## **European Parliament**

2014-2019



Committee on Industry, Research and Energy

2018/2085(INI)

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## AMENDMENTS 1 - 52

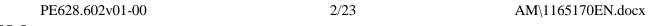
**Draft opinion Cristian-Silviu Buşoi**(PE623.833v01-00)

Blockchain: a forward-looking trade policy (2018/2085(INI))

AM\1165170EN.docx PE628.602v01-00

**United in diversity** 

AM\_Com\_NonLegOpinion



## Amendment 1 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

Draft opinion Recital A a (new)

Draft opinion

Amendment

A a. - Whereas Blockchain in itself is not an application, but the technology behind its applications;

Or. en

Amendment 2 Lieve Wierinck, Ramon Tremosa i Balcells

Draft opinion Recital A b (new)

Draft opinion

Amendment

A b. Whereas Blockchain is a disruptive technology with a potentially disruptive impact on different stakeholders around the industries it affects;

Or. en

Amendment 3 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

Draft opinion Recital B

Draft opinion

B. whereas DLTs, and in particular blockchain, could optimise transparency and traceability, in turn building confidence and fostering competitiveness and the capacity for innovation in the EU;

Amendment

B. whereas DLTs, and in particular blockchain, could optimise transparency and traceability, in turn building confidence and fostering competitiveness and the capacity for innovation in the EU; Whereas nodes within the Blockchain operate under a pseudonym, and can therefore, by definition not operate

Or. en

Amendment 4 Rolandas Paksas

Draft opinion Recital B

## Draft opinion

B. whereas DLTs, and in particular blockchain, could optimise transparency and traceability, in turn building confidence and fostering competitiveness and the capacity for innovation in the EU;

#### Amendment

B. whereas DLTs, and in particular blockchain, could optimise transparency and traceability, in turn building confidence and fostering competitiveness and the capacity for innovation, *new partnerships*, *and cooperation models* in the EU;

Or. lt

Amendment 5
Benedek Jávor
on behalf of the Verts/ALE Group

Draft opinion Recital B a (new)

Draft opinion

## Amendment

B a. whereas the emergence of DLT applications, especially in the financial sector, have revealed that the potential benefits are accompanied by challenges such as increased energy consumption, facilitation of organised crime activities, incompatibility with privacy protection

Or. en

Amendment 6 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

**Draft opinion** 

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## Recital B a (new)

Draft opinion

Amendment

B a. - Whereas Blockchain's inherent characteristics are automatic tracing, recognition, verification and supervision;

Or. en

Amendment 7 Eva Kaili

Draft opinion Paragraph 1 a (new)

Draft opinion

**Amendment** 

1 a. Recognizes the significance of Distributed Ledger Technologies in improving the operations of International Trade and stresses the importance of further developing the DLT applications in the spirit of an innovation friendly approach that it is both technology neutral and business model neutral.

Or. en

Amendment 8 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

Draft opinion Paragraph 1 a (new)

Draft opinion

Amendment

1 a. Stresses that it is not desirable to legislate the Blockchain technology itself, but its applications instead. Notes that legislating the technology at the basis of the applications would limit innovation and the creation of new applications;

Or. en

Amendment 9
Benedek Jávor
on behalf of the Verts/ALE Group

Draft opinion Paragraph 1 a (new)

Draft opinion

## Amendment

1 a. Underlines the need to study and asses the feasibility of using DLT based technologies as alternatives to the current solutions, before encouraging or financing new projects.

Or. en

Amendment 10 Eva Kaili

Draft opinion Paragraph 1 b (new)

Draft opinion

#### Amendment

1 b. DLT is a general-purpose technology, which has the capacity to reduce the transaction costs, improve efficiency by removing intermediaries and intermediation costs and increase the transparency and trust between the transacting parties through appropriate encryption and control mechanisms

Or. en

Amendment 11 Eva Kaili

Draft opinion Paragraph 1 c (new)

Draft opinion

**Amendment** 

1 c. DLT is a "family" of distributed technologies of different designs, verification protocols and governance

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mechanisms, primarily divided between permissioned and permission-less ledgers. Though the application of permission-less blockchains can be used in the operations of international trade, we note that the majority of the applications that employ DLTs so far are based on permissioned ledgers.

Or. en

Amendment 12 Eva Kaili

Draft opinion Paragraph 1 d (new)

Draft opinion

#### Amendment

1 d. Notes that in the case of application of permission-less ledgers for international trade operations, the consensus mechanisms employed(e.g. "proof of work", "proof of stake", "proof of elapsed time" inter alia)have various energy consumption needs;

Or. en

Amendment 13 Eva Kaili

Draft opinion Paragraph 1 e (new)

Draft opinion

## Amendment

1 e. Urges the consensus mechanisms should be environmentally friendly and less energy consuming.

Or. en

Amendment 14 Eva Kaili Draft opinion Paragraph 1 f (new)

Draft opinion

Amendment

1 f. Underlines that DLT can be employed to reduce corruption, detect tax evasion, allow the tracking of unlawful payments, facilitate anti-money laundering policies and detect misappropriation of assets.

Or. en

Amendment 15 Eva Kaili

Draft opinion Paragraph 1 g (new)

Draft opinion

#### Amendment

1 g. Stresses that International Trade operations can be significantly improved especially in relation to the monitoring of the origin of goods and their ingredients through the supply chain, by providing a verification mechanism that advances visibility and compliance check that can ensure that sustainability and human rights protocols are followed in the place of origin of a product.

Or. en

Amendment 16 Eva Kaili

Draft opinion Paragraph 1 h (new)

Draft opinion

**Amendment** 

1 h. Highlights that DLT can provide mechanism that mitigate the risk of the entering of illegal goods in the supply

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chain and ensure consumer protection.

DLT can be an essential tool for the improvement of the operations of the Custom authorities in the fight of contraband;

Or. en

Amendment 17 Eva Kaili

Draft opinion Paragraph 1 i (new)

Draft opinion

#### Amendment

1 i. Notes that DLT minimizes the cost of logistics, shipping and transportation with a significant reduction in documentation and verification cost, with digitization of standard documents of transfer of ownership (e.g. bills of landing) improving thus the certainty and efficiency in various sectors, including container shipping;

Or. en

Amendment 18 Eva Kaili

Draft opinion Paragraph 1 j (new)

Draft opinion

#### Amendment

1 j. Calls on the Commission to explore best practices, encourage the development of applications and collaborate with the Member States for the development of coordinated actions that improve monitoring, control. security, and verification mechanisms as well as DLT based collaborative mechanisms between the Customs and Tax Authorities of the EU;

## Amendment 19 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

## Draft opinion Paragraph 2

## Draft opinion

2. Notes the potential of the integration of DLTs with other technologies such as the Internet of Things, Artificial Intelligence and quantum computing, and calls for further research into their applicability to the digital transformation and automation of international trade;

#### Amendment

2. Notes the potential of the integration of DLTs with other technologies such as the Internet of Things, Artificial Intelligence and quantum computing, and calls for further research into their applicability to the digital transformation and automation of international trade; Welcomes the Commission proposal to set up the DigitalEurope Programme that will strengthen the EU's capacities for those technologies, as these are catalysts for blockchain technology;

Or. en

## Amendment 20 Răzvan Popa

## Draft opinion Paragraph 2

### Draft opinion

2. Notes the potential of the integration of DLTs with other technologies such as the Internet of Things, Artificial Intelligence and quantum computing, and calls for further research into their applicability to the digital transformation and automation of international trade;

### Amendment

2. Notes the potential of the integration of DLTs with other technologies such as the Internet of Things, Artificial Intelligence and quantum computing, and calls for further research into their applicability to the digital transformation and automation of international trade and cooperation with academia to find the best solutions to keep step with constantly developing new technologies;

Or. ro

## Amendment 21 Rolandas Paksas

## Draft opinion Paragraph 2

## Draft opinion

2. Notes the potential of the integration of DLTs with other technologies such as the Internet of Things, Artificial Intelligence and quantum computing, and calls for further research into their applicability to the digital transformation and automation of *international trade*;

#### **Amendment**

2. Notes the potential of the integration of DLTs with other technologies such as the Internet of Things, Artificial Intelligence and quantum computing, and calls for further research into their applicability to the digital transformation, *international trade*, and automation of *the public sector*;

Or. lt

Amendment 22 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

Draft opinion Paragraph 2 a (new)

Draft opinion

Amendment

2 a. Notes that Blockchain is becoming an important tool across various sectors and industries, notably in the financial sector and supply-chain modelling.

Or. en

Amendment 23 Lieve Wierinck

Draft opinion Paragraph 2 b (new)

Draft opinion

Amendment

2 b. Stresses that Blockchain could have a disruptive effect on employment in labour-intensive service industries; calls

on the Commission to request a study on the potential impact on disruptive interand intra-industry employment evolution;

Or. en

Amendment 24 Marisa Matias

## Draft opinion Paragraph 3

## Draft opinion

3. Underlines that smart contracts can be a key enabler of decentralised applications in international trade operations, but warns, at the moment, that the technology may not be sufficiently mature for regulation to be considered legally enforceable;

#### Amendment

3. Underlines that smart contracts can be a key enabler of decentralised applications in international trade operations, but warns, at the moment, that the technology may not be sufficiently mature for regulation to be considered legally enforceable; requests for a deep assessment of the potential and jurisdictional risks of using these new agreements.

Or. en

Amendment 25 Lieve Wierinck, Fredrick Federley

# Draft opinion Paragraph 3

## Draft opinion

3. Underlines that smart contracts can be a key enabler of decentralised applications in *international* trade operations, *but warns*, at the *moment*, *that the technology may not be sufficiently mature for regulation to be considered legally enforceable*;

#### Amendment

3. Underlines that smart contracts can be a key enabler of decentralised applications in trade operations, such as in balancing the energy market by helping supply to meet demand at the current market price through automatic smart contracts between prosumers, whom it fully empowers;

Or. en

## Amendment 26 Lieve Wierinck, Fredrick Federley

Draft opinion Paragraph 3 a (new)

Draft opinion

### Amendment

3 a. Notes the important role that this technology can play in the completion of the EU Energy Union; Recognises the challenge that energy consumption poses when using this technology; Notes that blockchain could be part of the solution by using more efficient algorithms, improving the efficiency of energy exchanges, enhancing the design and use of energy grids and decentralised energy production, contributing to the transformation of the energy markets;

Or. en

Amendment 27 Eva Kaili

Draft opinion Paragraph 3 a (new)

Draft opinion

## Amendment

3 a. Stresses that smart contracts can be a key enabler of decentralized application in international trade operations. We note that even though smart contracts is a developed concept in Computer Science, it is still new in a legal context and they are not developed yet to be considered as legally enforceable. There are technological risks, jurisdiction risks and general lack of mutual recognition that must be addressed;

Or. en

Amendment 28 Eva Kaili Draft opinion Paragraph 3 b (new)

Draft opinion

### Amendment

3 b. Notes that though it cannot be ruled out the potential of smart contracts for international trade operations, further encouragement is necessary for the development of technical standards that will ensure the quality, efficiency, security and arbitration mechanisms of those smart contracts;

Or. en

Amendment 29 Eva Kaili

Draft opinion
Paragraph 3 c (new)

Draft opinion

#### Amendment

3 c. Encourages the further investigation of the possibility of use of cryptocurrencies (potentially a crypto-Euro) that will enable the transfer of value and assets between transacting parties in international trade operations via smart contracts;

Or. en

Amendment 30 Eva Kaili

Draft opinion Paragraph 3 d (new)

Draft opinion

Amendment

3 d. Calls on the Commission to promote the legal validity and mutual recognition of digital signatures throughout EU;

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## Amendment 31 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

## Draft opinion Paragraph 4

## Draft opinion

4. Calls on the Commission to collaborate with Member States in coordinated actions using DLTs to improve monitoring, control, security and verification mechanisms to fight unlawful payments, facilitate anti-money laundering policies and detect misappropriation of assets;

## Amendment

4. Calls on the Commission to collaborate with Member States in coordinated actions using DLTs to improve monitoring, control, security and verification mechanisms to fight unlawful payments, facilitate anti-money laundering policies and detect misappropriation of assets; Notes that the technology can provide an alternative to the central supervisory authority in models where this authority cannot be trusted;

Or. en

## Amendment 32 Răzvan Popa

# Draft opinion Paragraph 4

## Draft opinion

4. Calls on the Commission to collaborate with Member States in coordinated actions using DLTs to improve monitoring, control, security and verification mechanisms to fight unlawful payments, facilitate anti-money laundering policies *and* detect misappropriation of assets;

#### Amendment

4. Calls on the Commission to collaborate with Member States in coordinated actions using DLTs to improve monitoring, control, security and verification mechanisms to fight unlawful payments, facilitate anti-money laundering policies, detect misappropriation of assets and identify the best conflict resolution options, especially regarding cross-border transactions;

Or. ro

## Amendment 33 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

Draft opinion Paragraph 4 a (new)

Draft opinion

Amendment

4 a. Notes that Blockchain can play an important role in the protection and sharing of intellectual property, specifically regarding the protection of the rights of the owner; Calls on the Commission to consider the role of Blockchain in the development of Smart IP Rights;

Or. en

Amendment 34 Marisa Matias

Draft opinion Paragraph 4 a (new)

Draft opinion

Amendment

4 a. Asks the commission to assess and develop a legal European framework in order to solve any jurisdictional problem that may arise in the event of fraudulent and criminal cases in DLT transactions.

Or. en

Amendment 35 Eva Kaili

Draft opinion Paragraph 4 a (new)

Draft opinion

Amendment

4 a. Emphasizes that DLTs technologies employed for international trade operations are data sensitive and GDPR provisions should be applied;

Amendment 36 Eva Kaili

Draft opinion Paragraph 4 b (new)

Draft opinion

#### Amendment

4 b. Underscores that cybersecurity is critical for DLT based international trade operations. Calls on the Commission to monitor the technological developments (especially in quantum computing), explore the security challenges assess technological risks and undertake actions that improve our knowledge of the dangers associated with the use of DLTs;

Or. en

Amendment 37 Eva Kaili

Draft opinion Paragraph 6 a (new)

Draft opinion

#### Amendment

6 a. Notes that DLT is not merely a technology but an infrastructure in a wider sense and can work as the basis of the development of Internet of Things applications, that are essential for the automation and digital transformation of international trade;

Or. en

Amendment 38 Eva Kaili

Draft opinion Paragraph 6 b (new)

## Draft opinion

#### Amendment

6 b. Calls on the Commission to promote and finance programmes that educate international trade stakeholders about the opportunities and challenges that DLTs bring in their operations as well as promote pilot projects and research initiatives to this direction;

Or. en

Amendment 39 Eva Kaili

Draft opinion
Paragraph 6 c (new)

Draft opinion

#### Amendment

6 c. Underscores that the need for efficiency in international trade requires interoperability between DLTs as well as between DLTs and legacy operation systems. We note that standardization is necessary for the diffusion of the DLTs innovation and scalability;

Or. en

Amendment 40 Eva Kaili

Draft opinion Paragraph 6 d (new)

Draft opinion

#### **Amendment**

6 d. Highlights that standards setting is critical for DLT enabled international trade operations. A global view should be adopted by the EU in the development of standards. We call on the Commission to continue its collaboration with ISO and other international organizations in this field;

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## Amendment 41 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

## Draft opinion Paragraph 7

## Draft opinion

7. Calls for measures to encourage SMEs and start-ups to explore the use of DLT to improve international trade operations and the development of an innovation ecosystem that reduces entry barriers and facilitates access to financing;

#### Amendment

7. Calls for measures to encourage SMEs and start-ups to explore the use of DLT to improve international trade operations and the development of an innovation ecosystem that reduces entry barriers and facilitates access to financing; Stresses blockchain's potential role in enhancing the level playing field for SME's through a reduction in the administrative burden; Emphasises that the developing industry around Blockchain brings new employment opportunities;

Or. en

## Amendment 42 Răzvan Popa

# Draft opinion Paragraph 7

### Draft opinion

7. Calls for measures to encourage SMEs and start-ups to explore the use of DLT *to* improve international trade operations and the development of an innovation ecosystem that reduces entry barriers and facilitates access to financing;

### Amendment

7. Calls for measures to encourage SMEs and start-ups to explore the use of DLT *that will* improve international trade operations and the development of an innovation ecosystem that reduces entry barriers and facilitates access to financing;

Or. ro

## Amendment 43 Eva Kaili

Draft opinion Paragraph 7 a (new)

Draft opinion

Amendment

7 a. Notes that DLT enables SMEs and startups to explore innovative ways that improve international tradeoperations. Reduces the entry barriers of the firms and create opportunities for jobs and growth across the line of the international supply chains;

Or. en

Amendment 44 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

Draft opinion Paragraph 7 a (new)

Draft opinion

Amendment

7 a. Emphasises that Blockchain can be used in applications of regulatory technologies (RegTech), significantly reducing compliance costs;

Or. en

Amendment 45 Eva Kaili

Draft opinion Paragraph 7 b (new)

Draft opinion

Amendment

7 b. Underscores that innovative SMEs and startups should be encouraged to explore opportunities opened by DLT in the space of international trade. The development of an innovating ecosystem around these applications should be developed in the EU. For achieving this

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goal, it is important to accelerate the channelling of capital from structural funds and investment instruments of the European Investment Fund to those innovative SMEs and startups;

Or. en

Amendment 46 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

Draft opinion
Paragraph 7 b (new)

Draft opinion

Amendment

7 b. Highlights that the rise of a new industry around Blockchain comes with high efficiency gains and an increase in productivity;

Or. en

Amendment 47 Eva Kaili

Draft opinion
Paragraph 7 c (new)

Draft opinion

Amendment

7 c. Underlines the improved transparency provided by DLT in international trade operations has the potential to reduce the costs of international trade insurance policies and facilitate the international trade financing operations and documentation;

Or. en

Amendment 48 Eva Kaili

**Draft opinion** 

## Paragraph 7 d (new)

Draft opinion

#### Amendment

7 d. Calls on the EBA to explore the possibility of safe commercial bank operations that include the use of DLT based applications in order to improve the quality and streamlining of international trade financing;

Or. en

Amendment 49 Eva Kaili

Draft opinion Paragraph 7 e (new)

Draft opinion

#### Amendment

7 e. Calls on the ECB to recognize the need and explore the feasibility of a crypto-based Euro. A crypto-Euro can be a significant innovation that will enable the coding of the currency for execution of payments in algorithms that streamline international trade transactions, especially in smart contracts;

Or. en

Amendment 50 Lieve Wierinck, Fredrick Federley, Ramon Tremosa i Balcells

**Draft opinion Paragraph 8** 

Draft opinion

8. Welcomes the 'EU Blockchain and Observatory Forum' *and* encourages it to study applications aimed at facilitating international trade.

Amendment

8. Welcomes the 'EU Blockchain and Observatory Forum' on the 1st of February 2018. Requests hereby the Commission to explore the possibility to expand the mandate of the EU Blockchain Observatory and Forum in order to involve relevant stakeholders in

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the framework of addressing upcoming challenges; Encourages it to study applications aimed at facilitating international trade.

Or. en

Amendment 51 Rolandas Paksas

Draft opinion Paragraph 8

## Draft opinion

8. Welcomes the 'EU Blockchain and Observatory Forum' and encourages it to study applications aimed at facilitating international trade.

## Amendment

8. Welcomes the 'EU Blockchain and Observatory Forum' and encourages it to study applications aimed at facilitating international trade; *calls on the Commission to initiate dialogue involving global players and watchdogs*.

Or. lt

Amendment 52 Marisa Matias

Draft opinion Paragraph 8

## Draft opinion

8. Welcomes the 'EU Blockchain and Observatory Forum' and encourages it to study applications aimed at facilitating international trade.

## Amendment

8. Welcomes de use of foresight and other forward looking research frameworks to better assess potencial opportunities and challenges of emerging technologies in support of decision makers.

Or. en