



2017/2772(RSP)

30.1.2018

DRAFT MOTION FOR A RESOLUTION

further to Question for Oral Answer B8-xx

pursuant to Rule 128(5) of the Rules of Procedure

on Distributed ledger technologies and blockchains: building trust with
disintermediation
(2017/2772(RSP))

Eva Kaili

on behalf of the Committee on Industry, Research and Energy

**European Parliament resolution on Distributed ledger technologies and blockchains:
building trust with disintermediation
(2017/2772(RSP))**

The European Parliament,

- having regard to the question to the Commission on xx (O-xx – B8-xx),
 - having regard to the motion for a resolution of the Committee on Industry, Research and Energy,
 - having regard to Rules 128(5) and 123(2) of its Rules of Procedure,
 - having regard to the report on virtual currencies (2016/2007(INI)),
 - having regard to the report on FinTech (2016/2243 (INI)),
 - having regard to the report on addressing geo-blocking (COM(2016)0289),
 - having regard the General Data Protection Regulation (Regulation (EU) 2016/679),
 - having regard to the regulation on extension of the duration of the European Fund for Strategic Investments (COM(2016)0597 – C8-0375/2016 – 2016/0276(COD)),
 - having regard to the report on the draft general budget of the European Union for the financial year 2018 (11815/2017 – C8-0313/2017 – 2017/2044(BUD)),
 - having regard to the European Commission (EC) initiatives for the exploration of DLTs including, inter alia “Blockchain4EU”, “EU Blockchain and Observatory Forum”, “Blockchains for Social Good” and the “Study on the Opportunity and Feasibility of an EU Blockchain Infrastructure”
- A. whereas Distributed Ledger Technology (DLT) can empower citizens by giving them ownership of their own data;
- B. whereas DLT is a general purpose technology with strong potential to improve products and services by disrupting value chains and improving efficiency;
- C. whereas DLT introduces an IT-based paradigm of social value that promotes self-sovereignty, trust and transparency;
- D. whereas DLT is still evolving and it is therefore necessary to create a framework of legal certainty around the applications that have originated from it;
- E. whereas regulating DLT is not politically optimal as the approach of being technology-neutral in regulation is favoured; whereas it is important to develop innovation-friendly

regulation based on the innovation principle;

- F. whereas Blockchain is only one of several types of Distributed Ledger Technologies;
- G. whereas DLT can improve significantly the key-sectors of the economy as well as the quality of public services, providing high level transactional experience to the consumers and citizens.

DLTs, Decentralization and Applications

- 1. Stresses that DLT facilitates disintermediation, improves trust between the transacting parties and allows peer-to-peer exchange of value that can empower citizens, disrupt legacy models, improve services and reduce costs throughout value chains in a wide range of key-sectors;

Energy and Environmentally Friendly Applications

- 2. Underscores that DLT can transform and democratize the energy markets and allows households to produce environment-friendly energy and peer-to-peer exchange it;
- 3. Underlines that consensus mechanisms based on “proof-of-work” concepts (like the Bitcoin blockchain) are energy wasting and environmentally unsustainable; Alternative consensus mechanisms (e.g. “proof-of-stake” or “proof-of-authority”) are less energy demanding and more desirable;

Healthcare Sector

- 4. Highlights the potential of DLT to improve the data efficiency and clinical trials reporting of the health sector;
- 5. Notes that DLT allows citizens to protect and own their health data, including their use with insurance companies;
- 6. Calls on the Commission to explore DLT-based use-cases in the management of health-care systems and identify standards and requirements that enable high quality data-entrances and interoperability among the DLTs;

Supply Chains

- 7. Underlines the significance of DLT in improving supply chains, the quality of forwarding and tracking as well as the monitoring of the origin and the verification of quality of products along the supply chains, protecting consumers and preventing counterfeiting;

Education

- 8. Stresses the potential of DLT in encrypted educational certification (e.g. “blockcerts”), verified accreditation, and credit-transfer mechanisms;
- 9. Calls on the Commission to create a network that makes the use of the technology possible amongst the educational institutions of the Union;

Creative industries and Copyrights

10. Underlines that DLT enables the “tokenizing” of creative content, tracking and managing intellectual property and protect copyrights and patents;

DLT Ecosystem

Self-sovereignty, Identity and Trust

11. Underscores that DLT enables users to identify themselves while they maintaining the control of their personal data; stresses though that data in a public ledger are pseudonymous (not anonymous);
12. Notes that encrypted data that are not accessible are compliant with the General Data Protection Regulation GDPR, even if they are located in public ledgers and allow greater user control of their data through private keys than current platforms do;
13. Stresses that trust in DLT is enabled by cryptographic algorithms that replace the third party intermediary through a mechanism that performs validation, safe-guarding of transactions and transactions preservation;

Smart Contracts

14. Emphasizes that smart contracts is a backbone facility of the DLTs;
15. Calls on the Commission to explore both the technical standards at ISO and CEN-CENELEC and the legal frameworks that will permit smart-contracts to be legally enforceable across the Digital Single Market and not within the fragmented legal frameworks used in individual Member States;

Interoperability, Standardization and Scalability

16. Stresses that there is a constellation of DLT technologies with various technological characteristics as well as different governance (permissioned and permission-less distributed ledgers) and consensus mechanisms;
17. Notes that interoperability (i) between DLTs, (ii) between applications built on the same DLT, and (iii) between DLTs and legacy systems is essential to ensure efficiency;
18. Welcomes the initiatives of organizations like ISO in creating standards in DLTs. Calls on the Commission to continue its collaboration with other international organizations in standards setting;
19. Underlines that trust generation through DLTs requires extended numbers of robust and expanded distributed ledgers to avoid data concentrating in the hands of few market-players that might lead to collusion;

Infrastructure security

20. Recalls the importance of DLT infrastructure protection;

21. Calls on the Commission to closely monitor technological developments (such as quantum computers), assess technological risks and support cybersecurity and data protection projects that ensure the sustainability of DLT platforms;

Strategic Importance of the DLTs for Public Infrastructure

22. Underlines the efficiency potential of DLT for the public-sector services and management;
23. Calls on the Commission to explore the improvement of traditional public services, including land registry, licencing and citizen certifications (e.g. birth-, marriage-certificates);
24. Calls on the Commission to explore the potential of DLT in law enforcement, tracking of money-laundering and shadow-economy transactions as well as DLT- based tax monitoring;
25. Asks the Commission to create a strategic plan for building DLT-based infrastructure within and amongst the EU Institutions that can be used by the Member States as a model for their public sector modernization;
26. Stresses that a European public-sector blockchain could be the heart of a trusted transactional ecosystem, compliant with the applicable EU Law, consisting of nodes in the 28 Member States, the Commission and the Parliament, aiming to enable cross-border transactions between Member States, regulatory reporting, and data transactions between citizens and the EU Institutions utilising smart contracts;
27. Asks the Commission to evaluate the efficiency of the DLT-based voting and its use in the EU level from the voting operations in the European Parliament to the European Elections;

SMEs, Technology Transfer and Financing

28. Welcomes the potential of DLT to disrupt existing value chains and transform business models and thus promote innovation-driven growth;
29. Stresses that SMEs can benefit from disintermediation by reducing transaction costs, intermediation costs and red-tape;
30. Notes that innovative firms and start-ups should be incentivised to create DLT-based projects; Calls on the EIB and the EIF to create funding opportunities that support DLT-based entrepreneurial endeavours to accelerate technology transfer;
31. Asks the Commission to promote DLT applications with Member States, create legal certainty and harmonization within the Union as well as to promote an idea of a European passport of DLT-based projects;
32. Underscores that Initial Coin Offerings (ICOs) have a strong potential in funding innovation and accelerate technology transfer; ICOs are a distinct asset class with strong potential; Calls on the Commission to propose a framework for ICOs;

33. Welcomes the Commission's and Council's decision to include DLTs as a legitimate sector for funding in EFSI 2.0;

Policies for Boosting DLTs in Europe

34. Stresses that any regulatory approach toward DLT should be innovation-friendly, enabling passporting, and should be guided by the principles of technology neutrality and business-model neutrality;
35. Underlines that the Union should not regulate DLT *per se* but should try to bring down existing barriers to implementing blockchains. It welcomes the Commission's approach to follow a use-case method in exploring the regulatory environment around the use of the DLT and the actors using it per sector;
36. Notes that the use of cases is essential to the development of best practices in the DLT ecosystem;
37. Notes that the post-2020 MFF should ensure funding for research initiatives and projects based on DLT;
38. Asks the Commission to undertake policy initiatives that promote the competitive position of EU in the field of DLT;
39. Emphasizes that the Union has an excellent opportunity to become the global leader in the field of DLT and to be a credible actor in shaping its development and markets globally in collaboration with our international partners;
40. Instructs its President to forward this resolution to the Commission and the Council.