



European Union Leadership in Blockchain

Helen Köpman, Deputy Head of Unit

Digital Innovation and Blockchain

Digital Single Market

DG CONNECT

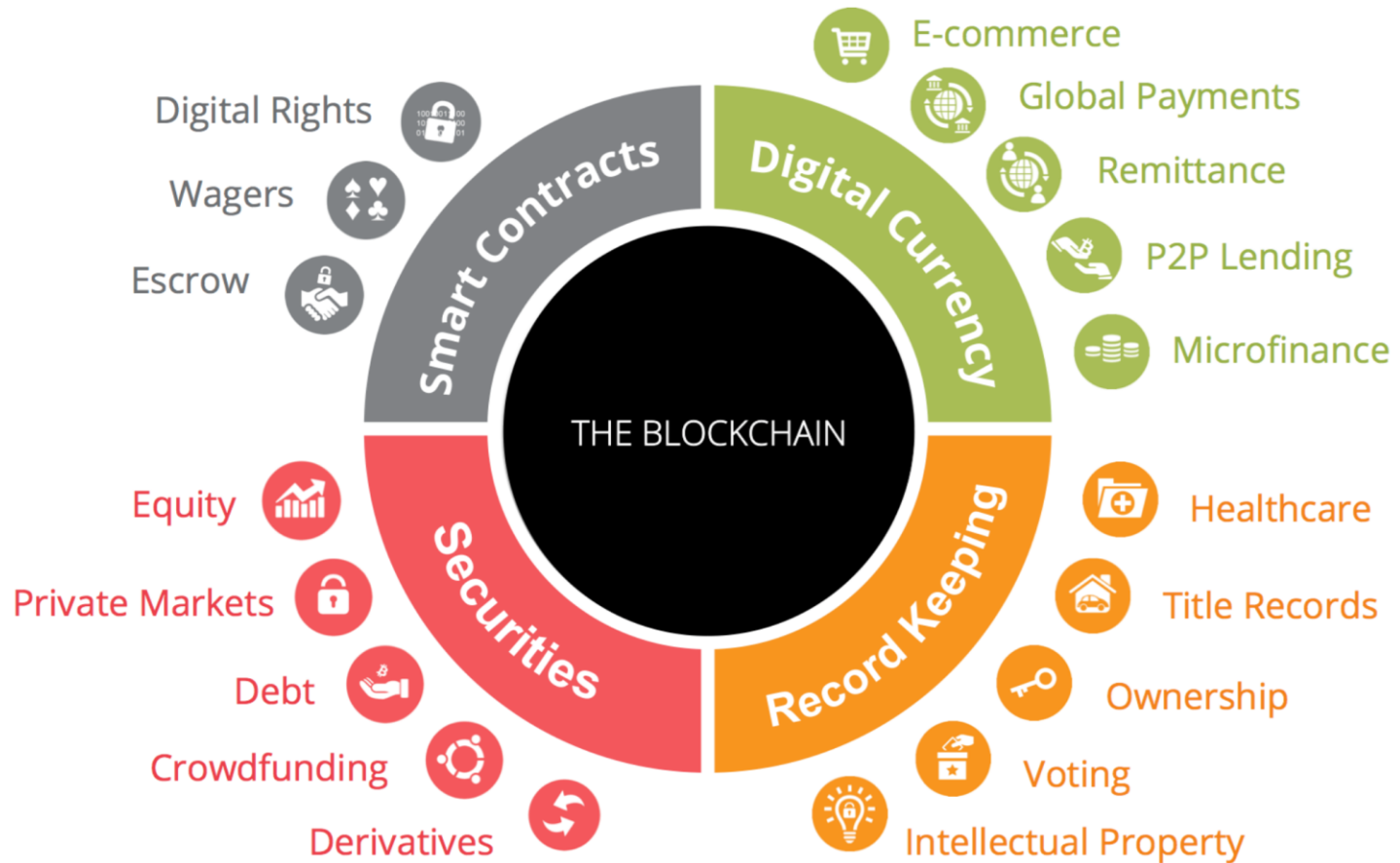
European Commission

- New collaborative models in the digital economy (creating trust)
- Transformative capacities (disintermediation, incentives through use of tokens)
- Potential alternative model to dominant platforms (decentralisation, user empowerment)
- Higher quality and efficiency (traceability, immutability)
- New opportunities for European companies



Blockchain Potential Applications & Disruption

The blockchain is radically changing the future of transaction based industries



Role for public bodies in transformative technologies

- Foundational converging technologies that will underpin the future of digital transformation across whole economy
 - deep-tech at a stage of development where volumes of investments make a difference
 - embedding values of society
- Leadership role of Europe
 - The EU has leading research, innovation, knowledge and developers
 - High AI, Blockchain and IoT standards (data privacy protection, interoperability, ethical guidelines and cybersecurity)
 - Engine for innovation-led economic growth

AI declaration joined
by all **28 Member
States and Norway**

Blockchain declaration
with all **28 Member
States, Norway and
Lichtenstein**

ESTABLISHING GLOBAL LEADERSHIP IN BLOCKCHAIN AND DISTRIBUTED LEDGER TECHNOLOGIES



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, START-UPS AND SKILLS DEVELOPMENT

THROUGH THE **CONNECTING EUROPE FACILITY** AND **HORIZON PROGRAMME**, THE EU IS CO-INVESTING IN THE MOST ADVANCED DIGITAL INFRASTRUCTURE AND THE MOST INNOVATIVE EU START-UPS. EU INVESTMENT SCHEME FOR AI AND BLOCKCHAIN.



PROMOTING AN ENABLING LEGAL FRAMEWORK, INTEROPERABLE STANDARDS

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]**

3 DELIVERABLES BY END OF 2018
Use-cases for cross border public sector services
Functionalities and architecture of the EBSI
Governance Model



FROM 22 MEMBERS TO 30 MEMBERS

WORKING TOGETHER TO DEVELOP THE 3 DELIVERABLES OF THE JOINT DECLARATION



AGREEMENT WITH THE ORIENTATIONS IN 3 DELIVERABLES

D1: INITIAL SET OF USE CASES FOR EBSI DEPLOYMENT
D2: PRINCIPLES AND TECHNICAL FEATURES OF THE EBSI INFRASTRUCTURE
D3: GOVERNANCE MODEL FOR 2019-2020 TO SUPPORT THE DEVELOPMENT OF THE EBSI



CONNECTING EUROPE FACILITY FOR EBSI DEVELOPMENT

SUPPORT TO THE DEPLOYMENT OF CROSS-BORDER DIGITAL SERVICES INFRASTRUCTURES IN THE EUROPEAN UNION

SELECTED USE CASES FOR 2019



Notarisation of Documents for Auditing Purposes

Leveraging the power of blockchain to create trusted audit trails, to prove data integrity for audit purposes (e.g. in structural funds management)



Certification of Diplomas

Facilitating cross-border access to certified diplomas , education and qualification credentials, significantly reducing verification costs and improving authenticity trust



EU Self-Sovereign Identity Framework

Implementing a European Self-Sovereign Identity Scheme to allow users to control and manage their own data to access cross-border services



Trusted Data Sharing

Leveraging blockchain to securely share data (e.g. VAT identification numbers) amongst customs and tax authorities in the EU



INTERNATIONAL ASSOCIATION OF **TRUSTED BLOCKCHAIN** APPLICATIONS



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



INATBA is bringing together members to :

- Develop open, transparent & inclusive **governance** models
- Support **interoperability** of DLT/Blockchains
- Make industry sector **specifications**
- Promote convergence of policy by establishing **regulatory dialogues** between industry & public authorities at global level
- Working groups on supply chain, financial services, energy, mobility...

European Parliament – Resolution on Blockchain: a forward-looking trade policy

“Use of blockchain can increase the efficiency, speed and volume of global trade by limiting the costs associated with international transactions”

In particular:

- Notes that Free Trade Agreements (FTAs) in the EU are underutilized — only 67 percent of EU exporters and 90 percent of EU importers make use of the preferential tariffs.
- Blockchain’s potential in providing trust in the provenance of products.
- Could enable customs authorities to obtain the required information for customs declarations.

**An Observatory and a Forum,
an online and offline community,
a map of 770+ projects,
workshops organised,
reports published,
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



4300
views/downloads



4800
views/downloads



3200
views/downloads



1600
views/downloads



2400
views/downloads



Just released



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



An active twitter account spreading awareness
6000 followers
450 tweets published



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.

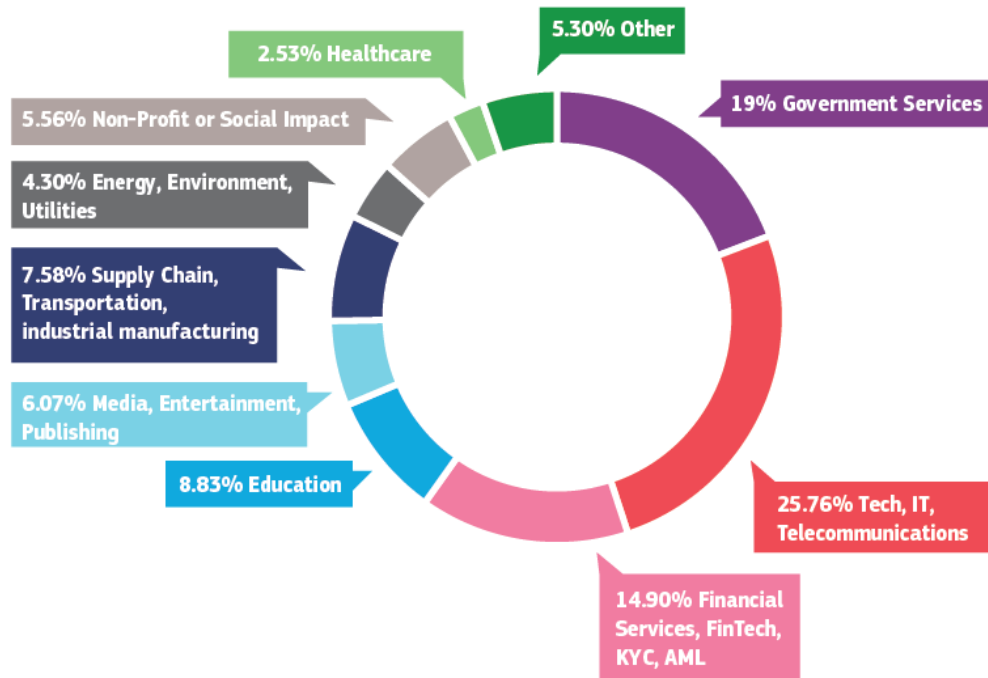


By the **Health & Pharma Sectors** to trace the origins of goods in a reliable manner.



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

Sectors currently using blockchain in Europe



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

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

Investments in AI/Blockchain

- Investment for start-ups, early and growth stages
- EUR 100 million (EU contribution in 2020)
- With ambitious objectives:
 - **Financing a portfolio** of innovative AI/blockchain companies
 - Developing a **dynamic EU-wide investors community** focusing on AI and Blockchain
 - **Scaling up the volume of investments** at the national level by involving the national promotional banks that are willing to participate
 - **Incentivising further private sector investments**
 - Making **Europe more attractive for start-ups** to stay and grow
- ⇒ Prepare **future support through InvestEU** (starting in 2021)

- Energy consumption
- Scalability
- Interoperability
- Integration with existing IT systems and organisations
- Smart contract resilience and legal enforceability
- Framework for use of tokens incentivising users
- Lack of complete EU regulatory framework / lack of clarity



Smart Contracts : Is the current legal framework sufficiently clear to ensure the mutual recognition 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 as financial instruments ?

- => EU Blockchain Observatory Working Group "Legal"
- => Opinion EBA, ESMA Jan 2019 (gap analysis)
- => Study EU Commission 2019
- => New Commission from 1 December 2019



Thank you!
helen.kopman@ec.europa.eu
@EUBlockchain

