



EU Blockchain Strategy

**Blockchain challenges in Europa en Vlaanderen
uitnodiging infosessie 17 december, Living
Tomorrow, Vilvoord**

bftoonblocks.net

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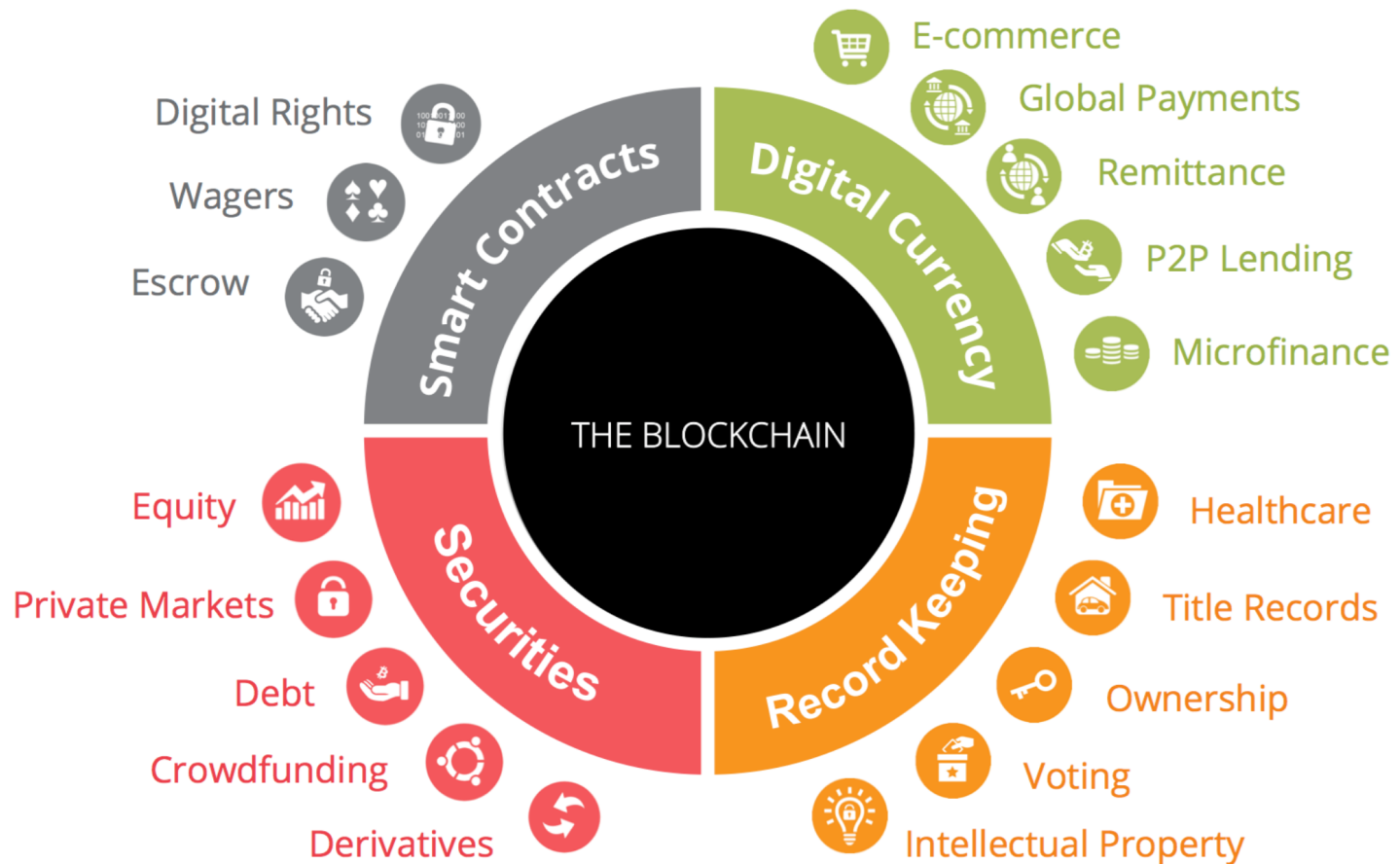
Why Blockchain?

- *New paradigms and collaborative models in the digital economy (trust)*
- *Transformative capacities (e.g. disintermediation, tokenisation)*
- *Potential alternative model to dominant platforms (decentralisation)*
- *Higher quality and efficiency (e.g. data integrity, traceability)*
- *New opportunities that Europe must seize NOW*
- *Role for public bodies and the private sector*



Blockchain Potential Applications & Disruption

The blockchain is radically changing the future of transaction based industries





By the **Financial Sector** for payment solutions, securities and insurance products.



By the **Transport Sector** for connecting mobility services and autonomous vehicles.



By the **Energy Sector** to integrate renewable electricity generation in Europe's grids.



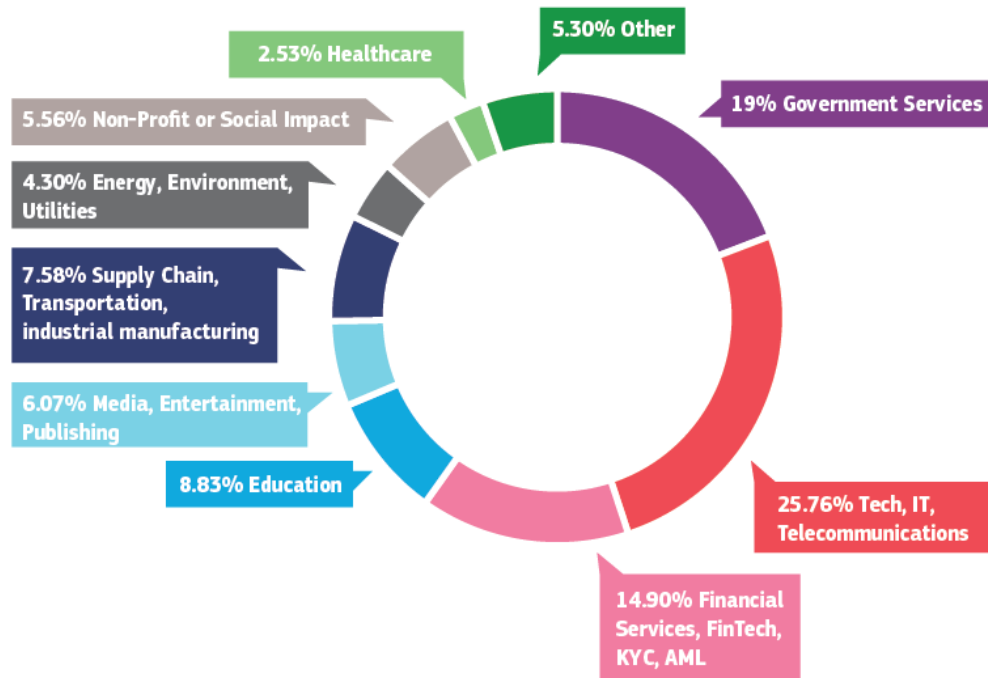
By the **Health & Pharma Sectors** to trace the origins of goods in a reliable manner.



By the **Public Sector** to protect democracy, improve e-voting and use of e-identities.

<https://www.eublockchainforum.eu/initiative-map>

Sectors currently using blockchain in Europe



Source: European blockchain observatory and forum April 2019 based on self-declarations by 400 startups and other blockchain initiatives

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.

3 DELIVERABLES BY END OF 2018

Use-cases cross border digital public sector services
Functionalities and architecture of the EBSI
Governance Model

By September 2018, identifying an initial set of existing cross-border digital public sector services that would gain added value from the support of a blockchain services infrastructure, and start exploring other use cases;

By the end of 2018, assisting the Commission in preparing the technical specifications of this initiative, defining the appropriate governance model and identifying other framework conditions which are essential to its success (including compliance with regulatory requirements). Due consideration should be given to possible cooperation between the public and private sector;



What is the European Blockchain Services Infrastructure (EBSI)?

EBSI means services and infrastructure

- The use cases (services) with specific 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 will be built and upgraded through different versions and iterations

- Starting with use cases that may build on existing blockchains or specific solutions
- Proposing a testing and integration environment
- Converging towards common architecture and solution(s) supporting new use cases
- Preparing for an "advanced" architecture and solution(s) supporting more demanding use cases and for interoperability



SELECTED USE CASES FOR 2019

A Member State led and composed user group has been established per selected use case. These user groups aim to deliver a working prototype connected to the infrastructure layer of EBSI by the beginning of 2020. A new set of use cases will be selected by the European Blockchain Partnership Policy Group for 2020 (and onwards).



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.

EU Blockchain Observatory and Forum

Stakeholders engagement

European
Commission

**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

EU Blockchain Observatory and Forum Achievements



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

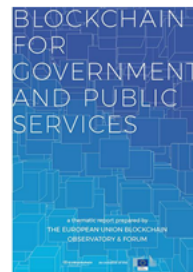
Our thematic reports are viewed as strong thought leadership pieces



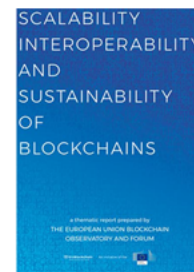
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3200
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1600
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2400
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Just released

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

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](#)

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)



An active twitter account spreading awareness

6000 followers
450 tweets published



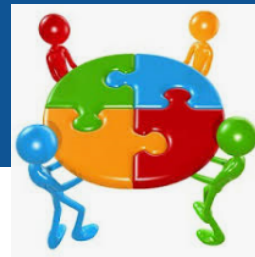
INTERNATIONAL ASSOCIATION OF TRUSTED BLOCKCHAIN APPLICATIONS



Official launch in Brussels, 3rd April 2019
105 founding members www.inatba.org

Focus INATBA

Its mandate



The **I**nternational **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

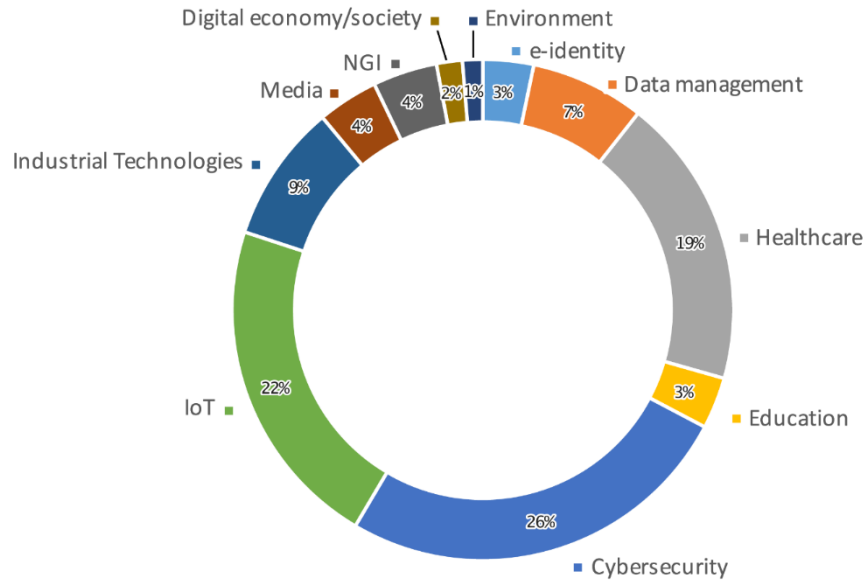


Smart Contracts : Is the current legal framework sufficiently clear to ensure the enforceability of smart contracts and clarify jurisdiction in case of legal disputes?

Tokenisation : Is the current legal framework appropriate for issuing and trading tokens (i.e.: crypto assets), when they are not considered as financial instruments ?

- => EU Blockchain Observatory Working Group "Legal"
- => Opinion EBA, ESMA Jan 2019 (gap analysis)
- => Study EU Commission 2019
- => New Commission from Dec. 2019

Blockchain EU funded Project per sector



H2020 projects

New blockchain actions under NGI (ICT-54) in ICT LEIT WP2020

- **Two additional application areas (fighting against fake news and supporting collective intelligence)**
- **New: research on blockchain technologies and components**
- **RIA though cascading grants**

New AI-blockchain INVESTMENT SCHEME

100 M€ in 2020 -> 300 to 400 M€ in startups

EIF supporting VC funds investing in AI and Blockchain

+ Support programme starting in 2020



Thank you!

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

@EUBlockchain

