NATIONAL BLOCKCHAIN ECOSYSTEM

Public-Permissioned Blockchain networks

The Trust/Decentralization Continuum

The Trust/Decentralization Continuum

Transact among anonymous parties without a central entity

No recourse to legal system

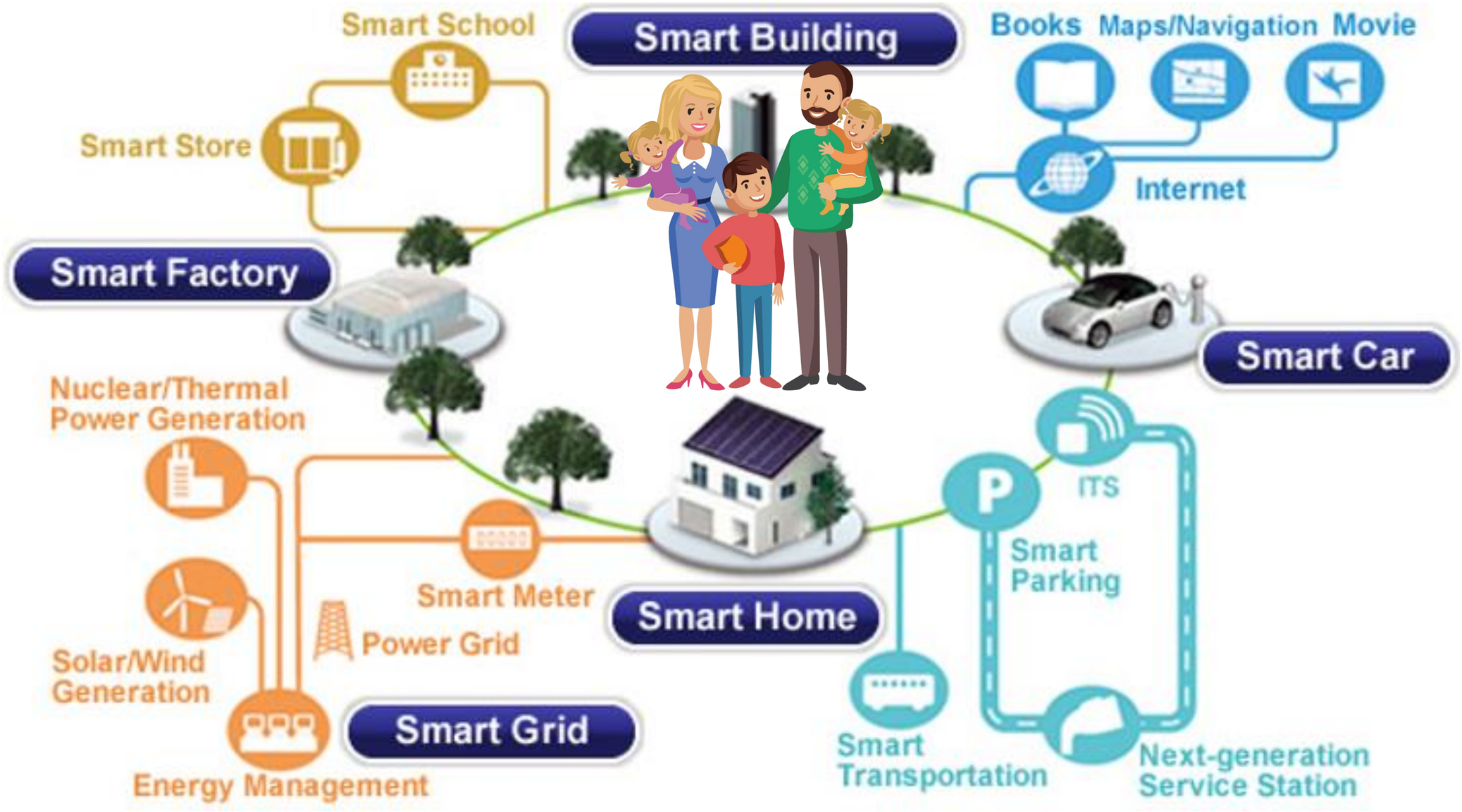
The Trust/Decentralization Continuum

Transact among very well-known parties without a central entity

Typically in a regulated and controlled environment

The people at the center of everything

Decentralized Smart Cyber-physical Society



Decentralization is not the objective, but a mechanism

Inclusive

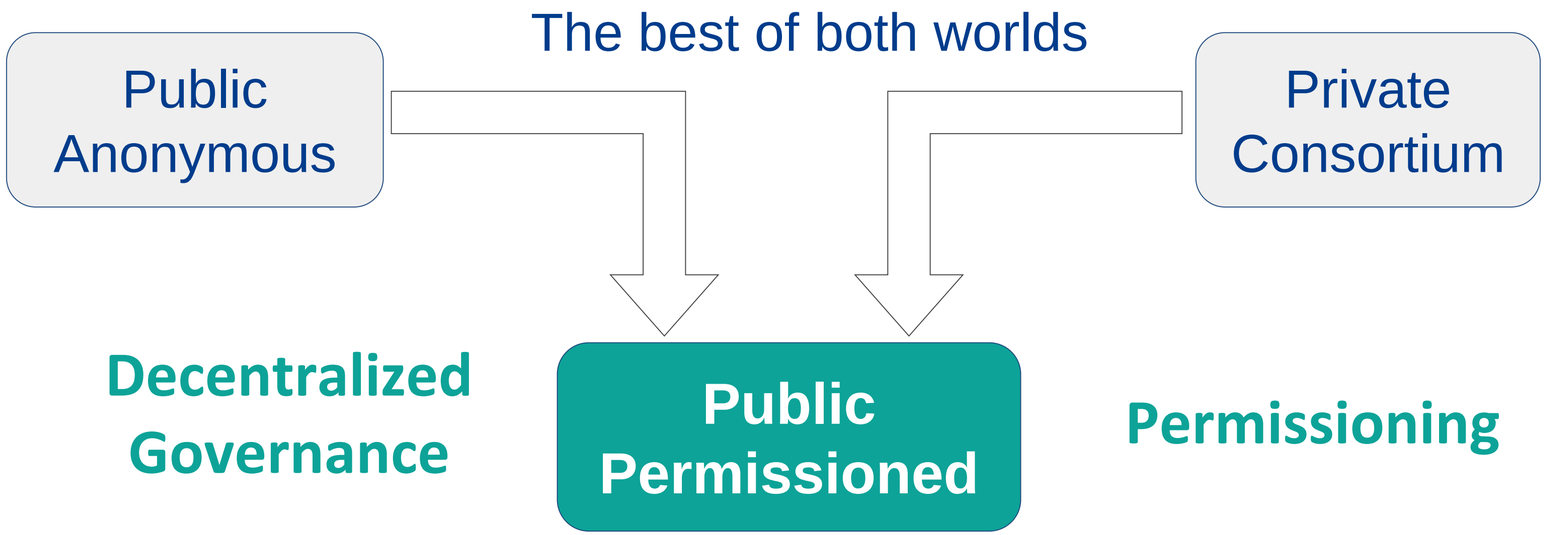
Open

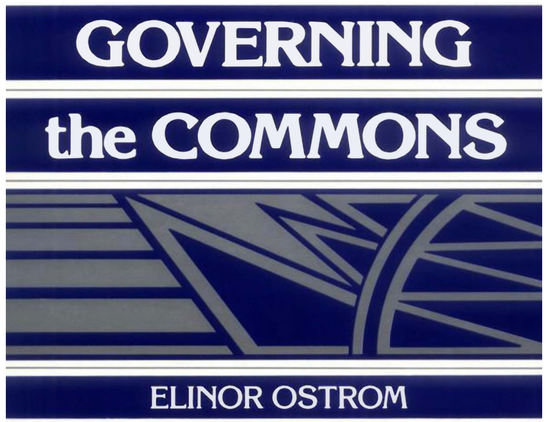
Transparent

Fair

Consumer protection

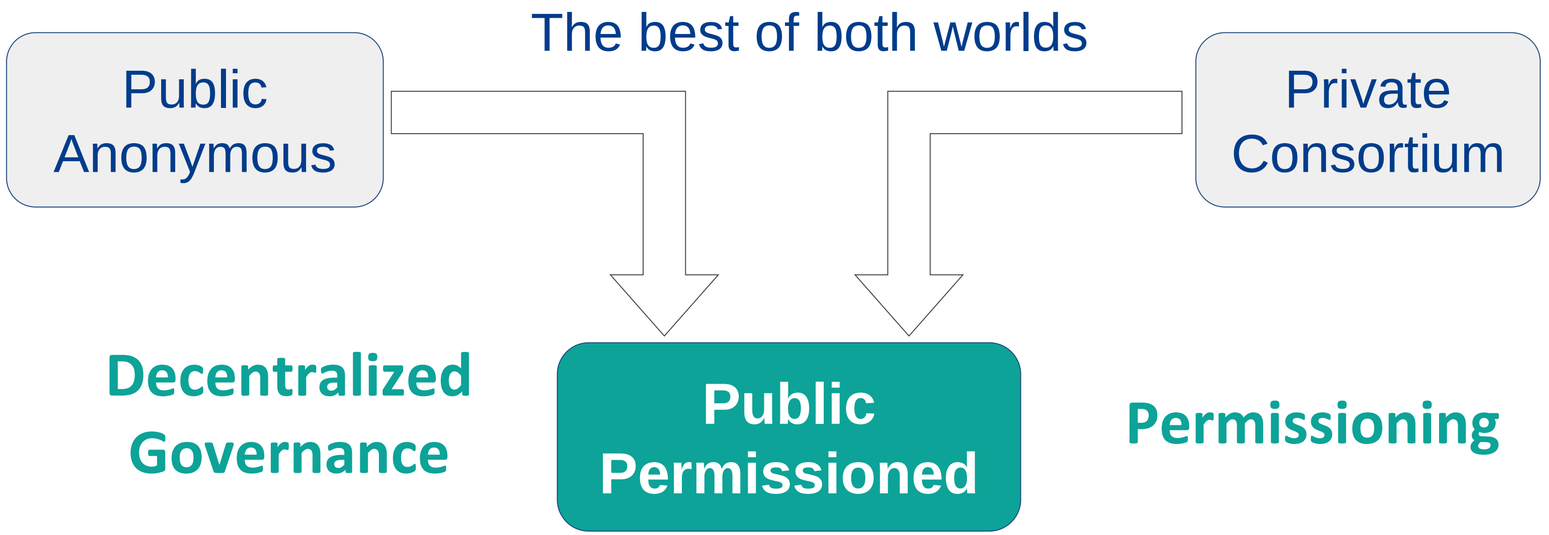
Sustainable

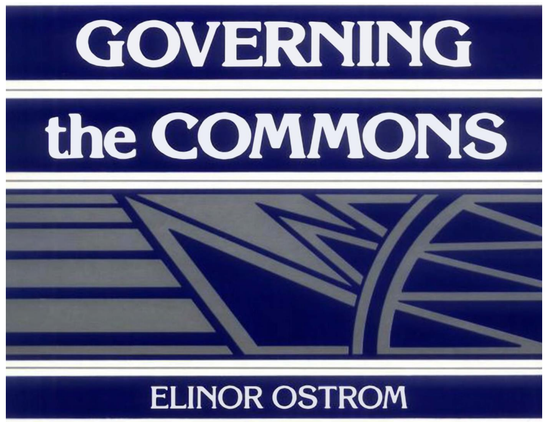




The Evolution of Institutions for Collective Action

Nobel Prize in Economics 2009

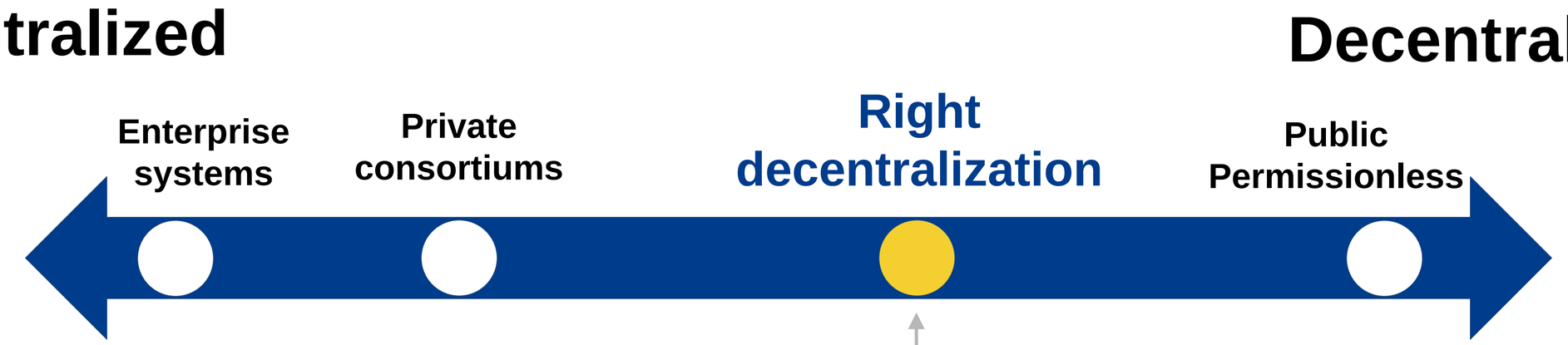




The Evolution of Institutions for Collective Action

Nobel Prize in Economics 2009

A solution compatible with European values

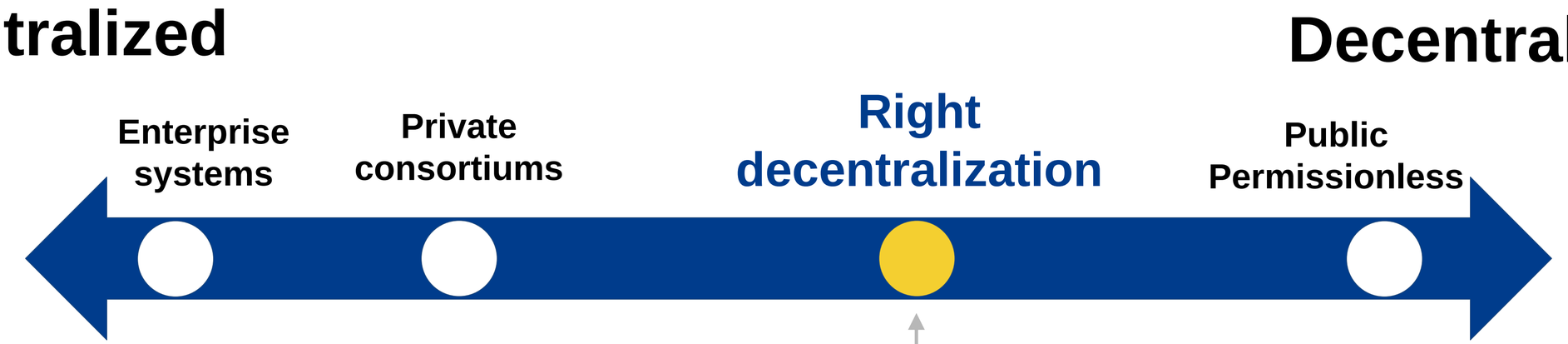


Permissioning
Higher performance (Consensus algorithm) Low transactional cost (No cryptocurrency)

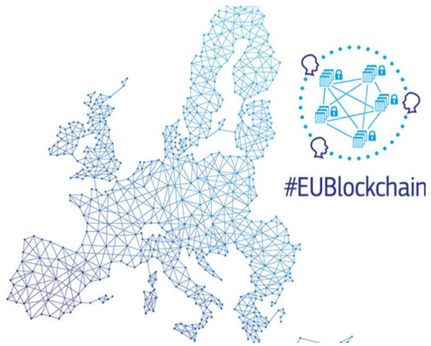
ALASTRIA

Strong Identities
Right decentralization (Trusted Validators) Compatible with regulation (Privacy, Identities)

A solution compatible with European values

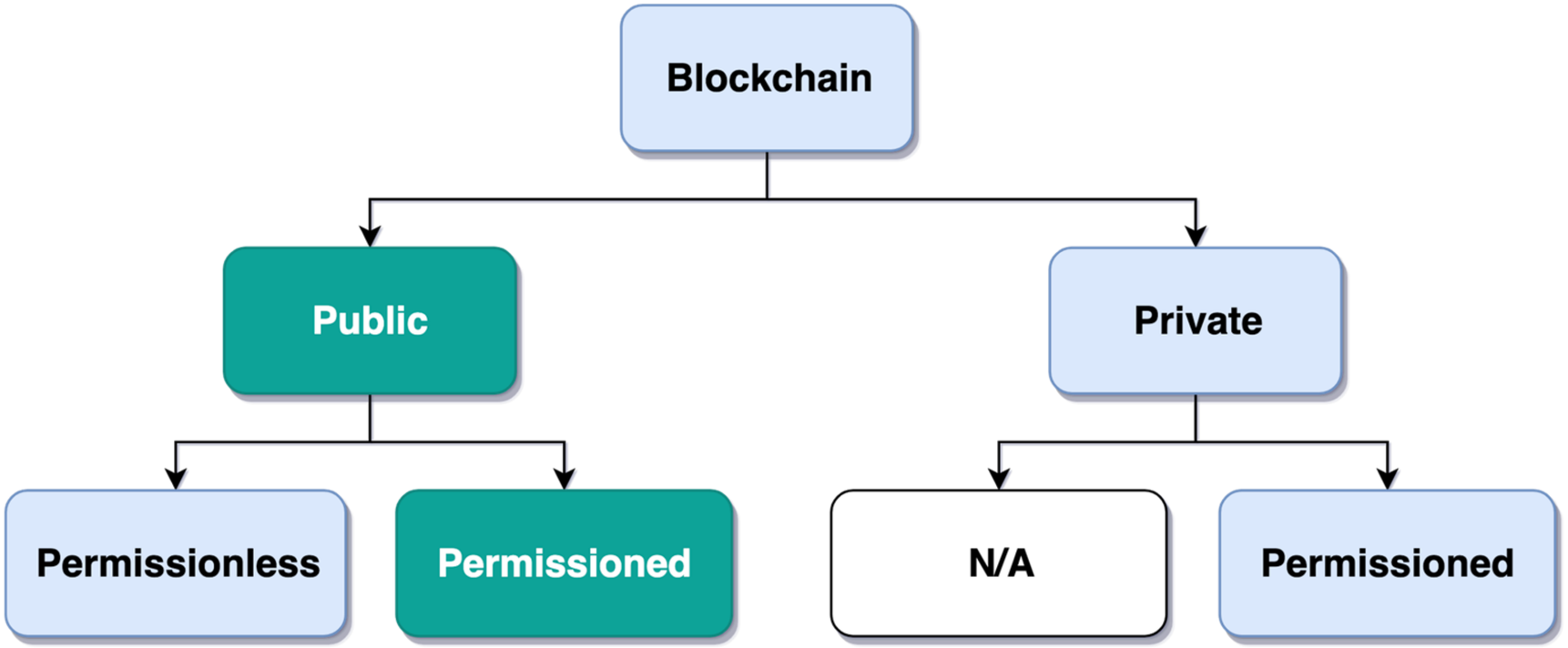


Permissioning	Strong Identities
Higher performance (Consensus algorithm) Low transactional cost (No cryptocurrency)	Right decentralization (Trusted Validators) Compatible with regulation (Privacy, Identities)



EBSI

Blockchain taxonomy

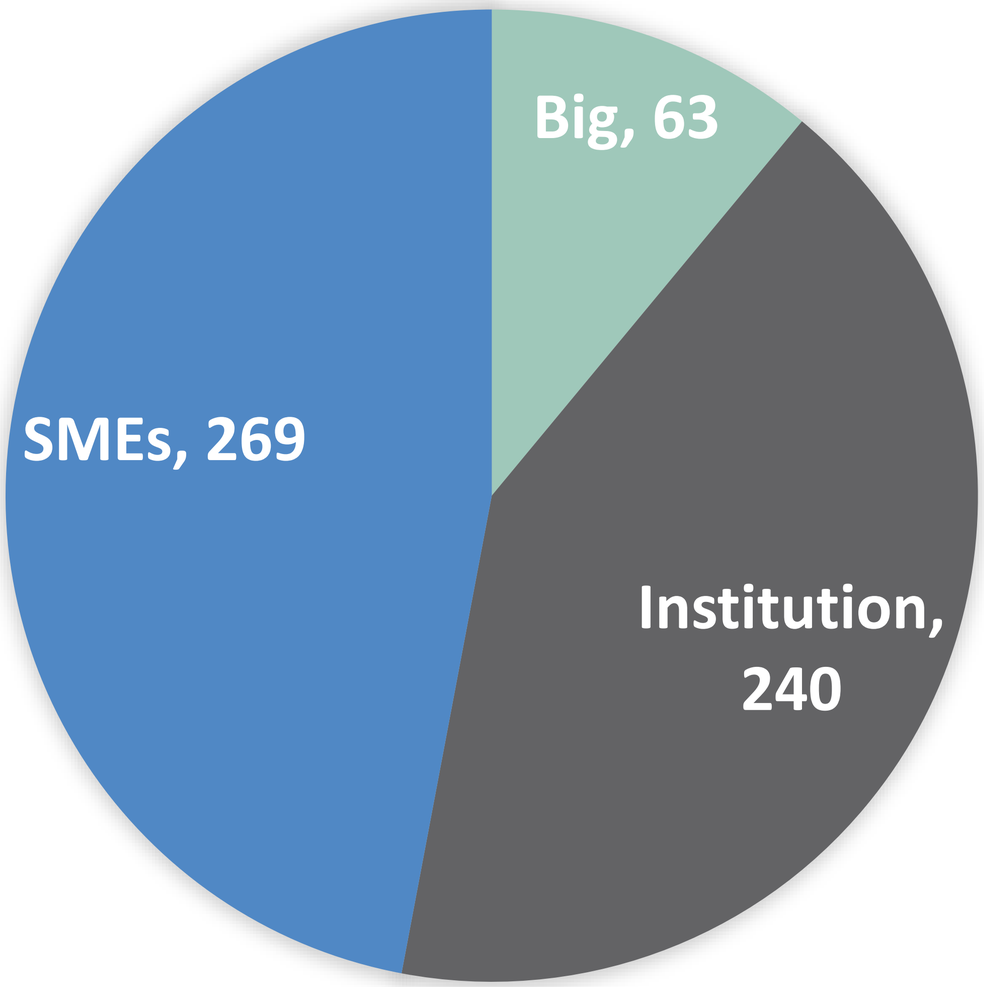


Bitcoin
Ethereum

Alastria
LACChain
EBSI

Private Consortiums

ALASTRIA



572

MEMBERS

53

UNIVERSITIES

49

PUBLIC ADMINISTRATIONS

11

COUNTRIES

2.8 MILLION TRANSACTIONS/MONTH

99.99% AVAILABILITY

120 NODES

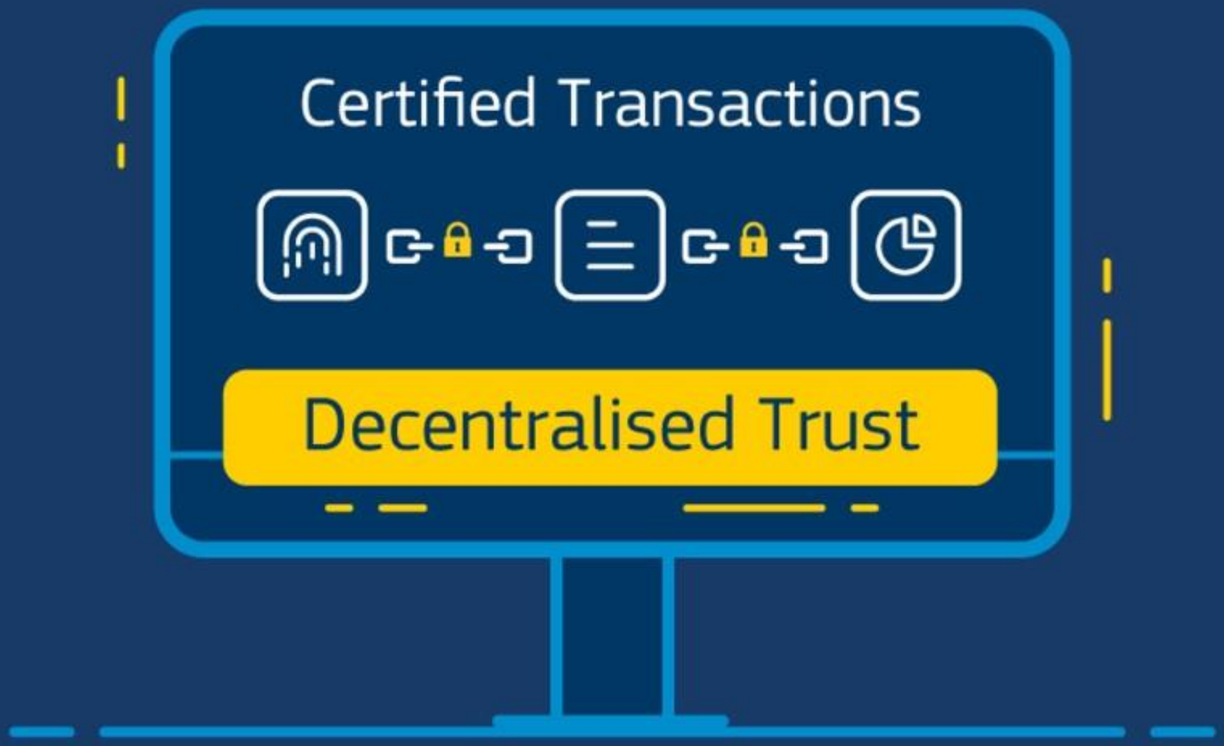
EBSI

Meet

European Blockchain Services Infrastructure

HARNESS THE POWER OF BLOCKCHAIN SERVICES, INCREASING TRUST THROUGH DATA SECURITY, PRIVACY AND TRANSPARENCY

#Blockchain4Europe



Joint initiative EC - Member States to deliver

EU-wide cross-border public services using blockchain technology.

Cross border

enhance cross border services provided by government to the citizen

Mobility

enhance cross border citizen and enterprise mobility

Sustainable

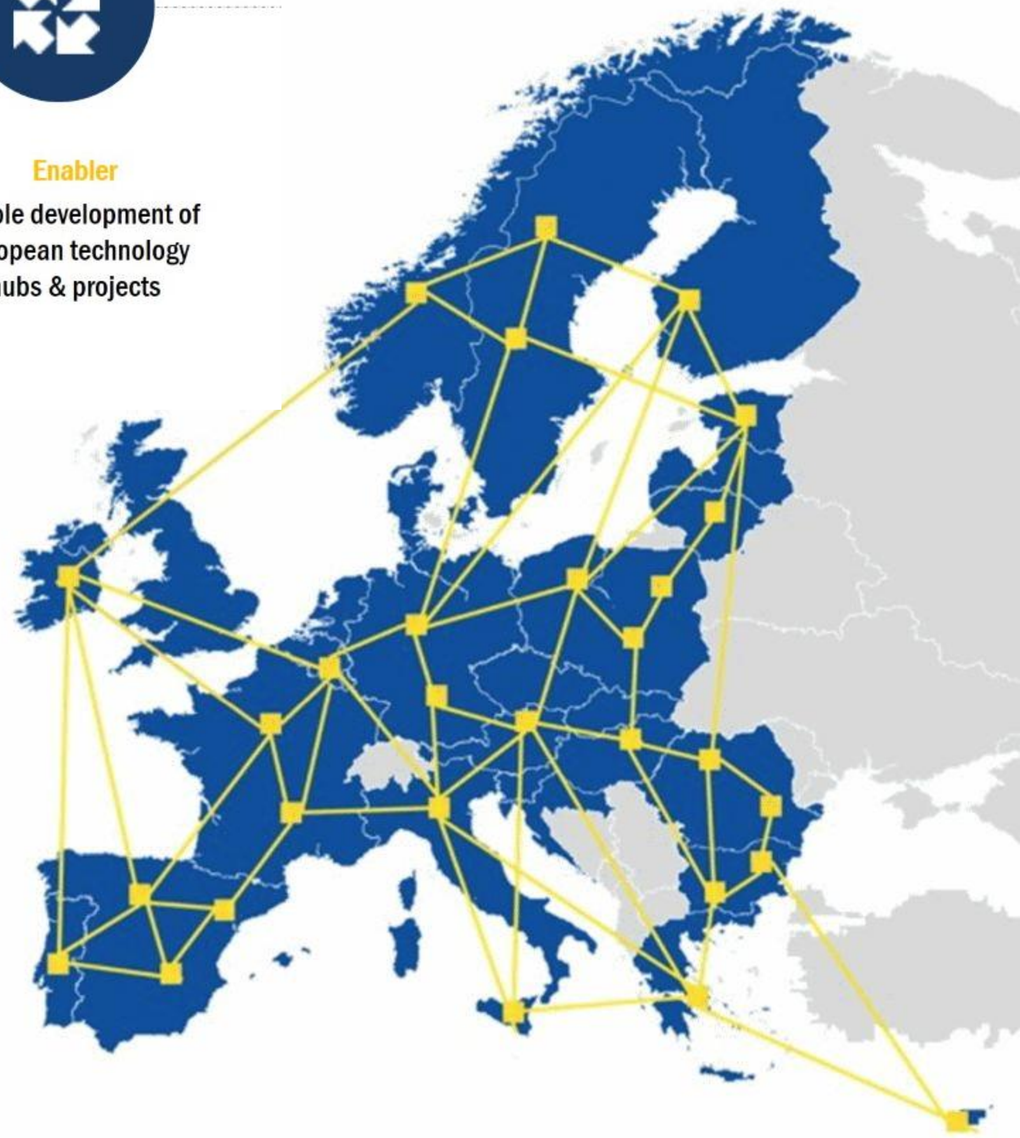
reduce environmental impact of paper and transportation

Compliance

compliance with GDPR, eIDAS, SDGR...

Enabler

enable development of European technology hubs & projects

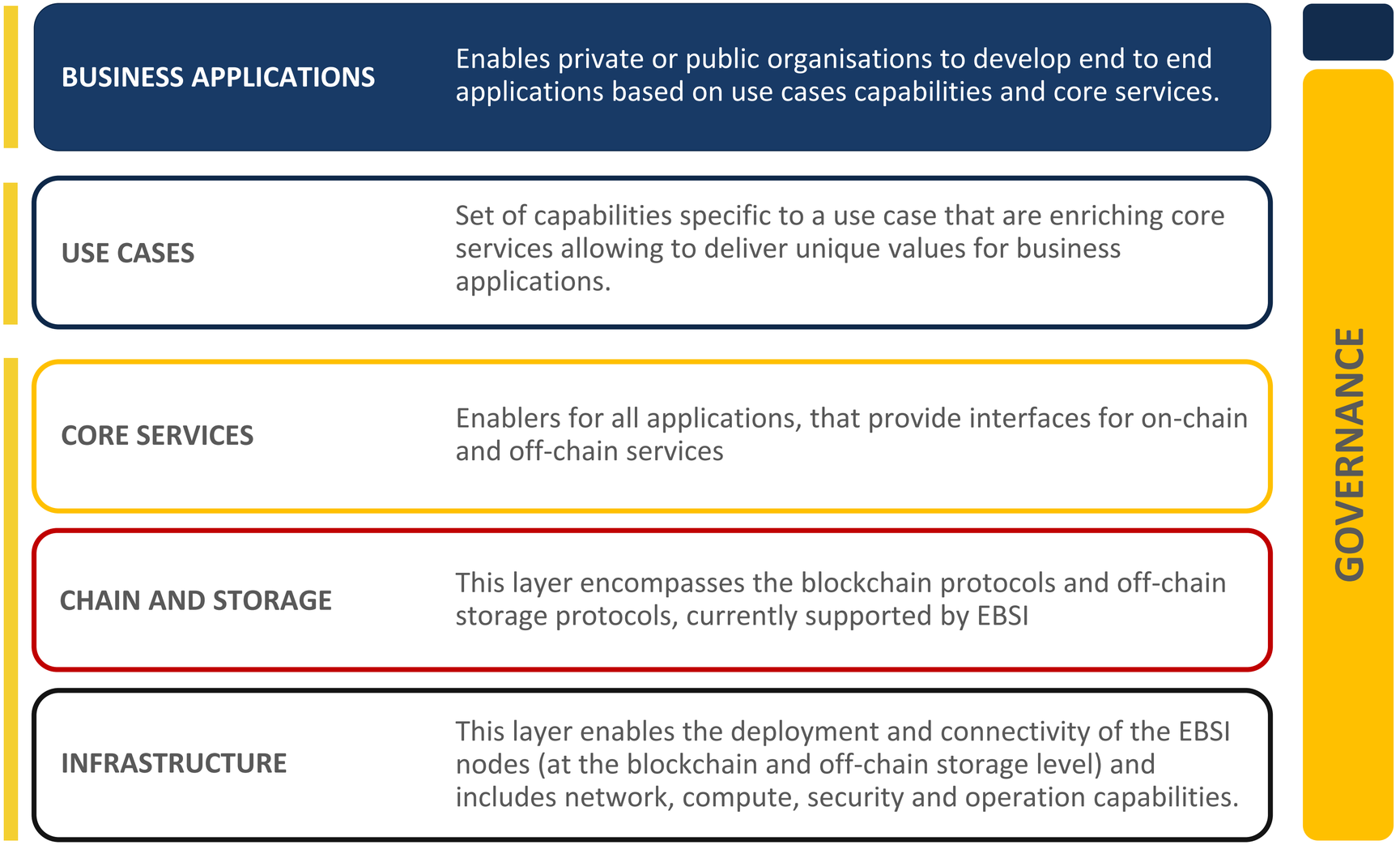


Status of the EBSI network

Status	Nodes
COMPLETE	33
ON-BOARDING	5
IN PROGRESS	3
WAITING	2

Layered Architecture

- Use Cases and Business Applications are largely independent from the blockchain protocol used

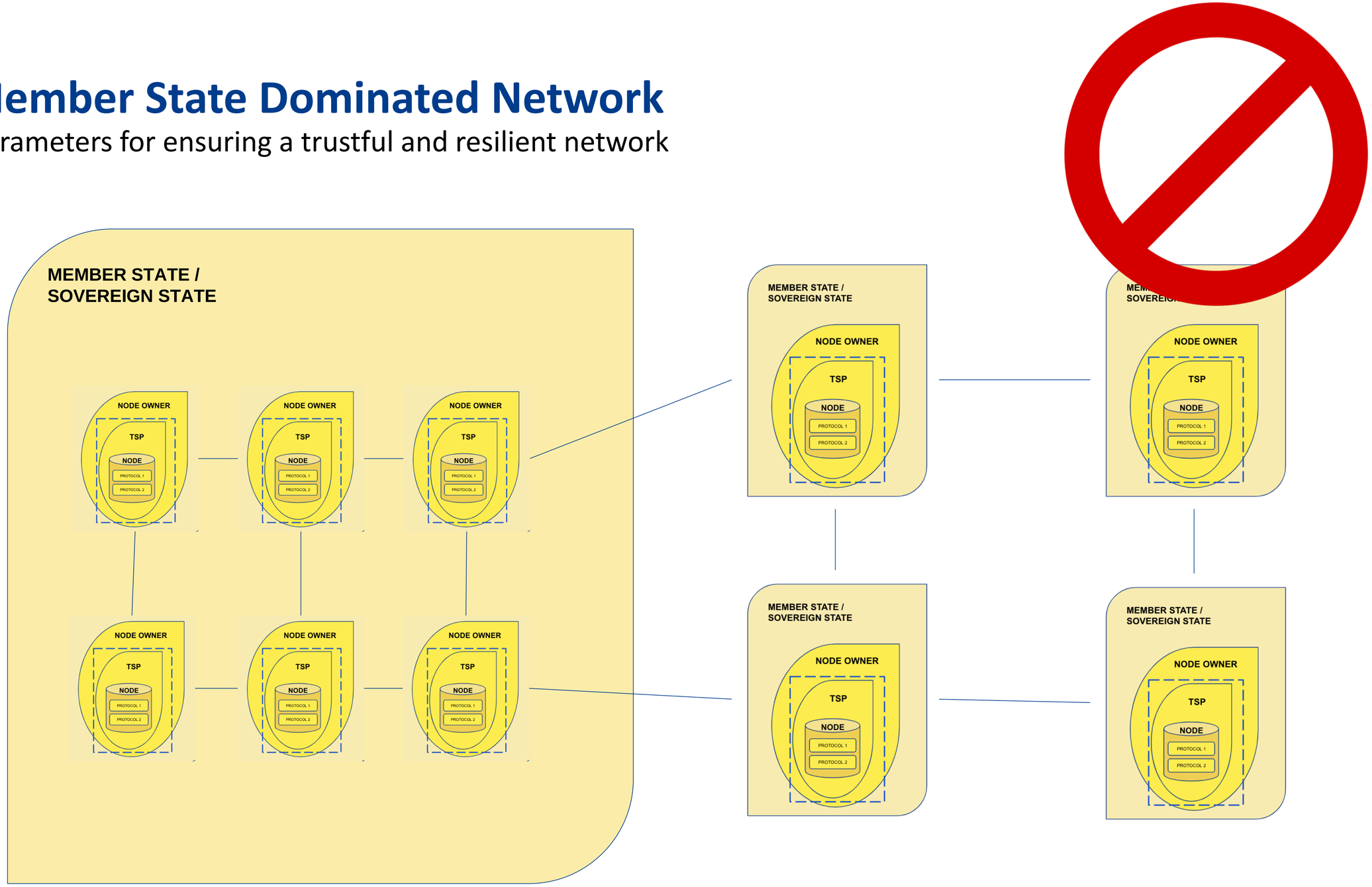


Decentralized Governance Model (DGM)

The DGM describes the Member State agreed **Operational Boundaries** required to ensure that the **TRUST** (relative immutability) and **RESILIENCE** in the EBSI network conform to the aims, strategy and rules of the European Blockchain Partnership and the European Union aims and rules they sit within.

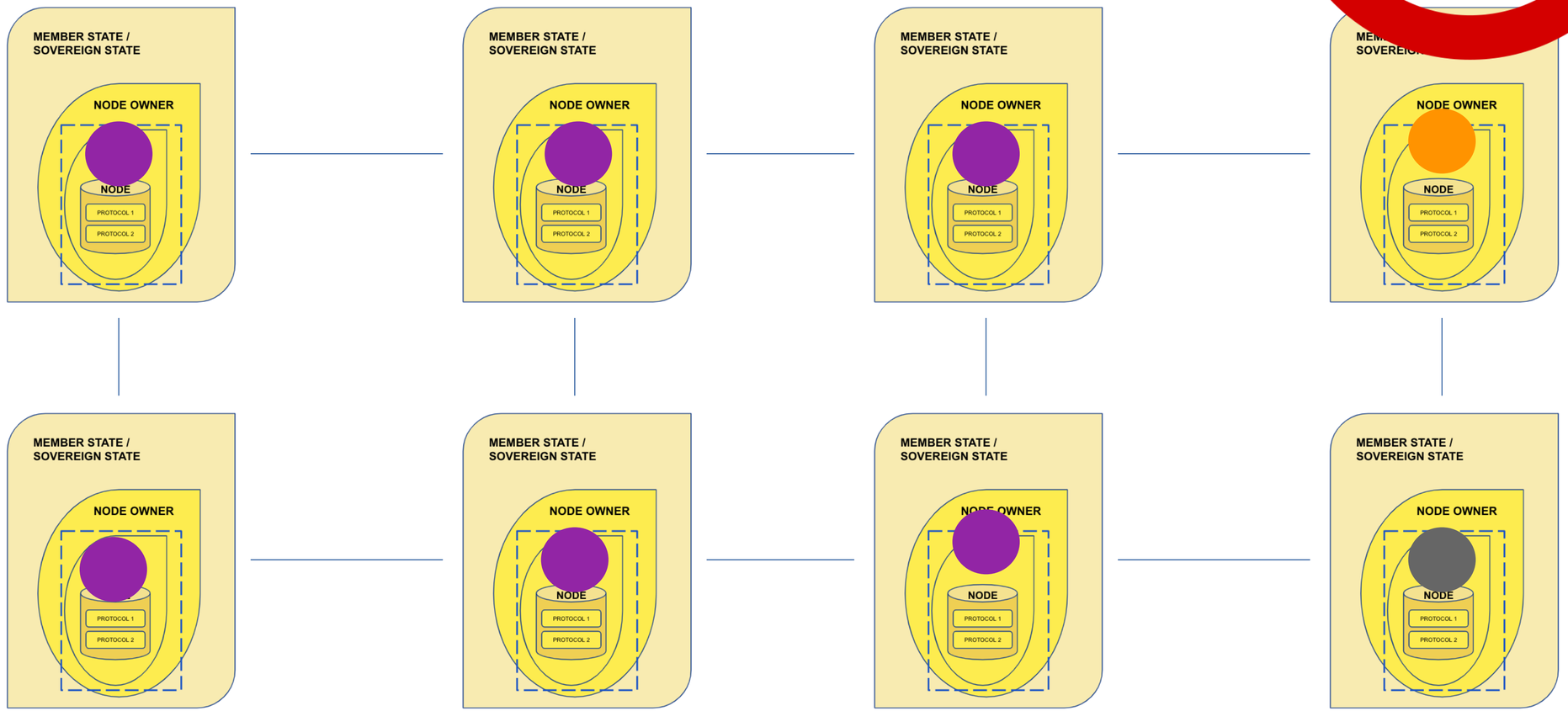
Member State Dominated Network

Parameters for ensuring a trustful and resilient network



Technical Operator Dominated Network

Parameters for ensuring a trustful and resilient network



TSP 1

TSP 2

TSP 3

THE SAME CAN BE APPLIED TO NODE OWNERS

Governance and Use cases

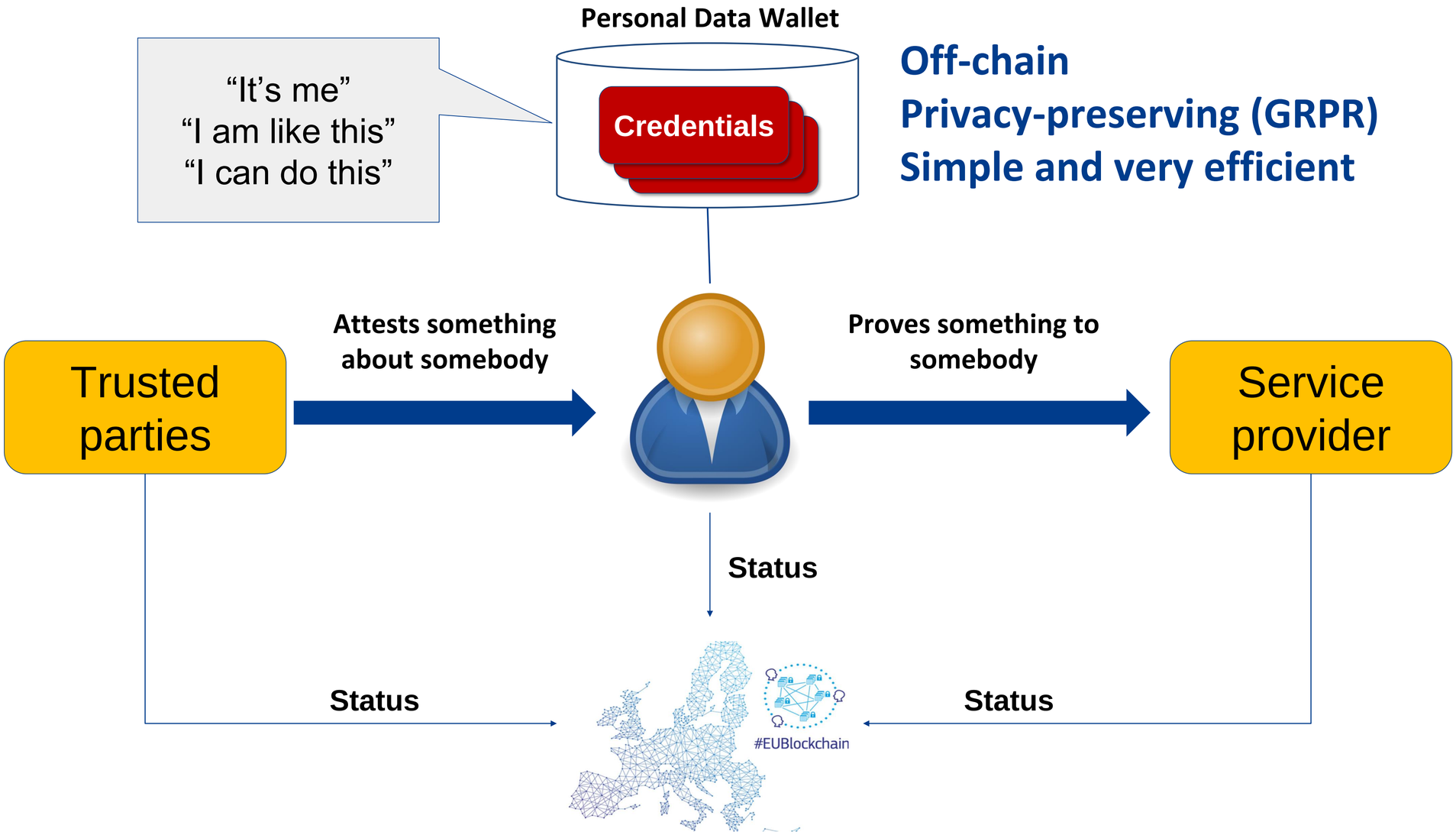
“Every time an App or website asks us to create a new digital identity or to easily log on via a big platform, we have no idea what happens to our data in reality.

That is why the Commission will soon propose a secure European e-identity.

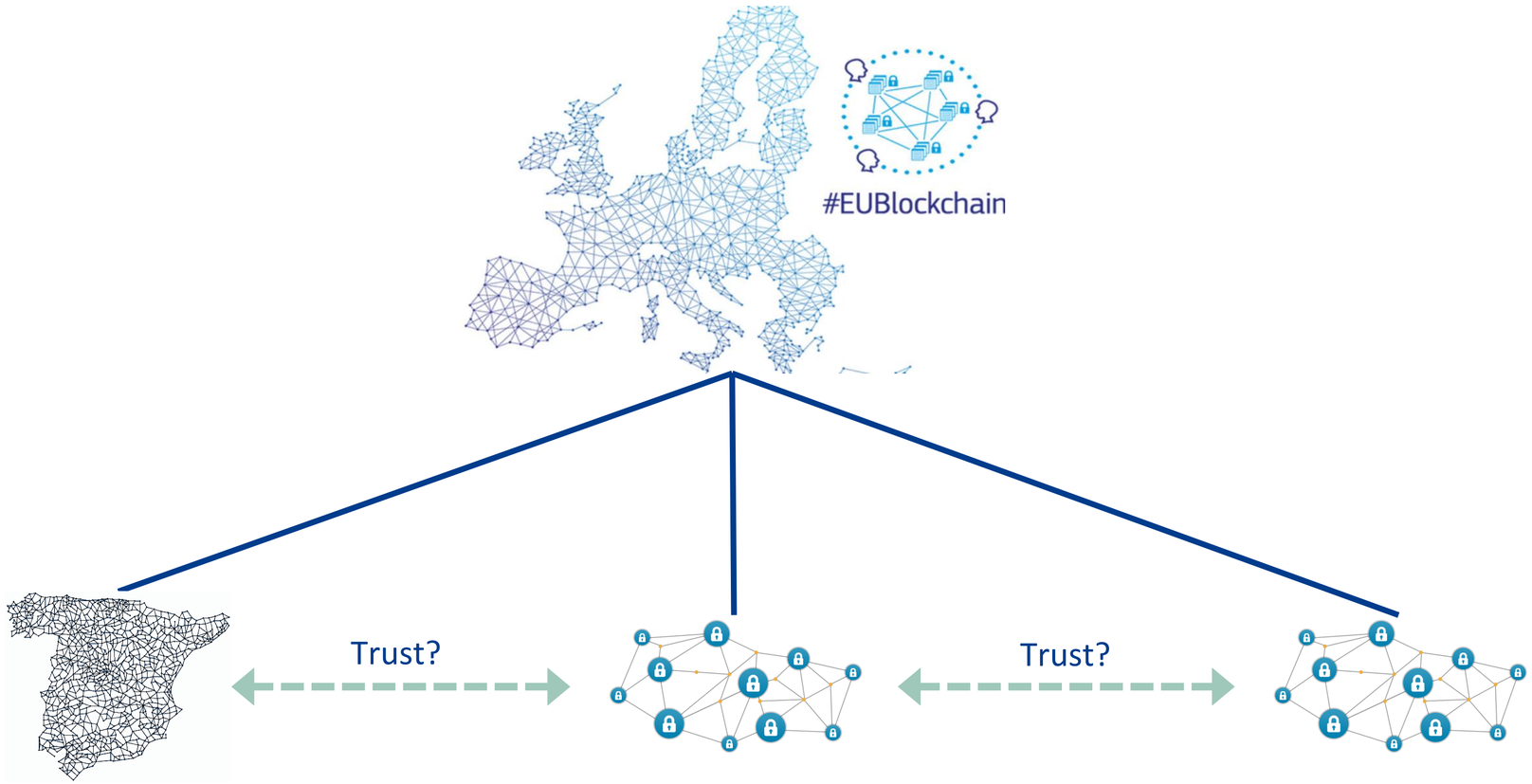
One that we trust and that any citizen can use anywhere in Europe to do anything from paying your taxes to renting a bicycle. A technology where we can control ourselves what data and how data is used.

State of the Union 2020 - President von der Leyen's speech
16th of September 2020

European Self-Sovereign Identity: the user in control of her data



The future is a network of interoperable networks



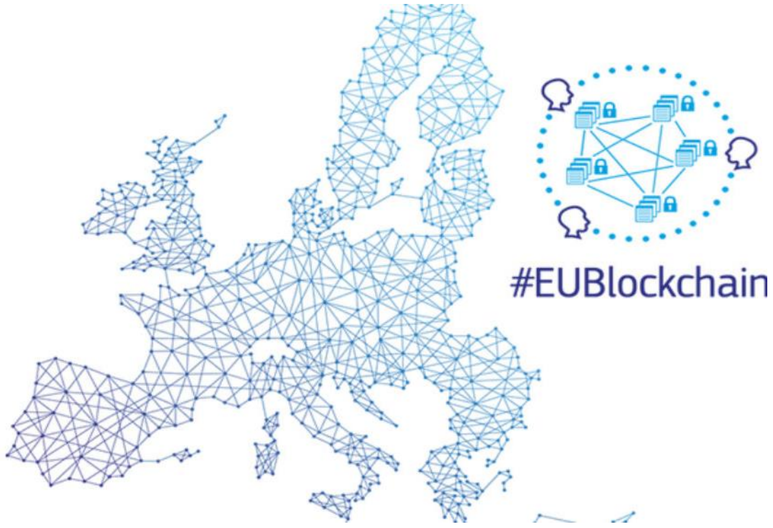
Country networks, Private consortiums, even existing systems

Interoperability across blockchain networks

Interoperability

GOVERNANCE	
CORE SERVICES	Enablers for all applications, that provide interfaces for on-chain and off-chain services
CHAIN AND STORAGE	This layer encompasses the blockchain protocols and off-chain storage protocols, currently supported by EBSI
INFRASTRUCTURE	This layer enables the deployment and connectivity of the EBSI nodes (at the blockchain and off-chain storage level) and includes network, compute, security and operation capabilities.

EBSI



Collaboration across public and private sectors is critical

Private sector & Local Government

Capillarity

Interoperability

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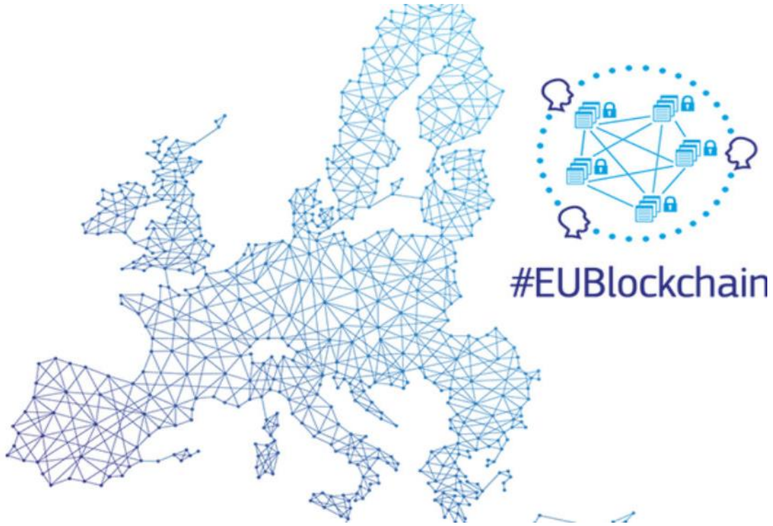

Regulatory backbone

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