



DCMA INSTITUTIONAL PUBLICATION SERIES | PUBLICATION 3

DCMS and the Bank for International Settlements

Central Banking, Prudential Architecture,
and the Next Generation of Digital Monetary Settlement

*A Functional Architecture for Trusted Money,
Monetary Interoperability, and Prudential Policy Execution*

Digital Currency Monetary Authority
August 2026

Executive Summary

The Bank for International Settlements occupies a distinctive position in the international monetary system. It supports central banks in the pursuit of monetary and financial stability, provides a forum for international cooperation, hosts the Basel Committee on Banking Supervision and the Committee on Payments and Market Infrastructures, operates banking services for official institutions, and develops experimental public goods through the BIS Innovation Hub. Its current digital monetary agenda is increasingly focused on tokenisation, programmable settlement, the preservation of trust in money, cross-border payment efficiency, and the continued centrality of central bank money.

The Digital Currency Monetary Authority addresses a complementary architectural problem. MSRM-7 and the Digital Currency Monetary System provide a functional framework through which Sovereign Money, Commercial Bank Private Money, and Institutional Private Money can coexist within one digital monetary environment while preserving the authority, legal character, and policy requirements of each monetary class. The DCMS therefore extends the inquiry from the modernization of payment and settlement infrastructure to the architecture of the monetary system itself.

This publication develops four principal propositions. First, the next-generation monetary system requires a common functional architecture beyond tokenisation alone. Second, the traditional two-tier monetary structure can be extended to recognize a third institutional class of money without weakening the role of central bank money or commercial bank money. Third, prudential requirements can be translated from supervisory standards into executable monetary-system constraints. Fourth, cross-border settlement can become more direct and programmable while national monetary sovereignty and jurisdiction-specific policy remain controlling conditions.

The central proposition is that trusted digital money requires more than a common ledger. It requires a complete monetary architecture capable of preserving institutional authority while coordinating governance, denomination, issuance, credit, markets, and settlement across sovereign and private monetary systems.

1. The BIS Mandate in the International Monetary System

The BIS describes its mission as supporting central banks in their pursuit of monetary and financial stability through international cooperation and acting as a bank for central banks. Its institutional reach extends beyond research. The BIS supports policy dialogue, hosts standard-setting bodies, provides banking and reserve-management services to official institutions, and operates the BIS Innovation Hub as a center for technological experimentation and public goods for the central banking community.

This combination of monetary cooperation, prudential architecture, payment-system policy, banking services, and technological experimentation makes the BIS uniquely relevant to the digital transformation of money. It also means that the BIS agenda should not be reduced to central bank digital currencies. The larger question is how trusted money, regulated banking, financial markets,

and settlement infrastructures should evolve as tokenisation and programmable systems become increasingly capable.

DCMA approaches the same transition from the level of monetary architecture. The relevant question is not simply how existing monetary claims can be represented digitally. It is how the functions required for a complete monetary system can be coordinated across multiple institutional issuers and jurisdictions.

2. Trust in Money and the Two-Tier Monetary Architecture

BIS research places the singleness of money at the center of monetary trust. In the conventional two-tier structure, central bank money serves as the ultimate settlement asset and monetary anchor, while commercial banks create deposit money and provide the elasticity of credit required by the real economy. Par convertibility between these forms of money allows users to treat them as interchangeable expressions of the same sovereign unit of account.

The two-tier model remains a powerful institutional architecture. DCMS does not require its displacement. Instead, MSRM-7 makes it possible to identify where an additional monetary class can coexist with it without collapsing institutional boundaries.

SOVEREIGN MONEY Central bank reserves, cash, qualifying sovereign digital money
COMMERCIAL BANK PRIVATE MONEY Commercial bank deposits and tokenized deposits
INSTITUTIONAL PRIVATE MONEY UMC, qualifying stablecoins, electronic money and other authorized institutional money
MSRM-7 / DCMS Authority Governance Denomination Issuance Credit Market Settlement

The first two classes correspond to the core public-private monetary relationship recognized by the BIS. The third class recognizes money issued under private institutional authority outside conventional commercial-bank deposit creation. This class is necessary because the digital monetary system increasingly includes regulated monetary instruments that are neither sovereign money nor commercial bank deposits.

The three-class model extends the institutional taxonomy of money without requiring monetary reclassification, consolidation of authority, or the subordination of one monetary class to another.

3. The Digital Monetary Transition

The BIS 2026 Annual Economic Report places tokenisation within a broader effort to preserve trust while modernizing the monetary and financial system. It emphasizes permissioned and interoperable infrastructures, programmability, atomic settlement, financial integrity, and the

continued availability of central bank money as a settlement anchor. It also recognizes that appropriately designed and supervised reserve-backed private instruments may participate in a future tokenised ecosystem under strong safeguards.

This evolution is consequential because it moves the policy discussion beyond the binary choice between traditional banking and unregulated crypto markets. The emerging architecture is increasingly public-private, programmable, multi-instrument, and jurisdiction-aware.

DCMS begins from the same institutional reality but asks a broader functional question. Tokenisation changes representation. It does not, by itself, determine monetary authority, establish credit policy, govern issuance, create markets, resolve denomination, or determine the legal conditions of settlement. A complete digital monetary architecture must address those functions whether the underlying records are tokens, accounts, database entries, or other representations.

4. Project Agora and the Unified Ledger

Project Agora is one of the most significant BIS experiments in the modernization of wholesale cross-border payments. Convened by the BIS and the Institute of International Finance, the project brings central banks and regulated financial institutions together to test a multi-currency programmable platform using tokenised central bank reserves and tokenised commercial bank deposits.

The May 2026 prototype demonstrated atomic multi-currency settlement, programmable workflow logic, jurisdiction-specific control over central bank reserves, privacy safeguards, and the possibility of aligning settlement finality with national legal frameworks. Real-value testing followed in July 2026 across a selection of currencies and participating institutions. The project is explicitly experimental and continues to advance toward further testing rather than representing a finished production system.

Project Agora therefore provides important evidence that shared programmable infrastructure can improve wholesale cross-border settlement while preserving the legal identity of central bank reserves and commercial bank deposits. It also demonstrates that jurisdictional autonomy and interoperable settlement need not be mutually exclusive.

4.1 From a Shared Settlement Platform to a Complete Monetary Architecture

Functional Domain	Project Agora / Unified-Ledger Emphasis	DCMS Extension
Authority	Participating central banks and regulated institutions retain existing authority	Authority is modeled as a first-class monetary function across all participating monetary systems
Governance	Platform rules, institutional participation, legal and operational controls	Policy, institutional, technical, risk, jurisdictional, and monetary governance integrated within DCMS
Denomination	Multiple sovereign currencies	Sovereign denominations plus system-native monetary reference and conversion architecture
Issuance	Existing reserves and bank deposits are	Native issuance is separately governed

	tokenised without changing their legal character	for each monetary class, including Institutional Private Money
Credit	Primarily external to the settlement platform	Credit is a distinct monetary function and can interact directly with governed issuance
Market	FX and liquidity arrangements support transactions	Market is a first-class monetary function including price discovery, liquidity, and conversion
Settlement	Atomic, programmable wholesale cross-border settlement	Settlement is integrated with the other six monetary functions within a complete system boundary

The distinction is not competitive. Project Agora demonstrates the feasibility of advanced shared settlement infrastructure. MSRM-7 provides a method for identifying the monetary functions that exist around and beyond that infrastructure. DCMS supplies an implementation architecture in which those functions can operate together.

5. The Three-Class Next-Generation Monetary Architecture

The most important extension proposed by DCMA is the recognition that the future monetary system will require governed interoperability among three institutional classes of money. The traditional public-private relationship between central bank money and commercial bank money remains fundamental, but it no longer exhausts the monetary landscape.

Institutional Private Money captures qualifying monetary instruments issued under the authority of an institution that is neither the sovereign monetary authority nor a commercial bank creating deposit money. The Universal Monetary Commodity is the generic DCMS monetary abstraction within this class. The Universal Monetary Unit is DCMA's implementation of that concept.

This classification avoids the conceptual weakness of defining monetary instruments by technology. A tokenised deposit remains Commercial Bank Private Money. A CBDC remains Sovereign Money. A qualifying UMC remains Institutional Private Money whether represented on a distributed ledger, conventional ledger, or another compliant infrastructure.

5.1 Representation Invariance

MSRM-7 therefore treats digital representation as an implementation choice rather than a monetary class. This is particularly important for prudential policy because risk, legal character, issuer obligations, and monetary authority should not change merely because an instrument is tokenised.

5.2 Institutional Interoperability Without Monetary Consolidation

The three classes can interact within one DCMS while retaining distinct issuers, balance-sheet treatment, regulatory requirements, and monetary authorities. Interoperability does not require that central bank reserves become private money, that bank deposits become sovereign liabilities, or that Institutional Private Money be absorbed into either category.

6. Institutional Private Money and the Stablecoin Challenge

The BIS has identified serious weaknesses in many current stablecoin arrangements, including deviations from par, run risk, fragmentation, weak reserve structures, financial-integrity concerns, potential effects on bank funding and credit provision, and the risk of foreign-currency substitution in economies with weaker macro-financial fundamentals. These concerns are significant because poorly designed private money can transmit instability into both domestic banking systems and cross-border capital flows.

DCMA treats these concerns as design requirements rather than as reasons to exclude Institutional Private Money as a category. The appropriate question is whether a private monetary instrument can be engineered with sufficient governance, reserve discipline, liquidity, legal certainty, transparency, convertibility, settlement finality, and jurisdictional control to operate alongside sovereign and commercial bank money.

6.1 UMU Primary and Market Accounts

UMU uses two financial account models. The Primary Account is issuer-facing and provides direct redemption rights with DCMA under the applicable terms. UMU may be transferred to a Market Account, where price discovery, market liquidity obligations, and market-based value realization apply. The architecture separates contractual issuer liquidity from market liquidity and permits different monetary functions to operate under different account conditions.

This distinction is important in the BIS context. Not all private money must rely upon a single fixed-peg model, and not all market-based monetary instruments should be analyzed as though they possess no issuer-facing liquidity mechanism. The relevant prudential analysis should follow the legal and economic characteristics of each account state.

7. Prudential Policy Interoperability

The Basel architecture establishes prudential requirements for regulated banks through capital, liquidity, credit-risk, market-risk, operational-risk, and exposure frameworks. The challenge for digital monetary systems is not merely to reference those standards. It is to translate applicable prudential requirements into executable controls across transactions, institutions, assets, and monetary functions.

Prudential Policy Interoperability is the capacity of a common monetary architecture to recognize and enforce different prudential requirements across institutions, monetary classes, products, and jurisdictions without requiring those regimes to become identical.

Prudential Requirement	MSRM-7 Functional Location	Illustrative DCMS Execution
Capital and exposure limits	Governance / Credit	Counterparty eligibility, credit ceilings, concentration controls, and transaction restrictions
Liquidity requirements	Governance / Market / Settlement	Liquidity thresholds, settlement buffers, redemption controls, and market access

		conditions
Reserve and backing rules	Governance / Issuance	Issuance conditions linked to qualifying reserve or funding requirements
Credit risk	Credit / Governance	Obligor qualification, collateral, repayment terms, risk limits, and credit authorization
Market risk	Market / Governance	Price controls, benchmark governance, liquidity monitoring, and exposure limits
Operational resilience	Governance / Settlement	Access controls, continuity requirements, auditability, redundancy, and settlement safeguards
Financial integrity	Governance / Settlement	AML/CFT, sanctions, identity, transaction screening, and jurisdiction-specific restrictions
Custody and legal ownership	Governance / Settlement	Institutional wallets, asset segregation, permissions, and finality rules

This framework does not convert DCMS into a banking supervisor. Supervisory authorities determine the applicable prudential requirements. DCMS provides an environment in which those requirements can be expressed as operational monetary constraints.

8. Basel Cryptoasset Prudential Architecture

The Basel Committee has incorporated a prudential standard for banks' cryptoasset exposures into the consolidated Basel Framework, including criteria for preferential treatment of qualifying tokenised traditional assets and stablecoins and more conservative treatment for other cryptoasset exposures. The revised framework took effect from 1 January 2026, while the Committee continues a targeted review of the cryptoasset standard.

For DCMA, the significance of this work is methodological. Prudential treatment follows the risk characteristics and structural safeguards of the exposure rather than the novelty of the underlying technology alone. This is consistent with MSRM-7 representation invariance and supports a design philosophy in which Institutional Private Money should be evaluated according to its legal rights, reserve structure, liquidity, governance, and risk characteristics.

Publication 3 does not seek to assign a Basel classification to UMU. It establishes the architectural basis through which banks and supervisors can evaluate UMU exposures according to the applicable prudential framework and through which DCMS can implement the resulting controls.

9. ISO 20022, Messaging, and Monetary Interoperability

The Committee on Payments and Market Infrastructures has identified fragmented payment messaging as an important source of cost, delay, and opacity in cross-border payments. Its updated 2026 harmonisation requirements recommend broader alignment of ISO 20022 usage guidelines before the end of 2027. The standard provides richer, structured financial data and improves automation, compliance screening, fraud controls, and straight-through processing.

ISO 20022 is therefore an essential interoperability standard. It should nevertheless be located correctly within the monetary architecture. Messaging interoperability allows systems to exchange structured information. It does not itself determine monetary authority, create credit, govern issuance, provide FX liquidity, establish reserve requirements, or settle obligations across heterogeneous monetary systems.

Messaging interoperability enables systems to communicate. Monetary interoperability enables different forms of money and monetary authority to transact coherently.

DCMS can incorporate ISO 20022 at the communications and transaction-data layer while MSRM-7 governs the broader monetary functions surrounding those messages.

10. Cross-Border Settlement Beyond Correspondent Dependencies

BIS research and Project Agora identify structural frictions in contemporary correspondent banking, including sequential processing, multiple hand-offs, limited operating-hour overlap, fragmented liquidity, reconciliation burdens, and limited end-to-end transparency. Tokenisation can reduce these frictions by coordinating instruction, compliance, and settlement within a programmable workflow.

MSRM-7 permits a further architectural observation. Correspondent banking is an institutional mechanism for achieving cross-border connectivity. It is not itself a required monetary function. Where Governance, Denomination, Market, and Settlement can be resolved directly within an interoperable monetary architecture, unnecessary chains of correspondent accounts can be reduced while regulated financial institutions continue to perform the banking functions for which they are required.

DCMS therefore does not presume the disappearance of correspondent banking. It creates a functional alternative where direct monetary interoperability is legally and operationally available.

11. Global Localization and Jurisdiction-Aware Settlement

Project Agora demonstrates that shared infrastructure can preserve jurisdiction-specific control over central bank reserves and can align settlement finality with different national legal frameworks. DCMS extends the same principle across the complete monetary architecture through Global Localization.

Global Localization identifies the jurisdictions implicated by a monetary activity and applies the relevant monetary, banking, sanctions, capital-flow, tax, financial-integrity, market, and legal requirements to the transaction and participants. The resulting model is policy interoperability rather than policy harmonization.

This is particularly important for central banks. Cross-border interoperability should not require a monetary authority to surrender control over its currency, reserve accounts, domestic policy, or

regulatory perimeter. DCMS treats those authorities as persistent properties of the sovereign monetary domain.

12. BIS Innovation Hub and Operational Monetary Architecture

The BIS Innovation Hub was established to identify technology trends relevant to central banks, develop public goods and proofs of concept, and serve as a focal point for central-bank innovation. Its projects are deliberately experimental. Their institutional value lies in testing feasibility, convening central banks and the private sector, and producing knowledge that can inform future systems.

DCMA occupies a different point in the innovation lifecycle. MSRM-7 provides a reference model. DCMS provides a monetary-system architecture. UMC provides a generic system-native monetary concept, and UMU provides an implementation of that concept. The architecture includes operational policy domains for issuance, credit, markets, settlement, jurisdictional governance, and institutional participation.

Innovation Function	BIS Innovation Hub	DCMA / DCMS
Research	Technology trends and central-bank use cases	Monetary-system architecture and functional modeling
Experimentation	Proofs of concept and prototypes	Reference implementations and deployable monetary architecture
Institutional focus	Central banks and public-private experimentation	Sovereign, commercial-bank, and institutional private monetary systems
Primary contribution	Feasibility, public goods, collaboration	Operational monetary functions, governance, issuance, credit, markets, and settlement
Potential interface	Standards, prototypes, research findings	Implementation environment for compatible monetary capabilities

13. Central-Bank Reserve Management and Emerging Digital Reserve Instruments

The BIS also acts as a bank for central banks and provides deposit, foreign-exchange, gold, securities, asset-management, and reserve-management services to official-sector customers. This banking role places the BIS at an important intersection between monetary policy, market infrastructure, and the practical management of sovereign reserves.

Publication 2 introduced UMU as an instrument engineered around substantive reserve-management characteristics, including liquidity, convertibility, settlement reliability, sovereign control, transparency, diversification, and stress usability. Publication 3 does not repeat that analysis. It identifies the institutional question created by the digital transition: whether emerging digital monetary instruments can satisfy the same prudential and reserve-management disciplines expected of other assets held by monetary authorities.

The DCMS architecture is designed to make that question testable. Institutional wallets, governed issuance, direct Primary Account redemption, Market Account liquidity, transparent valuation, jurisdiction-aware controls, and auditable settlement create an architecture through which a monetary authority can evaluate the instrument on its merits under its own reserve policy.

14. Representative Areas of BIS-DCMA Complementarity

Area	BIS Capability	DCMA / DCMS Capability	Potential Institutional Value
Next-generation money	Two-tier architecture, unified-ledger research, tokenisation	Three-class monetary architecture	Extends analysis to Institutional Private Money while preserving existing money classes
Wholesale cross-border settlement	Project Agora	Complete MSRM-7 monetary architecture	Connects settlement to Authority, Issuance, Credit, Market, and broader Governance
Prudential standards	Basel Framework and supervisory coordination	Prudential Policy Interoperability	Translates applicable requirements into executable monetary constraints
Payment standards	CPMI and ISO 20022 harmonisation	Monetary interoperability above messaging	Combines structured messaging with monetary-system functions
Stablecoin policy	Risk analysis and prudential treatment	Governed Institutional Private Money	Provides a framework for addressing design deficiencies through architecture
Central-bank innovation	Innovation Hub prototypes and public goods	Operational DCMS implementation	Creates a pathway from experimentation to monetary-system deployment
Reserve management	BIS banking and official-sector services	UMU reserve-capable digital monetary infrastructure	Supports research into emerging digital reserve instruments
Monetary sovereignty	Central bank autonomy and domestic control	Global Localization	Preserves jurisdictional authority within cross-border digital operation

These areas do not require institutional convergence. They identify points at which BIS standards, research, experimentation, and official-sector services can coexist with an independent monetary architecture designed to implement compatible objectives across a broader functional system boundary.

15. Institutional Boundaries and Monetary Authority

A durable digital monetary system requires clear boundaries of authority. Central banks retain authority over sovereign money, monetary policy, reserve accounts, and the domestic monetary functions assigned to them by law. Commercial banks retain the legal and prudential

responsibilities associated with deposit money and regulated banking. Supervisory authorities determine the prudential requirements applicable to regulated institutions. International standard-setting bodies establish frameworks that jurisdictions may implement through their respective legal systems.

DCMA governs the DCMS institutional domain: its monetary architecture, participation rules, system-native monetary instruments, issuance conditions, credit mechanisms, market structures, and settlement processes, subject to applicable sovereign law. The architecture is designed to interoperate with other monetary authorities rather than absorb them.

This separation is essential to the concept of monetary interoperability. Cooperation is strongest when each institution contributes the capabilities for which it is constituted and a common architecture permits those capabilities to interact without erasing their institutional identity.

Conclusion: Extending the Architecture of Trusted Money

The BIS has moved the international monetary discussion decisively toward tokenisation, programmable settlement, interoperable ledgers, and the preservation of trust in money. Project Agora demonstrates that central bank reserves and commercial bank deposits can operate across currencies and jurisdictions on shared programmable infrastructure while preserving legal identity, domestic control, and settlement finality.

MSRM-7 and DCMS extend that trajectory from payment and settlement infrastructure to monetary-system architecture. They add a functional framework for Authority, Governance, Denomination, Issuance, Credit, Market, and Settlement and provide a common environment in which Sovereign Money, Commercial Bank Private Money, and Institutional Private Money can coexist without monetary reclassification or consolidation of authority.

The resulting contribution is prudential as well as technological. Applicable capital, liquidity, reserve, credit, market, operational, custody, and financial-integrity requirements can be expressed as executable constraints within the monetary architecture. ISO 20022 can provide messaging interoperability while DCMS provides monetary interoperability. Global Localization can preserve jurisdictional policy while cross-border settlement becomes more direct and programmable.

The next generation of trusted money will therefore require both institutional standards and operational monetary architecture. The BIS contributes central-bank cooperation, prudential frameworks, payment standards, experimentation, and official-sector banking expertise. DCMA contributes a complete digital monetary architecture capable of extending those objectives across additional monetary classes, credit, markets, and settlement. Together, these capabilities describe a path toward a more interoperable monetary system that preserves central-bank authority while expanding the functional possibilities of digital money.

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