



Stakeholder Feedback on UNTP Requirement CI.05 (Blockchain Use)

We commend the [United Nations Transparency Protocol \(UNTP\)](#) team for its comprehensive and inclusive approach to sustainability data governance. As stakeholders supporting the development of verifiable and interoperable ESG infrastructures, we write to propose a friendly refinement to the framing of Requirement CI.05 (Blockchain).

The current language may unintentionally understate the viability and impact of blockchain when implemented responsibly and cost-efficiently, including in numerous existing UN-led or affiliated projects.

Current Text of CI.05:	Suggested Revision:
CI.05 Blockchain- Whilst some implementers MAY choose blockchain technologies to underpin their solutions, the UNTP MUST NOT require the use of blockchain for conformant implementations – so that implementers that wish to avoid the costs and complexity of blockchain technologies are free to do so.	CI.05 Blockchain technologies MAY be used to support and enhance traceability, verifiability, and decentralized data integrity within UNTP. To ensure flexibility across technological contexts, their use remains optional.

To provide further context and demonstrate the practicality of blockchain technologies in public-good applications, we believe it is important to clarify that our suggestion is based on the concern that the current statement: "so that implementers that wish to avoid the costs and complexity of blockchain technologies are free to do so", may unintentionally discourage actors who are less familiar with blockchain from exploring or experimenting with it.

Blockchain brings significant benefits in terms of transparency, traceability, and verifiability. Moreover, the complexity involved in implementing blockchain solutions is often comparable to that of deploying other infrastructure technologies within large-scale sustainability or ESG-focused projects.



The United Nations itself has a number of successful blockchain deployments across a range of use cases, from identity verification to humanitarian assistance. These examples show that blockchain can be responsibly, efficiently, and meaningfully integrated within the framework of international development.

In the specific context of Digital Product Passports (DPPs), blockchain offers unique advantages for: A. Ensuring the integrity of distributed product data across value chains, B. Enabling auditability of sustainability claims over time, C. Supporting decentralised verification without reliance on a single data authority. Blockchain technologies offer “out-of-the-box” properties such as immutability, accountability and transparency to meet DPPs requirements.

Successful DPP-related projects that demonstrate these capabilities include EBSI, TLIP, and WFP’s Building Blocks.

We offer the following examples to illustrate these points:

1. [EBSI-ELSA](#) – [Trace4EU](#), and Other EBSI Initiatives – Digital Product Passports, Anti-Counterfeiting, and Trust Services (Europe)

The European Blockchain Services Infrastructure (EBSI) hosts several key digital public service projects under the Digital Europe Programme (DEP). EBSI-ELSA, led by EUIPO, focuses on anti-counterfeiting and supply chain traceability by leveraging Verifiable Credentials and NFTs to authenticate products and create tamper-proof logs across customs, brands, and logistics networks. In parallel, Trace4EU is developing traceability infrastructure for DPPs, building on GS1 and EPCIS standards. Other flagship DEP projects include, the [European Blockchain Pre-Commercial Procurement](#) which has explored novel, future-proof Blockchain solutions for EBSI, [EBSI-Vector](#), which supports the cross-border issuance and verification of educational diplomas and social security credentials, and [EBSI-NE](#), dedicated to maintaining the EBSI node infrastructure across member states. These initiatives demonstrate the maturity and modularity of blockchain applications in public-sector settings, with several already piloting on the EBSI infrastructure.

2. [TLIP](#) – Trade Logistics Information Pipeline (Kenya)

TLIP is integrated with Kenyan traders, logistics companies, customs and trade authorities to enable sharing of cross-border trade data using GS1 and UN/CEFACT standards, with blockchain-based traceability. It simplifies trade data exchange, ensures data integrity, and reduces administrative costs in East African cross-border processes.

3. [UNICEF Project Connect](#): Internet Connectivity Audits via Blockchain (Colombia)

As part of a digital inclusion initiative, UNICEF deployed sensors in schools to measure



internet speed and published the results to a public blockchain. This created a transparent and immutable trail of connectivity data, reinforcing accountability in infrastructure projects.

4. **UNICEF Ventures: Blockchain Certification for Drone Testing (Kazakhstan)**

UNICEF Ventures leveraged Ethereum to issue verifiable, tamper-proof participation certificates to drone-testing companies. These blockchain-based credentials ensured authenticity, transparency, and direct verification via smart contracts without intermediaries, demonstrating the practical application of public blockchains for certification and auditability.

5. **UNHCR: Blockchain-Based Impact Staking for Humanitarian Aid (Global)**

The Cardano Foundation, together with Switzerland for UNHCR, created the With Refugees (WRFGS) stake pool to support people affected by conflict and crisis. Instead of making a one-time donation, supporters can delegate their ADA (Cardano's cryptocurrency) to this special pool. The rewards generated are donated to UNHCR, providing steady, flexible funding for refugee programs, especially in places that receive little media attention and are often underfunded.

6. **UNJSPF: Blockchain and Facial Recognition for Identity Verification/Proof-of-Life**

In 2021, the UN Joint Staff Pension Fund implemented a digital identity solution to support the periodic proof-of-life verification of more than 80,000 retirees/beneficiaries, residing in 192 countries. The solution uses blockchain, biometrics/facial recognition, artificial intelligence, and geo-localization, and is based on open-source protocols. . The UNJSPF solution has been certified in accordance with ISO/IEC 27001 (information security), and ISO/IEC 42001 (artificial intelligence), and received the UN Secretary-General Award on Innovation and Sustainability. This initiative enhanced process efficiency, identity security, and fraud prevention, demonstrating blockchain's role in digital identity management within the UN system. This project is already being implemented across multiple UN Agencies, and led to the development of the UN Digital Identity initiative, approved by the UN Chief Executive Board, and currently under implementation by six UN entities. .

7. **WFP Building Blocks – Blockchain-Based Humanitarian Assistance (Jordan, Bangladesh, Ukraine)**

The World Food Programme's "Building Blocks" project supported over 4 million beneficiaries using a blockchain coordination layer to prevent duplicative aid, reduce banking costs, and ensure secure delivery of food and cash assistance. The platform



provided a decentralized, privacy-preserving, and transparent infrastructure, co-managed by 65 humanitarian organizations.

We support UNTP's commitment to technological neutrality and low-barrier implementation. However, we believe the Protocol can better reflect the maturity and relevance of blockchain in public-good contexts. We would be pleased to support the development of a brief annex or resource sheet summarizing these and other examples to inspire implementers.

Stakeholder Reflections

To complement the practical examples above, the following reflections underscore the increasing relevance and maturity of blockchain in advancing transparency and sustainability goals:

- **Arun Maharajan, Blockchain Lead, UNICEF:** “Despite lows in cryptocurrency markets and the re-orientation of the tech industry around the generative AI revolution, the blockchain ecosystem has maintained its appeal among developers, designers, and business innovators. UNICEF has been actively exploring blockchain applications to advance its mission. Key initiatives in 2024 include: [DPG DAO](#) prototype, [digital financial registry in Burundi](#), carbon footprint calculation, and supply chain system coordination in Bangladesh, among others. The outlook for blockchain technology in 2025 is promising, with stablecoins emerging as a key area of growth for UNICEF.”
- **Dino C. Dell’Accio, Chief Information Officer, UNJSPF, Co-Lead UN-IGF-DC-Emerging Technologies and DC-Blockchains Assurance and Standardization:** “UNJSPF has extensive experience in developing and deploying solutions based on emerging technologies. Our years of production deployment experience has demonstrated that while emerging technologies offer transformative potential for innovation and transparency, the absence of mature assurance protocols and standards creates significant implementation challenges. When dealing with emerging technologies, we are inherently dealing with emerging standards, which creates a fundamental disconnect between technological capability and standardized verification methods. The UNTP's ambitious goal of making supply chains traceable and transparent at scale cannot be achieved without addressing the standards gap in emerging technologies. Our experience has shown that sustainability claims must be supported by robust verification mechanisms that emerging technologies could provide if properly assessed and standardized. UNJSPF co-leads the UN-IGF Dynamic Coalitions on Blockchain Assurance and Standardization and Dynamic Coalition on Emerging Technologies, to develop – with a multi-stakeholder approach - protocols and



frameworks for developing these essential standards. I strongly recommend that the UNTP initiative leverage these existing efforts and incorporate emerging technology assurance standards as a core component of its protocol specification framework. By embracing standardized approaches to emerging technologies, the UNTP can fulfill its promise of making unsustainable practices have nowhere to hide while enabling truly scalable transparency across global supply chains”.

- **Joachim Schwerin, Principal Economist, European Commission, DG GROW:** “Blockchain technology has been undergoing rapid progress in terms of scalability, resource efficiency and user friendliness over the past months and years. In the EU alone, more than two dozen major use cases have been built on top of the open source public EBSI infrastructure, and the private sector has in parallel significantly advanced in building up integrated solutions that bridge different layer 1 and 2 systems. For tracking and tracing any type of value transfer within ecosystems and value chains, no other technology has proven similarly resilient, cyber secure and successful. While I support the notion of technical neutrality (which is a theoretical fiction anyway, given that existing rules always favour incumbent solutions), I advise that any language is avoided that may place blockchain at a comparative disadvantage that is not merited by facts.”
- **Jose Manuel Panizo, EBSI Team Leader, European Commission, DIGIT:** “I would like to offer a reflection regarding the mention of blockchain and its associated complexity and costs. While I appreciate the aim to ensure technological neutrality and avoid imposing unnecessary burdens on implementers, I believe some important nuances are worth highlighting, particularly from the perspective of the European Blockchain Services Infrastructure (EBSI). EBSI is an example of a permissioned network that uses a blockchain client based on a proof-of-authority consensus mechanism. This approach does not require high computational power or energy consumption, countering the common association of blockchain with resource-intensive operations like proof-of-work. Furthermore, blockchain technologies, by design incorporating smart contracts, offer a robust and reusable foundation for a wide range of use cases and initiatives. This inherent versatility supports economies of scale and long-term sustainability, moving beyond ad-hoc or one-off solutions and thereby helping to reduce overall implementation costs. Finally, it is worth noting that the complexity of blockchain interaction can be significantly reduced through commonly-used interfaces. In EBSI, for instance, access to the ledger is abstracted through RESTful HTTP APIs, making integration for service providers straightforward and shielding them from the underlying protocol details.”



- **Nena Dokuzov, Head of Project Group for New Economy and Blockchain Technologies at Ministry of Economic Development and Technology, UNECE expert and Head of Delegation for Slovenia:** “Blockchain technology characterized by traceability, transparency, accuracy and reliability can substantially contribute to better efficiency of the processes, business and societal. The project Trace4EU evidently shows how blockchain can be used as a common denominator for the traceability of documents, data, products and materials, using common reference architecture based on criteria based framework. Therefore it enables the implementation of DPP in a transparent and trusted based manner”.
- **Teodor Petricevic, UNDP AltFinLab, Blockchain Partnerships and Accelerator Lead:** “Blockchain technology is pivotal for advancing UNDP’s mission to achieve the Sustainable Development Goals by enhancing transparency, efficiency, and inclusion across our work. Flagship initiatives such as the UNDP Blockchain Academy, the SDG Blockchain Accelerator, the Tadamon project for digital identity and transparent grant allocation, and blockchain-based digital payment systems for aid disbursement all demonstrate the transformative potential of this technology. These efforts - supported by diverse blockchain partnerships - are enabling financial inclusion, sustainable supply chains, and more efficient aid delivery, directly contributing to SDGs related to poverty reduction, inequality, and climate action. By streamlining operations through secure data management and automated processes, blockchain can also significantly improve UNDP’s internal efficiency. Continued investment in these initiatives will position UNDP as a global leader in leveraging emerging technologies for sustainable development, amplifying our impact worldwide.”

We thank you for your openness to dialogue and look forward to continued collaboration.

Thank you for your attention

Mariana de la Roche W.





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