

# Technology Market Scan

## INTERNATIONAL

### Multiple-central bank digital currency

In a collaborative effort of the BIS Innovation Hub, four founding central banks and over 25 observing members started Project mBridge. The founding central banks are the Hong Kong Monetary Authority, the Central Bank of the United Arab Emirates, the Digital Currency Institute of the People's Bank of China, and the Bank of Thailand.

For Project mBridge, a platform based on a new blockchain – the mBridge Ledger – was built by central banks to support real-time, peer-to-peer, cross-border payments and foreign exchange transactions using CBDCs, focusing on the use case of international trade. It also ensures compliance with jurisdiction-specific policy and legal requirements, regulations, and governance needs. In 2022, a pilot involving real corporate transactions was conducted on the platform among participating central banks, selected commercial banks, and their corporate customers in four jurisdictions.

Project mBridge experiments with a multi-central bank digital currency (multi-CBDC) common platform for wholesale cross-border payments. It seeks to solve some of the key inefficiencies of cross-border payments, such as high costs, low speed and transparency, and operational complexities. At the same time, the project aims to safeguard currency sovereignty and monetary and financial stability for each participating jurisdiction, guided by the principles of “do no harm”, compliance, and interoperability. Project mBridge’s platform is underpinned by custom-built distributed ledger technology (DLT), a set of comprehensive legal rulebook documents, and a fit-for-purpose governance structure.

<https://www.bis.org>

## ASIA-PACIFIC

### ASEAN roadmap for digital education

Indonesia hosted ASEAN’s Second Regional Meeting on Roadmap on Declaration on Digital Transformation of Education Systems on August 8 in Surabaya, East Java. A total of three key agenda items were discussed at the meeting: the Post Transforming Education Summit 2022: How the world reaffirms digital learning and transformation; a presentation by ASEAN member states (AMS) on the strategy to incorporate digital transformation in the education system; and the AMS overview on the Roadmap on Declaration on Digital Transformation of Education Systems in ASEAN.

The development of this roadmap is a joint effort among ASEAN member countries, with support from the ASEAN Secretariat. During the pandemic, digital technology was initially used to ensure that the teaching and learning processes could continue during the closure of some or all schools. As it developed, education stakeholders grew to realize the potential of digital technology in accelerating the education sector’s recovery and in resuming the efforts to realize Sustainable Development 4 on Quality Education.

Indonesia consistently fights for transformation at all levels of education. During last year’s G20 [Group of 20] presidency, Indonesia put forward the importance of using ICT in education to support learning recovery and to create more inclusive and relevant education.

The preparation of a roadmap is carried out to realize the commitments outlined in the Declaration on the Digital Transformation of Education Systems in ASEAN. This road map also serves as a tool for ASEAN countries to achieve the digital transformation goals in the education sector through agreed key areas, common milestones,

indicative timeframes, and potential partners. The bloc’s 2025 vision underscored the importance of skills and knowledge in the digital era, with education being the cornerstone of the vision of an inclusive ASEAN. ASEAN Community Vision 2025 puts forward efforts to increase regional integration and connectivity through digital technology and encourages a collaborative education ecosystem to support the exchange of knowledge among institutions, educators, and students throughout ASEAN. The ASEAN Declaration on Human Resources Development for the Changing World of Work recognizes the dynamic nature of the modern workforce and the imperative for continuous skills upgrading and training, given that digital transformation plays a role in reshaping industries and job markets.

<https://www.thejakartapost.com>

## AUSTRALIA

### Data and digital strategy

The Australian government has published a new digital and data strategy that sets a clear vision for delivering connected public services through 2030.

The Data and Digital Government Strategy outlines five missions to accelerate transformation across the Australian Public Service (APS), focusing on delivering simple and seamless services for all people and businesses, embedding solid foundations for trusted and secure digital and data, and calibrating government so that it is fit for the future.

The government said the strategy represents the first time it has a unified blueprint for how it will maximize the value of its data holdings and digital capabilities. It is accompanied by an implementation plan which includes whole-of-government scorecards for unprecedented accountability.

Minister for Finance and the Public Service, Katy Gallagher, said she wants to ensure the APS is keeping up with technology and adopting leading-edge practices while ensuring services are inclusive and accessible. “We want to provide better services that are easy to use, that save people time and money, and that are safe and secure,” she said.

Chris Fechner, CEO of the Digital Transformation Agency, said the strategy “represents the maturing of the Australian government’s digital transformation and the recognition of data and digital as vital to delivering for people and business.” He added: “Going forward, the strategy provides a blueprint for government investments in data and digital to be coordinated, driving greater impact and effectiveness, and revealing where future efforts should be focused.”

The government said achieving the 2030 vision would require an ongoing commitment and it would need to “build our data and digital expertise within the APS, and more effectively partner with industry, the community sector and academia to deliver for the Australian public”.

<https://www.globalgovernmentforum.com>

## Telecommunications and disaster resilience program

The Telecommunications Disaster Resilience Innovation (TDRI) Program will encourage the development and deployment of innovative, new, or emerging technologies and/or solutions that will improve the resiliency of telecommunications against the impacts of natural disasters. The TDRI Program Innovation Round will focus on funding innovative telecommunications technologies that will improve the resiliency, redundancy, and availability of telecommunications during and/or following a natural disaster. The Innovation Round has three focus areas:

- Deployable telecommunications solutions
- Satellite connectivity
- Enhanced situational awareness

The objective of the TDRI program is to improve the preparedness of Australia’s telecommunications networks against

rising climate risks, including against an anticipated increase in the frequency and severity of natural hazards in Australia, by:

- Supporting and accelerating the development and deployment of innovative, new, or emerging technologies that will improve the resiliency of telecommunications, particularly in rural, regional, remote, or First Nations communities;
  - Demonstrating the benefits of emerging telecommunications technologies in improving disaster resiliency outcomes; and
  - Encouraging greater collaboration and partnerships between industry and government stakeholders on telecommunications disaster resilience matters
- The intended outcomes of the program are:
- Expedited adoption of emerging telecommunications technologies in Australia that will improve disaster resilience outcomes for Australian communities (including through preventing outages and/or supporting the rapid restoration of services following an outage); and
  - Reduced instances of telecommunications outages during natural disaster events, including reduced instances of communities being isolated and unable to contact Triple Zero services or access other critical services/supports such as disaster financial assistance.

<https://www.advance-africa.com>

## BANGLADESH

### Phygital public infrastructure

Digital Public Infrastructure holds the potential to benefit every country, provided it can effectively tailor the concept to its specific context and unique national needs. Unlike physical infrastructure, which has limited construction methods, DPI presents virtually limitless possibilities. In its pursuit of establishing a frugal and inclusive DPI, Bangladesh has adopted this searcher approach, drawing inspiration from India Stack, Estonia’s X-Road, and Sin-

gapore’s Moments of Life initiative, among others.

Bangladesh’s “phygital public infrastructure” is characterized by two key elements: Identifying Services as the Entry Point: Bangladesh has recognized services as the gateway to DPI, making the concept more accessible and relatable to policymakers and citizens alike. Expanding DPI to include an additional Access Layer: This layer encompasses physical locations and call centers, enhancing DPI accessibility for persons with disabilities and disadvantaged individuals residing in remote rural areas.

With a focus on open, modular architecture and the use of open source where possible, Bangladesh’s “phygital public infrastructure” now encompasses all three DPI layers: Identity (ID), Payments, and Data Exchange.

<https://govinsider.asia>

### Digital bank guideline

The board of the Bangladesh Bank has approved the Digital Bank guideline keeping provision for paid-up capital at Tk125 crore. The license of the Digital Bank will be given under the Banking Company Act 1991. The payment service will be operated under the Bangladesh Payment and Settlement System Regulations, 2014, according to the approved guidelines.

The minimum shareholding of each sponsor will be Tk50 lakh (maximum 10% or Tk12.5 crore), according to the digital bank guideline. The ceiling of 10%, in consultation with the government, may be relaxed in case of a digital bank formed as a joint venture of banks, financial institutes, microfinance institutions, MFS providers, fintech companies, and technology firms or for a needed special case.

Digital banking is part of the broader context for the move to online banking, where banking services are delivered via the Internet. The major difference is digital banks will have only headquarters, and no other physical presence while conventional banks have physical presence across the country. The business, e-governance and operational requirements applicable to traditional banks in general shall continue

to apply to digital banks, according to the guideline

The central bank is going to introduce digital banks in Bangladesh at a time when new-generation banks across the globe are turning away from traditional brick-and-mortar banks in favor of digital banking. At present, the banking sector is oversaturated with 61 conventional banks in Bangladesh.

At present, Nagad, the country's second-largest Mobile Financial Service (MFS) provider, is planning to set up a digital bank. Nagad first approached the Bangladesh Bank for a digital bank license in 2020 and following that the regulator moved to formulate guidelines in this regard.

<https://www.tbsnews.net>

### Innovation initiative

On December 12, 2022, Prime Minister Sheikh Hasina announced the vision to build a Smart Bangladesh by 2041. The vision rests on four fundamental pillars: Smart Citizen, Smart Economy, Smart Governance, and Smart Society. The journey towards Smart Bangladesh is planned to unfold over 18 years, starting from 2023 to 2041.

Aspire to Innovate (a2i) of the Cabinet Division and ICT Division, supported by the United Nations Development Program (UNDP), is working towards simplifying citizen services and making them more accessible by using modern and integrated information technology. Simultaneously, efforts are underway to develop services tailored to the specific needs of individual citizens. The a2i initiative and its associated projects have received over 17 national and international awards, demonstrating their commitment to technology-dependent services and innovation for Smart Bangladesh development.

Aspire to Innovate - a2i has received prestigious awards from the United Nations. Their 'Covid-19 Telehealth Centre' initiative has earned them the 'World Summit on the Information Society (WSIS) Prize-2023' for their remarkable work on the international stage. In addition, their 'ekShop' platform has been awarded the 'SDG Digital Game Changer Award' by the United Nations, for its contribution to extending e-commerce

services to both rural and urban areas and breaking down the distance barrier. a2i has also been recognized with the 'WITSA 2023 Global Innovation and Technology Excellence Awards' for their excellence in skill development and education through online platforms like 'National Intelligence Employment and Entrepreneurship (NISE)' and 'MuktoPaath.'

Agency to Innovate (a2i)- 2023 act has been passed in the National Parliament. The "Agency to Innovate (a2i) Act" was passed in the eleventh National Parliament with the aim of establishing the Agency to Innovate (a2i) in order to enhance citizen services and foster an innovative culture in the country. In 2009, following the establishment of the government, the Access to Information (a2i) initiative was created as part of the "Digital Bangladesh" project, which was funded by the UNDP to oversee digital initiatives in Bangladesh. In 2018, a2i was placed under the Information and Communication Technology Division and the Ministry Division for project implementation as per the Prime Minister's directives. Recently, in 2020, the "Aspire to Innovate (a2i)" project began, and a2i is gearing up to become an information technology policy agency.

The initiative aims to bridge global digital divides and promote inclusivity in technology. In addition to knowledge exchange to reduce digital disparities in countries lagging behind in technology, the E-Quality Centre has already established the I-3 Matching Fund, which provides financial support to innovative projects. The fund has already provided financial assistance to five countries, including Gambia, Uganda, Sao Tome and Principe, Somalia, and Ghana.

<https://www.dhakatribune.com>

### BHUTAN

#### Blockchain-based digital identity system

Bhutan has decided to roll out a national digital identity system for all its citizens. National Digital ID is the platform on which digitization and online

services of banks to hospitals to taxation to universities, everything can come online. The national ID system has been built using blockchain technology, which will provide each individual a self-sovereign identity, meaning it can only be controlled by the citizen and no other entity, similar to how cryptocurrencies work. The country's crown prince, Jigme Namgyel Wangchuck, was the first to enroll in the new system, and it is expected to reach the rest of the population within the year, Dahal said.

With self-sovereign identity, the person would have verified credentials in one's wallet, and in phone. Nobody can access it. The onboarding process takes about 5 seconds. People have to download an app; and share their details, selfies, and national ID card. This timeline would differ for people who don't have smartphones or require assistance.

During Parliament's discussion on the digital ID bill, lawmakers received a total of 55 recommendations, with privacy among the major concerns. Since self-sovereignty ensures only the individual has the right to disclose their credentials, it should keep such concerns at bay. Now, it's up to the individual if I don't want service from the bank, I won't share my credentials. If I do share it, it's with one's consent. If a phone is lost, there's a process to recover the ID from a cloud but only the individual has the right to recover it from the government or any other entity.

<https://restofworld.org/2023>

### CHINA

#### Blueprint for digital development through 2035

The Communist Party of China (CPC) Central Committee and the State Council unveiled the blueprint and timeline for the construction of a "digital China" through strengthening 5G and computing. Building a "digital China" is an important engine for promoting Chinese-style modernization in the digital age, and it is strong support for building new advantages in global competition. It is of great significance and will

have a far-reaching impact on the construction of a socialist modern country and comprehensively promoting the great rejuvenation of the Chinese nation, read the guidelines.

The guidelines set a specific timeline for China's digital construction through 2035. By 2025, the digital infrastructure will be efficiently connected through a broad range of sectors, and China will become a global leader in digital innovations. And by 2035, the level of digital development in China will enter the forefront of the world.

Major technology breakthroughs are highlighted in the document, which vows to strengthen the "key capabilities" of building a "digital China." Moreover, the guidelines also call for building a credible and manageable digital security apparatus, to maintain network security through improving the system of network security laws, regulations, and policies.

The guidelines call for an open and win-win international cooperation regime in the digital field, calling for overall plans for international cooperation in the digital field. "We will expand the space for international cooperation in the digital field, actively participate in digital cooperation platforms under multilateral frameworks such as the United Nations, the World Trade Organization, the G20, APEC, BRICS, and the Shanghai Cooperation Organization, and build a new platform for open cooperation in the digital field with high quality," read the guidelines.

<https://www.globaltimes.cn>

### Action plan for metaverse industry development

On September 11, 2023, China's Ministry of Industry and Information Technology (MIIT) along with other four departments unveiled the ambitious Three-Year Action Plan for the Industrial Innovation and Development of the Metaverse (2023-2025) (hereinafter referred to as the "action plan" or "plan").

This document outlines China's visionary approach to metaverse industry development, with a focus on establishing "three to five industrial clusters" that revolve around emerging technologies. These clusters will serve as

central hubs, driving innovation and governance structures within the realm of the next-generation internet, characterized by immersive three-dimensional spaces.

The action plan, spanning the period from 2023 to 2025, underscores the versatile application of the metaverse across various sectors, including but not limited to home appliances, automotive, and aerospace industries. Furthermore, traditional manufacturing sectors, such as steel and textiles, can harness related technologies to optimize critical processes, including scheduling and material calculations, thereby enhancing their overall production procedures, as articulated in the plan.

At its core, the plan introduces five key tasks, which serve as the pillars of its strategy: Building advanced metaverse technologies and industrial systems: This task emphasizes the integration and innovation of critical technologies like artificial intelligence, blockchain, cloud computing, and virtual reality within the metaverse landscape. It places a strong focus on advancing key technologies, including intelligent generation algorithms, distributed identity authentication, and data asset circulation. Additionally, it seeks to develop fundamental software components, such as metaverse-specific operating systems and middleware, contributing to the creation of a unified metaverse development platform.

<https://www.china-briefing.com>

## INDIA

### Digital India Bill 2023

The Digital India Bill 2023 aims to replace India's existing Information Technology Act of 2000 and provide comprehensive oversight of the digital landscape. It seeks to address modern challenges like cybercrime, data protection, deepfakes, and online safety. The Bill introduces a classification system for intermediaries based on risk and size, allowing tailored regulations. It proposes a dedicated internet regulatory authority for effective governance. However, debates have arisen concerning certain provisions, particularly regarding safe harbor, granting

legal immunity to intermediaries for user-generated content, with stakeholders having different views on the Bill's scope and applicability.

The upcoming Digital India Bill 2023 is set to replace India's existing Information Technology Act (IT Act) of 2000. This new legislation has been designed to establish comprehensive oversight over India's digital landscape, effectively tackling contemporary challenges like cybercrime, data protection, deepfakes, competition among internet platforms, online safety, and the negative impact of artificial intelligence (AI).

This move is expected to have significant implications for businesses operating in India's digital landscape. Aligned with India's goal of achieving a US\$1 trillion digital economy by 2025-26, the Digital India Bill aims to foster global innovation, and entrepreneurship, and establish India as a trusted player in the global digital value chains.

Recent reports suggest that the draft of the Digital India Bill will soon be released for public consultation by the federal government. This move is expected to have significant implications for businesses operating in India's digital landscape.

Aligned with India's goal of achieving a US\$1 trillion digital economy by 2025-26, the Digital India Bill aims to foster global innovation, and entrepreneurship, and establish India as a trusted player in the global digital value chains. The draft of the Digital India Bill will be released for public consultation by the federal government.

The primary objective of the Digital India Bill is to streamline and unify existing laws concerning the digital domain. It must be noted that this Bill will work in conjunction with other notable legislation and policies, such as the Digital Personal Data Protection Act, the National Data Governance Policy, the Indian Penal Code amendments for cybercrime, etc. Together, these laws and policies are set to establish a comprehensive framework aimed at governing different facets of the digital sphere in India.

<https://www.india-briefing.com>

## Digital public infrastructure repository

India's Ministry of Electronics and Information Technology (MeitY) has created the Global Digital Public Infrastructure Repository – a collection of code created by governments, and made freely available to other nations. Digital public infrastructure (DPI) is a signature policy of India's government, which has championed the idea that governments should open source their own apps so that other nations can more quickly create digital services by re-using existing code.

Sharing Indian projects like the Aadhaar digital identity framework, or the Unified Payments Interface – both of which are proven to operate at a billion-user scale – is seen as a way for India to enhance its relationships with other nations.

While launching the repository, Indian Prime Minister Narendra Modi advanced the cause of DPI by also announcing India has chipped in \$25 million to a "Social Impact Fund" – billed as a "government-led, multistakeholder initiative to fast-track DPI implementation in the global south." The fund was described as a platform to help accelerate the achievement of Sustainable Development Goals in Low- and Middle-Income Countries through DPIs and will offer financial support to assist to develop and implement DPIs.

<https://www.theregister.com>

## Digital public infrastructure for climate finance

India is at the forefront of a groundbreaking initiative, poised to merge the forces of technology and ecology. The government, in collaboration with Niti Aayog, is developing a Digital Public Infrastructure (DPI) for climate finance. This endeavor is more than an advancement in environmental strategy; it's a blueprint for sustainable growth, signaling India's role as a pioneer in the global narrative of digital-led environmental sustainability.

In the aftermath of climate-induced disasters, the DPI is envisioned to play a critical role in providing immediate financial relief to those affected. DPIs

which enable direct digital payments can assist those persons affected by extreme weather events and who may not have ready access to banks and other physical infrastructure, highlighting the infrastructural advantage in times of crisis.

Niti Aayog's strategic involvement Niti Aayog is not merely a facilitator but a strategic collaborator in this initiative. Their role extends to policy integration and active stakeholder engagement. "NITI Aayog today is playing an active collaborative role by engaging with stakeholders about issues and measures for DPI integration in India's development. This involves a series of workshops and discussions, aiming to calibrate India's policies toward a sustainable and low-carbon future.

With the DPI, India aims to improve carbon trading markets' transparency and effectiveness, bolster forest conservation efforts through better data monitoring, and enhance weather prediction systems. Such measures are crucial as India confronts the increasing impact of climate change, underscored by reports ranking nine Indian states among the world's most at-risk regions. A sustainable blueprint for tomorrow India's DPI for climate initiatives represents a fusion of digital innovation with environmental responsibility. It is a blueprint for a sustainable future, one that promises a more resilient infrastructure capable of withstanding and responding to the climate challenges ahead. This initiative by India, in collaboration with Niti Aayog, is a testament to the country's commitment to leading the way in climate-smart governance and sustainable development.

<https://energy.economictimes.india-times.com>

## Digital Personal Data Protection Act, 2023

The Digital Personal Data Protection Act, 2023 holds considerable importance as a legislative measure aimed at safeguarding individuals' privacy rights. Its primary focus lies in regulating the collection, storage, processing, and transfer of personal data in the digital landscape. The DPDP Bill underwent 81 amendments after its initial

introduction, resulting in a comprehensive overhaul to its present form.

By prioritizing privacy and security, the DPDP Act strives to create a robust framework that addresses the challenges posed by data handling in the digital age. Key provisions of the DPDP Act, 2023 are as follows:

The DPDP Act applies to all data, whether originally online or offline and later digitized, in India. Additionally, the Act applies to the processing of digital personal data beyond India's borders, particularly when it encompasses the provision of goods or services to individuals within the Indian territory.

Age verification mechanisms will be necessary for all companies in India (telcos, banks, e-commerce, etc.) under the new DPDP law. The compliance requirement is not just limited to social media platforms. This is essential to record the verifiable consent of users per legal experts.

<https://www.india-briefing.com>

## MALAYSIA

### Blueprint to achieve digital economy

Technology continues to drive advances throughout the economies of many countries and Malaysia is no exception. The government has introduced MyDIGITAL, a national initiative to transform Malaysia into a country with a high-income status that is focused on digitalization and a regional pioneer in the digital economy.

The Malaysian Digital Economy Blueprint outlines the efforts and initiatives taken to fulfil MyDIGITAL's aspirations. The blueprint will determine the trajectory of the digital economy's contributions to the Malaysian economy and build the foundation to drive digitalization nationwide, including bridging the digital divide.

Malaysia's digital transformation is anchored in artificial intelligence (AI), data analytics, cloud computing, Internet of Things (IoT), cybersecurity, and robotics. Malaysia's technology sector has accelerated into the Fourth Industrial Revolution with the National 4IR

Policy from July 2021. The policies outlined in the Malaysia Digital Economy Blueprint and MyDIGITAL would play a pivotal role in fostering Malaysia's technology sector.

By identifying emerging technologies and actively involving all stakeholders, Malaysia has bridged digital divides across income, gender, and age groups. The workforce has adapted to higher-value jobs, extending beyond 4IR core areas to encompass emerging fields such as blockchain technology, digital forensics, and robotic process automation.

<https://thesun.my>

## NEW ZEALAND

### Digital services tax

New Zealand has announced it will impose a digital services tax on multinational companies from 2025 following delays in talks for the global rollout of international tax rules at the Organization for Economic Cooperation and Development (OECD). New Zealand is seeking a 3% levy for multinationals that earn more than US\$812 million annually from global services and make more than US\$2.1m a year from digital services in New Zealand.

The global tax accord was agreed upon in full in 2021. The accord aims to designate how, where and how much multinational companies are taxed. OECD talks in Paris last month agreed a one-year delay in implementing the first phase of the tax accord, to 2025. The proposed legislation could generate around NZ\$222m over four years.

Efforts in recent years to create a global corporate tax system have failed to gain traction. This has led some nations, including the UK, to implement special taxes on digital services. In April 2020, the UK launched its Digital Services Tax, which subjects search engines, social media platforms, and online marketplaces that make revenue from users in the UK to a 2% tax on those revenues.

<https://www.wsj.com>

## PAKISTAN

### Digital census

Pakistan's National Database and Registration Authority (NADRA) has introduced a service intended to put people in charge of their biometric data. NADRA now offers a service called 'Ijazat Aap Ki, that decentralizes citizen data, at least to some extent. People will be able to give their consent – or refuse it – before a transaction requiring their Pakistani ID card.

The government is calling the move, making personal information just like any other precious personal possession, unprecedented. For the government, according to officials, it means the creation of a "digital consent regime."

Verification transactions now require that a six-digit code be sent to a mobile phone registered to a citizen. Sharing the code is a means of authentication and will be a person's agreement for a third party to get verification of their ID number. People will have to update NADRA when they change their phone numbers.

The agency is promoting what it says is Pakistan's first digital census, the deepest and broadest collection of personal information most people will ever experience. The digital census is conducted by the Pakistan Bureau of Statistics (PBS), with hardware and software support from NADRA.

<https://www.biometricupdate.com>

## PHILIPPINES

### Digital PhilID rollout

According to the Philippines Statistics Authority (PSA), there is continued progress in issuing the two digital versions of the Philippines ID card (PhilID) as the push to enhance user experience in accessing public services advances. The digital PhilID has printed and downloadable versions. The two versions of the digital PhilID have the same functionality. The downloadable version in PDF format would make it available on mobile phones, this will contribute to furthering the country's ambitions of having a highly digital society.

The Central Bank of the Philippines (BSP) recently revised its digital Know Your Customer (KYC) rules for customer due diligence (CDD), making the PhilID one of the digital ID credentials required for customer onboarding. The adjustments fall in line with the BSP's financial inclusion strategy which aims to allow holders of the PhilID to have access to bank accounts and other financial services. As Per the new requirements, when the PhilID is presented for KYC, the front section which has the photo of the holder is scanned and the number on the back of the card must not be disclosed. The amendment also sets out certain rules that entities carrying out digital KYC through digital ID systems must take note of.

According to the new rules, firms are expected to understand the basic components of the digital ID system particularly how they apply to the CDD requirements; utilize anti-fraud and cyber-security processes to support digital identity authentication and ensure all practices of digital KYC comply with relevant data sharing and protection privacy laws and rules about data processing, storage, and management. Institutions have one year to comply with the new rules.

The publication notes that the Philippines is the latest country in the Asia-Pacific region to adjust its digital KYC rules to enable financial institutions to meet requirements of anti-money laundering and the fight against the financing of terrorism. It also cites Hong Kong and Malaysia as the other nations having done similar rule changes for digital KYC recently in the region.

<https://www.biometricupdate.com>

## THE REPUBLIC OF KOREA

### Sci-tech deal

The United Kingdom and the Republic of Korea formalized a series of science and tech deals in the presence of Secretary of State Michelle Donelan, Minister of Trade, Industry and Energy Bang Moon-kyu, and Minister of Science and ICT Lee Jong Ho. These have

been agreed as part of an Accord between the two countries. As two of the world's most innovative economies, the UK and the Republic of Korea are natural partners, with both countries placing in the top five of the Global Innovation Index.

The two countries will work closer together than ever before to harness the potential of critical technologies like AI, quantum, and semiconductors to create jobs and unlock economic growth, alongside a new £4.5 million fund to create joint research and innovation partnerships. This builds on the recent international progress on safe, responsible AI development achieved at the AI Safety Summit, the next edition of which will be co-hosted by the Republic of Korea and the UK next year.

New commitments to collaborate in space, and on digital tech, as well as an over-arching agreement on science and technology, will open up new opportunities for trade, innovation and investment in both countries – ultimately helping to grow the economy, one of the Prime Minister's five priorities.

The science and technology agreements being signed as part of the UK-Republic of Korea bilateral Accord are:

- A new Framework for Semiconductor Cooperation to enhance our collaboration on skills, R&D, supply chain resilience and trade, and deepen industry links.
- A broad new Digital Partnership, boosting joint work in priority areas such as data, telecoms, AI, and digital competition.
- A new Memorandum of Understanding on space cooperation, bringing our space industries closer together and paving the way to joint space endeavors
- A new Implementation Arrangement, which updates and reboots a Science & Tech cooperation agreement from 1985, to modernize the two countries' science and tech partnerships for the 21st century
- A new dialogue on quantum, which will include talent exchanges
- A commitment to closer cooperation on engineering biology

<https://www.gov.uk/government>

## A new digital order

The "Digital Bill of Rights," crystallizing President Yoon's digital vision, is announced as the manifesto for a universal digital order.

This announcement is a comprehensive result derived from many global discussions, from the New York Initiative in September 2022 and the Davos Forum, to lectures at Harvard University and Sorbonne University, and public conversations integrating diverse input from scholars, the younger generation, and more.

Values and five principles for a digital community of mutual prosperity that global citizens should collectively embrace are announced.

The Ministry of Science and ICT (Minister Lee Jong Ho, hereinafter referred to as "MSIT") announced on September 25th (Mon.) that the "Digital Bill of Rights" will now be formally reported, with its full contents disclosed for the first time, at the cabinet meeting chaired by President Yoon Suk Yeol.

MSIT has been actively supporting the establishment of the "Digital Bill of Rights," which will in turn set out the foundation for the establishment of a "new digital order," in line with the President's digital vision. After the New York Initiative last year, MSIT organized a body of experts and representatives from various sectors to drive the formulation process and conducted many activities, namely: 1) Drafting a foresight of future digital society, 2) Provision of advice on legal and philosophical matters, 3) Case studies of important digital charters and declarations made overseas, and 4) Analysis of digital issues with currency. Moreover, MSIT has led the public conversation by operating the "Council for a New Digital Order," and a series of roundtables that invited a diverse range of stakeholders, such as university presidents, major academic societies, and CEOs, to listen to different voices coming from different parts of our society.

The "Digital Bill of Rights" is a charter codifying nation-level standards and principles to synchronize with this era of deepening digitalization, as well as outlining the basic direction for universal digital order for guiding the interna-

tional community. It consists of a preamble, which lays out the background and objectives of the document, and the main text, a total of 6 chapters and 28 articles.

The "Digital Bill of Rights" sets forth a blueprint for a digital society of mutual prosperity, in which the pursuit of digital innovation comes with just and fair distribution of its benefits. To achieve this exemplary vision of how future society should be shaped together with all members of the international community, the "Digital Bill of Rights" defines principles for action.

<https://www.korea.net>

## RUSSIAN FEDERATION

### Digital ruble

Russia's digital ruble has been integrated into the nation's tax code after its President Vladimir Putin signed the move into law. The tax code now contains a definition of "digital ruble account" and has rules for the taxation of transactions with digital rubles. The Bank of Russia has been working on the Digital ruble as a central bank digital currency project since 2020.

The new law will allow authorities to recover digital currency if the taxpayer does not have enough funds in their bank accounts. It also permits authorities to suspend transactions on digital ruble accounts and requires that the platform operator provide documents to reflect funds have been written off from the taxpayer's account.

<https://www.coindesk.com>

## SINGAPORE

### National AI strategy

Singapore government has announced its updated national AI strategy, dubbed the National AI Strategy (NAIS) 2.0, as AI technology development gains momentum across the globe. The new policy introduces three major changes. The first key policy shift is that Singapore now believes that AI is a necessity and no longer "good to have." In this context, it aims to triple the talent

pool of AI experts to 15,000 by training and hiring people. As the technology continues to progress, AI professionals and data scientists are in high demand in all geographies, so the country plans to train people and hire from overseas markets to gain an edge.

The second policy change is that the country now harbors global ambitions and aims to make a significant contribution to AI breakthroughs at a global level.

The third significant change is to adopt a projects-to-systems approach. "We will take a systems approach, bringing together stakeholders within and outside Singapore to add to our resources, capabilities, and infrastructure, accelerate the exchange of ideas, and administer AI-enabled solutions at scale," the new policy document read.

Singapore was one of the first countries to come up with a National AI Strategy in 2019 and the country committed an investment of about \$373 million (S\$500 million) through AI Singapore (AISG) for the Research, Innovation, and Enterprise (RIE) 2020 and 2025 plans. However, the recent advances in AI technology, with the advent of generative AI, demanded a relook at the existing policies, which led to the launch of NAIS 2.0.

NAIS 2.0 defines excellence and empowerment as the twin goals of the policy. The country hopes to excel in AI to "maximize value creation" by empowering people and businesses to use the technology with confidence.

It further defines ten enablers in three categories: activity drivers (industry, Government, and research), people and communities (talent, capabilities, and placemaking), and infrastructure and environment (compute, data, trusted environment, and leader in thought and action).

The launch of ChatGPT by OpenAI last year put the technology in the spotlight and brought forth the transformative impact it will have on various industry verticals.

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### Blueprint for digital financial infrastructure

The Monetary Authority of Singapore (MAS) unveiled three initiatives to ensure the safe and innovative use of digital money in Singapore, namely: a blueprint outlining the infrastructure required for a digital Singapore dollar; expanding digital money trials; and a plan to issue a "live" central bank digital currency (CBDC) for wholesale settlement. The three forms of digital money that MAS is promoting are wholesale CBDCs, tokenized bank liabilities, and regulated stablecoins.

MAS published the Orchid Blueprint which sets out the technology infrastructure that would be required to facilitate digital money transactions in the future. The blueprint builds on learnings from the Project Orchid and industry trials, and identifies the following infrastructure building blocks for the sound use of digital money in Singapore:

Settlement ledger – to record digital money transfers, with supporting features such as native programmability and atomic settlement of digital tokens.

Tokenization bridge – to connect existing account-based settlement systems with ledgers compatible with tokenized forms of digital money.

Programmability protocol – to use Purpose Bound Money (PBM) as a common protocol to specify the conditions for the use of digital money.

Name Service – to translate between unwieldy wallet addresses and alternative name identifiers that are readable and meaningful for verification.

To complement the digital money trials by the financial industry involving retail and corporate users, MAS will commence the development of CBDC for wholesale interbank settlement next year. MAS will pilot the "live" issuance of wholesale CBDCs for the first time, after previously simulating issuance within test environments. The first pilot will involve the use of "live" wholesale CBDC to settle retail payments between commercial banks. Future pilots could include the use of "live" wholesale CBDC for the settlement of cross-border securities trade. The issuance of wholesale CBDC reinforces the role that central bank money plays in facilitating safe and efficient payments."

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