



REPUBLIC OF SLOVENIA  
**MINISTRY OF ECONOMIC DEVELOPMENT  
AND TECHNOLOGY**



# Interoperable Blockchain infrastructures

M.Sc. Nena Dokuzov, December 2021



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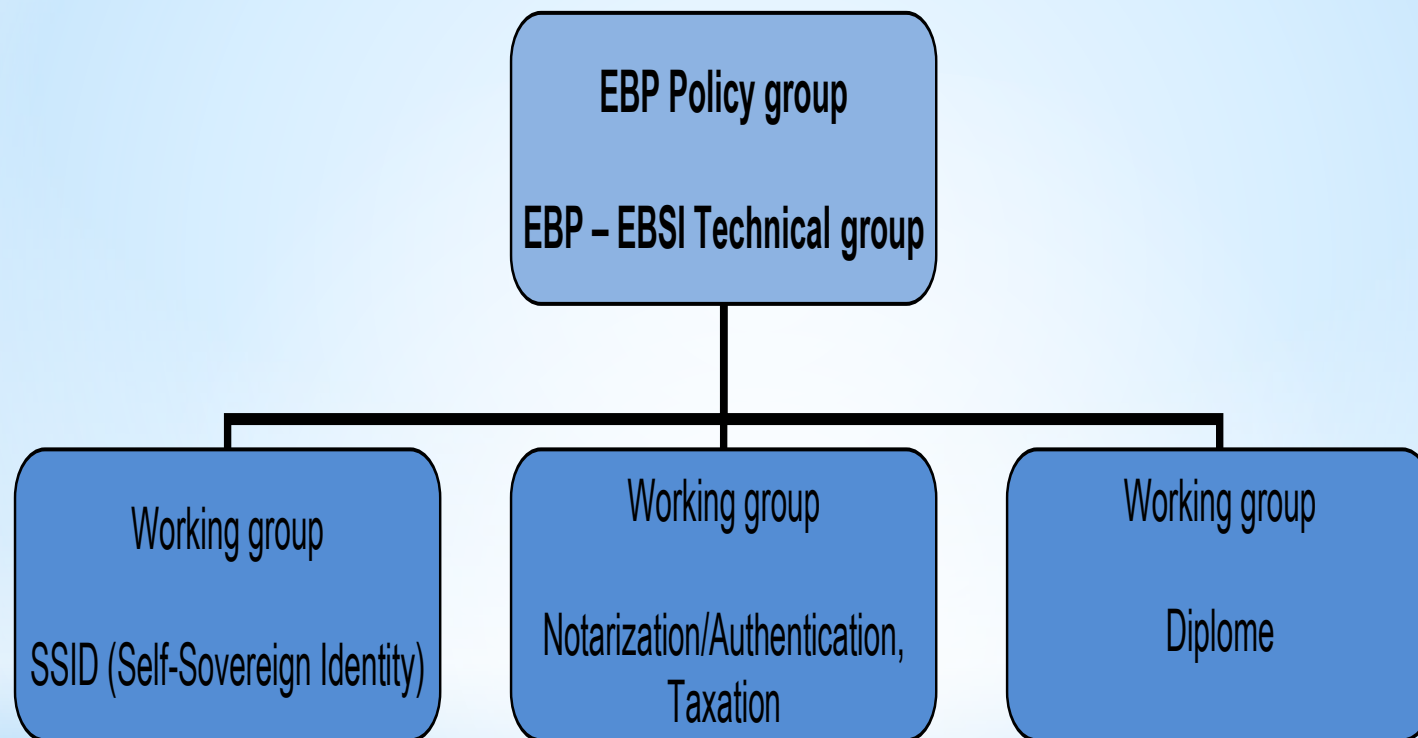


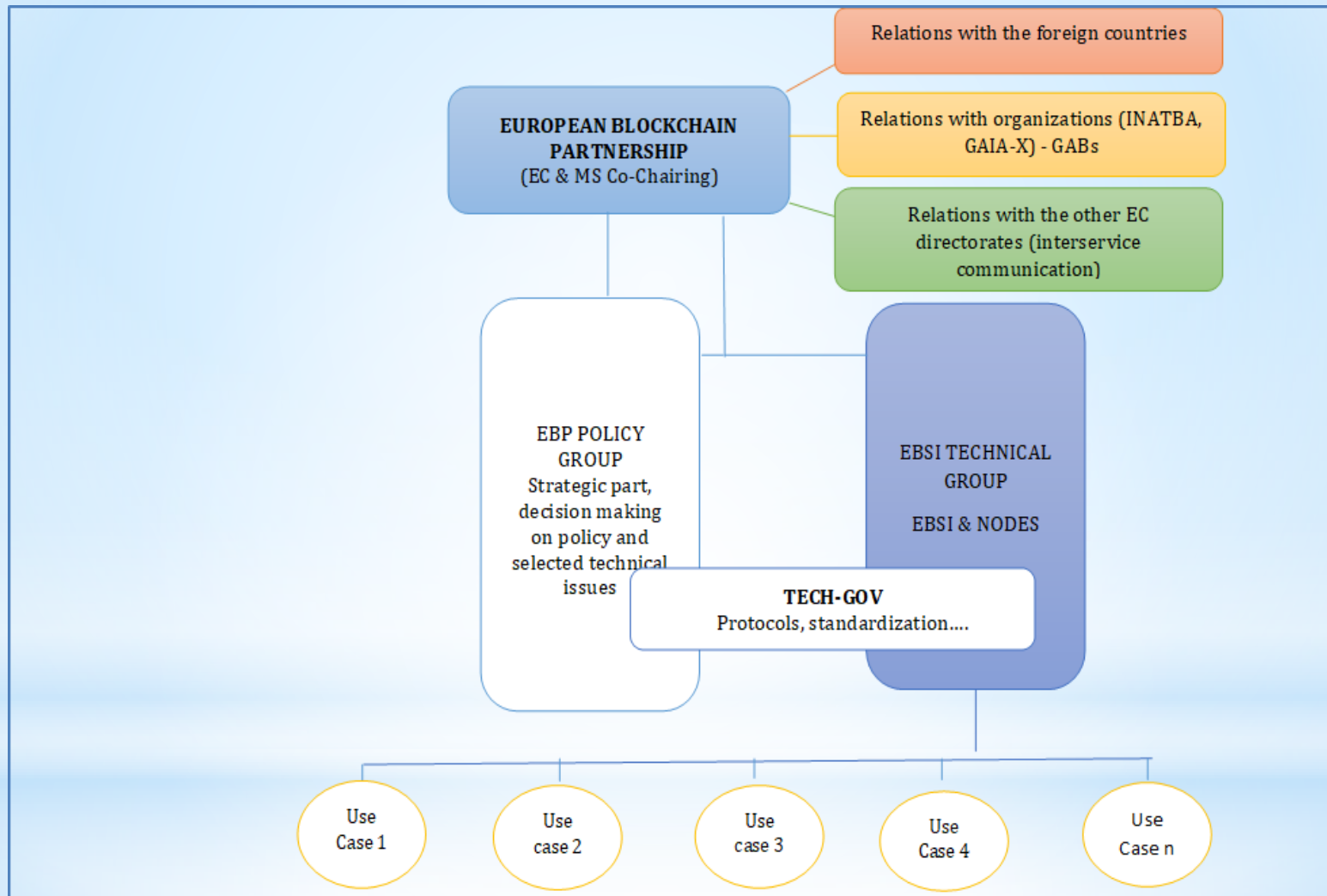
#EUBlockchain

# EU BLOCKCHAIN OBSERVATORY & FORUM













## Mission statement of EBP (July 2019)

„ Policy Group will work together towards realising the potential of blockchain-based services for the benefit of citizens, society and economy across Europe.“

- ❖ Sharing experiences, best practices, key learnings, close cooperation of policy and regulatory cooperation between Member States towards the creation of a European ecosystem
- ❖ Promoting interoperability amongst relevant public-sector and private-sector blockchain infrastructures



- ❖ The EBP Policy Group and the EC must agree on the creation of any new EBSI User Group to be set up to support a new use case to be deployed by the EBSI.
- ❖ The EBP Policy group members are the sole entities that may appoint national representatives to take part in the EBSI Technical and User Groups in accordance with the Guidance Note on the National Representation in the EBSI Groups .
- ❖ Work with the EC on the oversight of the EBSI governance and technical development and how it support EU policies to relevant decision-makers.
- ❖ Voting, co-chairmanship and rotation based on EC Presidency „trio“



## 2021:

- ❖ Digital Europe Programme
- ❖ RRF
- ❖ Blockchain Strategy
- ❖ EBSI V2
- ❖ EBP Policy Group non-paper
  
- ❖ Cross-border Multi country projects:
  - Further development of EBSI and use cases
  - Early adopters programme
  - Competence centre





## EU presidency priorities in Blockchain

- ❖ EBP: strengthening the role of European blockchain partnership in EU Blockchain Ecosystem
- ❖ Strengthening the role of blockchain technology in the European digital Landscape
- ❖ Further development of EBSI, together with the integration of national blockchain infrastructures for upgrading of EBSI
- ❖ Strengthening of Knowledge, skills and competences and
- ❖ Identification of the Early adopters Use Cases in the field of:
  - Traceability
  - Notarization
  - Skills
  - Energy efficiency
  - Smart cities and communities

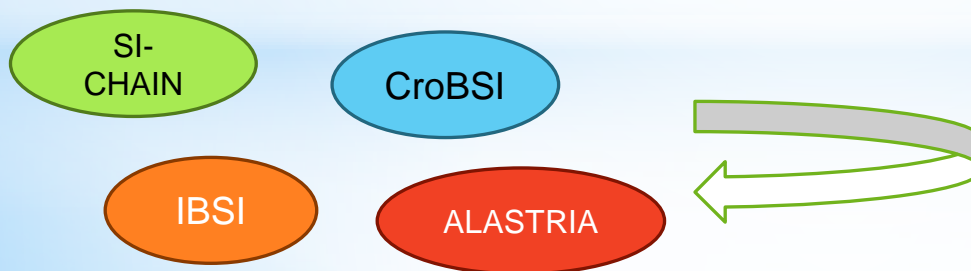


## Recovery and resilience Plan

### The European blockchain service infrastructure (EBSI):

#### Objectives

- Strengthen the use of EBSI by strengthening the use of EBSI in the public sector
- extend the applicability of EBSI by integrating the infrastructure with some national infrastructures through the application
- Improve innovation through early deployment technological solutions of Blockchain
- Create an appropriate supportive environment for knowledge sharing, skills and best practices



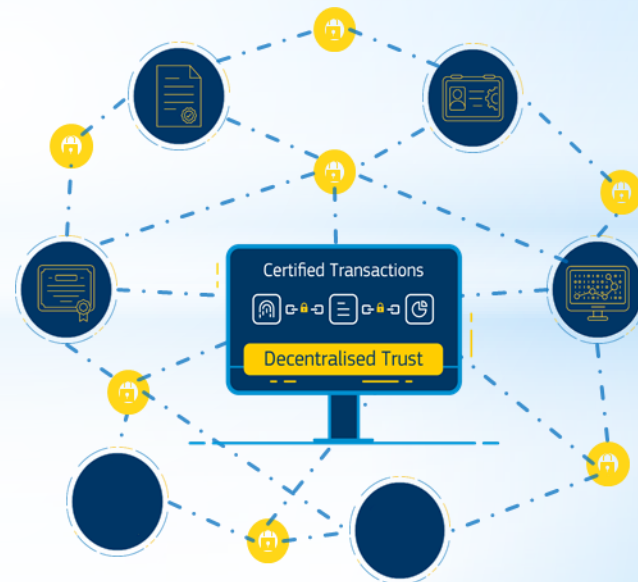
#### Activities:

- upgrading of nodes and the addition of new nodes to the network (inclusion of new target population groups, development of additional use cases)
- complementary activities under Digital Europe – Early Adopters programme to support innovative SMEs and start-ups in developing applications, establishment of a Competence Centre for Blockchain
- upgrading of EBSI together with the upgrading of national infrastructures, we will connect and integrate the national blockchain of the infrastructure of at least three EU MS and the national infrastructure with EBSI with use cases in digital identities and other relevant areas.
- upgrading of the EBSI together with the upgrading of the national infrastructures, we will complete the integration and integration of national block infrastructures with EBSI in cooperation with other Member States



**EBSI** is public permissioned blockchain infrastructure:

- nodes will be used by EC, MS or associated countries
- public access to public data to business and civil society (pre-defined data available only to state stakeholders)
- crossborder interoperability
- three layer architecture: infrastructure layer, service layer

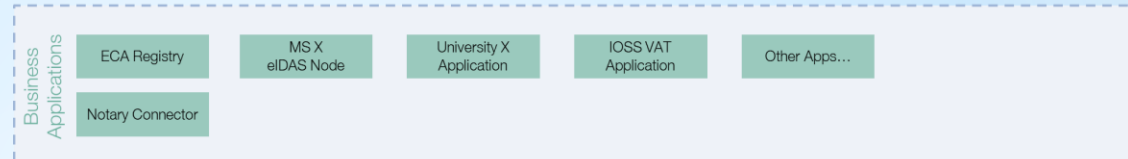




# 1

## Business Applications

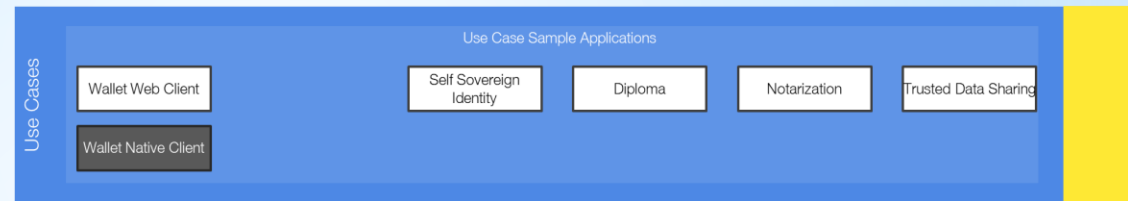
Business applications to enable cross-border services that reside **outside of the EBSI governance layer**



# 2

## Use Case Applications

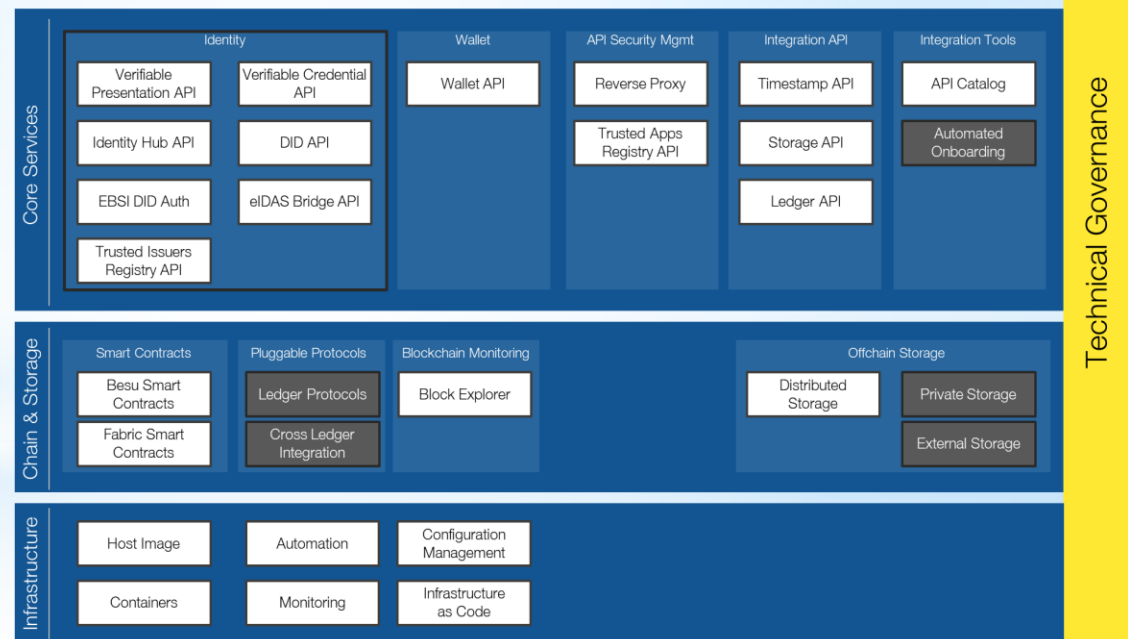
A **use case-specific application** developed to enable cross-border services



# 3

## Core Infrastructure

The **infrastructure layer** with capabilities common to all use cases. A thorough analysis will determine the EBSI native network based on specific use case requirements.





## SI- CHAIN

### **A National Blockchain Pilot Infrastructure**

that offer EMV smart contracts and Ethereum compatible dApp environment and explores supporting tools for implementing Blockchain services and outline the technology infrastructures which can support high speed and scalable fourth generation blockchain technology.

### **How do we compare to EBSI?**

SI-Chain is built on a HashNET technology, that employs DLT and consensus algorithm that keeps all positive characteristics of blockchain technology while increasing throughput to more than 50,000 transactions per second, what gives us the significant advantage.

### **Project Scope?**

To develop a framework/mechanism for development and implementation of Blockchain services infrastructure, which will be compatible and in line with European Blockchain services infrastructure and usable or extendable globally.

- MVP version of SiChain deployed and operational
- Using Tolar HashNET blockchain technology
- Telemach infrastructure
- First version of SiChain core services platform
  - Smart Contracts
  - Cryptocurrency
  - Data storage





## Benefits for Public and private sector

Strengthening digital capacities of public sector:

- ❖ in terms of digital knowledge and skills, which is directly connected with the higher efficiency in the human resource implementation
- ❖ in terms of better access of the companies to the services of the public sector (through digital identities of the companies and digital identities of the persons)
- ❖ Reducing administrative barriers for private parties when interacting with the public authorities
- ❖ Reducing cross border barriers
- ❖ Strengthening the attractiveness of EU national economies and EU as a whole for foreign investors
- ❖ Legal settlements for better stability and predictability of business environment



## *First Slovenian Blockchain Meetup (end June 2017)*





## *Second milestone: European Blockchain Meetup in Slovenia – October 2017*





**M.Sc. Nena Dokuzov, National  
representative of European Blockchain  
Partnership, Slovenia**

- \* E-mail: [nenadokuzov@gov.si](mailto:nenadokuzov@gov.si),
- \* Tel. +386 (0)41 675 944