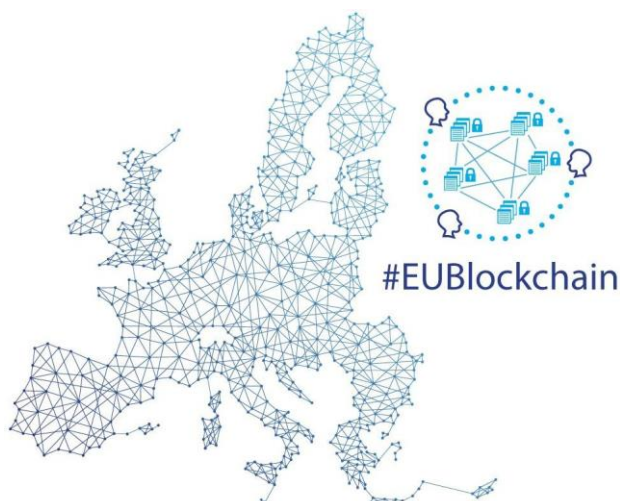


# EU BLOCKCHAIN OBSERVATORY & FORUM

Demystifying NFTs workshop—  
Online Video Conference, 22 July 2021



*By the European Commission, Directorate-General of Communications Networks, Content & Technology.*

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Author: Marianna Charalambous

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Comments and inquiries may be addressed to the following email: [info@eublockchainforum.eu](mailto:info@eublockchainforum.eu)

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## WELCOME

**Nikos Kostopoulos**, 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. He mentioned that now is the time to demystify NFTs, while a set of policy and legislative initiatives are taking place at the European Commission and that a lot of interesting issues in the areas of national law, European law and civil law aspects will be discussed during the workshop.

## KEYNOTE PRESENTATION “NFTS – A SOCIAL AND FINANCIAL BREAKTHROUGH”

After the welcoming to the workshop, the floor was given to **Mr. Antonis Polemitis**, CEO of the University of Nicosia (UNIC), who delivered the keynote speech of the workshop. He started the presentation by saying that NFTs have evolved over the last six months and that they are now the most interesting area in the field of blockchain and crypto assets and the one with the most potential to enable regular people, regular consumers, to participate in a different type of economy.

He went on to explain that NFTs will support art, estate, football tickets, rentals, holiday villas, coupons etc. The token itself isn't what's important, is how it's being used. If an NFT is representing a baseball card, the NFT should be treated as a baseball card. If an NFT is representing a house, the NFT should be treated like real estate. NFTs are simply a way to represent something that's unique. They are the gatekeepers and guardians of culture which allows direct participation between consumers and creators.

From a regulatory perspective, it is too early to define NFTs as we're still at the beginning of the beginning of what can be enabled with NFTs. The regulatory regime shouldn't get locked in too early and too restrictively because there's a huge opportunity for innovation.

The world at large is overwhelmingly non-fungible. Fungibility is something that humans do to make things work better within our systems, but a precise representation of the world would be non-fungible. And so here there is a technology that because it can represent non fungible objects and it is programmable, certain things that couldn't be handled manually are manageable now in their native state, which is non-fungible.

Mr Polemitis made a reference to the Andy Warhol soup cans, which are generally acknowledged to have been the project that started the pop art movement. If someone wants to buy a soup can today, they will have to go to a set of dealers, most likely in downtown Manhattan, London and some other metropolis. But if someone wants to buy a crypto punk, the only thing needed is an internet connection. All details can be found online, such as which address owns every single crypto punk, the complete transaction history of every crypto, whether it was bought, sold, transferred, what crypto punks are currently available for sale, what the last sales were of crypto punks for those characteristics. If a person wants to be an Andy Warhol collector, realistically, they are limited to a handful of metropolis, and must be very wealthy and able to travel. But if someone wants to be a crypto punk collector, they only thing needed is a computer with an internet connection. It feels like when thinking about crypto punks and soup cans, it's like looking at eBay and a local antique shop, respectively.

NFTs will eventually platform beyond art, to more and more categories of goods, for all the same

reasons that the post-internet world evolves more rapidly than the pre-internet world. As they platform more and more categories of goods, more categories of goods will benefit from this greater accessibility, equal terms, efficient and effective markets, and rapid innovation.

Another issue raised by Mr Polemitis is the composability of NFTs. On the website SuperRare that sells fine art NFTs, an artist can sell the NFT to a collector, then it's sold to another one, and a third one and a fourth one. Unlike in the traditional art world, where the stereotype of the starving artist is broadly true, with NFTs if the work does well, the artist is rewarded along the way automatically with royalties, not through some complicated paper-based organizational human based approach, which in practice is so hard to implement that it doesn't happen. As that NFT goes from collector to collector, the artist automatically receives their royalty. The website has recently introduced collector royalties, to reward collectors who invest in early stage emerging artists. The idea of automated collector and artist royalties is something that is hard to imagine being implementable in the analog world, and the ecosystem needs to be given the space to develop these capabilities. All these benefits will apply to everything else that comes in NFT, not just art.

NFTs are also a big part of gaming, the type of blockchain based games where if someone owns a character or a shield or a sword in a game, they actually own that as an asset in their Ethereum wallet, that they can then trade with others, compose with other software. They are not simply a database entry in the gaming companies, in the gaming company servers. This will allow people to own and pay for culture leading to a flourishing of culture from this technology. Ultimately, towards the end of the decade, this will be the underlying basis to think of the metaverse as a persistent virtual or augmented reality and the objects there are two visions of what that could be. It could all be owned by some big gaming company, or it can be an open system where people own their actual objects in that world. The second world is much more compelling. In the field of digital assets, as exploded in the last year, there were \$14 million of global NFT sales in the first half 2020, and two and a half billion dollars of sales in the first half of 2021. UNIC conducted the first market cap of an NFTs collection, and then ran a set of machine learning algorithms and calculated the total market value at around 2 billion.

Mr Polemitis concluded that this is a horizontal technology which will apply to dozens of fields, so it needs to be thought of by stakeholders in that capacity. This will be the underlying architecture and property rights of the digital culture, including ultimately the metaverse, which is certainly something that is coming within this decade. The creator consumer relationship will be redefined. There's a spike for innovation, particularly in the creative arts and for the European Union, which has probably the world's most rich heritage in the creative arts, there is a massive opportunity to take that into the 21st century.

## PRESENTATION OF THE “DEMYSIFYING NFTs” THEMATIC REPORT

Following the keynote speech, the floor was given to **Mr. Nikos Kostopoulos**, Blockchain Strategist at INTRASOFT International, who presented on behalf of the EUBOF consortium, the upcoming thematic report on NFTs.

He explained that NFTs are getting traction and this traction is monitored by the available data. What has really contributed to the NFTs adoption at such a large scale, is the unique monetization avenue with the transparent proof of ownership, the ease conversion of asset from virtual to fiat currency, the improvements in UI and UX, the adoption of NFTs by the gaming industry (one of the industries that has contributed to real users), the possibility of monetizing virtual rewards, the accessibility, the

decentralization, and that anyone can buy and sell in secondary marketplaces. The creators are not bound in a specific platform or protocol schemes, they can use multiple front-end or smart contracts to engage. Another reason why NFTs have really scaled, is the empowerment of collectors in emerging technologies.

The report will provide a basic theoretical framework to facilitate the introduction of more advanced concepts and follow up sections. In the definition of NFTs, it provides a concrete and platform agnostic definition for the terminology, discusses the basic characteristics of NFTs, especially those that are universal across platforms, introduces a framework for taxonomizing NFTs and will also address the question on why are NFTs interesting, and if the industry has potential in real substance.

The report also includes the history of NFTs which starts with the colored coins on the Bitcoin network, (the forefront of the NFTs movement) and continues with the establishment of the ERC20 token standard and how visioners have identified the challenges of the ERC20 token and they have worked towards the ERC721 token. The report also monitors the growth of the NFT ecosystem.

Mr Kostopoulos presented the core value proposition of the report which has been to identify as many use cases as possible. It has been hectic to identify every single use case, that's why the report only includes those that got some traction, that they are somehow validated and reputable. NFT use cases would include anything requiring verifiable provenance, ownership, authenticity, and custodial on/off chain representation. Some of the most characteristic use cases are: identity/reputation, tickets, access/permission control, property deeds, in-game assets, supply chain provenance/logistics, historical records, certificates, loyalty/point systems, real-work asset NFTs, blockchain domains, collectibles and digital content.

The report also monitors the NFT market and marketplaces. There are about 30 marketplaces that have real traction. The goals from identifying and collecting all marketplaces are:

- Gather information on market structure and growth, including size, value, volume, and user activity
- Define which are the core marketplaces in case regulators or other persons and collectives they want to actively engage to learn more about the industry
- Analyze the NFT tokens market capitalization and sales volume
- Discuss top NFT tokens (their purpose, capitalization and perspective)
- Discuss new major NFTs marketplaces

A major part of the report is to identify all NFT token standards, starting with a briefing of the Ethereum ecosystem, ERC721, which is the most frequently used token standard, then with the ERC998, which is an extension of the previous and finally the ERC1155 token which was developed for games and allows users to register non-fungible tokens.

The presentation was concluded with the challenges on the road to adoption:

- Cybersecurity incidents
- High gas fees
- Energy consumption and environmental concerns
- Establishing legal ownership of assets traded through NFTs
- Accessibility challenges for blockchain users

## PANEL DISCUSSION 1: NOTABLE NFTs USE CASES

### *Moderated by Ash Costello*

- “Peer Mountain: The Permissionless NFT Based Ecosystem of Trust”, **Jed Grant**, KYC3
- “Trace Network”, **Lokesh Rao**, Co-Founder at Trace Network
- “How NFTs are helping to create player owned virtual economies in the (video) gaming space”, **Warren Sample** - Chief Strategy Officer for Vorto Gaming AB (Sweden)
- “Non-Fungible Tokens in Architecture and Construction: from building Information modelling to digital twins”, **Dr Theodoros Dounas**, ARB RIAS RIBA SFHEA

### *Objectives of the session:*

- To present notable NFT’s use cases from the blockchain ecosystem
- To discuss the unique characteristics of each use case

### *Main outtakes from the session:*

- Initially, the moderator, **Ms. Ash Costello** presented the panelists and explained that each panelist will present a notable NFT use case.
- **Mr. Jed Grant** took the floor and presented the “Peer Mountain”, a Permissionless NFT Based Ecosystem of Trust. NFTs can replace much of the trusted information exchange that we do in a decentralized and open ecosystem without having to worry about cross border validity of information, because it's all on a global system, which is provided on a blockchain. DeFi business can be conducted without the fear of compliance violations and GDPR issues can be avoided because the data subject is the data owner and the custodian of the data. This technology enables to reliably match a blockchain address with a physical person and issue the NFT to that address. It enables instant consumption of regulated services, even in a secure and pseudo or even fully anonymous manner, when getting into using zero knowledge proofs and having the trust provider maintain the knowledge, but the service provider doesn't need to have full knowledge of who the customer is in that case. What this will do is deliver a permissionless and open ecosystem architecture so anyone can play, anyone can add value, speed up a node and be part of it. Or anyone can just register one of the roles or multiple roles and be part of it. The recognition of all the value exchange is settled on chain in cryptocurrency. That is also one of the transforming things of this technology is that value can be settled instantly and globally. Governance as well of the ecosystem is managed on chain, so the holders of certain governance tokens will be able to make governance decisions on the architecture. Mr Grant said that “Peer Mountain” currently approaches MVP status and will become open source to begin building in a very open and collaborative manner with the industry. Peer chain is built on trustless nodes, they're incentivized to work positively towards strengthening the needs of a system of trust. It's a layer 2 protocol that can be anchored to any blockchain. In the Peer Mountain ecosystem there are three roles, there's a consumer, a service provider and a trust provider. Anyone can be any of those roles or multiple roles as well. Each party gets remunerated for participating in the good function of the trustee ecosystem, so the tokenomics are all built on incentivized behavior. As time goes on, the reputation for trustworthiness will materialize as an immutable record on chain so this is very much like the real world trust. He mentioned that it takes decades to build a great reputation and it only takes minutes to record. It's the same when you're doing it in an immutable on chain manner. So, the knowledge that the trust is placed in, becomes NFTs, digital bearer asset. These are called non-fungible trust tokens and every trusted element in the environment is cryptographically signed improvable. All

the knowledge is encrypted and secure. Peer mountain it's all NFT power, it's very much based on the idea of each one owns their information.

- **Lokesh Rao**, followed describing the “Trace Network” which is about enabling fashion for metaverse. Studies show that people globally are spending more than 10 hours daily online, so as people spend more and more time online, buying virtual has become more mainstream. Digital fashion products have been increasingly getting attention. He made a reference to L'Oréal which has recently introduced a new line of digital beauty products, which can be applied on person's face in the zoom meeting calls. The use of digital fashion will be extended to various metaverses. Trace network enables more sophisticated things like integrating fashion NFTs with gaming platforms and virtual meetings. Nowadays fashion brands struggle with supply chain issues and their sales are plunging despite having a loyal customer base. It is therefore inevitable to look for other venues to generate sales, the brands need a window to the digital world. The Trace Network is providing infrastructure on blockchain for these brands to be able to create and sell limited edition and exclusive products and NFTs for the loyal communities. Brands will be able to create a new category of digital fashion products in the form of NFTs, to increase their possibility of sales, with very low overhead costs and better margins. These brands will be able to earn royalties on resale of these NFTs on the Trace Network and on any other NFT platform. These products, give consumers a sense of owning exclusive products directly from the brand and share these products on various social media platforms on metaverses. Trace Network would enable standards, which would allow integration with various metaverses to enable the application of these NFTs. The evolution of this space has enabled various use cases of these NFTs, which is beyond just possessing them. With the current evolution rate in the space very soon the Trace Network would let people own luxury goods as NFTs.
- **Warren Sample** joined the discussion by introducing Vorto Gaming, a company that was born from a merger of a Nordic publishing house and a Baltic gaming studio. There's about 2.8, 2.9 billion gamers worldwide who do an estimated about 181 billion in revenue for the industry and that's going to be growing substantially even over the next four years to reaching around 295 billion by 2026. But the long and short of it, is that revenue, that growth in the industry is built on those 2.8 billion or 2.9 billion players out there. Instead of these 2.9 billion people fueling that much revenue, that's going to the hands of a few, a wider and more distributed equilibrium in the economy will support even more engagement and more growth for every actor on the supply chain. Mr Sample mentioned that the Vorto network focuses on blockchain enabled apps for games and marketplace that allows players to be rewarded for their time and intention. This is clearly where it comes back into the NFT process. The game rules have changed and instead of the players working only for the game, the games will work for the players. As gamers move through their games and titles, earning a winning competition, finding rare resources, crafting those into digital items, the difference is that they have the right of that digital item in game item to use to as an actual asset that they own. People have access to digital goods and rights, but they don't own it. That is the simplification of demystifying NFTs, the ability to have those rights or objects, but they're now in the owner's possession, to use, to trade, to delete, to give away or to sell and trade. Vorto network is looking to build a sort of marketplace and trading platform that not only gives games, the toolbox to generate in game items through a tokenized process and generate the NFTs that can be sold, earned, or provided to the use space, but equally a secondary marketplace for the gamers worldwide, to be able to use their time and intention to generate these digital assets, generate these NFTs and use that as an ownership that they can monetize. He concluded with the realization that gaming can be a source of income or even a gig economy sort of a work effort. If gamers are able to produce things within the games that are relevant for their effort, they should be monetized and be able to be rewarded. The Vorto network is a hub for blockchain enabled games, connecting the studios to the players and giving the players equally an ability to generate valuable assets through their processes.

- **Dr. Theodoros Dounas** took the floor and presented the use case of trying to solve problems for the architectural, engineering and construction industry by using blockchain technologies in integration with building information modeling, which is the software used to design, construct, and operate buildings. Blockchain is a good fit for coordination problems on construction. In essence, their work on NFTs revolves around developing digital tools that allow to connect the tools already used to design buildings with smart contracts, in NFTs. They are looking at the creation of dynamic NFTs that can encapsulate a new building detail or a building configuration where the architect no longer needs to design prototypes in full buildings, but it's free to create their own innovative solutions to say a facade or structural assistance, and then publish this as an NFT, whereas then each architect that will use that information will have to pay the original creator. Additionally, any kind of changes that have happened to that IP will be able to be recorded and then compensate anybody else up; essentially contributes to improving the design. They used the same digital tools to create a novel manner enabling architects to create NFTs out of a whole design, but also NFT of each unique building component that goes into their design track, essentially, it's a composable topology in the building. There is one NFT that represents the whole building and then a series of NFTs that represent a topological hierarchy, everything else in the building. When there is the need to reuse these buildings, the information on what components they have and what kind of materials they contain, already exists. It will also allow to reduce waste and reduce embodied carbon in new buildings in the future. The use of NFTs into digital twins of existing or new buildings are combined with building information models where the NFT and the billing component is owned by a service provider that owns and must maintain the NFT and the billing component or even cases where the smart contracts themselves, the NFTs, act automatically and trigger the maintenance or upgrade of a building. This use case introduces new operating models, new business models out of these tools and the potential for creating new markets and unlocking potential in a traditional fragmented industry. Certificates can be issued for any kind of action that deal takes place between the physical and the digital world.
- On a follow-up question by the moderator in regard to what is the critical factor to bring NFTs into mainstream adoption, **Mr. Warren Sample** emphasized the need to continue focusing on making the technology seamless and easy to use, to get people on board, but do that with the growing perception of what the real benefit to the end user is. That's going to be varied from business to business versus consumer, but one should always keep the end user's benefit in mind.
- On a question from the audience on how we should deal with off chain storage that might suffer from digital obsolescence on supported formats over time, **Mr. Jed Grant** said that there are several projects that are dealing with persistent storage. On IPFS, an interplanetary file system, if you're the provisioner of that data store, you can run your own node and you can pin that data on your IPFS server. There are also projects like Filecoin where you can just pay to guarantee the storage, and they have an algorithm for proof of having that data on available off chain on that store.



## PANEL DISCUSSION 2: CIVIL LAW ASPECTS (OWNERSHIP, POSSESSION, TRANSFER, ACQUISITION IN GOOD FAITH)

*Moderated by Nina-Luisa Siedler*

- **Dr. Robert Herian**, Open University Law School (UK)
- **Jim Mason**, Blockchain Practice Leader at Paramount Software Solutions, Inc
- **Andres Chomczyk Penedo**, PhD researcher at LSTS

### *Objectives of the session:*

- To provide an overview of the legal status of NFTs
- To discuss the civil law perspectives that different countries have on NFTs

### *Main outtakes from the session:*

- Initially, the moderator, Nina-Luisa Siedler, presented the panelists and mentioned that a number of legal experts within EUBOF Experts Panel, formed a subgroup to provide some legal papers on NFTs, [the first of which is already published](#) and it contains a new comparison of total classification applying to NFTs in a number of countries. She mentioned that are three continents represented on this panel to showcase the variety of legal views towards this topic and that one of the main challenges is establishing legal title in the asset that is represented by an NFT.
- After the introduction, **Mr. Jim Mason** commenced his statement by trying to explain his understanding of NFTs. NFT represents the rights to an asset, and the rights to that asset can be either digital or physical, it's not specific, it can be either. The only point of it, is that in theory, the asset is unique in some respect, so that the token representing the asset would be considered non-fungible. Because the NFT in theory represents rights to an asset, it allows pursuit of legal remedies, where those rights are violated. The kind of rights that an NFT could potentially represent for the asset, could be access rights, ownership rights, possession rights, transformation, transfer the asset, physically usage rights, naming rights, and even legal custody. All of these things do exist in concept today in existing contracts, and contracts in a sense can cover all of those rights. There's a contract that relates to an asset. There may be fees associated with the contract, and then there are specific rights related to the contract. Conceptually, there is still a relationship of fees, rights, and a contract logically, except that now we are adding an NFT. The concept is that it can authenticate the asset easier, protect those rights easier, track and trade those rights easier. All of that can be done under contracts. The process to provide title insurance to trade property is not cheap, it's expensive, it takes time and involves a lot of parties. NFTs simplifies the process, it could add value and that's why NFTs make sense.
- **Dr. Robert Herian** was the next speaker and shared his view on how to associate the NFT with physical assets of chain where essentially it ends up with a misalignment or a gap between the two. There's the problematic question of what the NFT ends up being from a legal point of view and what is the standalone value in the NFT itself when you're left holding an NFT with no sort of guarantee that it links to anything. He then referred to the British artist's, Damien Hirst, latest project called Currency, where he has created 10,000 pieces of individual artwork, each of which is associated with an NFT. The NFTs are purchased by prospective buyers of the artwork, but the artwork themselves can be held in a vault for a year and after the year is up for purchase. Buyers have the option to either keep the NFT or the artwork. They can't have both. At that

point, Damien Hirst has raised this question as to really where the value lies. Does the value lie in the NFT itself, or does it lie in the physical piece of artwork? The artist has raised an obvious and problematic question in relation to the legal status of NFTs as certificates of authenticity, of verifiability and validity of certain assets. This raises the questions on where the economic value from a market perspective would lie whether it's in the asset itself or in the NFT and from a legal property rights automatically lie. He concluded that there is the need to distinguish between the NFT as token, as digital assets versus what it represents.

- **Mr. Jim Mason** followed in the panel discussion giving a background on the banking and currency regulation in the US and how the state and federal laws work. Crypto regulation in the US is underneath either the SEC or the CFTC. Overlapping jurisdictions creates challenges with legal interpretations from different agencies. The most famous piece of legislation in the US related to digital assets is the Howey Test, a case law that was established in 1946 and which has determined whether an asset was a security of a currency. He went on to explain the key regulations in the state of Wyoming, the SF0125 digital asset law that defines the whole digital asset environment completely, and the HB0070 house bill according to which tokens are not securities unless there's very strict attributes that apply. NFT US regulations is in a draft process in many States, and multi-jurisdiction issues will exist in the US. Legal rights for what ownership means for a digital asset, like an NFT is fully defined in Wyoming and until the federal government passes some law that says, “this is illegal”, everything is fully defined.
- **Mr. Andres Chomczyk Penedo** joined the discussion to discuss the state of ownership in the Latin America region. He said that looking at property rights in general, one is tied to the legislation and if the concept of ownership limits you to having something that is physical, obviously it cannot be applied to an NFT. Looking at any NFT, regardless of the rights or its content, if it's a whole NFT with rights and the digital asset and everything embedded into it, or just a simple representation of rights in any case, they fall outside the realm of property rights. The path in that regard is more implying towards the realm of personal rights in that respect and property is something that is right now out of the question and people should rethink about the concept and the exact limitations of the property rights in general.
- **Dr. Robert Herian** elaborated on the common law jurisdictions that seem to handle the question of ownership rights in tokens and NFTs. He mentioned that the flexibility that may be employed by judges to try and reach a conclusion for a particular problem relating to digital assets is certainly one path for re-imaging and recalibrating the way that property rights are seen in this domain. The problem that the law of England and Wales has is that intangibles could never be seen as a thing in possession and therefore the discussion has been about whether a third category of property was necessary. Intangible assets of crypto assets are a problem to be sorted out by the courts on a case-by-case basis and as long as they're able to do that, a definition of property that sits outside of the traditional framework is deemed acceptable.
- The moderator **Nina-Luisa Siedler** explained the German perspective, as Germany does not acknowledge tokens as objects and does not acknowledge true ownership in the real sense or title to such tokens.
- Lastly, the panel discussed the case of claiming jurisdiction when a token that was created in Wyoming is bought by a person in Berlin and later sold to a person in the UK.

## PANEL DISCUSSION 3: FINANCE REGULATORY

*Moderated by Dr. Agata Ferreira*

- **Alireza Siadat**, Partner at Annerton
- **Dr. Joshua Ellul**, University of Malta
- **Andres Chomczyk Penedo**, PhD researcher at LSTS

*Objectives of the session:*

- To present an overview of NFTs in terms of finance regulatory via a constructive dialogue between the panelists.
- To discuss recommendations for regulators and the NFT community

*Main outtakes from the session:*

- The moderator, **Dr. Agata Ferreira**, introduced the panelists and initiated the discussion with a question on what the current stage of NFTs is, with a particular focus on financial regulatory framework.
- **Mr. Andres Chomczyk Penedo** took the floor to discuss the Latin American regulatory framework. He mentioned that NFTs in Latin America are in an unregulated situation and the regulation on the financial perspective is no exception, it is trickier. General frameworks (capital markets law, financial entities law) are applied to the current situation without any success and in most cases without any guidance from regulators. When it comes to understanding and interpreting the legal framework, the ICO situation in 2017 is a reference that most of the regulators in the region have provided or taken a stance either for binding regulation or non-binding regulation, depending on the country; in general, it's mostly on the non-binding type. In a way, NFTs sort of mimic that process of conducting an initial offering of office security. It is a situation where, legal practitioners and legal operators in the field have to be very wary of and be interpreting the rules in a particular country. He concluded that there's a lot of regulatory uncertainty and void, and not many responses from the regulators, not even a guidance.
- **Mr. Alireza Siadat** followed to discuss the current situation of NFTs in Germany. He said that NFTs are not something defined by law, and this is very important because before starting to regulate something, we first need to understand what it is. It's a non-fungible token, a term known from a technical perspective. It is important to understand that so far, there is no official publication by BaFin or Bundesbank on NFTs, but there is some common practice by German regulators, especially BaFin, and the department which is in charge for the securities. The department looks into different token instruments and qualify them according to the existing law. The crypto asset definition is very broad according to the existing German law. When looking at regulation, on one side there are the regulating activities, which are services but usually there is no regulation on the issuing of a financial instrument. When there is a financial instrument such as a security or an investment asset, there is also the need to have a perspective or at least a key information document which is accepted and allowed by the German regulator. The German regulators are already looking very deep into the NFTs details from a technological perspective, but also from a regulatory perspective and they have already some internal documentations which may be published soon looking exactly how the German regulator would qualify a token and a crypto asset as an NFT.

- On a follow up question by the moderator on what the EU wide perspective on NFTs is, **Mr. Alireza Siadat** mentioned that currently in the EU, there is no regulation on crypto assets because there is no definition of crypto assets. There is a different understanding of crypto asset and different regulation on crypto assets in different European economic area jurisdictions. This is going to change with the regulation of the issuance of crypto assets with a white paper. Crypto asset service providers will be asked to receive a license from the domestic or international competent authority which both the white paper and the license can be passported within a European economic area. He expressed the opinion that MiCa is going to exclude NFTs because they're non-fungible and therefore not similar to financial instruments. If NFTs are non-fungible, the risk for the market and users is not as high as for financial instruments and therefore there's no need for regulation.
- **Dr Joshua Ellul** took the floor to discuss his views in terms of treatment of NFTs under a regulatory approach and his recommendations for regulators and the NFT community. As the chairperson of the Malta Digital Innovation Authority (MDIA), a technology regulator, he mentioned that MDIA is there to help the financial regulator to make sure that the smart contracts are doing what they could be doing. Some of the challenges of the NFT community have to do with ownership and possession. When there is a token representing a real-world object, the owner really owns the object. But when the token represents a virtual object, the situation is different. There's a lot of complexity when it comes to the technology and to the legal aspects and regulators aren't typically versed in technology, at least financial regulators. One of the problems is resourcing regulators, and even the space itself needs to get people who are acquainted with the legal sides to NFTs technology and business aspects. These are interesting academic challenges. Regulators need to start seeing how to come up with frameworks that allow for this innovation to grow. He made a reference to the development of a technology sandbox which creates an environment where a regulatory space is created for a particular operator to work and therefore coming up with a regulatory framework that is adequate for the type of operation. Dr Ellul spoke of the need to have a right diligence processes in place from the financial aspect, but also from the technology aspect, to make sure that the various smart contracts used are fit for purpose. NFTs are going to change the way that we view ownership and will empower the future sovereign individual.
- **Mr. Andres Chomczyk Penedo** agreed that using the regulatory sandbox in that respect, to try to innovate in a contained manner is good recommendation for policymakers. The regulatory sandbox has proven to be a tool in different countries such as Mexico and Colombia.
- **Mr. Alireza Siadat** recommended to policy makers within the European economic area to not regulate the technology, because when you regulate technology, you just stop innovation. Policy makers should be looking into the details instead, better understand how the technology works and what it does before jumping into regulations.
- Lastly, all panelists said that from a regulatory point of view, they are hopeful about the future of NFTs and that regulators will come up with solutions that will help the industry develop.

# Appendix

Click here to get the [Workshop slides](#)

## 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  |
|-------|---|
| 14.00 | <b>Welcome</b> , <i>Pēteris Zilgalvis, Head of Unit, Digital Innovation and Blockchain, DG CNECT</i>  |
| 14.05 | <b>Keynote speech, NFTs - A Social and Financial Breakthrough</b> , <i>Antonis Polemitis, CEO of the University of Nicosia</i>  |
| 14.25 | <b>Demystifying NFTs overview of the upcoming EUBOF Thematic report</b> , <i>Nikolaos Kostopoulos, EUBOF (INTRASOFT International)</i>  |
| 14.40 | <p><b>Panel Discussion 1 – Notable NFTs use cases</b>, <i>moderated by Ash Costello</i></p> <ul style="list-style-type: none"> <li>• “Peer Mountain: The Permissionless NFT Based Ecosystem of Trust”, Jed Grant, KYC3</li> <li>• “Trace Network”, Lokesh Rao, Co-Founder at Trace Network</li> <li>• “Non-Fungible Tokens in Architecture and Construction: from building Information modelling to digital twins”, Dr Theodoros Dounas, ARB RIAS RIBA SFHEA</li> <li>• “How NFTs are helping to create player owned virtual economies in the (video) gaming space”, Warren Sample - Chief Strategy Officer for Vorto Gaming AB (Sweden)</li> </ul> |
| 15.40 | <p><b>Panel Discussion 2 - Civil law aspects (ownership, possession, transfer, acquisition in good faith)</b> <i>moderated by Nina-Luisa Siedler</i></p> <ul style="list-style-type: none"> <li>• Dr. Robert Herian, Open University Law School (UK)</li> <li>• Jim Mason, Blockchain Practice Leader at Paramount Software Solutions, Inc</li> <li>• Andres Chomczyk Penedo, PhD researcher at LST</li> </ul>  |
| 16.20 | <p><b>Panel Discussion 3 - Finance regulatory</b> <i>moderated by Agata Ferreira</i></p> <ul style="list-style-type: none"> <li>• Alireza Siadat, Partner at Annerton</li> <li>• Dr. Joshua Ellul, University of Malta</li> <li>• Andres Chomczyk Penedo, PhD researcher at LSTS</li> </ul>   |
| 17.00 | <b>End of event</b>   |

## Speakers Biographies



**Antonis Polemitis** currently serves as the Chief Executive Officer of the University of Nicosia and EDEX, as a Board member of EDEX and UNICAF, and as a member of the Council of the University of Nicosia. The University of Nicosia (UNIC) serves over 14,000 students, along with over 18,000 additional students in its affiliated academic institutions. UNIC is the largest university in Cyprus and is the largest English language university in southern Europe.

Mr. Polemitis helped found the world-leading Digital Currency / Blockchain Initiative at the University of Nicosia, co-taught the first university cryptocurrency course in the world, and is regularly quoted as an expert on cryptocurrency issues. He was a member of the national committee that designed the blockchain strategy for Cyprus.

Mr. Polemitis is the managing partner of Ledra Capital where he led early-stage investments in, or software development of, Software-as-a-Service platforms in the areas of higher education, cryptocurrency, online video publishing and legal research. Mr. Polemitis was previously a principal at ACG Capital, a privately held multi-billion dollar investment firm and a partner based in New York and London in the private equity practice of Mercer Management Consulting (now Oliver Wyman), one of the world's leading strategy consultancies.



**Nikolaos Kostopoulos**

Generating new blockchain products to diversify product line based on the needs of clients and institutional partners. Representing the company's interests in public engagements related to blockchain technology. Research & analysis of market trends in the consensus space to support blockchain innovation of the in-house incubator. Part of the European Blockchain Advisory & Forum team, with main focus on conducting market, regulatory, and technical research about the latest blockchain developments. Building on the work done since its launch and taking stock of its achievements, INTRASOFT has won a clear mandate to reinvigorate its mission and further expand and strengthen its activities in the world of blockchain. INTRASOFT is leading a consortium of technology leaders aiming to engage the European blockchain community, providing educational and dissemination opportunities among stakeholders, and further participating in the cutting-edge developments in this area.



**Lokesh Rao**

Managing various International ERP Implementation Projects running in various segments of fashion industry with help of a team of 7 experienced consultants . These companies vary from Retail Brands, Sourcing Companies to manufacturing companies . Continuous engagement in strategic product upgrades and its sales to the target segment of customers. Managing Relationships with clients management teams to ensure 100% subscription renewals.



### Jed Grant

An investor and entrepreneur, Jed Grant is the CEO of [KYC3](#), a Luxembourg based FinTech company providing smart solutions for compliance, counterparty risk management and competitive intelligence. A regtech leader and decentralized systems architect, Jed Grant was named in the [Top 200 FinTech Leaders in Europe](#) by LATTICE80 in March of 2018 and in 2019 as a [Top EU blockchain expert](#) by Blockpool.



### Dr. Theodoros Dounas

Dr Theo Dounas is a registered and chartered architect (ARB, RIBA) and the learning excellence leader at the Scott Sutherland School of Architecture and Built Environment at Robert Gordon University where he directs the MSc in Advanced Architectural Design and orchestrates the school's efforts in digitization. His research expertise encompasses blockchain, generative and parametric systems with a tight orchestration between design and fabrication.

He is currently directing [www.archchain.cc](#), a project that seeks to establish a decentralised Building Information Modelling toolset and mechanisms for the AEC industry. Additionally he conducts research in design for fabrication and assembly, through a series of projects in robotic fabrication of timber components for buildings.



### Warren Sample

Warren has a comprehensive backstory stemming from business, commercial & high-growth strategy leadership spanning 25+ years of execution across the US, Europe & Asia, including years of hands on emerging markets experience. Identifying early opportunities and developing solutions which support fast user adoption through understanding the psychology of the market fit. Large scale technology, cost & business transformation experience in both corporate (*Banks, Consulting, Nokia*) + the lean-agile start-up world. A serial entrepreneur over the last decade, Warren has extensive expertise in solution innovation across fintech, AI, DLT, Crypto wallets-assets & Tokenomics/ICOs. Delivery of distributive network (incentivised) models responsible for lifting 1.2B\$+ in cash off the streets & pulling in millions more of underbanked people firmly into the digital economy."



### Jim Mason

Paramount Software Solutions, Inc Blockchain Practice Leader | Sybal.io | Member of Expert Panel at EU Blockchain Observatory & Forum. Experienced leader enjoys building teams and helping businesses deliver new data solutions, services, products and applications using new technologies improving internal operations and partner networks in manufacturing, financial services, banking, healthcare, supply chain and transportation.



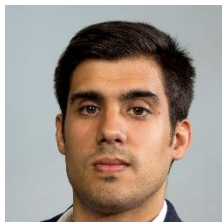


### **Dr Robert Herian**

Dr Robert Herian is currently a senior lecturer in law at the Open University Law School (UK) and co-founder of the Law, Information, Future, Technology (LIFT) research group and Equity and Trusts Research Network (ETRN). Robert's research includes intersections of law, technology and data studies, critical theory, social and political economy and philosophy. He is author of several articles and books, including *Regulating Blockchain: Critical Perspectives in Law and Technology* (Routledge, 2018) and *Data: New Trajectories in Law* (Routledge, 2021).



**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.



### **Andres Chomczyk Penedo**

Andrés Chomczyk is a PhD researcher at the Law, Science, Technology and Society (LSTS) research group of the Vrije Universiteit Brussel. His research is conducted within the PROTECT project, a Marie Skłodowska-Curie ITN. Before joining LSTS, he was a lawyer in Argentina where he provided advice to FinTech firms in Latin America, in particular companies working within the cryptoassets industry.



### **Alireza Siadat**

Alireza Siadat is a Partner and a lawyer of Annerton, Member of the Board of Directors of INATBA and of thinkBLOCKtank. He is working on the regulation of NFTs from a domestic, MiFID and MiCAR perspective whilst advising regulated and non-regulated firms and assisting law makers with the regulation of crypto-assets.

## Moderators Biographies



### **Ash Costello**

Ash Costello is a blockchain and privacy lawyer, with a background in financial services law. She is a member of the Expert Panel of EU Blockchain Observatory and Forum (<https://www.eublockchainforum.eu/>) and is currently working with blockchain and crypto developers and engineers to ensure their products and platforms are compliant with (among others) Europe's General Data Protection Regulation and the California Consumer Privacy Act. She is a member of the Standards Committee and the Steering Committee for The Baseline Protocol. She is working on launching privacy risk management tools which assess an entity's international privacy compliance including the GDPR and CCPA and offer remedial solutions. Both volumes of her books 'What's Hot in Blockchain and Crypto' are available on Amazon at: <http://mybook.to/WHBC1> and <http://mybook.to/WHBC2>. Book 3, and an omnibus of all 3 volumes will be out in July. Ash previously worked as a Financial Services Solicitor advising on investment funds in lawfirms such as Withers LLP, Dundas & Wilson (now CMS Cameron McKenna), Addleshaw Goddard, Carey Olsen. She also worked as Global Head of Legal for MUFG Investor Services, a multinational investment funds custodian/trustee/administrator. She is licensed to practise law in Ireland, England and



### **Dr. Agata Ferreira**

Agata Ferreira is an assistant professor at Warsaw University of Technology and a UK qualified solicitor. She practiced law for a number of years in the financial sector in the City of London. She focuses on legal and regulatory issues of emerging technologies and innovation including blockchain and fintech. She is a current member of the Advisory Council of Blockchain for Europe, member of the Advisory Board of Consensus Health and a member of the Expert Panel of EU Blockchain Observatory & Forum.



### **Dr. Nina-Luisa Siedler**

Nina-Luisa Siedler is partner at DWF, a technology-oriented global law firm, and head of the international Blockchain Competence Group. She focusses on the legal implication of blockchain/distributed ledger technology projects and assists her clients with the structuring of business cases with view to legal and regulatory compliance. Nina-Luisa Siedler is active member of several associations and initiatives (Blockchain Bundesverband, ITSA, EU Blockchain Observatory & Forum Expert Group, UNIDROIT Working Group on Digital Assets) and member of the board of directors of thinkBLOCKtank. She had also been on the board of directors of IPDB and INATBA.