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The digitalization of public administrative services across Europe is making a step forward with EBSI, the European Blockchain Services Infrastructure, an initiative of the European Blockchain Partnership (EBP) and the European Commission (EC). The project aims to leverage decentralised blockchain technology to accelerate the creation of cross-border services for public administrations and their ecosystems, initially in the case of issuing, presenting and validating Diplomas. Soon all administrative documents will become digital. EBSI aims to facilitate citizens and businesses to exchange important information, especially in certain cross-border contexts, in a safe, trustworthy and controlled manner via an EBSI Conformant wallet. This all is done by implementing the W3C's Verifiable Credentials standard, to ensure wide adoption and compatibility. Digitizing documents is the easy part. The challenge we face is the transition from traditional to digital controls that we can trust. The blockchain, which will act as a single point of truth, will offer verifiable certificates from a new pattern for exchanging information.



All of EBSI's Core Technical Services - APIs, Smart Contracts, and the EBSI ledger - are hosted in a decentralised way, by a network of nodes all across Europe. They synchronise their copies of the ledger, making it distributed, and all make EBSI's Core Technical Services available. Anyone can choose to operate an EBSI Node, but Node Operators must abide by EBSI's Governance rules and respect its General Conditions for Node Operators in order to ensure the integrity and stability of the network. With verifiable certified documents (Verifiable Credentials -VC), EBSI provides a new way for Public Administrations to provide upgraded as well as new services to the citizens as part of their digital transformation program. A new way for citizens to manage and take ownership of their documents. And a trusted way for an entire ecosystem to verify them. In conclusion, EBSI is creating a new trust paradigm serving citizens, public and private administrations across the EU.



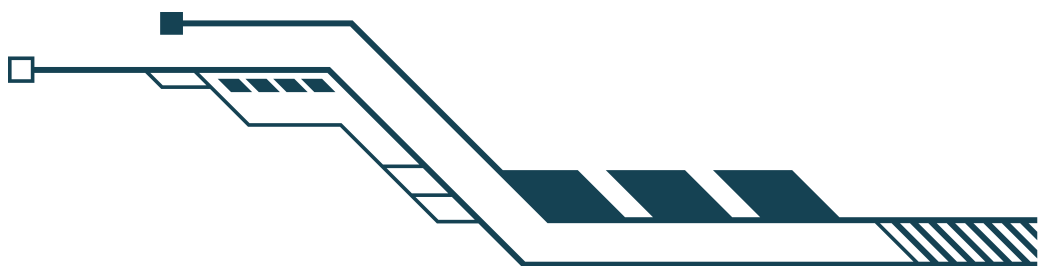
Blockchain as a technology is associated with many myths because the most famous examples of blockchain technology involve cryptocurrencies. However, there are many types of blockchain networks with many opportunities to develop innovative applications.

The deployment of the EBSI network is different from most public blockchains in several key ways:

It is considered a public-permissioned network not a permissionless. Briefly, it means that although anyone can join the network and operate a node, the administration of the network decides on their permissions. This access layer safeguards EBSI from being used for illegal purposes.

It is sovereign and EU-based, which means that EBSI nodes are based in Europe, and EBSI complies with European values and regulations, such as GDPR.

It is energy-efficient because it uses a consensus algorithm based on Proof of Authority. Unlike proof-of-work, the common mechanism for reaching consensus on many public chains, Proof of Authority requires almost no computational power and consumes very little energy. This is because fewer actors are involved (it is a permissioned network where node operators are selected based on criteria), and there is no competition to add blocks to the chain (leading to a “computational race”).



By creating its own sovereign network, EBSI ensures that Europe benefits from an autonomous and eco-friendly infrastructure, providing legal certainty. The aim is to enable public authorities to deliver decentralised services that simplify the life of EU citizens. The use of decentralised registries can be trusted, and support easy verification processes , anytime and anywhere.


EBSI’s operational model is focused on respecting the European values and it is fully compliant with European Regulations.

Achievements

It should be considered a great achievement that Cyprus has been chosen as a country 'role model' of the way the CY-EBSI - Establishment of EBSI node(s) in Cyprus project team worked for its implementation. The project is mainly financed by the European Commission with a total percentage of 75% and the remaining 25% is from the other implementing partners of the project: the company RTD TALOS LTD, the University of Nicosia, AC Goldman Solutions & Services GSS Ltd and the Deputy Ministry of Research, Innovation and Digital Policy of the Republic of Cyprus. Having successfully operated a pre-production EBSI hub for EBSI v1.0 since the start of the project, Cyprus is one of the Member States that are intending to gradually and actively migrate to the EBSI production environment under EBSI v2.0. To ensure the smooth operation of the service, via resilience and availability of the EBSI v2.0 network, Cyprus has employed computing resources for:

- 1 the pilot environment,
- 2 the pre-production environment, and
- 3 the production environment

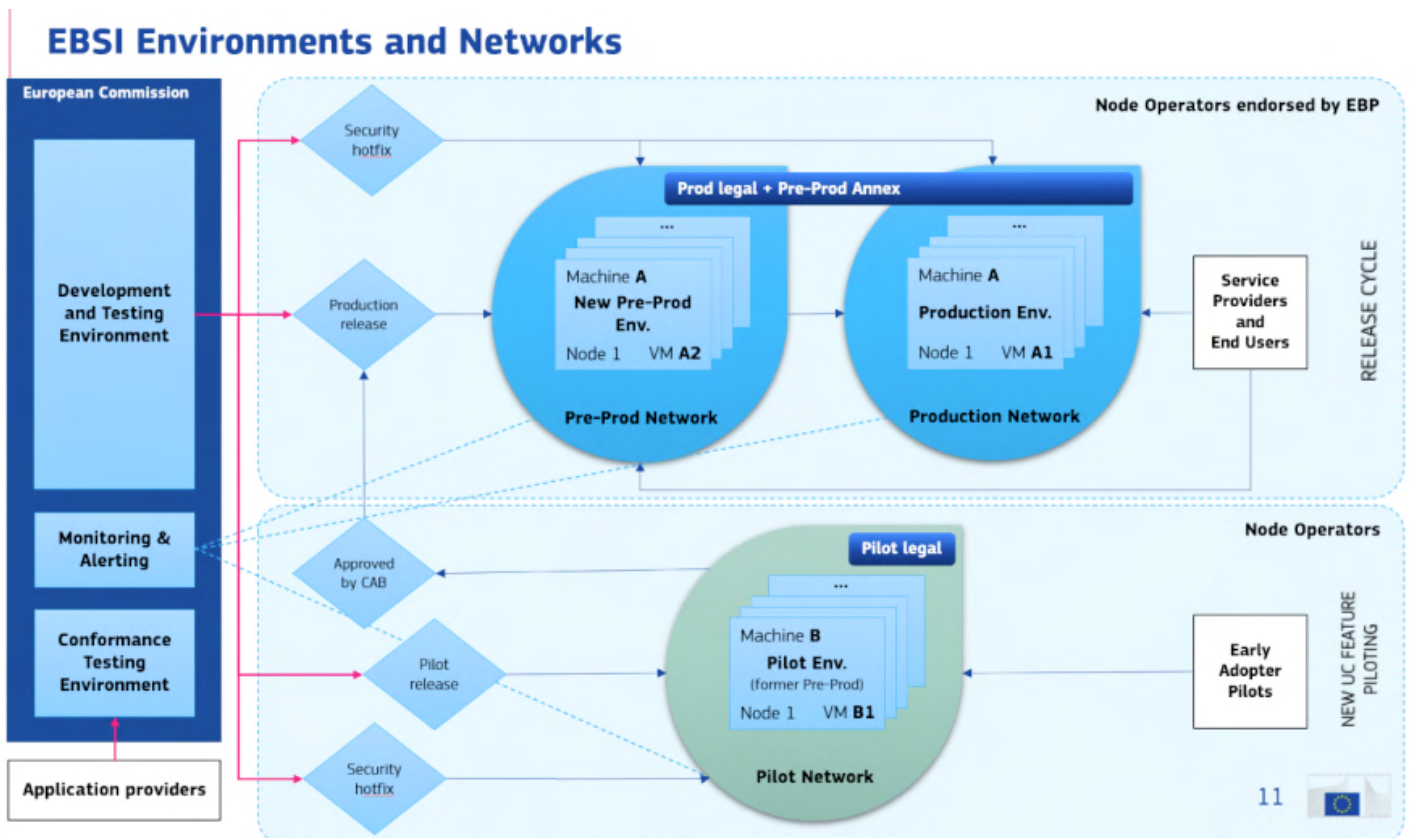
AC Goldman Solutions & Services GSS Ltd contribution to CY-EBSI's achievements deserves particular recognition for the development, successful delivery and presentation of the "License to Practice" Use Case that put Cyprus on the EU map of leading EBSI adopters. The developed Use Case (UC) was recognized, accredited and promoted by EBSI as one of the first 6 EBSI Diploma-themed success stories for its uniqueness and completeness, as a "full journey" application – Goldman cooperated with the Greek Universities Network (GUnet) to materialize and successfully demonstrate its Cross-border efficacy, as intended to be facilitated by EBSI's platform - a truly significant achievement considering the size/capacity of our Country, compared to the other 5 success stories developed by multiple contributions from the most advanced and much larger EU states. More information on the success stories can be found here:

 [Success stories](#)

Achievements

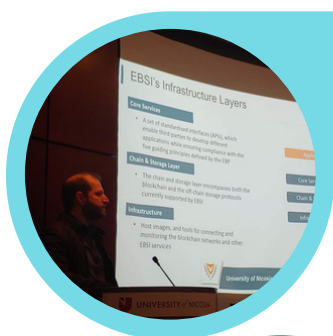


From January 17th, 2023, and having met the minimum number of validation nodes and peers to be considered stable, the EBSI v2.0 Pilot environment is now fully operational and available for use. This milestone is a step closer to running EBSI v2.0 pre-production and production environments in the coming period. The EBSI hubs for Cyprus are managed by the University of Nicosia on behalf of the Deputy Ministry of Research, Innovation and Digital Policy of the Republic of Cyprus under action 2020-CY-IA-0047




Information day

 The first information day took place on March 18th, 2022 at the UNESCO auditorium of the University of Nicosia, on the topic "The importance of blockchain technology in Digital Governance". The day was opened by the Deputy Minister of Research, Innovation and Digital Policy Mr. Kyriakos Kokkinos. The main speakers were Dr Nikolaos Mastrogiannopoulos, Chief Scientist for Research and Innovation, Dr. Alexandros Michaelidis, General Manager, RTD Talos Ltd, Dr. Cleitos Christodoulou, Assistant Professor, Department of Digital Innovation, University of Nicosia, Yiorgos Antoniou, Technical Project Manager, and Yiorgos Konstantinou, Architect and Development Lead, of AC Goldman Solutions & Services GSS Ltd, and Daniël Du Seuil, Convenor, ESSIF - EBSI at EBP and member of the Expert Group of the European Blockchain Observatory and Public Dialogue. During the Information Day, topics such as digital governance and the role of EBSI and its intended purpose, the European Union's decentralized approach to electronic identification, the plan for funded programs utilising decentralised technologies, the European CY-EBSI project, the infrastructure created and the possibilities it provides. The pilot application of the CY-EBSI diploma use case developed in collaboration with ETEK and GUnet (EBSI - Early Adopters Program) was presented and demonstrated to the participants. Finally, the conference closed with questions from the audience and a live discussion. It was the first time since the launch of the Early Adopters program in 2021, that the results of the multi-university EBSI pilot program had been publicly presented in real-time and with real data.



Digital demo day



 On May 31st of 2022, a pan-European EBSI demo day was held, demonstrating through its Success Stories' use cases the capabilities as well as EBSI's potential role in Europe's digital transformation. The CY-EBSI's UC ("License to Practice") was presented by AC Goldman Solutions & Services Ltd, a member of the consortium, which sparked a great deal of interest and inspiration amongst the audience. Over 800 participants/audiences across Europe and beyond had a unique opportunity to experience and learn how verifiable credentials can be leveraged, using W3C standards, alongside distributed technologies to give citizens control over their identity and their data in a trustworthy and secure manner. The session concluded with a discussion on the role the public sector should play in this decentralized information landscape. More information about the demo can be found at the link [EBSI Demo Day](#) event, while you can watch the recorded presentation here:

 [Success story 5](#)

In the next issue:

Carrying out two seminars for the purpose of training end users and programmers which will take place in March 2023

The final seminar will take place in April. During this seminar the results of the action will be presented focusing on the future prospects of using EBSI for Cyprus.



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Find out more at :

 www.ec.europa.eu/digital-building-blocks/wikis/display/EBSI/Home



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