurity Improvement Act of 2020	Legislation	2020	National Institute of Standards and Technology, Department of Commerce
2.	K-12 Cybersecurity Act of 2021	Legislation	2021	Cybersecurity and Infrastructure Security Agency, Department of Homeland Security
3.	Enterprise Data Strategy	Strategy	2021	Department of State
4.	Geospatial Data Strategy	Strategy	2021	Department of State
5.	National Cybersecurity Preparedness Consortium Act of 2021	Legislation	2022	Department of Homeland Security
6.	State and Local Government Cybersecurity Act of 2021	Legislation	2022	National Cybersecurity and Communications Integration Center, Department of Homeland Security
7.	Chips and Science Act	Legislation	2022	Department of Commerce
8.	Commerce Data Ethics Framework	Framework	2022	Department of Commerce
9.	AI Risk Management Framework	Policy	2023	National Institute of Standards and Technology, Department of Commerce
10.	Enterprise AI Strategy	Policy	2023	US Department of State
11.	United States International Cyberspace and Digital Policy Strategy	Policy	2024	US Department of State
12.	Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government	Executive Order	2020	Executive Office of the President
13.	Ensuring Safe and Lawful E-Commerce for United States Consumers, Businesses, Government Supply Chains, and Intellectual Property Rights Holders	Executive Order	2020	Executive Office of the President

14.	<u>United States Space Priorities Framework</u>	Strategy		Executive Office of the President
15.	Executive Order on Improving the Nation's Cybersecurity	Executive Order	2021	Executive Office of the President
16.	Executive Order on America's Supply Chains	Executive Order	2021	Executive Office of the President
17.	Executive Order on Ensuring Responsible Development of Digital Assets	Executive Order	2022	Executive Office of the President
18.	Executive Order on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy	Policy	2022	Executive Office of the President
19.	Blueprint for an AI Bill of Rights	Strategy	2022	Office of Science and Technology Policy, Executive Office of the President
20.	National Cybersecurity Strategy	Strategy	2023	Executive Office Of The President
21.	National Cyber Workforce & Education Strategy	Strategy	2023	Office Of The National Cyber Director, Executive Office Of The President
22.	Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence	Executive Order	2023	Executive Office of the President

JAPAN

S.No.	Policy	<u>Document</u>	Year	Concerned Public Office
23.	IoT Security Safety Framework Ver1.0	Policy	N/A	Ministry of Economy, Trade and Industry
24.	Act on Improving Transparency and Fairness of Digital Platforms	Legislation	2020	Ministry of Economy, Trade and Industry
25.	Act on the Establishment of the Digital Agency	Legislation	2021	Digital Agency, Ministry of Digital <u>Transformation</u>
26.	Basic Act on the Formation of a Digital Society*	Legislation	2021	Prime Minister's Office
27.	Data Management Framework for Collaborative Data Utilization – A New Approach toward an Establishment of Trust in a Data- Driven Value Creation	Framework	2022	Ministry of Economy, Trade and Industry
28.	Act on Making Payments That Become Part of the National Revenue by the Method Using Information and Communications Technology	Legislation	2022	Digital Agency, Ministry of Digital <u>Transformation</u>

SOUTH KOREA

<u>S. No.</u>	Policy	<u>Document</u>	Year	Concerned Public Office
29.	Enforcement Decree Of The Framework Act On National Informatization	Legislation	2020	Ministry of Science and ICT
30.	Mobile Device Distribution Improvement Act	Legislation	2020	Ministry of Science and ICT
31.	Framework Act On Intelligent Informatization	Legislation	2020	Ministry of Science and ICT
32.	Korea Advanced Institute Of Science And Technology Act	Legislation	2020	Ministry of Science and ICT
33.	National Research Foundation Of Korea Act	Legislation	2021	Ministry of Science and ICT
34.	Framework Act On Electronic Documents And Transactions	Legislation	2021	Ministry of Science and ICT
35.	Framework Act On Promotion Of Data Industry And Data Utilation	Legislation	2021	Ministry of Science and ICT
36.	Special Act On Establishment Of And Support For International Science And Business Belt	Legislation	2021	Ministry of Science and ICT

37.	Biotechnology Support Act	Legislation	2021	Ministry of Science and ICT
38.	Special Act On The Promotion Of High-Tech Medical Complexes	Legislation	2021	Ministry of Science and ICT
39.	Act On The Promotion And Management Of Non-Destructive Testing Technology	Legislation	2021	Ministry of Science and ICT
40.	Radio Waves Act	Legislation	2022	Ministry of Science and ICT
41.	Internet Multimedia Broadcasting Business Act	Legislation	2022	Ministry of Science and ICT
42.	Framework Act On Intellectual Property	Legislation	2022	Ministry of Science and ICT
43.	Basic Research Promotion And Technology Development Support Act	Legislation	2022	Ministry of Science and ICT
44.	Internet Address Resources Act	Legislation	2022	Ministry of Science and ICT
45.	Act On Promotion Of Technology Development For Coping With Climate Change	Legislation	2022	Ministry of Science and ICT
46.	Act On The Protection Of Information And Communications Infrastructure	Legislation	2022	Ministry of Science and ICT
47.	Act On Utilization And Fostering Of National Super-Computers	Legislation	2022	Ministry of Science and ICT
48.	Special Act On The Fostering Of National Strategic Technology	Policy	<u>2023</u>	Ministry of Science and ICT
49.	Strategic Roadmap For Artificial Intelligence And Advanced Biotechnology	Policy	2023	Ministry of Science and ICT
50.	Framework Act On Science And Technology	Legislation	2023	Ministry of Science and ICT
51.	Three-Dimensional Printing Industry Promotion Act	Legislation	2023	Ministry of Science and ICT
52.	Act On The Establishment, Operation And Fostering Of Government-Funded Science And Technology Research Institutes	Legislation	2023	Ministry of Science and ICT
53.	Act On The Establishment, Operation And Fostering Of Government-Funded Science And Technology Research Institutes	Legislation	2023	Ministry of Science and ICT
54.	Act On The Establishment Of Safe Laboratory Environment	Legislation	2023	Ministry of Science and ICT
55.	Brain Research Promotion Act	Legislation	2023	Ministry of Science and ICT
56.	Software Promotion Act	Legislation	2023	Ministry of Science and ICT
57.	Space Development Promotion Act	Legislation	2023	Ministry of Science and ICT
58.	National Research And Development Innovation Act	Legislation	2023	Ministry of Science and ICT
59.	Ulsan National Institute Of Science And Technology Act	Legislation	2023	Ministry of Science and ICT
60.	Nuclear Energy Promotion Act	Legislation	2023	Ministry of Science and ICT
61.	Digital Signature Act	Legislation	2021	Ministry of Science and ICT
62.	Presidential Advisory Council On Science And Technology Act	Legislation	2021	Ministry of Science and ICT
63.	Act On The Promotion Of Information Security Industry	Legislation	2023	Ministry of Science and ICT

64.	Special Act On Promotion Of Information And Communications Technology And Vitalization Of Convergence Thereof	Legislation	<u>2023</u>	Ministry of Science and ICT
65.	Information And Communications Technology Industry Promotion Act	Legislation	2023	Ministry of Science and ICT
66.	Act On The Development Of Cloud Computing And Protection Of Its Users	Legislation	2022	Ministry of Science and ICT
67.	National Research And Development Innovation Act	Legislation	2023	Ministry of Science and ICT
68.	Korea's National Quantum Strategy	Policy	2023	Ministry of Science and ICT
69.	Ethical Principles For The Metaverse	Policy	2023	Ministry of Science and ICT
70.	Digital Bill Of Rights	Policy	2024	Ministry of Science and ICT
71.	Daegu Gyeongbuk Institute Of Science And Technology Act	Legislation	2024	Ministry of Science and ICT
72.	National Strategic Technology Development Basic Plan	Policy	<u>2024</u>	Ministry of Science and ICT
73.	Act On Promotion Of Information And Communications Network <u>Utilization And Information Protection</u>	Legislation	2024	Ministry of Science and ICT
74.	Gwangju Institute Of Science And Technology Act	Legislation	<u>2024</u>	Ministry of Science and ICT

TAIWAN

<u>S. No.</u>	Policy	<u>Document</u>	Year	Concerned Public Office
75.	Organization Act of the Administration for Cyber Security, Ministry of Digital Affairs	Legislation	2022	Ministry of Digital Affairs
76.	Act for the Establishment of the National Institute of Cyber Security	Legislation	2022	Ministry of Digital Affairs
77.	Organization Act of the Ministry of Digital Affairs	Legislation	2022	Ministry of Digital Affairs
78.	Organization Act of the Administration for Digital Industries, Ministry of Digital Affairs	Legislation	2022	Ministry of Digital Affairs
79.	Electronic Signatures Act	Legislation	2024	Ministry of Digital Affairs

AUSTRALIA

S. No.	Policy	Document	Year	Concerned Public Office
80.	Australia's Cyber Security Strategy	Strategy	2020	Department of Home Affairs
81.	Australian Security Intelligence Organization Amendment Act 2020	Legislation	2020	Department of Home Affairs
82.	Technology Strategy <u>2020</u>	Strategy	2020	Formerly Department of Immigration and Border Protection, now merged with Department of Home Affairs
83.	Data <u>Strategy</u> 2021-2024	Strategy	2021	Department of Industry, Science and Resources
84.	Industry Research and Development Amendment (Industry Innovation and Science Australia) Act 2021	Legislation	2021	Department of Industry, Science and Resources
85.	Australia's International Cyber and Critical Technology Engagement Strategy, 2021	Strategy	2021	Department of Foreign Affairs and Trade
86.	Security Legislation Amendment (Critical Infrastructure) Act 2021	Legislation	2021	Department of Home Affairs

87.	Ransomware Action Plan	Policy	2021	Department of Home Affairs
88.	Digital Trade Strategy	Strategy	2022	Department of Foreign Affairs and Trade
89.	Security Legislation Amendment (Critical Infrastructure Protection) Act 2022	Legislation	2022	Department of Home Affairs
90.	Critical Technologies <u>Statement</u>	Policy	2023	Department of Industry, Science and Resources
91.	National Quantum <u>Strategy</u>	Policy	<u>2023</u>	Department of Industry, Science and Resources
92.	2023-2030 Australian Cyber Security Strategy	Policy	2023	Department of Home Affairs
93.	National Robotics <u>Strategy</u>	Strategy	2024	Department of Industry, Science and Resources
94.	National Battery <u>Strategy</u>	Strategy	2024	Department of Industry, Science and Resources

SINGAPORE

S.No.	Policy	Document	Year	Concerned Public Office
95.	Digital Government Blueprint	Policy	2020	Ministry of Digital Development and Information
96.	An Act to amend the Personal Data Protection Act 2012	Legislation	2020	Ministry of Digital Development and Information
97.	Singapore's Safer Cyberspace Masterplan 2020	Policy	2020	<u>Cybersecurity</u> Agency of Singapore, Ministry of Digital Development and Information
98.	Singapore Cybersecurity Strategy	Policy	2021	Smart Nation Singapore, Ministry of Digital Development and Information
99.	Online Criminal Harms Bill	Legislation	2023	Ministry of Home Affairs
100.	Singapore's Digital Connectivity Blueprint	Policy	2023	Ministry of <u>Digital</u> Development and Information
101.	Digital Enterprise Blueprint 2024	Policy	2024	Ministry of Digital Development and Information
102.	Singapore's National AI Strategy	Strategy	2023	Ministry of Digital Development and Information (formerly Ministry of Communication and Information)

INDIA

S.No.	Policy	<u>Document</u>	<u>Year</u>	Concerned Public Office
103.	National Geospatial Policy	Policy	2022	Ministry of Science and Technology
104.	The Digital Personal Data Protection Act, <u>2023</u>	Legislation	2023	Ministry of Electronics and Information Technology
105.	The Anusandhan National Research Foundation Act, 2023	Legislation	2023	Ministry of Science and Technology
106.	India AI Mission	Policy	2024	Ministry of Electronics and Information Technology
107.	National Strategy on <u>Blockchain</u>	Strategy	2021	Ministry Of Electronics & Information Technology
108.	National <u>Data</u> Governance Framework Policy	Policy	2022	Ministry of Electronics and Information Technology

109.	National Deep Tech Startup Policy (NDTSP)	Policy	2023	Office of the Principal Scientific Adviser, Prime Minister's Office Ministry of Electronics and Information Technology Department of Biotechnology, Ministry of Science and Technology
110.	National Quantum Mission	Policy	2023	Ministry of Science and Technology Office of the Principal Scientific Adviser, Prime Minister's Office
111.	E-Mobility R&D Roadmap	Policy	2024	Office of the Principal Scientific Adviser, Prime Minister's Office