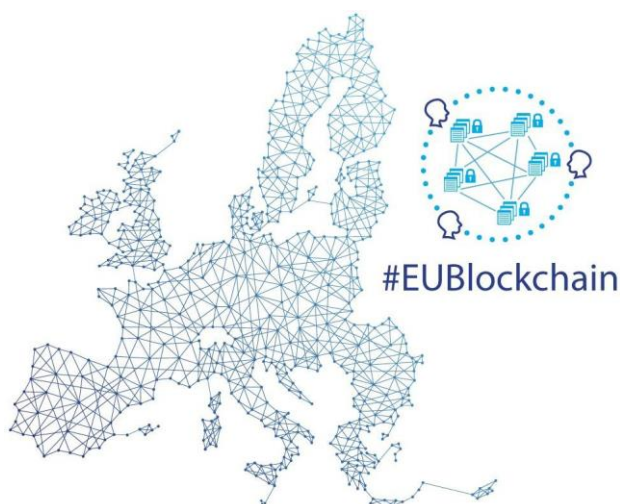# EU BLOCKCHAIN OBSERVATORY & FORUM

EUBOF hybrid event -
EU Blockchain Week 2023:
EUBOF & EBSI-VECTOR Joint Conference
Ljubljana, Slovenia
6-7 October 2023

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INTRODUCTION

The EU Blockchain Observatory and Forum (EUBOF) organized its third hybrid titled "*EUBOF & EBSI-VECTOR Joint Conference" within the frame of the EU Blockchain Week 2023. The event* was held on October 6th and 7th in Ljubljana, Slovenia and featured speakers across a variety of panels and keynotes on blockchain trends and innovation in Europe and beyond.

The event attracted attendees from the European Commission, startups, NGOs, academia, and governments and covered a variety of topics such as MiCA regulation, Metaverse, European Blockchain Services Infrastructure (EBSI) and Sustainability powered by blockchain.

The hybrid event was attended by more than 200 participants both online and onsite.

WELCOME

The inaugural segment of the event set an inspiring tone with a series of welcome speeches delivered by the co-organizers. **Dr. Vlado Stankovski** of BC DIH took the podium first, extending a warm welcome to the attendees. **Nena Dokuzov**, representing EBSI, EDIC, and EBP under the Slovenian Government, then took the stage, followed by **Pierre Marro** from DG CNECT.

Finally, **Tonia Damvakeraki**, Managing Director of the EU Blockchain Observatory and Forum welcomed and invited the audience to engage with the discussions with an eye towards shaping a future where blockchain technology is integrated into the fabric of European digital strategy.

PANEL 1: POLICY MAKING AND REGULATORY ISSUES

Moderated by Nena Dokuzov, EBSI, EDIC, EBP/ Slovenian Government

- Pierre Marro, EC
- Dr Charis Savvides, University of Nicosia
- Patrick Hansen, Circle
- Marina Markežič, EUCI
- Mariana de la Roche, EUBOF Expert Panel, IOTA

Main outtakes from the session:

- Nena Dokuzov, in her keynote speech, provided a retrospective and forward-looking view of blockchain's role in European digital infrastructure, detailing historical milestones and strategic objectives going forward. One of the significant historical moments highlighted was the "First Slovenian Blockchain Meetup" in June 2017, a cornerstone event for the blockchain community in Slovenia and a testament to the growing interest and engagement with blockchain technology in Europe. Her speech then shifted towards the "EUROPEUM Objectives," which are aligned with the goals of the Digital Decade 2030. The EUROPEUM objectives include supporting the digital transformation of public and private services, strengthening digital skills and competencies, and enhancing the blockchain/DLT ecosystem in Europe. This involves promoting digital sovereignty through international partnerships, with a clear emphasis on the integration of blockchain as a key technology. Nena Dokuzov emphasized the establishment of EDIC (European Digital Infrastructure Consortium) as a pivotal move to scale up EBSI and reinforce the partnership established by the European Blockchain Partnership (EBP). The EDIC's role encompasses governance, development, and operational facets of EBSI and EBP, seeking to bolster EU policies, cross-border exchanges, and interoperability within the digital transformation agenda. These strategic objectives reflect a comprehensive approach to harnessing digital technologies for Europe's socio-economic advancement and sustainability.
- The panel that followed which was moderated by Nena Dokuzov, navigated through the multiple layers of current and forthcoming regulatory frameworks that are poised to shape the blockchain landscape.
- The crux of the discussion centered on the Markets in Crypto-Assets (MiCA) framework, the Digital Ledger Technology (DLT) Pilot Regime, the challenges presented by the Data Act, and how these environments synergistically influence the trajectory of blockchain technology development.
- The panel was an enlightening discussion on how policy and regulation could either serve as the backbone of technological innovation or become a hurdle if not carefully crafted to accommodate the fast-paced evolution of blockchain technologies.

PANEL 2: EDUCATION & SKILLS

Moderated by Marcela Tuler de Oliveira, TU DELFT

Keynote Speech: Experience with NOO ULTRA: Microcredentials for Microcompetences - University of Ljubljana Use case, Dr Ksenija Vidmar Horvat , Vice Rector for study

- Dr Elias Iosif , Teaching smart contracts to non-coders: The chmod 444 pov
- Prof. Zorislav Sojat, DAP Project - Democratization of Academic Publications, IRB,
- Alan Mlekuž , Works&Skills - Pro-bit, (Practical use case – Slovenian project - recording of competences, professional not professional)
- Dionysios Solomos, CHAISE Project
- Paul Aartsen, European Software Skills Alliance
- Emanuele Cisbani, Resume credentials

Main outtakes from the session:

- Panel 2 of the conference, titled "Education & Skills," focused into the crucial interplay between emerging technologies and educational paradigms, moderated by Marcela Tuler de Oliveira from TU Delft.
- A keynote speech by Dr. Ksenija Vidmar Horvat, Vice Rector for Study from the University of Ljubljana, illuminated the conference with insights from the "NOO ULTRA: Microcredentials for Microcompetences" initiative, sharing valuable experiential knowledge through a pertinent use case.
- Following the keynote, Dr. Elias Iosif shared innovative approaches in teaching smart contracts to non-coders, offering perspectives on making intricate technological concepts accessible to a broader audience.
- Prof. Zorislav Sojat contributed thought-provoking insights from the "DAP Project - Democratization of Academic Publications," exploring the evolving landscapes of academic publication in the digital era.
- Alan Mlekuž presented the "Works&Skills - Pro-bit" initiative, illustrating a practical use case from Slovenia, which focused on the efficient recording of competences, both professional and non-professional.
- Dionysios Solomos, representing the CHAISE Project, brought to the fore discussions centered around the project's initiatives and its broader impacts.
- Contributions from Paul Aartsen highlighted the initiatives of the European Software Skills Alliance, emphasizing collaborative approaches in fostering software skills.
- Emanuele Cisbani offered insights into "Resume Credentials," exploring the authentication and validation aspects of educational and professional credentials.
- The panel fostered an enlightening dialogue on the multifaceted intersections between technology, education, and skills. It highlighted the wealth of ongoing projects and innovative approaches that are reshaping educational frameworks and skill development in alignment with contemporary technological advancements and societal needs.

INTERACTIVE SESSION -SUSTAINABILITY OF BUSINESS MODEL FOR BLOCKCHAIN IN EUROPE/ CREATING A SUSTAINABLE BUSINESS MODEL FOR THE FUTURE OF BLOCKCHAIN IN EUROPE – Q&A

Moderated by Nena Dokuzov and Daniel Du Seuil

Main outtakes from the session:

- In a highly interactive session titled "Sustainability of Business Model for Blockchain in Europe," co-moderators Nena Dokuzov and Daniel Du Seuil facilitated a dynamic exchange of views.
- Miroslav Polzer of IAAI GloCha took the stage with a presentation from the Climate Change Coalition, drawing attention to the critical intersection of blockchain technology and environmental sustainability. The discourse revolved around harnessing blockchain's potential to create transparent, efficient, and sustainable business models that align with European values and climate objectives. The discussion delved into the applicability of blockchain in monitoring and mitigating climate change, as evidenced by the showcased use cases from EBSI-VECTOR and TRACE4EU projects, demonstrating how blockchain initiatives could lead to tangible environmental benefits.
- The Q&A segment transformed into a vibrant brainstorming platform, where the audience actively engaged with the panelists to identify viable business models for a sustainable blockchain future in Europe. The insights gathered during this session highlighted a profound commitment among stakeholders to ensure that the European blockchain narrative is one that contributes to a sustainable future, setting a precedent for how technology and ecological responsibility can go hand-in-hand.

PANEL 3: BLOCKCHAIN AND CONVERGING TECHNOLOGIES

Moderated by Stamatis (Manos) Panangelou, Researcher, University of Nicosia

Keynote Speech: by Alex Nascimento

- Dr John Soldatos, Netcompany - Intrasoft
- Dr Joshua Ellul, University of Malta
- Marcela Tuler de Oliveira, ExtremeXP
- Alex Nascimento
- Jose Jacob K

Main outtakes from the session:

- The panel focused into "Blockchain & Converging Technologies," moderated by Stamatis Panangelou, a researcher and PhD candidate from the University of Nicosia.
- The panel explored how blockchain technology is synergizing with other fields to forge groundbreaking solutions.
- Keynote speaker Alex Nascimento provided an enlightening exposition on the transformative potential of integrating blockchain with other emerging technologies, setting the stage for an in-depth discussion. Alex Nascimento, doubling as a panelist, shared his foresight on the future of asset-backed tokens and the role of AI in enhancing their efficiency and security within the DeFi ecosystem.
- Dr. John Soldatos from Netcompany - Intrasoft discussed the amalgamation of blockchain and AI, detailing their potential to craft more efficient and secure systems, and the competitive advantages they could offer to businesses.
- Dr. Joshua Ellul from the University of Malta addressed the academic frontier, highlighting key research areas where blockchain and AI intersect and the evolving ethical and regulatory landscapes accompanying these advancements.
- The discussion continued with Marcela Tuler de Oliveira from ExtremeXP, who explained the practical challenges and opportunities faced by software development teams in adopting these technologies. She provided insights into how these hurdles could be overcome and the impact of blockchain and AI on future software development methodologies.
- Jose Jacob K brought a different perspective by discussing the role of AI and blockchain in urban development and their potential to fast-track the achievement of Sustainable Development Goals. He further commented on the synergy between these technologies in transforming solutions for emerging businesses, offering strategic insights for startups aiming to integrate these technologies into their models to promote sustainability.

PANEL 4: INTEROPERABILITY OF BLOCKCHAIN PLATFORMS

Moderated by Nikos Kostopoulos, EUBOF

- EBSI – use cases:
    - Vector project, Roman Beck
    - Trace4EU project, Steffen Schwalm
- Bruno Kinyaga and Farrukh Aimdjanov, UNIDO, Tanzania blockchain infrastructure
- Branimir Rakić, Trace Labs, Core Developers of the OriginTrail
- Jose Cantera, IOTA use case
- Caroline Barelle, ONTOCHAIN

Main outtakes from the session:

- In a very interesting panel moderated by Nikos Kostopoulos from EUBOF, discussions centered around the European Blockchain Services Infrastructure (EBSI) and its use cases. The session featured an array of projects and experts who are at the forefront of blockchain application and development.
- Roman Beck presented the Vector project, shedding light on its aims and achievements within the blockchain space.
- Steffen Schwalm followed with an insightful exposition on the Trace4EU project, which leverages blockchain for enhanced traceability and transparency across Europe.
- The panel also featured a global outlook with Bruno Kinyaga and Farrukh Aimdjanov from UNIDO discussing the development and potential of blockchain infrastructure in Tanzania, an initiative that shows the expansive reach and adaptability of blockchain technologies across continents.
- Branimir Rakić from Trace Labs delved into the technical aspects as a core developer of the OriginTrail, which is designed to enable businesses to speak the same language of trust with their supply chains.
- Jose Cantera introduced a use case from IOTA, offering insights into how this technology is being tailored to specific needs and challenges, while Caroline Barelle from ONTOCHAIN presented the project.

PANEL 5: WEB3 & METAVERSE

Moderated by Ales Pevc (Technology Park Ljubljana)

Keynote Speech: World's first university course delivered on-chain and in the metaverse: the case of the University of Nicosia, Prof George Giaglis

- Marc Taverner, CEO, Bluesphere Solutions
- Dr Ioannis Revolidis, EUBOF Expert Panel/ University of Malta
- Jakob Sočan, Metaverse Infrastructure, MWC
- Andrej Kotar, Endava
- Dr Jane Thomason - Metaverse Infrastructure

Main outtakes from the session:

- Prof. George Giaglis from the University of Nicosia delivered the keynote presentation, outlining the innovative experiment conducted by the University of Nicosia's Department of Digital Innovation, focusing on testing education "in the metaverse" and "on-chain." The experiment aimed to immerse education entirely within the virtual world of the metaverse, where the complete course, including lectures, seminars, interviews, and panels, took place. Additionally, the experiment emphasized the need for all student communications and material sharing to be confined within the metaverse, circumventing the use of the University of Nicosia's Learning Management System (UNIC LMS). He discussed the "on-chain" aspect of the experiment which centered on leveraging blockchain technology for educational processes. The experiment sought to ensure that the entire course, from registration to certification, was conducted on-chain, negating the involvement of any centralized service, whether internal to UNIC or external. The goals set within this experiment were clearly structured to explore the boundaries and capabilities of decentralized technologies like blockchain and the metaverse in the realm of education, aiming to foster a self-sufficient, decentralized educational environment that functions independently of traditional centralized systems and services.
- The panel discussion that followed, presented a mosaic of viewpoints from esteemed panelists, each providing unique insights into the evolving metaverse and Web3.0 landscape.
- Marc Taverner, CEO of Bluesphere Solutions, initiated the discussion, outlining the profound technology and business opportunities that the Web3/4.0 metaverse brings. Taverner discussed how businesses navigate the transition, emphasizing adaptability, and a nuanced understanding of the metaverse's impacts on existing business models.
- Dr. Ioannis Revolidis of the EUBOF Expert Panel/University of Malta explored the instrumental role of universities in the research and development of metaverse and Web3.0 technologies. He articulated the reciprocity between academia and industry, emphasizing collaborative efforts to navigate the benefits and challenges of integrating these emerging technologies into academic environments.
- Jakob Sočan of Reeb XR concentrated on the logistical and technical challenges inherent in constructing metaverse or Web3/4.0 environments. His focus on interoperability highlighted

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its significance in facilitating seamless transitions between different metaverse realms, making them more user-friendly and accessible.

- Andrej Kotar from Endava brought into focus the transformative potential of the Metaverse and Web3.0 in reshaping urban spaces into smart cities and communities. Kotar shared insights into applying existing solutions to new frameworks like the Citiverse, demonstrating Endava's commitment to fostering innovation within Web3/4.0 and Virtual Reality domains.

- Dr. Jane Thomason delved into the foundational elements and prevailing challenges of the emerging Metaverse, articulating the influential role of conferences and community events in its popularization and development. Her insights emphasized communal engagement as a driving force behind the metaverse's evolution.

PANEL 6: SUSTAINABLE FINANCE (DEFI & REFI)

Moderated by Marina Niforos, EUBOF Expert Panel

Keynote Speech: BC100+, Mariana de la Roche, IOTA

- Mariana de La Roche, IOTA, BC100+
- Garbriela Chang, EthicHub
- Katherine Foster, Green Digital Finance Alliance & Board Member EU EIT Food
- Antonio Lanotte, EUBOF Expert Panel
- Denis Petrovčič, Blocksquare

Main outtakes from the session:

- A keynote speech, delivered by Mariana de la Roche, one of the leaders of BC100+, presented BC100+, a global initiative, under the High Patronage of H.E. Csaba Körösi, President of the 77th UN General Assembly, that aims to convene the blockchain ecosystem to the broader efforts of UN Agencies and global initiatives in support of the UN Charter values and the SDGs by mapping global Blockchain for Sustainability ecosystems. BC100+ brings together a variety of organisations across different sectors. At the core, BC100+ intends to promote quality debate, raise awareness and clarify the opportunities of blockchain's role in realising the UN Charter Values and the 2030 Agenda.
- Gabriela Chang from EthicHub articulated the necessity of inclusivity in financial frameworks, advocating for a new economic model that pivots from extraction to regeneration. Chang also emphasized the urgency of incorporating underrepresented voices in the decision-making processes to ensure holistic and sustainable development.
- Katherine Foster, representing the Green Digital Finance Alliance & EU EIT Food, offered insights into the nuances of sustainable finance, delineating successful projects that demonstrate the interweaving of technological innovation and sustainability objectives. Foster's contribution also underlined the pivotal role of digital technologies in monitoring, reporting, and verifying processes integral to sustainable finance.
- Antonio Lanotte from the EUBOF Expert Panel discussed the crossroads of digital transformation, green transition, and future statecraft in Europe. Lanotte emphasized the disruptive potential of technologies like blockchain and AI in fostering a carbon-neutral region and promoting a circular economy, underscoring their transformative impact on economic models.
- Denis Petrovčič from Blocksquare brought into focus the transformative role of blockchain in redefining the realms of real estate investment. Petrovčič's discussion highlighted blockchain's potential to democratize access to sustainable real estate investments, bridging technological innovation with investment inclusivity and sustainability.

PANEL 7: SUSTAINABLE BUSINESS MODELS FOR ENVIRONMENTAL PILLARS-TARGETING SDGS

Moderated by Nena Dokuzov

Keynote by Ingrid Vasiliou Feltes, EUBOF Expert Panel

Blockchain use cases for sustainability:
- Tomaž Levak, Trace Labs, Core Developers of the OriginTrail, Circular economy and circular construction
- Daniel Avdagic, Sustainable transport - AVLiving Lab
- Oscar Wendel , World trade center sustainable focus - future blockchain summit
- Sunita Khatri, Dubai World trade Center

Main outtakes from the session:

- This panel focused on how blockchain technology can be harnessed to promote sustainability and advance the Sustainable Development Goals (SDGs). Nena Dokuzov moderated the session, bringing together a diverse group of speakers to discuss and explore the intersection of blockchain and sustainable practices.
- The keynote by Ingrid Vasiliou Feltes from the EUBOF Expert Panel set the stage with a call to action for integrating blockchain technology into sustainable business models.
- Tomaž Levak of Trace Labs, one of the core developers of the OriginTrail, brought attention to the concept of a circular economy, particularly in the context of construction.
- Daniel Avdagic of AVLiving Lab presented on the role of blockchain in sustainable transport solutions. His insights into AVLiving Lab's work demonstrated the potential for blockchain to drive significant change in the transportation sector.

APPENDIX

EVENT PHOTOS

OFFICIAL AGENDA

TIME - CET	ACTIVITY
	DAY 1, 6 October 2023
09:00	**Registration**
09:30-09:45	**Welcome**
	• **Dr. Vlado Stankovski,** BC DIH • **Nena Dokuzov,** EBSI, EDIC, EBP/ Slovenian Government • **Pierre Marro**, DG CNECT • **Tonia Damvakeraki,** EU Blockchain Observatory and Forum
09:45-10:45	**Panel 1: Policy Making and regulatory issues**
	Moderated by Nena Dokuzov *Keynote Speech:* **MiCA, Data Act, digital EURO, DLT Pilot (how can we connect all of the regulatory issues under umbrella focus regarding blockchain/DLT)** - Nena Dokuzov • **Pierre Marro,** EC • **Dr Charis Savvides**, University of Nicosia • **Patrick Hansen**, Circle • **Marina Markežič**, EUCI • **Mariana de la Roche,** EUBOF Expert Panel, IOTA
10:45-11:00	**Coffee Break**
11.00-12:00	**Panel 2: Education & Skills**
	Moderated by Marcela Tuler de Oliveira, TU DELFT *Keynote Speech: Experience with NOO ULTRA: Microcredentials for Microcompetences - University of Ljubljana Use case,* Dr Ksenija Vidmar Horvat , Vice Rector for study • **Dr Elias Iosif ,** Teaching smart contracts to non-coders: The chmod 444 pov • **Prof. Zorislav Sojat,** DAP Project - Democratization of Academic Publications, IRB, • **Alan Mlekuž ,** Works&Skills - Pro-bit, (Practical use case – Slovenian project - recording of competences, professional not professional) • **Dionysios Solomos,** CHAISE Project • **Paul Aartsen,** European Software Skills Alliance • **Emanuele Cisbani,** Resume credentials
12.00-13.00	Sustainability of business model for blockchain in Europe/ creating a sustainable business model for future of blockchain in Europe - Q&A
	Sustainability of business model for blockchain in Europe/ creating a sustainable business model for future of blockchain in Europe - Q&A

	Session to be moderated by Nena Dokuzov **Intervention by Miroslav Polzer, IAAI GloCha , Climate Change Coalition presentation** *Interactive and inclusive session for the audience (on site and on-line) addressing certain use cases from EBSI-VECTOR and TRACE4EU to identify the business model for sustainable blockchain for the future.*
13:00-14:00	**Lunch Break**
14.00-15:00	**Panel 3: Blockchain & converging technologies**
	Moderated by Manos Panangelou, Researcher, University of Nicosia *Keynote Speech: by Alex Nascimento* ● **Dr John Soldatos,** Netcompany - Intrasoft ● **Dr Joshua Ellul,** University of Malta ● **Marcela Tuler de Oliveira,** ExtremeXP ● **Alex Nascimento** ● **Jose Jacob K**
15:00-16:00	**Panel 4: Interoperability of blockchain platforms**

	Moderated by Nikos Kostopoulos, EUBOF
	
	Keynote Speech: EUBOF's Interoperability report, Nikos Kostopoulos
	
	● **EBSI – use cases:**
	    ○ Vector project, Roman Beck
	    ○ Trace4EU project, Steffen Schwalm
	● **Tadej Slapnik,** SI-Chain
	● **Bruno Kinyaga and Farrukh Aimdjanov, UNIDO**, Tanzania blockchain infrastructure
	● **Branimir Rakić,** Trace Labs, Core Developers of the OriginTrail
	● **Jose Cantera,** IOTA use case
	● **Caroline Barelle,** ONTOCHAIN

	DAY 2, 7 October 2023
09:30-10:30	**Panel 5: Web3 & Metaverse**
	Moderated by Ales Pevc (Technology Park Ljubljana) *Keynote Speech:* **World's first university course delivered on-chain and in the metaverse: the case of the University of Nicosia,** Prof George Giaglis ● **Marc Taverner,** CEO, Bluesphere Solutions ● **Dr Ioannis Revolidis,** EUBOF Expert Panel/ University of Malta ● **Jakob Sočan,** Metaverse Infrastructure, MWC

	• **Andrej Kotar,** Endava
	• **Dr Jane Thomason -** Metaverse Infrastructure
10:30-11:30	**Panel 6: Sustainable finance (DeFi & ReFi)**
	Moderated by Marina Niforos, EUBOF Expert Panel **Keynote Speech: BC100+, Mariana de la Roche, IOTA** **Panelists:** • **Mariana de La Roche**, IOTA, BC100+ • **Garbriela Chang,** EthicHub • **Katherine Foster,** Green Digital Finance Alliance & Board Member EU EIT Food • **Antonio Lanotte,** EUBOF Expert Panel • **Denis Petrovčič,** Blocksquare
11:30-12:00	**Coffee Break**
12:00-13:00	**Panel 7: Sustainable Business Models for environmental pillars - targeting SDGs**
	Moderated by Nena Dokuzov *Keynote by Ingrid Vasiliou Feltes, EUBOF Expert Panel* **Blockchain use cases for sustainability:** • **Tomaž Levak,** Trace Labs, Core Developers of the OriginTrail, Circular economy and circular construction • **Daniel Avdagic,** Sustainable transport - AVLiving Lab • **Oscar Wendel ,** World trade center sustainable focus - future blockchain summit • **Sunita Khatri,** Dubai World trade Center
13:00-15:00	**Lunch and Networking**