EU Blockchain innovation, regulation, infrastructure

UN Commission on Science and Technology for Development, UNCTAD, 20 January 2020

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EU Approach

EXPLORING - CONNECTING - SUPPORTING

JOINED-UP POLITICAL VISION (EU-MS)

JOINT DECLARATION ON THE ESTABLISHMENT OF THE EUROPEAN BLOCKCHAIN PARTNERSHIP [EBP] AND THE DEVELOPMENT OF THE EUROPEAN BLOCKCHAIN SERVICES INFRASTRUCTURE [EBSI] FOR CROSS-BORDER DIGITAL SERVICES OF PUBLIC INTEREST

PUBLIC-PRIVATE PARTNERSHIP

SUPPORTING THE CREATION OF THE INTERNATIONAL ASSOCIATION OF TRUSTED BLOCKCHAIN APPLICATIONS [INATBA]; A MULTISTAKEHOLDER ORGANISATION TO PROMOTE TRUST AND INTEROPERABILITY AT GLOBAL LEVEL

CONNECTING GLOBAL and EUROPEAN EXPERTISE

THE EU BLOCKCHAIN OBSERVATORY AND FORUM BRINGS TOGETHER THE LEADING GLOBAL EXPERTS TO IDENTIFY OBSTACLES, INCENTIVES AND PRACTICAL SOLUTIONS TO PROMOTE BLOCKCHAIN UPTAKE.

INVESTING IN EU RESEARCH, INNOVATION AND START-UPS

THROUGH THE CONNECTING EUROPE FACILITY AND H2020 PROGRAMMES, THE EU IS CO-INVESTING IN THE MOST ADVANCED DIGITAL INFRASTRUCTURE AND THE MOST INNOVATIVE EU START-UPS
NEW EU INVESTMENT SCHEME FOR AI AND BLOCKCHAIN + SUPPORT PROGRAMME

PROMOTING AN ENABLING DSM LEGAL FRAMEWORK, INTEROPERABLE STANDARDS and SKILLS DEVELOPMENT

The European Blockchain Partnership

MANDATE OF THE EUROPEAN BLOCKCHAIN PARTNERSHIP
JOINT DECLARATION 10th OF APRIL 2018

SIGNATORIES AGREE TO ENGAGE IN COOPERATION TO ESTABLISH A EUROPEAN BLOCKCHAIN SERVICES INFRASTRUCTURE [EBSI]
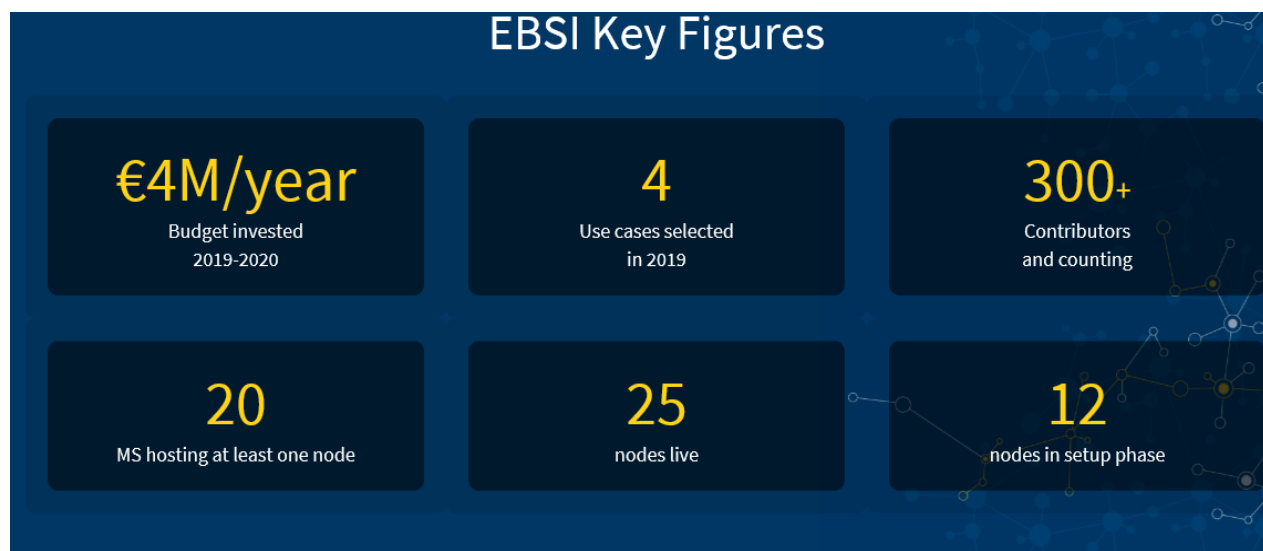
In order to harness the many opportunities of blockchain and avoid a fragmented approach, the signatories of this declaration agree to cooperate to establish a European Blockchain Partnership with a view to developing a blockchain infrastructure that can enhance value-based, trusted, user-centric digital services across borders within the Digital Single Market.

➢ **All EU Member States, Liechtenstein and Norway**
➢ Each member of the EBP – the 27 EU Member States, Norway, Liechtenstein and the European Commission – will run at least one node.
➢ **Deliverables:**
  • **Use-cases cross border** digital public sector services
  • **Functionalities and architecture** of the EBSI
  • **Governance Model**
  • **Entering pilot & deployment phase in 2021**

European Commission

What is the European Blockchain Services Infrastructure (EBSI)?

EBSI means services and infrastructure

- The use cases with focus on the delivery of cross-border digital public services.

- The infrastructure aspects including the blockchain nodes at EBP / Member State level and the central services provided by the European Commission.

- The same infrastructure is expected to be re-used in different use cases.

EBSI Key Figures

€4M/year	4	300+
Budget invested 2019-2020	Use cases selected in 2019	Contributors and counting
20	25	12
MS hosting at least one node	nodes live	nodes in setup phase

EBSI Use Cases 2019

Notarisation of Documents for Auditing Purposes

Leveraging the power of blockchain to create trusted digital audit trails, automate compliance checks in time-sensitive processes and prove data integrity.

EU Self-Sovereign Identity Framework

Implementing a generic Self-Sovereign Identity capability, allowing users to create and control their own identity without relying on centralized authorities.

Certification of Diplomas

Giving control back to citizens to validate their education credentials, significantly reducing verification costs and improving authenticity trust.

Trusted Data Sharing

Leveraging blockchain technology to securely share data (e.g. IOSS VAT identification numbers and import one-stop-shop) amongst customs and tax authorities in the EU.

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New EBSI use cases for 2020

Leveraging the EBSI blockchain for:

- SME financing,
- European Social Security Identification Number,
- and Asylum process management.

INATBA
Industry engagement

INTERNATIONAL ASSOCIATION OF
TRUSTED BLOCKCHAIN
APPLICATIONS

Official launch in Brussels, 3rd April 2019
105 founding members, till date more than 170 members www.inatba.org

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The **IN**ternational **A**ssociation for **T**rusted **B**lockchain **A**pplications is an **open** and **inclusive multi-stakeholders** organisation, created in **Europe** bringing together all stakeholders committed to **promote interoperability, transparent governance, legal certainty and trust** in services enabled by blockchain and DLT, **worldwide**, through continued collaboration and openness.

INATBA is bringing together members to develop open, transparent & inclusive **governance** model; **Interoperability** of DLT/Blockchains; Sector-specific **specifications** & promote convergence of policy by establishing **regulatory dialogues** between industry&public authorities at global level.

1ˢᵗ World Blockchain Congress, Malaga, 11-13 November 2019

An Observatory and a Forum, an online and offline community, a map of ~1000 projects, workshops organised, reports prepared, available trainings

#EUBlockchain

EU
BLOCKCHAIN
OBSERVATORY
& FORUM

Content produced and workshops organized by the Observatory drive a lot of attention worldwide

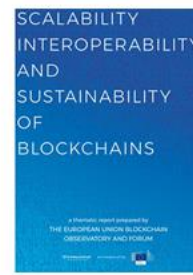### Our thematic reports are viewed as strong thought leadership pieces

BLOCKCHAIN INNOVATION IN EUROPE	BLOCKCHAIN AND THE GDPR	BLOCKCHAIN FOR GOVERNMENT AND PUBLIC SERVICES	SCALABILITY INTEROPERABILITY AND SUSTAINABILITY OF BLOCKCHAINS	BLOCKCHAIN AND DIGITAL IDENTITY	LEGAL AND REGULATORY FRAMEWORK OF BLOCKCHAINS AND SMART CONTRACTS
4300 views/downloads	4800 views/downloads	3200 views/downloads	1600 views/downloads	2400 views/downloads	Just released

12 workshops organized so far, gathering hundreds of experts

- Blockchain innovation in Europe
- GDPR
- Government services and digital identity
- Scalability, Interoperability and Sustainability
- Digital identity
- Legal recognition of blockchain and smart contracts
- Supply chain and traceability
- Convergence of Blockchain, AI and IOT
- Governance and new organizational challenges
- Digital Assets
- Healthcare
- Financial services

Academic papers participate to the research effort

- On Blockchains and the General Data Protection Regulation (University of Southampton)
- Government services and digital identity (Open University)
- Legal Recognition of Blockchain Registries and Smart Contracts (Open University)
- An overview of blockchain scalability, interoperability and sustainability (Hochschule Luzern)
- Tokenization of physical assets and the impact of IoT and AI (Hochschule Luzern)
- Blockchain and Digital Assets (University of Southampton)

Prepared by ConsenSys for the EU Blockchain Observatory and Forum

Workshops and events videos available in replay
5800 views total
35 videos published

More details in our special edition newsletter

An active twitter account spreading awareness
6000 followers
450 tweets published

Legal Issues

Smart Contracts : Is the current legal framework sufficiently clear to ensure the enforceability of smart contracts and clarify jurisdiction in case of legal disputes?

Tokenisation : Is the current legal framework appropriate for issuing and trading tokens (crypto assets), when they are not considered financial instruments ? → Forthcoming Market in Crypto-Assets MiCA) Regulation.

GDPR & Blockchain: Forthcoming Blockchain Guidelines by the EDPB

SSI solutions under eIDAS Framework (currently up for revision.)

> **-> Regulatory sandboxes will help with live-testing the deployment of innovative blockchain solutions in line with EU standards and values.**

The EU's Crypto Asset Regulation

Legislative Proposals on:

- **'Regulation on Markets in Crypto Assets' (MiCA)**, creating a pan-European regulatory regime for crypto assets and related services;
- **'Pilot regime for market infrastructures based on distributed-ledger technologies**, creating a safe space for testing innovative DLT-based financial market infrastructures in the EU.
  - ➢ **Adopted 24.09.2020.**

1. **A Regulation – full harmonisation**

2. **Balances** consumer protection and market integrity needs with promotion of innovation

3. **EU Passport Principle** (« one stop shop » principle for single framework across EU)

4. **Regulatory requirements are proportionate to type of crypto asset & risks to consumers, investors or market integrity** (Lighter regime for utility tokens and payment tokens; stricter for stablecoins and significant stable coins)

➡ **Public Consultation running from 02 October 2020 - 11 January 2021**

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International Standardisation Bodies working on Blockchain

And others…

Blockchain for Climate Action and Sustainable Blockchain

- Exploring the **sustainability and carbon footprint of blockchain** solutions and related policy measures.

- Promoting the use of **blockchains for sustainability**, such as for the **'farm to fork'** strategy, **Circular economy and other etc.**

Sustainability from Farm to Fork

- Under the **European Strategy for Data** (02/2020), developing **digital 'product passports'** providing information on a product's origin, durability, composition, reuse, repair and dismantling possibilities, and end-of-life handling. Blockchain can help to trace and verify relevant production information.

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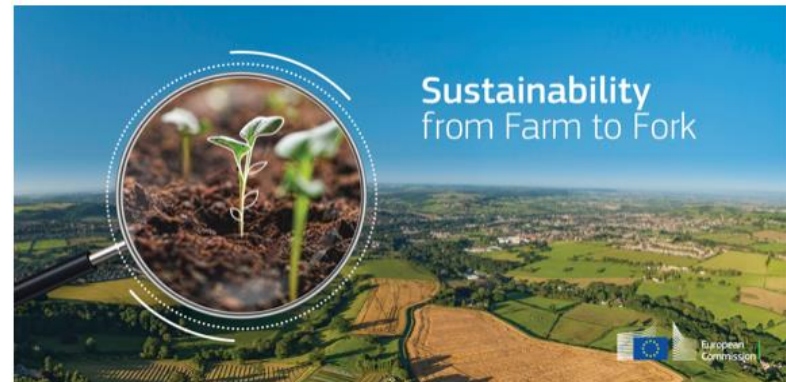
Investments in AI and/or Blockchain

Investment for start-ups, early and growth stages

100 M€ (EU contribution in 2020), Leveraged to 700 M€

- Financing **a portfolio of innovative AI/blockchain companies**
- Developing a **dynamic EU-wide investors community** on AI&blockchain
- **Scaling up the volume of investments** at the national level by facilitating co-investment with national promotional banks (NPBs)
- **Incentivising further private sector investments**
- Making **Europe become more attractive for start-ups** to stay and grow
- $\Rightarrow$ Prepare **future support through InvestEU Programme** (starting in 2021)

Thank you!

https://ec.europa.eu/digital-single-market/en/blockchain-technologies

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