EU BLOCKCHAIN OBSERVATORY & FORUM
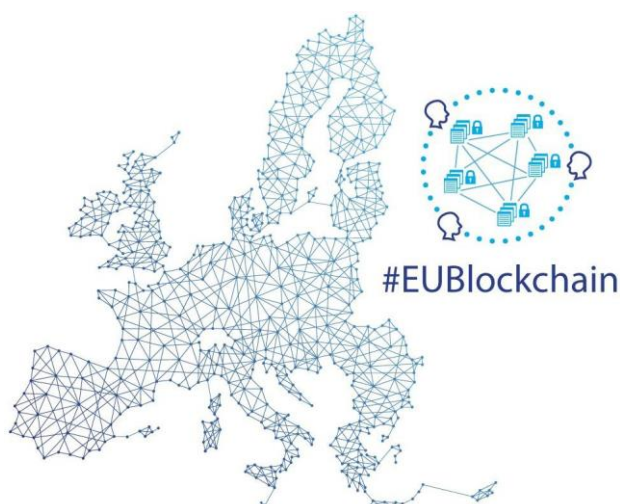
Workshop Report –

EU Blockchain Ecosystem workshop–
Online Video Conference, 2 March 2021

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WELCOME

Lefteris Tsonidis, EU Blockchain Observatory and Forum, commenced the workshop with a brief explanation on the housekeeping rules that had to be followed during the workshop.

Peteris Zilgalvis, Head of Unit, Digital Innovation and Blockchain, DG CONNECT; Co-Chair, FinTech Task Force, EC followed, welcoming everyone to the workshop for the EU blockchain ecosystem which gives a real snapshot of where each member of the European Union stands, as well as Europe as a whole. Before passing the floor to the keynote speaker, Mr Zilgalvis, emphasized that the European Parliament is an important part of the European Commission institutional makeup, as the markets and crypto assets regulation are going through the Parliament and Council, hopefully towards a speedy adoption.

KEYNOTE SPEECH

After the brief introduction to the workshop, the floor was given to **Ms. Eva Kaili**, Member of the European Parliament who highlighted that Europe now has the maturity to move to the next step in finding ways to harmonize the European environment related to the blockchain technology and its tremendous potential.

It's very important to make sure that the European Parliament and the European Commission have the expertise to proceed together and make sure that a beneficial environment for entrepreneurs will be created. Europe should not be less behind China and the US, Europe should be leading into setting up the main framework and the basis of a positive approach to blockchain.

Blockchain is not super flexible as a technology, it's not easy to scale, and it's really important to understand that from the beginning, it needs to be designed in a way that it will not create frictions later. It's very important to have the right architecture so that this technology will be a platform that everybody can join and use, but at the same time, if things change in regulation, it's very difficult to change the design of a blockchain and this is something that needs to be taken into consideration.

Another issue raised by Ms. Kaili was how to overcome banking systems' hidden costs by using technology to benefit citizens. The pandemic has been a catalyst to bring more people on board as everybody is trying to use new technologies to make cross border transactions faster, cheaper, and safer.

Ms. Kaili said that the challenge ahead is to create a legal certainty as many legal questions remain unanswered. It's really crucial for the stability of the market to get the maximum of the potential of this technology. Fragmented regulations can create a headache to businesses, across Europe, because of the uncertainty. Blockchains are immutable and cannot be easily mandated. Common standards and clearly defined regulations are the steps ahead, but they also need to be compatible with the legal definitions across the globe.

Blockchain can also be connected with other technologies such as Artificial Intelligence to create more secure transactions. Blockchain enables cooperation, safe data sharing and removing intermediaries. It has given the citizens more options while giving less excuses to the banks to make mistakes.

Ms. Kaili concluded that the workshop and the report are helpful for the European Parliament, while they are drafting the legislation and expressed her willingness to keep working with the EU Blockchain Observatory and Forum to achieve the legal framework required.

PRESENTATION OF THE EU BLOCKCHAIN ECOSYSTEM DEVELOPMENTS REPORT

Following the keynote speech, Prof. **George Giaglis**, Executive Director of the Institute for the Future at the University of Nicosia presented on behalf of the EUBOF consortium, the main findings of the EU blockchain ecosystem report, published in November 2020.

The report analyses 27 EU member states plus Switzerland and the United Kingdom, in two levels:

a) Country-level overviews, a synopsis of the state of blockchain in each of these 29 countries

b) An evaluation, a comparative evaluation between these countries in terms of their ecosystems or regulatory maturity

It's a detailed report of more than 200 pages and has already proven to be a reference point for the development of policy regarding blockchain in Europe. The most interesting part of the report is the cross-country analysis, the comparative evaluation of what's happening in Europe, across three dimensions: a) the entrepreneurial ecosystem, b) the academic initiatives and c) regulation. Things like the size of the blockchain industry in each country and in Europe as a whole, were researched, as well as academic initiatives, focusing both on education and training professional training programs but also on identifying research groups. EUBOF is currently working on developing an interactive map where everyone can see what types of academic initiatives exist across Europe.

On a first level analysis, almost 3000 companies that are focused on blockchain and crypto have been identified. EU member states host around half of these companies while the rest of them are based in Switzerland and United Kingdom. Within the EU, Germany, France, Netherlands, Spain, and Estonia host the majority of the companies but this is a first level analysis that does not take into account the fact that these are countries of different sizes. On the second level analysis, the report looks at the per capita distribution of blockchain companies around Europe. Malta, Estonia Luxembourg, and Cyprus take the lead, as they have a larger number of companies compared to their population.

Prof Giaglis mentioned that from the 7.5 billion euros of total funds raised, Switzerland and the United Kingdom take the lion share, with Lithuania, the Netherlands and Estonia being the top three EU countries. From the per capita point of view, Switzerland continues to be at the top of the list because of its very strong ecosystem. Other European countries such as Estonia, Cyprus, Lithuania, and Malta have also raised an impressive amount of money by blockchain companies. Switzerland also leads the distribution per capita, while Estonia, Cyprus, Malta and Lithuania follow.

According to the report, Europe is a global leader in blockchain and crypto education. The University of Nicosia in Cyprus became the first university in the world to offer the first blockchain program, in 2013. The ecosystem has grown since then and currently there are 18 programs in 11 different countries. Spain has eight different universities offering programs related to blockchain. There is a steady growth in the academic offerings in this market, which is very important in the sense that it will provide the skilled talent that Europe needs for its entrepreneurial ecosystem.

The report includes a three-stage maturity model to measure the regulatory majority of different countries when it comes to blockchain:

• *Stage I* includes 11 countries that either do not have any specific legislation, or the authorities have only issued warnings for investment protection or have some small-scale national initiatives.

- *Stage II* includes 11 countries that have voted frameworks for KYC, AML or taxation, or the governments have set up specific task forces related to crypto and blockchain, or have launched blockchain related pilots in the public sector, or have a science of strong support of research by the government.

- *Stage III* includes 7 more mature countries that have either voted comprehensive legislation through their parliaments, have announced national blockchain strategies or have implemented the regulatory sandboxes.

This model was complimented by looking at the ecosystem maturity, through three indicators: a) business ecosystem, b) user communities and c) academic initiatives. A three-stage model was used which produced a relatively fair distribution, as there are 11 countries in Stage I, 10 countries in Stage II and 8 countries in Stage III.

Prof Giaglis presented a chart with synthesizes the findings of the report, as it groups countries by a combination of their maturity in the regulatory and ecosystem growth to produce a map of the current state of blockchain in the EU.

Additionally, four factors were identified that favor the development of blockchain at the national level: a) regulatory certainty, b) state support, c) innovation-friendly climate and d) skilled workforce.

Prof Giaglis concluded that the European blockchain ecosystem is growing fast and that's why the EU Blockchain Observatory and Forum and the European Commission are planning to follow up with a second version of this report next year.

A Q&A session followed, during which Prof Giaglis said that since 2017 blockchain represents the fastest growing sub segment of VC funding. In regard to a question about the regulatory initiatives in the EU, Prof Giaglis replied that the European Commission, the Parliament and the Council are moving in the right direction. On a question about how the EU compares to the rest of the world, it was mentioned that the USA is trying to find their pace while China has made huge leaps not only in researching, studying and designing, but also implementing around and rolling out a national digital currency. This should keep Europe alert and it is something to be taken very seriously by the EU.

VIEWS AND PERSPECTIVES OF THE EU BLOCKCHAIN ECOSYSTEM BY THE EBP

Ms. **Nena Dokuzov**, Co-Chair of the European Blockchain Partnership (EBP) started the presentation by giving a short historic view of the EBP and European Blockchain Service Infrastructure (EBSI).

Ms. Dokuzov delineated that in 2018, four use cases that could be implemented on the blockchain infrastructure were identified: self-sovereign identity, trusted data sharing for custom and tax authorities, diplomas on blockchain and European Court of Auditors platform for checking the regularity of payments for EU funds. In 2019 and 2020 there was an intensive work on establishing EBSI and on development of use cases. The EBP policy groups' structure and how the working groups for the use cases are related to it, were analyzed during the presentation.

Ms. Dokuzov highlighted that the most important milestone of the EBP was in 2019 when the policy group adopted the following mission statement: *"Policy group will work together towards realising the potential of blockchain-based services for the benefit of citizens, society and economy across Europe".*

It was decided that the blockchain policy group would work towards materializing the potential of blockchain, through sharing experiences, knowledge and practices and through the close regulatory cooperation between EU member states towards the creation of a European ecosystem. In addition, it would promote interoperability amongst relevant public-sector and private sector blockchain infrastructures. The development of national protocols is very important and can substantially contribute in making the European Union a pioneer in the field.

Ms. Dokuzov introduced how in 2020, the EBSI v1 was launched, as well as the CEF Telekom Call for projects which had 19 successful applications from member states. New use cases were also selected such a social security card and SME financing that were proposed by EU member states.

Ms. Dokuzov concluded with revealing the EBP plans for 2021 as the debate about Digital Europe Program goes on. She confirmed that the reports from EUBOF can be proven very helpful while the EBP works on blockchain strategy. The EBSI v2 will be launched and an EBP Policy group non-paper will be published which will try to define the role of each sub-group and the relations between EBP, INATBA, EUBOF and other international organizations. The EBP will continue collaborating and supporting the work of the European Parliament, the European Commission and the EU Blockchain Observatory and Forum.

PANEL DISCUSSION 1: BUSINESS ENVIRONMENT AND DEVELOPMENT OF CRYPTOASSETS AND BLOCKCHAIN COMMUNITY: TRENDS, DRIVERS AND OBSTACLES

Moderated by Alexi Anania, Research Coordinator, Cambridge Centre of Alternative Finance & Co-Founder, Bartertrade.io

- **Marc Taverner,** INATBA
- **Montse Guardia,** Alastria
- **Luukas Ilves,** Guardtime
- **Ad Kroft,** EUBOF Expert Panel
- **David Coleman**, CPO, IOV42

Objectives of the session:

- **To present the key characteristics of the EU Blockchain business environment via a constructive dialogue between the panellists.**
- **To identify the main drivers for a healthy and flourishing business environment for blockchain companies/ start-ups**
- **To discuss the main hurdles faced by the industry / ecosystem and how they differ at EU or MS level**

Main outtakes from the session:

- Initially, the moderator, Mr **Alexi Anania**, presented the panellists and explained that the panel's main topic is the various trends, obstacles, and drivers behind the business environment and development of crypto assets and the blockchain community.

- Mr **Marc Taverner,** took the floor saying that from an EU perspective, there is a highly fragmented and somewhat inconsistent regulatory and a legislative environment. Progress is hampered by a lack of talent, especially in the technical and development areas but this is happening worldwide. Furthermore, Mr Taverner commented that most EU member states are left in the shadows of the success of Switzerland who went very early in providing legal certainty around crypto assets and also issuing some very strong and guidance that helped attract global players of scale into that jurisdiction, brought with them the talent and the funding to sit alongside that existing global financial ecosystem. In regards to the second panel topic, Mr Taverner said that sandboxes play an understated and undervalued role to create safe testing, learning, and iterative capabilities that many innovators treasure and those types of frameworks can lead to an environment that governments can help facilitate through a focus on allowing capital investments for subsequent stage development. Other important drivers for the blockchain business environment in Europe are legal certainty and standards which are even more critical than access to funding because the lack of standards and security can prevent mass adoption.

- Ms. **Montse Guardia,** followed expressing the view that Europe should start putting the pieces of fragmentation together, the EBP is only three years old and has achieved a lot in a very short period of time so this should be considered an advantage. Europe has talented people in the tech environment, and technology is evolving, as there are developments from a legal and

regulatory point of view. Ms. Guardia mentioned that Europe is a unique case with cross national understanding that enables countries to work together on initiatives such as the EBSI and concluded that standards can be built with investing on research, learning and testing.

- Mr **Luukas Ilves,** joined the discussion by saying that governments can play a big role with regulations, but it's actually adoption and demand that can play a bigger role. It is the willingness of commercial customers to accept what was initially a non-standard solution, and to accept some risk elements, that really affects the ecosystem. Mr Ilves agreed with Mr Taverner's view on the entrepreneurship environment as what's good for blockchain is probably good for startups in general. Blockchain requires unique elements, in particular finding ways to overcome the barrier of adoption, something that Alastria is trying to do. Lastly, it was mentioned that standardization is good, but it has to be done in a way that doesn't limit the ecosystem development.

- **Mr Ad Kroft** took the floor to thank DG Connect for involving every party to make this technology work and the European Commission and European governments for stimulating the ecosystem to innovate. Blockchain service providers are now more mature, as all the chess pieces are in place and Europe now knows the limitations and that rules are needed to grow into a more productive stage. It was emphasized that a good ecosystem is required to achieve top performance and that more incentives for SMEs are needed to promote engagement in blockchain applications.

- **David Coleman** pointed out that the fragmentation is a concern despite that blockchain is trying to eliminate fragmentation. It is encouraging to see that governments want to innovate and collaborate on much more hybrid public and private services. Mr Coleman expressed the view that it is important for policymakers and regulators to engage with the people innovating, to become aware of what is happening from a technology perspective and to be proactive, to be informed rather than suddenly introducing a regulation. This level of engagement between them can pave the way forward from a regulator and policy perspective. Lastly, the end user must be brought along the journey in order to flourish business environment for blockchain in Europe. Both businesses and governments are serving the people, the consumers, and the challenge around that, is to make crypto technology more accessible by investing in accessibility and user experience.

PANEL DISCUSSION 2: INTERNATIONAL EXPERIENCE & VIEWS

Moderated by: Marina Niforos, Affiliate Professor, Future of Work, HEC Paris

- **Sara Tucci**, INATBA AAB member
- **Dr Joshua Ellul**, Director of the Centre for Distributed Ledger Technologies (DLT), University of Malta
- **George Giaglis**, Executive Director, Institute for the Future, University of Nicosia & EUBOF
- **Florian Glatz**, German Blockchain Association

Objectives of the session:

- Discuss about the necessary skills for blockchain and the possibility of certifying these skills.
- Provide an overview of the status for skills in European level and the demand around these skills.
- Discuss about the research initiative on blockchain around Europe.

Main outtakes from the session:

- The panel moderator, Ms. **Marina Niforos**, curated the panel discussion to unravel the proper skills for blockchain, the European status quo, and research cases.

- After the introduction, Ms. **Sara Tucci** commenced her statement by pointing to technical challenges as the reason for ambitious applications failing. The technical challenges can be overcome by researching and producing skilled engineers in DLT, cryptography, and math. The challenges could be managed by prioritizing them as they are encountered and address the most pressing of them. On that note, the energy efficiency for blockchain infrastructures should be the first thing to address. The speaker brought the novelty in the technical domain that has the technical protocols coupled with economic incentives. The novelty springs from the existence of economic incentives and calls for the cooperation of multidisciplinary teams. The fact that these teams call for various fields of expertise is a challenge for human resource panorama. Ms. Sara Tucci has mentioned the absence of a blockchain dedicated program in France. Moreover, the researchers are working closely with foundations, like Cardano and Algorand, gaining experience in cutting edge software. A drawback of this focused research could be the restriction in solving problems specific to the individual software and ignore broader issues such as interoperability.

- Dr **Joshua Ellul** was the next speaker and shared his view on the multidisciplinary in the blockchain. The participation in the Maltese legislation formulation shaped the idea for the creation of a multidisciplinary program that fosters experts like computer scientists and legal professionals. The speaker noted the fact that the vocabulary and the perspective of the technology differ between the different stakeholders. The master program accounts for these facts and aims to broadly introduce to every stakeholder individually prior to diving deeper into specialised subjects of their preference. The experts from the various fields form appreciation on the challenges in blockchain and are ready to cooperate in multidisciplinary teams. The harmonization in education, ecosystem, and regulation is commencing in Europe. The harmonization goes beyond conferences or educational programs, but it needs to extend to deployed applications. Hands-on experience is going to drive the innovation of technology. An achievement for the technology will be to be adopted by applications without interrupting the user experience. Apart from the deployment of applications, there is a need for education across the board. In Europe, the demand for skilful individuals in blockchain is present, but the supply

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is not in part with the demand.

- Mr **George Giaglis** was the next speaker and shared lessons coming from his experiences of active participation in one of the first programs dedicated to blockchain. The first lesson is the existing imbalance between supply and demand for talent. Despite the growing number of programs, the imbalance is persistent. The second lesson concerns the widespread confusion around blockchain and crypto assets. People in positions to make decisions and develop policies are confused about blockchain subjects, but the phenomenon is diminishing as people are educated. Educators are burdened to clear the confusion by extending their educational efforts beyond the boundaries of traditional programs. The third lesson concerns the blockchain field, as it is a fast-paced field with constant updates. The accelerated pace makes it difficult for individuals to keep up with them. In light of the previous lessons, two takes toward educators are mentioned. The first take is the established of cooperation between institutes. The second take is the need to move beyond traditional academical education and shift to accommodate continuous professional education. Finally, a certification that is widely accepted in Europe calls for the joint ventures of academical institutes and industrial partners for its successful acceptance.

- Mr **Florian Glatz** followed in the panel discussion to provide his view around the education for regulators. A European strategic weakness is in the education of the policy-making side on blockchain. The weakness is regarded as strategic since the absence of knowledge on blockchain subjects limits the relevant bodies to make policies addressing blockchain issues. Beyond educating the regulators, the policy drafting and the assessment of their impact has to become more courageous. The paradigm of Facebook was given to showcase the AB testing on the policies impact. The testing can provide a feeling from the impact and connect to the policies goal. Emphasis was given on the fact that blockchain will have an impact on policy-making and call for novel adaptations that steer away from traditional ways. In more details, the structures in blockchain, and especially in DeFi, are different from any previous structures that work in the traditional legal system. Another point, that was brought up, was the innovation in the public sector. Startups find it difficult to participate in public procurement processes. The way for public sector adoption is to simplify the process. Finally, there is a need for education of the general public on blockchain and create a positive for cryptography.

- During the round discussion, the moderator Ms. **Marina Niforos** commenced the discussion with the ways of dispelling the negative feeling around blockchain. Mr **Florian Glatz** commented that there are enthusiasts in favour of blockchain surrounding the blockchain initiatives. He added the case in the US where the banks are allowed to settle their transactions in blockchain. That is a positive boost towards blockchain. Onwards, the moderator set the floor for Dr **Joshua Ellul** to discuss the education in blockchain. Dr Joshua Ellul shared his view that the regulators should possess technology education and transform to "technology regulators". He offered the Maltese case for the entities in crypto-space. In details, the entities are mandated by the financial authority in Malta to get a technology assurance audit through a technical.

- For the conclusion of the panel, Ms. **Marina Niforos** asked for a remark on measuring the success of blockchain. Ms. **Sara Tucci** talked about shifting the discussion for blockchain from a visionary perspective towards the data structure. She added the need to focus on the values that blockchain brings like trust, transparency, and decentralization. Dr **Joshua Ellul** discussed the future need to distinct the business cases between centralized and decentralized. Mr. **Florian Glatz** discussed the existence of a vibrant ecosystem of decentralized blockchain use cases and the issuance of a digital identity by a European organization. Finally, Mr. **George Giaglis** was looking forward to the creation of a European institute endorsed by industry and legislators that will act as a standard for the professional certification.

PANEL DISCUSSION 3: INTERNATIONAL EXPERIENCE & VIEWS

Moderated by Jeff Bandman, Bandman Advisors & Affiliate Professor of Institute for the Future, University of Nicosia

- **Nena Dokuzov**, Government of Slovenia
- **Dr Thomas Dünser**, Director, Government of Liechtenstein
- **Jo Bronckers**, FIBREE
- **Robert Kałuża**, Billon's Co-Founder and E-Money CEO
- **Edilson Osorio**, OriginalMy

Objectives of the session:

- Discuss about the initiatives in European level that aim to support the development of the national blockchain ecosystems.
- Discuss about the possible existence of gaps at European level that have to be addressed to guide the blockchain ecosystem into the future.
- Discuss about future policy development that could aid in scaling up blockchain companies and startups and bring forth examples from other countries around the globe.

Main outtakes from the session:

- The panel moderator, Mr **Jeff Bandman**, initiated the final panel discussion by giving the floor to the panellists for a brief introduction.

- The first panellist, **Dr Thomas Dünser**, was posed with questions on policy gaps to drive forward the ecosystem and Lichtenstein's national framework. An overview of the Lichtestein blockchain ecosystem was included for the public. In Lichtenstein, there are initiatives for the establishment of ecosystems for fintech and blockchain. Such initiatives include legal frameworks like the blockchain actor and token act established in 2020. Furthermore, the initiatives are not limited to legal frameworks but expand to community building and knowledge sharing. Furthermore, education and research are active in supporting blockchain. Dr Dünser added that the legal certainty, that is provided by two legal frameworks, is well received by the market. In details, the first framework is a general civil law fundament for tokens that answers fundamental questions. The second framework is related to the fundamental uncertificated rights and regulates the purely digital share and bond tokens issuance. On the policy gaps, it is noted that the company innovation is faster than the innovation of the legal framework. Another challenge is relevant to the classification of innovative solutions. For instance, the DeFi solutions classification is a difficult task and is dependent on the time that is needed to watch the way that the financial markets are treating these solutions.

- Mr **Jo Bronckers** was the next speaker who commenced his statement with a case of a gap bridging that occurred in the Netherlands. The case involves a group of industry representatives from the real estate sector. This group acknowledged the industrial fragmentation and the information loss over long periods and subsequently created a working to deliver a blockchain solution, FIBREE. The goal of the working group is to search for ways to improve the standardization and aggregation of data and subsequently create real estate digital passports. After conducting the appropriate national ministry, the working group realized that the ministry had planned to work on a similar project. The result was the public and private collaboration on developing a system for unique object identification. The project's added value is based on overcoming the silos that are created by storing the data by different stakeholders and providing a system for owners to control and access their data. Mr Bronckers noted the synergy of the

project with main topics in European policy. The examples are the green deal and the competitive European digital infrastructure. The synergy between blockchain project and green initiatives comes from the opportunity of organizing processes based on data in an efficient way to reduce emissions. The final remark is about the need to bring digitalization on a worldwide scale and surpass national borders.

- Ms. **Nena Dokuzov** was the next panellist and discussed the ways to further develop the blockchain ecosystem. Initially, she comments on the existence of unconnected steps on capitalizing on the strong commitment and achieving high standards in blockchain. Furthermore, she mentions the gap between the national blockchain strategy and the European partnership's strategy, as they are asynchronous. Additionally, Ms. Dokuzon presents an overview of Slovenia's national blockchain ecosystem. An action plan regarding the support of the blockchain has been in place since 2018. The blockchain startups support is not limited only to an advocacy role but extends to their financial aid in the hope of encouraging traditional businesses to follow them. Furthermore, the establishment of the European Blockchain Services Infrastructure gives the opportunity for covering cross-border projects. Moreover, EBSI should attract communities and governments to cooperate and increase the commitment to the national integration of blockchain. A final remark is on the education around technology. The usual case was that technologies were initially researched extensively for the business sector to adopted them in turn. In the case of blockchain, the reverse relation is present as the entrepreneurial sector drives the technology.

- Mr. **Robert Kałuża** commences his part in the panel with the introduction of the incentives for commercial companies in joining initiatives at a national level. The most profound incentive is to build a bigger blockchain ecosystem and popularize the technology. The main issue for that to happen is to the community the usability of blockchain. In other words, they have to clearly present the reason for blockchain implementations and the solutions to daily problems that will occur. Blockchain can be a component in the backend of an application, while the users enjoy the application benefits with easy navigation. The blockchain ecosystem has a wide range of participants that fosters private companies like startups and well-established companies to public institutes like universities and governmental entities. All these different participants have to join efforts in creating applications that are useful to people. A use case that is an example of good practice is EBSI. EBSI is a comprehensive use case that incorporates various thoughts around blockchain and can allow the public to benefit from the results. Mr Robert Kałuża final remark is that smaller and more focused organisations are the most effective. The effectiveness is a result of a down to earth approach that is about delivering a beneficiary approach to the public.

- Mr **Edilson Osorio** was the final panellist and discussed the use of hash functions and their role in anonymizing data. Firstly, new policies and regulations should consider hash functions for enhancing the user's privacy. Hash functions can be a tool for anonymizing the content and authenticate its integrity. A subject that the public has questions on the possibility of reverting the hashing and obtaining the original content. The previous case is impossible, as hash functions is a one-way conversion. Hashing algorithms have many uses and the speaker focused on their use in the notarization of information. Another subject in the discussion was about policies that do not need mentioning specific hashing algorithms or techniques. Instead, policies should focus on the benefits of hashing like content anonymization. A final remark was on the opportunity of supporting privacy and transparency with blockchain. Blockchain can leverage transparency without any trade-off between transparency and privacy. The data can be stored outside of the chain, as the major need is to authenticate the data to prove their integrity.

- Mr. **Jeff Bandman** brought up a question from the public on the accelerators, pilots and grant initiatives for startups in Europe. Mr. **Robert Kałuża** picked up the question to answer it. Blockchain initiatives can seek funding in innovative types of grants. In Poland, the NCBR is a national research and development centre that grants funding to innovative projects. Blockchain startups can explore the possibilities that Horizon programs are offering in funding their project. The discussion on the final part focused on the accelerators that could aid blockchain projects. Blockchain initiatives could look for accelerators relevant to innovative technologies, where they will compete for funding against initiatives outside of blockchain. Despite the higher competition, the available grants in these accelerators are expected to be bigger compared to the dedicated programs.

Appendix

Workshop slides
- [EU Blockchain Ecosystem Developments Report,](#) by Prof. George Giaglis
- [European Blockchain Partnership and its developments](#), by Ms. Nena Dokuzov

Workshop videos

- Videos from this and all other workshops can be found on the [EU Blockchain Observatory and Forum website](#) under the section [Reports](#)
- Videos specific to this workshop: [EU Blockchain Ecosystem workshop recording](#)

Official agenda

Time	Activity
13.55	**Opening of the session & house rules,** *Lefteris Tsonidis, EUBOF*
14.00	**Welcome,** *Pēteris Zilgalvis, Head of Unit, Digital Innovation and Blockchain, DG CNECT*
14.05	**Keynote speech,** *MEP Ms. Eva Kaili*
14.20	**Presentation of the EU Blockchain Ecosystem developments report (Presentation on the working methodology and key findings),** *Prof. George Giaglis, Executive Director, Institute for the Future, University of Nicosia & EUBOF*
14.35	**Questions and Answers**
14.50	**Views and perspectives of the EU Blockchain Ecosystem by the EBP,** *Nena Dokuzov, Co-Chair of the European Blockchain Partnership*
15.00	**Panel Discussion 1 –** *Business environment and development of cryptoassets and blockchain community: trends, drivers and obstacles,* moderated by *Alexi Anania, Research Coordinator, Cambridge Centre of Alternative Finance & Co-Founder, Bartertrade.io* • Marc Taverner, INATBA • Montse Guardia, Alastria • Luukas Ilves, Guardtime • Ad Kroft, EUBOF Expert Panel • David Coleman, CPO, IOV42
15.40	**Panel Discussion 2 -** *Main education, research and innovation initiatives in Europe: what is currently in demand and why?* moderated by *Marina Niforos, Affiliate Professor, Future of Work, HEC Paris* • George Giaglis, University of Nicosia • Sara Tucci - INATBA AAB member • Dr Joshua Ellul, Director of the Centre for Distributed Ledger Technologies (DLT), University of Malta • Florian Glatz, German Blockchain Association
16.20	**Panel Discussion 3 -** *Pan-EU, national and regional initiatives, and key policy developments: where we are and where we want to go,* moderated by *Jeff Bandman, Bandman Advisors & Affiliate Professor of Institute for the Future, University of Nicosia* • Nena Dokuzov, Government of Slovenia • Mr. Dr. Thomas Dünser, Director, Government of Liechtenstein • Jo Bronckers, FIBREE • Robert Kałuża, Billon's Co-Founder and E-Money CEO • Edilson Osorio, OriginalMy
17.00	**End of event**

Speakers Biographies

Eva Kaili was elected Member of the European Parliament in July 2014 with the Panhellenic Socialist Movement - Olive Tree and Head of the Hellenic S&D (Socialists & Democrats) delegation.

Professor George M. Giaglis is the Executive Director of the Institute for the Future (IFF) at the University of Nicosia (UNIC), as well as a leading expert on crypto assets and blockchain technology. Prior to joining UNIC, he was Professor at the Athens University of Economics and Business (2002-2017), where he also served as Vice Rector (2011-2015). George has been working on crypto assets and blockchain since 2012, with his main focus being on Decentralized Finance (DeFi), Decentralized Autonomous Organizations (DAOs), tokenised assets and Central Bank Digital Currencies (CBDCs). He has been one of the first academics to research and teach on blockchain, having:

a) Designed the curriculum of the world's first full academic degree on blockchain (MSc in Blockchain and Digital Currency at UNIC).
b) Led the development of blockchain credentialing technology that has resulted in the first ever publishing of academic certificates on the blockchain.
c) Organized a number of prominent blockchain conferences and events, including the annual conference series Decentralized, since 2017.

Throughout his career, he has published twelve books and more than 170 articles in leading scientific journals and conferences, while he is frequently interviewed by media and invited as keynote speaker or trainer in events across the globe. He is the Chief Editor for Blockchain Technology at *Frontiers in Blockchain* and member of the Editorial Board at *Ledger*.

Montse Guardia, General Manager at Alastria Blockchain Ecosystem.
Experienced Executive of Digital Services with a demonstrated history of working in the IT, EPC and the banking industry. Skilled in Business Process, Innovation, Knowledge Management, IT Emerging Technologies (Blockchain, AI, IoT, Quantum), IT Service Management, IT Strategy, and Business Transformation. Strong product management professional graduated as Telecom Engineer from Universitat Politècnica de Catalunya (UPC), Master from Universitat Ramon Llull. Enginyeria La Sa. Former VP Alastria Consortium now General Manager. Advisor of W Startup Community. President of the Quantum Blockchain Alliance.
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Marc Taverner is the Executive Director of INATBA. Since 2020, Marc works to ensure that INATBA becomes the go-to international organization for convening public and private industry partners, with the credible support of powerful allies, like the European Commission and key advisory bodies.

Luukas Ilves Head of Strategy at Guardtime, the world's leading enterprise blockchain company. Luukas is building Guardtime's e-government business, bringing tools deployed in defence, supply chain, healthcare and telecoms to the public sector. Hopefully, this will include products and services to enable mydata-type scenarios Luukas also chairs the Council of Europe's work on the human rights and ethics dimensions of Artificial Intelligence, which will culminate in ministerial guidance at the end of 2019.

Ad Kroft is project leader at the Dutch National Blockchain Coalition. Currently Ad also works for the top sector program dutchdigitaldelta to develop a National Blockchain Core Competence Center (BC3). The competence center is intended to support companies and governments in developing application capabilities of blockchain or otherwise distributed ledger technologies. At the conference Ad will be giving an update on identity!

David Coleman serves as Chief Product Officer at iov42. He is an award-winning technologist with 18 years of experience across startups and corporates. He created and led the Open API programme at a large global bank.

Sara Tucci-Piergiovanni, Head of Laboratory at CEA LIST - Blockchain programme leader at CEA. Sara is a senior research engineer at CEA - LIST, Saclay, France. She is currently leading the laboratory for trustworthy, smart and self-organising systems. Domains relevant for laboratory's research activity are: distributed computing, decision theory, trust management, formal methods, software engineering.

Dr Joshua Ellul is the director of the Centre for Distributed Ledger Technologies (DLT) at the University of Malta which runs a multidisciplinary Masters in Blockchain and DLT taking in students from different backgrounds including Computer Science, IT, Law, Business, Finance, Economics and Management. He was appointed Chairperson of the Malta Digital Innovation Authority, a world first technology regulator that has put into place a technology assurance regulatory framework for Blockchain, DLT and Smart Contracts. Dr Ellul was recently appointed as an expert evaluator for the European Commission.

Florian Glatz is President of the German Blockchain Association (Bundesblock) and co-founder of EUCI (European Crypto Initiative). Florian advises political decision-makers at the German and European level on blockchain regulation. Trained as a lawyer and software developer with many years of experience working full-time in the blockchain space, Florian is aware of the key issues at the intersection of crypto assets and regulation.

Nena Dukozov is the 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. Nena is an experienced Center Director with a demonstrated history of working in the government administration industry. Skilled in Policy Analysis, Analytical Skills, Government, Strategic Planning, and Marketing Strategy. Strong engineering professional with a Master's degree focused in Business Administration and Management, General from Faculty of economics, Ljubljana.

Dr. Thomas Dünser became Director of the Office for Financial Centre Innovation in April 2019. This government agency provides support for financial companies requiring advice and assistance on the issues arising from innovation and also monitors the implementation of the government's innovation policies to shape the legislative structures to support innovative businesses. Thomas Dünser had previously worked in the field of innovation and digitalisation at the Ministry for General Government Affairs and Finance, where he was responsible for the development of the Blockchain Act in Liechtenstein, among other things. Prior to his position at the Ministry for General Government Affairs and Finance he ran his own business and was Director of Group Asset & Liability Management at VP Bank in Vaduz. He holds a degree in Mechanical Engineering from the ETH (Federal Institute of Technology) and went on to earn his doctorate at ETH Zurich.

Jo Bronckers has a professional background in real estate. He worked for Dutch institutional real estate investors, asset managers and real estate banks before he decided to start his own consultancy company for business development at the intersection of real estate process optimizing and applying technology. Jo is co-founder in 2018 and at present vice-president of the executive board of the Foundation for International Blockchain and Real Estate Expertise (FIBREE, www.fibree.org). At FIBREE he is developing a Unique Object Identification (UOI)-concept for enhanced real estate data-exchange and aggregation. At FIBREE Jo is one of the driving forces in the Working Groups Real Estate and Climate Action, where he leads a joint subgroup about UOI. He is also member of the INATBA Standardization Committee. In 2020 Jo became member of the inaugural board of E-CREDA, the European Commercial Real Estate Data Alliance.

Robert Kaluza, Robert is the co-founder of Billon Group and its E-Money CEO, responsible for projects and products using Regulated Digital Cash - national currencies stored and transacted on blockchain with Billon's unique DLT technology. As an expert in building strategies at the intersection of IT and business, he previously managed the strategic analysis department at Orange Polska and was a consultant in the IT department of McKinsey. The value of IT projects he managed exceeded $100M. Robert completed an MBA in financial management at the University of Hull. In his spare time, he enjoys sailing, diving and skiing.

Edilson Osorio Junior, CEO @ OriginalMy - Blockchain ID
Founder, computer scientist, teacher, information security and infrastructure specialist. Graduated in Copyright on Harvard Law School, Convenor of Security, Privacy and Identity representing ABNT/Brazil @ ISO/TC307 - Blockchain and distributed ledger technologies, Member of EU Blockchain Observatory & Forum. Author of Hääl - the first open-source protocol for Secret e-Voting on Public Blockchains. Has been chosen as the #1 most important and influential personality in cryptocurrencies and blockchain in Brazil, by CoinTelegraph - bit.ly/2Yx2dZh