

# E-CNY: main objectives, guiding principles and inclusion considerations

## I . Main objectives and vision of e-CNY

The development of China's e-CNY system aims to create a digital version of the renminbi that meets the public's demand for cash in the digital economy era. The e-CNY system will support the development of retail payment infrastructures and improve payment system efficiency in parallel with digital economy developments in China.

First, e-CNY aims to improve the efficiency of central bank payment systems. Technological innovation, especially the digital economy, is the key driver of economic development. More secure and inclusive retail payment infrastructures as public goods provided by central banks are needed. As an important financial infrastructure, the e-CNY system will further fulfil the diversified payment needs of the general public and improve efficiency of financial infrastructures. In addition, as e-CNY transactions are settled upon payment, it will allow businesses and related parties to improve their cash flow while enjoying more convenient payment services.

Second, e-CNY aims to provide a backup or redundancy to the retail system. Big tech companies have become important retail payment infrastructures, and any failure will dramatically impact payment system operation, and even introduce systemic risks. The e-CNY is a direct claim on the central bank, backed by sovereign credit, and has the status of legal tender. Therefore, it can provide a backup or redundancy to the retail system backed by commercial bank deposits, offer diversified payment products and improve payment efficiency and safety.

Third, e-CNY aims to support equal access to digital payment and financial inclusion. As digital technology and electronic payments develop, the use of cash in retail payments has been declining. However, it is the mandate of the central bank to ensure the public's direct access to cash, and to make sure the unit of account is consistent in the digital economy era by digitalising cash. The e-CNY system will make financial services more accessible, providing fiat money for a large population in various scenarios.

Fourth, e-CNY aims to echo international initiatives and explore ways to improve cross-border payments. First of all, cross-border payment involves various contentious issues such as monetary sovereignty, foreign exchange policies and arrangements, as well as regulatory and compliance requirements. Though technically ready for cross-border use, e-CNY is still designed mainly for domestic retail payments at present. Looking ahead, the People's Bank of China (PBoC) will actively respond to initiatives of the G20 and other international organisations to improve cross-border payments, and explore the applicability of CBDC in cross-border scenarios. Based on experiences of domestic trials and international demand, and on the premise of mutual respect for monetary sovereignty and compliance, the PBoC will explore pilot cross-border payment programmes and work with relevant central banks and monetary authorities to set up exchange arrangements and regulatory

cooperation mechanisms on digital fiat currency in line with the principles of “no disruption”, “compliance” and “interconnectivity”.

## II. Guiding principles of e-CNY design and data governance

### 1. Guiding principles

*Compliance with laws and regulations.* The institutional design of the e-CNY system strictly complies with regulations on the administration of the renminbi, anti-money laundering and combating the financing of terrorism (AML/CFT), the administration of foreign exchange, and data and privacy protection. The operation of e-CNY should be included in the regulatory framework.

*Safety and convenience.* The e-CNY is a value-based, quasi-account-based and account-based hybrid payment instrument, with legal tender status and loosely-coupled account linkage. This makes it adaptive to various online and offline payments. It minimizes difficulties resulting from limited technological literacy and telecommunications coverage to meet people’s demand for safe and convenient payment instruments. The e-CNY operational system is highly secure, highly usable, and highly scalable and concurrent, helping to ensure business continuity.

*Openness and compatibility.* The PBoC leverages the advantages and professional experience of authorised operators and aspires to keep technology up to date by promoting technological competition and upgrading in line with the principle of evolving with the times, so as to avoid an excessive concentration of system operational risk. The e-CNY system supports interoperability with traditional electronic payment systems. It makes full use of existing financial infrastructures to connect digital wallets of different operators as well as connecting e-CNY wallets with bank accounts, thus improving the interoperability of payment instruments.

### 2. E-CNY design

The e-CNY system is built on a two-tier architecture whereby the PBoC is responsible for issuance and disposal, inter-institution connections and wallet ecosystem management. Additionally, it prudently selects commercial banks with certain strengths in capital and technology as authorised operators to provide e-CNY exchange services. Other commercial banks and institutions, under the PBoC’s centralised management, give full play to their creativity, and collectively provide services for e-CNY circulation. The PBoC will try to maintain a level playing field and ensure that the market plays a decisive role in resource allocation. This will incentivise all participants and unleash their creativity, and also maintain financial stability. The two-tier system can fully tap authorised operators’ advantages in terms of resources, talents and technology to build a market-driven system that promotes innovation and competition. On top of that, since the public is used to accessing financial services via commercial banks, this two-tier architecture may increase public acceptance of e-CNY.

### 3. Data governance

The e-CNY system follows the principle of “anonymity for small-value and trace ability for high-value transactions”, and attaches great importance to protecting personal information and privacy. It aims to meet the public demand for anonymous small-value payment services based on the risk features and information processing logic of current electronic payment systems. Meanwhile, it is necessary to guard against misuse of e-CNY in illegal and criminal activities, such as tele-fraud, internet gambling, money laundering and tax evasion, by making sure that transactions comply with AML/CFT requirements. The e-CNY system collects less transaction information than traditional electronic payment systems and does not provide information to third parties or other government agencies unless stipulated otherwise in laws and regulations.

### III. Relationship between e-CNY and financial inclusion

There is still a “digital gap” in the field of payment services. In remote areas with poor coverage by telecommunications networks, it is difficult for some people to enjoy the benefits of digital financial technology. Illiteracy and underdeveloped ability to use smart phones have discouraged people from reaping the benefits of digital financial services, especially in the case of disadvantaged people. Meanwhile, some small and medium-sized banks and micro-finance institutions that focus on local businesses are having difficulties with digital transformation due to their technological capabilities.

Issued by the PBoC and mainly meeting the need for domestic retail payments, the e-CNY is a public good that improves financial inclusion. First, the design of the e-CNY system will broaden the accessibility of payment services. Thanks to the design of loosely-coupled account linkage, the underbanked population in poor and remote areas could apply for digital wallets without opening a bank account, which could expand the coverage of financial services. The offline payment function of e-CNY will enable people in areas with poor network coverage to enjoy basic financial services, improving financial inclusion. Second, e-CNY will lower costs and improve affordability. The PBoC does not charge authorised operators or individual users, and the operators do not charge individual users for the exchange services either. This will reduce the burden on the real economy and optimise the business environment. Third, e-CNY will make payments more efficient. As e-CNY transactions are settled upon payment, it will greatly enhance payment efficiency, and also allow businesses and related parties to improve their liquidity. The programmability of e-CNY could be realised by deploying smart contracts, enabling conditional payments, guaranteed payments and other complex use cases, so as to facilitate financial inclusion and innovation. Fourth, e-CNY will support fair competition on the retail payment market. On the one hand, e-CNY will provide a level playing field for accessibility and infrastructure that promotes innovation and competition among different payment service providers. On the other, the e-CNY is a claim on the central bank and can break down barriers – institutional and platform alike – in the payment market, enabling payments in all use cases, broadening the accessibility of retail payment services and improving social welfare.

## References

Working Group on E-CNY Research and Development of the People's Bank of China (2021): "Progress of Research & Development of E-CNY in China".