DOCUMENTO STRATEGICO-OPERATIVO INTEGRATO

SISTEMA MONETARIO ZECCHINO (ZEC / XVN)

---

1. FONDAZIONE: NATURA GIURIDICA, POLITICA ED ECONOMICA

1.1 Dichiarazione di Sovranità Istituzionale

Lo **Zecchino (ZEC/XVN)** costituisce la **moneta sovrana operativa** del *Popolo Veneto in Autodeterminazione*, emessa dal **Banco Nazionale Veneto San Marco (BNVSM)** quale esercizio concreto e continuativo del diritto all'autodeterminazione dei popoli, così come riconosciuto dal **Patto Internazionale sui Diritti Civili e Politici (ONU, art. 1)**.

Lo Zecchino **non è un'ipotesi teorica né una sperimentazione accademica**, bensì un **sistema monetario vivente**, già integrato in un ecosistema istituzionale completo che comprende:

- **Cittadinanza Veneta autodeterminata**
- **Carta d'Identità Sovrana Digitale**
- **Codice Fiscale Veneto**
- **Sistema di Vigilanza Finanziaria Sovrana (OVF-VEN)**

La moneta opera quindi come **strumento funzionale di sovranità**, non subordinato a sistemi monetari esterni, ma interoperabile con essi secondo regole proprie.

1.2 I Tre Pilastri Costitutivi

1. Moneta di Credito Sovrano (Non a Debito)

Lo Zecchino è **moneta di credito sovrano originario**, emessa direttamente dal BNVSM **senza generazione di debito** verso soggetti terzi, pubblici o privati.
Il valore monetario nasce:

- dal **patrimonio collettivo**
- dalla **capacità produttiva reale**
- dal **lavoro e dalla fiducia della comunità autodeterminata**

In tal senso, lo ZEC rompe il paradigma della moneta-debito bancaria e ripristina la **funzione originaria della moneta come misura e strumento di scambio**, non come leva di indebitamento sistemico.

---

2. Ancoraggio al Valore Reale e Storico

Lo Zecchino si ispira direttamente alla **stabilità secolare dello Zecchino d'oro della Serenissima**, che per oltre 500 anni fu standard di riferimento nel commercio internazionale.

Il valore dello ZEC è garantito da un **paniere multilivello di asset reali**, comprendente:

- Oro e metalli preziosi
- Beni demaniali e patrimoniali pubblici
- Capacità energetica e infrastrutturale
- Riserve valutarie di compensazione

A questi si aggiunge il **fattore fiduciario comunitario**, ossia l'adozione consapevole da parte dei cittadini e degli operatori economici autodeterminati.

---

3. Strumento di Autodeterminazione Attiva

L'emissione, la gestione e l'utilizzo dello Zecchino sono **atti politici concreti di esercizio della sovranità popolare**.
La moneta non è neutra: è **architettura istituzionale codificata**, fondata su:

- Norme giuridiche proprie
- Tecnologie verificabili
- Governance trasparente e multilivello

Ogni transazione in ZEC è quindi anche un **atto di autodeterminazione economica**.

---

2. ARCHITETTURA TECNICA INTEGRATA

LA PARITÀ DINAMICA 1:1

2.1 Il Problema Sistemico e la Soluzione Concettuale

In un mercato aperto e globale, **mantenere un cambio fisso 1:1 con più valute contemporaneamente è matematicamente impossibile**, poiché le valute fiat fluttuano costantemente tra loro.

Tentare un “peg classico” porterebbe a:

- Speculazione
- Arbitraggio ostile
- Erosione delle riserve

La Soluzione: Paniere Dinamico di Compensazione (UDC)

Lo Zecchino non è ancorato a **una singola valuta**, ma opera come **Unità di Compensazione Universale (Universal Clearing Unit – UDC)**.

- Il suo valore è **relazionale**, non assoluto
- Il valore nominale resta **sempre 1** rispetto alla valuta di riferimento dell’utente
- Le fluttuazioni sono **assorbite internamente** dal sistema di riserva

In pratica:

1 ZEC = 1 unità di valore operativo, qualunque sia la valuta di ingresso o uscita.

2.2 Meccanismo Operativo della Parità Dinamica 1:1

Componente	Definizione Tecnica & Istituzionale	Funzione Sistemica
Asset Base & Collateral	Patrimonio Sovrano Veneto + Fondo di Stabilizzazione Veneto (FSV), gestiti tramite wallet multifirma BNVSM/OVF-VEN	Garanzia ultima del valore e copertura delle conversioni
Algoritmo di Peg & Stabilizzazione	CPMM avanzato con oracoli decentralizzati anti-manipolazione	Mantiene la parità nominale in ogni coppia valutaria
Protocollo di Conversione (Peg-In / Peg-Out)	Smart contract di atomic swap	Conversione immediata, irreversibile e senza intermediari
Network di Regolamento	VenetoChain, blockchain sovrana permissioned con standard ISO 20022	Registro immutabile e interoperabilità bancaria
Governance & Sicurezza	BNVSM + OVF-VEN + Consiglio Nazionale	Controllo collettivo, quorum e sicurezza istituzionale

---

2.3 Flusso di una Transazione Internazionale 1:1

1. **Fatturazione**
   Impresa veneta emette fattura da **10.000 ZEC**, richiedendo pagamento equivalente in EUR.

2. **Pagamento e Conversione**
   Il cliente estero paga **10.000 EUR** → smart contract verifica le riserve → emette **10.000 ZEC**.
3. **Regolamento**
   La transazione viene registrata su VenetoChain e notificata tramite messaggio ISO 20022.
4. **Risultato Sistemico**
   - L'impresa riceve ZEC senza rischio di cambio
   - Il FSV si rafforza
   - Il sistema aumenta la propria stabilità

---

3. PIANO DI IMPLEMENTAZIONE E SVILUPPO

Fase 1 – Consolidamento Istituzionale e Mercato Interno (0-12 mesi)

Obiettivo: radicare lo Zecchino come moneta funzionale della comunità autodeterminata.

Azioni:

- Attivazione definitiva dei wallet multifirma istituzionali
- Wallet civico per cittadini e imprese
- Integrazione identità-moneta
- Prime regole AML/CFT sovrane

Fase 2 – Interconnessione Regionale e Piloti di Cambio (13-30 mesi)

Obiettivo: apertura controllata verso l'esterno.

Azioni:

- Pool di liquidità ZEC/EUR, ZEC/CHF
- Smart swap per operatori selezionati
- Gateway carte e pagamenti elettronici
- Avvio procedura codice ISO 4217 provvisorio

Fase 3 – Standard di Valore e Clearing Globale (31-60 mesi)

Obiettivo: posizionamento internazionale.

Azioni:

- Pool multivalutari globali

- Adozione piena ISO 20022
- Riconoscimento come valuta contrattuale
- Emissione bond sovrani in ZEC

---

4. QUADRO GIURIDICO, SICUREZZA E PROSPETTIVE

4.1 Base Giuridica e Compliance

Il sistema Zecchino:

- Si fonda sul **diritto internazionale**
- Opera come **sistema monetario sovrano ad alta compliance**
- Integra **identità verificata + blockchain + multifirma**
- Fornisce un **audit trail giuridicamente opponibile**

4.2 Conclusione: Da Moneta a Standard

Lo Zecchino **non è una stablecoin**.
È un **nuovo standard di misura del valore**.

- **Per il cittadino:** moneta sicura, identitaria, non inflazionabile
- **Per l'impresa:** eliminazione del rischio forex
- **Per il sistema globale:** camera di compensazione neutrale e stabile

---

Sintesi Finale

Lo Zecchino fonde:

- Sovranità storica
- Tecnologia avanzata
- Governance istituzionale
- Visione geopolitica

Trasformando **un principio politico** in **una infrastruttura economica operativa, sicura e scalabile**.

Venezia, 15 gennaio 2025

Per il Banco Nazionale Veneto San Marco (ZEC)
S.E. Gianni Montecchio
Governatore
governatore.bnvsm@statovenetoinautodeterminazione.org

Firma e Sigillo

FIRME E SIGILLI PER LA SERENISSIMA REPUBBLICA VENETA

Per il Governo del Popolo Veneto Autodeterminato
S.E. Franco Paluan
Primo Ministro
esecutivodigoverno@statovenetoinautodeterminazione.org

Firma e Sigillo

Ambasciatore Straordinario e Plenipotenziario
S.E. Sandro Venturini
ambasciatore.sv@statovenetoinautodeterminazione.org

Firma e Sigillo

Presidente dello Stato Veneto
S.E. Irene Barban
presidentestatoveneto@statovenetoinautodeterminazione.org

Firma e Sigillo

Presidente del Consiglio Nazionale Parlamentare del Popolo Veneto
S.E. Roberto Giavoni
parlamentoveneto@statovenetoinautodeterminazione.org

Firma e Sigillo

Presidente della Corte Costituzionale
S.E. Marina Piccinato
cortecostituzionale@statovenetoinautodeterminazione.org

Firma e Sigillo

Presidente Corte Internazionale per l'Autodeterminazione dei Popoli
S.E. Laura Fabris
corteinternazionaleautod.popoli@statovenetoinautodeterminazione.org

Firma e Sigillo

Segretario di Stato
S.E. Gigliola Dordolo
segreteriagenerale@statovenetoinautodeterminazione.org

Firma e Sigillo di Stato

Pubblico Ufficiale di Cancelleria S.E. Pasquale Milella
Cancelleria: Via Silvio Pellico, n.7 - San Vito di Leguzzano (VI)
cancelleria@statovenetoinautodeterminazione.org

Firma e Sigillo

Stato Veneto   Cancelleria Protocollo "Documento strategico parità dinamica 1 a 1"

Venezia, Palazzo Ducale – 15 gennaio 2026

Sito Istituzionale: https://statovenetoinautodeterminazione.org/

ZECCHINO (ZEC / XVN)

A Sovereign Credit-Based Monetary and Clearing System

International White Paper – UN / IMF / BIS Aligned Framework

EXECUTIVE SUMMARY

This White Paper presents the **Zecchino (ZEC/XVN)** as a **sovereign credit-based monetary and clearing system**, designed to operate as a **Universal Clearing Unit (UCU)** within a multi-currency global environment.

The Zecchino is not conceived as a speculative crypto-asset nor as a conventional stablecoin. It is structured as:

- a **credit-issued monetary unit**, not debt-based,
- backed by **real assets and productive capacity**,
- governed by a **public institutional framework**,
- interoperable with existing financial infrastructures through **ISO 20022-compliant messaging**.

The system addresses key structural weaknesses of the current international monetary order, including exchange rate volatility, excessive reliance on debt-based money creation, and the absence of neutral clearing instruments for cross-border trade.

---

1. LEGAL, INSTITUTIONAL AND CONCEPTUAL FOUNDATIONS

1.1 Right of Economic Self-Determination

The Zecchino system is grounded in the **principle of self-determination of peoples**, as articulated in:

- Article 1 of the **International Covenant on Civil and Political Rights (ICCPR)**
- Article 1 of the **International Covenant on Economic, Social and Cultural Rights (ICESCR)**

These instruments recognize the right of peoples to freely determine their economic systems and to dispose of their natural wealth and resources.

The Zecchino operates as an **economic and monetary instrument** developed within this framework, without asserting extraterritorial monetary authority.

1.2 Institutional Issuer and Oversight

The system is administered through a **public-interest institutional architecture**, comprising:

- **Banco Nazionale Veneto San Marco (BNVSM)**
  Monetary issuing authority responsible for emission rules, reserve management and systemic liquidity.
- **Financial Oversight Authority (OVF-VEN)**
  Independent supervisory body ensuring compliance, risk control, auditability and integrity of operations.

This separation reflects **international best practices** in central banking and financial supervision (IMF Core Principles, BIS standards).

---

2. MONETARY NATURE AND ISSUANCE MODEL

2.1 Credit-Based Issuance (Non-Debt Money)

ZEC is issued as **sovereign credit**, not as interest-bearing debt.
Its issuance is linked to:

- public assets,
- economic output,
- transactional demand,
- reserve adequacy.

This approach aligns with historical and contemporary discussions on **credit theories of money**, including clearing-based monetary architectures (Keynes, BIS multilateral settlement studies).

2.2 Asset-Backed and Value-Anchored Structure

The Zecchino is supported by a **multi-layered value anchoring framework**, including:

- tangible assets (e.g. precious metals, public real estate),
- strategic infrastructure and energy capacity,
- foreign currency stabilization reserves,
- economic participation of verified users.

This structure is designed to enhance **confidence, stability and convertibility**, without rigid commodity pegs.

---

3. THE DYNAMIC 1:1 PARITY FRAMEWORK

3.1 The Structural Challenge

Maintaining fixed exchange rates with multiple fiat currencies simultaneously is mathematically and economically unfeasible under open-market conditions.

Traditional pegs expose issuers to:

- reserve depletion,

- speculative attacks,
- arbitrage imbalances.

3.2 The Universal Clearing Unit (UCU) Model

The Zecchino functions as a **Universal Clearing Unit**, meaning:

- it does not peg to a single currency,
- it acts as a **relational unit of account**,
- its nominal value remains constant (1 unit) relative to the transaction currency.

Exchange rate volatility is absorbed **internally** via reserve buffers and liquidity pools, rather than transferred to users.

This concept aligns with:

- IMF discussions on **synthetic units of account**,
- BIS research on **multilateral clearing mechanisms**,
- historical proposals such as the Bancor (Keynes).

---

4. TECHNICAL AND OPERATIONAL ARCHITECTURE

4.1 Stabilization and Liquidity Mechanisms

The system employs:

- **multi-currency liquidity pools**,
- algorithmic market-making models (CPMM-based),
- external price oracles for market integrity,
- a **Stabilization Fund** holding foreign reserves.

These mechanisms collectively ensure orderly convertibility and price coherence.

4.2 Settlement Infrastructure

Transactions are recorded on **VenetoChain**, a permissioned distributed ledger featuring:

- institutional validators,
- immutable transaction records,
- ISO 20022-compatible messaging,
- interoperability with traditional banking systems.

This enables recognition of ZEC transactions as **standardized settlement operations**, rather than crypto-native events.

4.3 Governance and Security

Critical system functions are protected through:

- multi-signature authorization schemes,
- quorum-based decision thresholds,
- separation between policy, execution and oversight roles.

This governance model reflects **BIS recommendations on operational resilience and control frameworks**.

---

5. INTERNATIONAL TRANSACTION FLOW (ILLUSTRATIVE)

1. A contract is denominated in ZEC.
2. The foreign counterparty pays in local currency.
3. The system converts funds via stabilization reserves.
4. ZEC is credited to the beneficiary.
5. Settlement is finalized and reported using ISO 20022 standards.

Outcome:

- no FX risk for economic operators,
- increased reserve depth,
- enhanced predictability for cross-border trade.

---

6. COMPLIANCE, TRANSPARENCY AND RISK MANAGEMENT

6.1 AML/CFT and Identity Integration

The system integrates:

- verified digital identities,
- transaction traceability,
- rule-based compliance enforcement.

This exceeds minimum AML/CFT requirements while preserving institutional accountability.

6.2 Auditability and Legal Robustness

- All critical actions are logged and auditable.
- Reserve movements require collective authorization.
- Data integrity is cryptographically verifiable.

These features support **legal enforceability and supervisory review**.

---

7. DEVELOPMENT ROADMAP

Phase I – Domestic and Institutional Consolidation

Phase II – Regional Interoperability and Pilot Convertibility

Phase III – International Clearing and Contractual Recognition

Each phase is designed to ensure **gradual exposure**, **risk containment**, and **institutional credibility**.

---

8. CONCLUSION: FROM MONETARY UNIT TO INTERNATIONAL STANDARD

The Zecchino is proposed as:

- a **neutral clearing instrument**,
- a **credit-based monetary unit**,
- a **complementary architecture** to existing systems.

It does not seek to replace national currencies, but to **enhance stability, reduce friction and support equitable trade** within a volatile global monetary environment.

---

9. INTEROPERABILITY WITH CENTRAL BANK DIGITAL CURRENCIES

9.1 Context: The Emergence of CBDCs

Central Bank Digital Currencies (CBDCs) are increasingly recognized by central banks and international institutions as:

- a modernization of sovereign money,
- a tool for payment efficiency and financial inclusion,
- a mechanism to strengthen monetary transmission.

However, current CBDC architectures—whether **retail** or **wholesale**—are predominantly **national or jurisdiction-bound**, and face structural challenges in the **cross-border domain**, including:

- interoperability fragmentation,
- foreign exchange complexity,
- lack of neutral settlement instruments,
- duplication of bilateral corridors.

These challenges are explicitly acknowledged in **BIS Project mBridge**, **Project Dunbar**, and IMF cross-border payment roadmaps.

9.2 Zecchino as a Neutral Clearing and Interoperability Layer

The Zecchino system is designed to operate as a **CBDC-interoperable clearing layer**, not as a competing sovereign currency.

In this framework, ZEC functions as:

- a **synthetic unit of account**,
- a **settlement-neutral value reference**,
- a **credit-based clearing instrument** between CBDC systems.

This positioning is fully aligned with BIS principles on:

- *interoperability by design*,
- *multi-CBDC arrangements*,
- *shared settlement infrastructures*.

9.3 Functional Relationship Between ZEC and CBDCs

9.3.1 CBDCs as Reserve and Settlement Inputs

In an integrated configuration:

- CBDCs (e.g. e-EUR, e-CHF, e-USD) may be held within the **Stabilization and Reserve Framework** of the Zecchino system,
- CBDCs serve as **high-quality liquid settlement assets**,
- ZEC issuance and redemption operations may reference CBDC balances directly.

This enhances:

- liquidity efficiency,
- settlement finality,
- trust among participating institutions.

9.3.2 ZEC as a Universal Clearing Unit for CBDCs

ZEC operates as a **Universal Clearing Unit (UCU)** across multiple CBDC systems by:

- maintaining a constant nominal unit value (1),
- absorbing FX volatility internally,
- enabling **CBDC-to-CBDC settlement without bilateral FX exposure**.

Example:

CBDC-A → ZEC → CBDC-B
without direct CBDC-A / CBDC-B exchange risk.

This mirrors and extends the conceptual objectives of:

- BIS synthetic CBDC (sCBDC) research,
- IMF proposals for multilateral settlement units.

9.4 Technical Architecture for CBDC Integration

9.4.1 Ledger Interoperability

The Zecchino infrastructure supports:

- API-based interoperability with CBDC platforms,
- compatibility with both **DLT-based** and **centralized ledger CBDCs**,
- standardized messaging via **ISO 20022**.

VenetoChain functions as a **clearing and reconciliation ledger**, not as a replacement for central bank ledgers.

9.4.2 Atomic Settlement and Programmable Interfaces

Integration enables:

- atomic delivery-versus-payment (DvP),
- programmable settlement logic,
- conditional and time-bound transactions,
- automated reconciliation between CBDC systems.

This architecture aligns with BIS guidance on:

- *atomic settlement*,
- *programmability with safeguards*,
- *operational resilience*.

9.5 Governance and Monetary Neutrality

9.5.1 No Monetary Policy Interference

The Zecchino system:

- does **not alter CBDC monetary supply**,
- does **not impose interest rates**,
- does **not override capital controls**,
- does **not perform monetary policy functions**.

All CBDCs remain fully under the authority of their issuing central banks.

ZEC acts solely as:

- a clearing,
- accounting,
- and settlement coordination instrument.

9.5.2 Institutional Safeguards

Integration requires:

- bilateral or multilateral institutional agreements,
- predefined operational limits,
- transparent reserve and exposure reporting,
- supervisory visibility for participating authorities.

This mirrors BIS expectations for **multi-jurisdictional CBDC platforms**.

9.6 Use Cases Enabled by ZEC–CBDC Integration

9.6.1 Cross-Border Trade Settlement

- Contracts denominated in ZEC,
- Payments executed in domestic CBDCs,
- No FX risk for exporters/importers,
- Immediate settlement finality.

9.6.2 Multilateral CBDC Clearing

- Reduction of bilateral corridors,
- Netting efficiencies,
- Lower liquidity requirements,
- Improved predictability.

9.6.3 Public and Institutional Payments

- Intergovernmental settlements,
- Development and infrastructure funding,
- Humanitarian or aid disbursements,
- Carbon and energy credit clearing.

9.7 Strategic Positioning within the Global Monetary System

From an international institutional perspective, the Zecchino system may be classified as:

- **CBDC-compatible clearing infrastructure**
- **Synthetic unit of account**
- **Non-sovereign monetary standard**
- **Complementary global public good**

It fills a structural gap between:

- national CBDCs,
- correspondent banking,

- and fragmented bilateral settlement systems.

---

10. CONCLUSION: COMPLEMENTING, NOT COMPETING

The integration of the Zecchino with Central Bank Digital Currencies reinforces its role as:

- a **stability-enhancing layer**,
- a **neutral clearing mechanism**,
- a **bridge between sovereign digital monies**.

Rather than fragmenting the global monetary system, the ZEC framework contributes to:

- coherence,
- interoperability,
- and resilience.

In this sense, the Zecchino aligns with the long-term objectives articulated by **BIS, IMF and UN bodies** for a more stable, inclusive and efficient international monetary architecture.

Final Note

This framework is **replicable**, **scalable**, and **adaptable** to other self-governing communities or regional entities seeking resilient monetary infrastructures aligned with international norms.

BIS WORKING PAPER

A Credit-Based Universal Clearing Unit Interoperable with CBDCs

The Zecchino (ZEC/XVN) Framework

BIS Working Papers
Monetary and Economic Department
(Draft – Analytical Research Paper)

Abstract

This paper presents the Zecchino (ZEC/XVN) as a **credit-based universal clearing unit (UCU)** designed to interoperate with Central Bank Digital Currencies (CBDCs) in a multi-currency environment. The framework aims to address structural inefficiencies in cross-border payments, including exchange rate volatility, fragmented CBDC corridors, and liquidity duplication. The Zecchino operates as a neutral unit of account and clearing instrument, absorbing foreign exchange fluctuations internally while preserving the monetary sovereignty of participating CBDC issuers. The paper analyses the institutional design, operational mechanics, governance safeguards, and interoperability implications of the model.

1. Introduction

Recent advances in CBDC design have significantly improved domestic payment efficiency. However, **cross-border CBDC interoperability** remains constrained by:

- jurisdictional fragmentation,
- bilateral corridor dependency,
- persistent foreign exchange risk,
- lack of neutral settlement instruments.

The BIS, CPMI, and IMF have identified these challenges in multiple initiatives (e.g. *mBridge*, *Dunbar*, *Icebreaker*). This paper contributes to the discussion by examining a **clearing-layer approach** that complements, rather than replaces, national CBDC systems.

2. Conceptual Framework

2.1 Credit-Based Clearing Units

The Zecchino is structured as a **credit-issued unit of account**, not as debt-based money. Issuance is linked to:

- reserve adequacy,
- transactional demand,
- asset backing,
- institutional governance constraints.

This model aligns with historical and contemporary literature on clearing-based monetary systems and multilateral settlement units.

2.2 Universal Clearing Unit (UCU)

Unlike traditional pegs or stablecoins, the Zecchino functions as a **Universal Clearing Unit**:

- it does not target a fixed exchange rate against a single currency,
- it maintains a constant nominal value (1 unit),
- it absorbs exchange rate volatility through internal mechanisms.

This approach avoids the vulnerabilities associated with rigid exchange rate regimes.

---

3. Operational Architecture

3.1 Stabilization and Liquidity Management

The system relies on:

- multi-currency liquidity pools,
- algorithmic market-making mechanisms,
- stabilization reserves,
- external price reference feeds.

Liquidity buffers are dynamically adjusted to maintain orderly convertibility without exposing users to FX risk.

3.2 Settlement Infrastructure

Transactions are settled on a **permissioned distributed ledger** with:

- institutional validators,
- immutable transaction records,
- ISO 20022-compliant messaging,
- compatibility with both DLT-based and centralized CBDC ledgers.

The ledger serves as a **clearing and reconciliation layer**, not as a monetary issuance platform for CBDCs.

---

4. Governance and Risk Controls

Governance is based on:

- separation of policy, execution and oversight,
- multi-signature authorization for critical actions,
- quorum-based decision thresholds,
- full auditability of reserves and transactions.

These features reflect BIS principles on operational resilience, transparency and control.

---

5. Relationship with CBDCs

5.1 Monetary Neutrality

The Zecchino framework:

- does not interfere with CBDC monetary policy,
- does not impose interest or credit conditions,
- does not bypass capital controls.

CBDCs remain fully governed by their issuing central banks.

5.2 Clearing Function

ZEC acts as an **intermediate clearing unit** enabling:

- CBDC-to-CBDC settlement without bilateral FX exposure,
- netting efficiencies,
- reduced liquidity requirements.

This is conceptually consistent with BIS research on synthetic settlement units.

---

6. Policy Implications

The model suggests a potential pathway toward:

- scalable multi-CBDC arrangements,
- reduced reliance on correspondent banking,
- enhanced predictability in cross-border trade,
- improved resilience of the international monetary system.

---

7. Conclusion

The Zecchino framework demonstrates how a **credit-based universal clearing unit** can complement CBDC initiatives by providing a neutral, interoperable settlement layer. While further empirical testing and institutional coordination would be required, the model contributes to ongoing discussions on the future architecture of cross-border payments.

ANNEX A

CBDC INTEROPERABILITY ANNEX

(Technical and Operational Considerations)

A1. Scope of the Annex

This annex outlines the **technical, operational and governance requirements** for interoperability between the Zecchino clearing system and national CBDC platforms.

A2. Interoperability Models

A2.1 Ledger-to-Ledger Model

- CBDC ledgers remain sovereign and independent.
- ZEC ledger operates as a clearing layer.
- Settlement messages are exchanged via ISO 20022.

A2.2 API-Based Integration

- Standardized APIs enable:
  - balance verification,
  - conditional settlement,
  - transaction confirmation.
- Compatible with both DLT and centralized CBDC architectures.

A3. Settlement Mechanisms

A3.1 Atomic Settlement (DvP / PvP)

- CBDC debit and ZEC credit occur atomically.
- Eliminates settlement risk.
- Supports time-bound and conditional logic.

A3.2 Netting and Liquidity Optimization

- Multilateral netting reduces gross settlement volumes.
- Lower liquidity requirements for participating institutions.
- Improved intraday liquidity management.

A4. Reserve Treatment of CBDCs

CBDCs may be held within the ZEC stabilization framework as:

- high-quality liquid assets,
- settlement buffers,
- temporary clearing balances.

Such holdings do not alter CBDC issuance or circulation.

A5. Governance and Supervisory Access

Interoperability requires:

- formal institutional agreements,
- predefined exposure limits,
- real-time reporting to participating authorities,
- audit access for reserve and transaction data.

A6. Compliance and Controls

- Full AML/CFT compliance via identity-linked transactions.
- Traceability without public exposure of sensitive data.
- Alignment with FATF and CPMI standards.

A7. Use Case Matrix

Use Case	CBDC Role	ZEC Role
Cross-border trade	Payment medium	Clearing & unit of account
Intergovernmental payments	Settlement asset	Neutral reference
Development finance	Funding disbursement	Value stabilization
Energy / carbon credits	Payment token	Clearing unit

A8. Risk Considerations

Key risks include:

- governance misalignment,
- liquidity concentration,
- legal recognition across jurisdictions.

Mitigation relies on:

- phased implementation,
- conservative exposure limits,
- multilateral oversight.

A9. Concluding Remarks

The interoperability model outlined in this annex demonstrates that a **neutral clearing unit** can enhance CBDC effectiveness without compromising monetary sovereignty. The framework is modular, scalable, and compatible with existing BIS-led initiatives.

BIS INNOVATION HUB – PILOT PROPOSAL

ZEC as a Universal Clearing Unit for Multi-CBDC Interoperability

(Innovation Hub Project Concept Note – Draft)

---

1. Project Title

A Credit-Based Universal Clearing Unit for Multi-CBDC Cross-Border Settlement

---

2. Problem Statement (BIS-Aligned)

Despite significant progress in CBDC design, cross-border CBDC use cases continue to face:

- fragmentation across jurisdictions,
- reliance on bilateral corridors,
- duplication of liquidity,
- persistent foreign exchange risk for end users.

Existing BIS Innovation Hub projects (mBridge, Dunbar, Icebreaker) demonstrate technical feasibility but **do not fully resolve the absence of a neutral multilateral clearing unit**.

---

3. Proposed Innovation

This pilot proposes testing the **Zecchino (ZEC)** as a **credit-based Universal Clearing Unit (UCU)** operating *between* CBDC systems, not *instead of* them.

Key characteristics:

- neutral unit of account,
- constant nominal value (1 unit),
- internal absorption of FX volatility,
- no interference with CBDC monetary policy.

---

4. Objectives of the Pilot

1. Test whether a clearing unit can:
   - reduce FX exposure for cross-border CBDC payments,
   - reduce liquidity requirements,
   - improve settlement predictability.
2. Evaluate interoperability:
   - between heterogeneous CBDC architectures,
   - across DLT and non-DLT ledgers.
3. Assess governance and risk controls under BIS principles.

---

5. Scope and Participants (Indicative)

- **Participants**:
    - 2–3 simulated or sandbox CBDCs
    - 1 clearing unit ledger (ZEC)
- **Institutions**:
    - BIS Innovation Hub (lead)
    - Participating central banks (observers / validators)

No legal tender status required.

---

6. High-Level Architecture

```
CBDC-A Ledger  →
                  → ZEC Clearing Layer →
CBDC-B Ledger  →
```

- CBDCs remain sovereign.
- ZEC functions as a clearing and reconciliation layer.
- Settlement messages use ISO 20022.

---

7. Key Metrics for Evaluation

- Settlement finality time
- FX risk exposure
- Liquidity efficiency
- Operational resilience
- Governance transparency

---

8. Expected Contribution to BIS Work

- Extends BIS research on synthetic units of account
- Provides empirical evidence for multilateral clearing models
- Offers a non-political, technically neutral architecture

---

9. Deliverables

- Pilot technical report
- Risk and governance assessment
- Policy implications note for CPMI / BIS committees

1. BIS INNOVATION HUB

2-PAGE EXECUTIVE CONCEPT NOTE

(Pilot Proposal – Draft)

Project Title

A Universal Clearing Unit for Multi-CBDC Interoperability

Project Type

Exploratory Pilot – Cross-Border Payments & Settlement

Proposing Framework

Zecchino (ZEC/XVN) – Credit-Based Clearing Unit (research prototype)

---

1. Background and Problem Statement

Central Bank Digital Currencies (CBDCs) have demonstrated strong potential to improve domestic payment systems. However, cross-border CBDC use cases remain constrained by:

- fragmented interoperability frameworks,
- reliance on bilateral currency corridors,
- persistent foreign exchange (FX) risk,
- duplicated liquidity requirements.

Current BIS Innovation Hub initiatives (e.g. mBridge, Dunbar, Icebreaker) have addressed technical settlement feasibility, but **the absence of a neutral, multilateral clearing unit** remains a structural gap.

---

2. Proposed Innovation

This pilot proposes the experimental evaluation of a **credit-based Universal Clearing Unit (UCU)**, denominated as *ZEC*, operating **between** CBDC systems.

Key features:

- constant nominal unit of account (1 unit),
- no peg to a single currency,
- internal absorption of FX volatility,
- no custody of CBDCs,
- no interference with monetary policy.

The clearing unit acts as an **accounting and settlement coordination layer**, not as a currency or payment rail.

---

3. Objectives

The pilot aims to assess whether a UCU can:

1. Reduce FX exposure in cross-border CBDC transactions
2. Improve liquidity efficiency through multilateral netting
3. Enhance predictability and transparency of settlement
4. Operate without impacting CBDC sovereignty or issuance

---

4. Scope and Experimental Setup

- Simulated CBDC environments (2–3 currencies)
- One clearing-layer ledger (UCU prototype)
- ISO 20022-compliant messaging
- Atomic settlement logic (PvP / DvP)

No legal tender status or live CBDCs required.

---

5. Expected Outputs

- Technical evaluation report
- Governance and risk assessment
- Policy implications note for CPMI / BIS committees

---

6. Strategic Relevance for BIS

The pilot:

- complements existing multi-CBDC projects,
- advances research on synthetic units of account,
- supports BIS objectives on scalable cross-border payments.

---

2. PILOT GOVERNANCE & RISK STATEMENT

Governance Principles

- **Monetary neutrality**: no impact on CBDC supply or policy
- **Institutional separation**: clearing logic separated from settlement rails
- **Collective authorization**: critical actions require quorum approval
- **Auditability**: all reserve and clearing operations logged and verifiable

---

Risk Categories and Mitigation

Risk	Description	Mitigation
Monetary risk	Policy interference	No issuance, no interest, no custody
FX risk	Volatility spillover	Internal absorption, reserve buffers
Liquidity risk	Concentration	Exposure limits, multilateral netting
Governance risk	Control ambiguity	Clear role separation, oversight access
Legal risk	Jurisdictional recognition	Pilot-only, non-binding framework

---

3. TECHNICAL ARCHITECTURE DIAGRAM

(Innovation Hub Style – Conceptual)

```
                              ISO 20022
┌────────────────┐                            ┌────────────────┐
│ CBDC Ledger A  │ ◄─────────────────────────►│ CBDC Ledger B  │
└────────────────┘                            └────────────────┘
        ▲                                              ▲
        │                                              │
        │  Settlement Instructions                     │
        ▼                                              ▼

┌──────────────────────────────────────────────────────┐
│        UNIVERSAL CLEARING UNIT (ZEC Prototype)        │
│  - Unit of Account (1)                                │
```

```
  - FX Absorption Logic
  - Multilateral Netting
  - No CBDC Custody
```

Key Properties

- CBDCs remain sovereign
- Clearing logic isolated
- Atomic settlement triggered externally
- Ledger-agnostic integration

---

4. mBRIDGE-COMPATIBILITY STATEMENT (POST-PILOT)

Statement of Compatibility

The architecture evaluated in this pilot is **compatible with multi-CBDC platforms**, including but not limited to mBridge, insofar as it:

- does not modify CBDC issuance or governance,
- does not introduce new settlement rails,
- operates as an optional clearing overlay,
- preserves atomic settlement and ISO 20022 messaging.

The clearing unit may be implemented as:

- a smart-contract module,
- or a side-ledger connected via API.

No changes to mBridge core governance or architecture are required.

---

5. USE-CASE NUMERIC SIMULATION & BIS KPIs

Use Case

Cross-border trade settlement between CBDC-A and CBDC-B

Transaction value: 10,000 units
Currencies: CBDC-A ↔ CBDC-B
Clearing unit: ZEC (1 unit = 1 nominal)

Comparative Metrics

KPI (BIS-aligned)	Bilateral CBDC	With UCU
FX exposure	High	None (user-facing)
Liquidity required	Gross	Net
Settlement steps	Multiple	Single
Settlement time	T+1 / intraday	Near-real-time
Corridor scaling	Linear	Multilateral

Liquidity Efficiency Example

- Bilateral model (3 currencies):
  → 3 corridors, full liquidity per corridor
- UCU model:
  → 1 clearing unit, pooled liquidity
  → **~30–50% reduction in required liquidity buffers**

Stato Veneto in Autodeterminazione
Venezia, Palazzo Ducale
statovenetoinautodeterminazione@pec.it
Sito Istituzionale: www.statovenetoinautodeterminazione.org

Registrazione su blockchain – Documento strategico

DOCUMENTO STRATEGICO PARITÀ DINAMICA 1 A 1

In data **22 gennaio 2026, alle ore 21:45:41**, è stata effettuata una registrazione su blockchain (rete *Zecchino*) relativa al **Documento Strategico "Parità Dinamica 1 a 1"**.

La registrazione è stata eseguita mediante transazione di notarizzazione digitale, con la finalità di garantire **data certa**, **integrità** e **immutabilità** del documento, attraverso la pubblicazione sulla blockchain del relativo **hash crittografico SHA-256**.

Dati della transazione:

- **Importo:** 0.01 ZECCHINO
- **Commissione:** 0.05 ZECCHINO
- **Indirizzo mittente:** 3P8VN8uzJsZJk23urkxdLFoHCbEjSsDdL3T
- **Indirizzo destinatario:** 3P8VN8uzJsZJk23urkxdLFoHCbEjSsDdL3T
- **Hash del documento (SHA-256):** `d74b27952a3c02a6c89dd105c35827ebfb1dbd559138edca0347094929bb11f7`

La transazione è consultabile tramite blockchain explorer e attesta l'esistenza del documento alla data e ora indicate, garantendone la non alterabilità nel tempo.

Redatto, letto e sottoscritto digitalmente.
Venezia, 22 gennaio 2026

✍ **Notaio S.E. Pasquale Milella**

Firma e Sigillo