



**PE619.045v01-00**

1.3.2018

# **AMENDMENTS**

## **1 - 192**

**Draft motion for a resolution**

**Eva Kaili**

(PE616.877v01-00)

Distributed ledger technologies and blockchains: building trust with disintermediation



**Amendment 1**  
**Eva Kaili, Henna Virkkunen**  
**Draft motion for a resolution**  
**Citation 10**

*Draft motion for a resolution*

– 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”

*Amendment*

– having regard to the European Commission (EC) initiatives for the exploration of DLTs including, inter alia “Blockchain4EU: **Blockchain for Industrial Transformations**”, “EU Blockchain and Observatory Forum”, “Blockchains for Social Good” and the “Study on the Opportunity and Feasibility of an EU Blockchain Infrastructure”

Or. en

**Amendment 2**  
**Eva Kaili, Henna Virkkunen, Ashley Fox**

**Draft motion for a resolution**  
**Recital A**

*Draft motion for a resolution*

A. whereas Distributed Ledger Technology (DLT) can empower citizens by giving them *ownership of their own* data;

*Amendment*

A. whereas Distributed Ledger Technology (DLT) **and blockchains** can empower citizens by giving them, **through control mechanisms, the opportunity to decide what data to share in the ledger as well as the capacity to choose who else can see these** data;

Or. en

**Amendment 3**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Recital A**

*Draft motion for a resolution*

*Amendment*

A. whereas Distributed Ledger Technology (DLT) can empower citizens by giving them *ownership of their own data*;

A. whereas Distributed Ledger Technology (DLT) can empower citizens by giving them *the possibility to choose which data they want to share and thus creating new ways to strengthen data-ownership, transparency and trust*;

Or. en

**Amendment 4**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Recital A**

*Draft motion for a resolution*

A. whereas Distributed Ledger Technology (DLT) can *empower* citizens by giving them ownership of their own data;

*Amendment*

A. whereas Distributed Ledger Technology (DLT) can *be a tool that promotes the empowerment of* citizens by giving them ownership of their own data;

Or. en

**Amendment 5**  
**Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Gunnar Hökmark**

**Draft motion for a resolution**  
**Recital A**

*Draft motion for a resolution*

A. whereas Distributed Ledger Technology (DLT) can empower citizens by giving them *ownership* of their own data;

*Amendment*

A. whereas Distributed Ledger Technology (DLT) can empower citizens by giving them *control* of their own data;

Or. en

**Amendment 6**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Recital A a (new)**

*Draft motion for a resolution*

*Amendment*

**Aa.** *whereas DLT is an integrated technology which is able to keep the final and immutable record of all transactions in a database that is distributed across a series of computer systems in a network, rather than held in a centralised location;*

Or. en

**Amendment 7**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Recital A a (new)**

*Draft motion for a resolution*

*Amendment*

**Aa.** *whereas DLT is a record of information or database shared across a network, it could be publicly available or restricted to a specific group of users*

Or. en

**Amendment 8**  
**Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michał Boni**

**Draft motion for a resolution**  
**Recital B**

*Draft motion for a resolution*

*Amendment*

**B.** *whereas DLT is a general purpose technology with strong potential to improve **products and services by disrupting** value chains and **improving efficiency**;*

**B.** *whereas DLT is a general purpose technology with strong potential to improve **quality of life, as it can introduce different software algorithms, which have a strong potential to reduce or remove intermediation costs, reshape** value chains and **decentralize ways of organisation in a***

*trustworthy way;*

Or. en

**Amendment 9**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Recital B**

*Draft motion for a resolution*

B. whereas DLT is a general purpose technology **with** strong potential to improve products and services by **disrupting** value chains and **improving efficiency**;

*Amendment*

B. whereas DLT is a general purpose technology, **which aims at facilitating more secure and transparent transactions and holds a** strong potential to improve products, **processes** and services by **increasing the efficiency of** value chains and **their organisation**;

Or. en

**Amendment 10**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Recital B**

*Draft motion for a resolution*

B. whereas DLT is a general purpose technology with strong potential to **improve** products and services by disrupting value chains **and improving efficiency**;

*Amendment*

B. whereas DLT is a general purpose technology with strong potential to **support new** products and services by disrupting value chains, **eliminating intermediates and automating transactions**;

Or. en

**Amendment 11**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Recital B**

*Draft motion for a resolution*

B. whereas DLT is a general purpose technology with **strong** potential to improve products and services by disrupting value chains and improving efficiency;

*Amendment*

B. whereas DLT is a general purpose technology with potential to improve products and services by disrupting value chains and improving efficiency;

Or. en

**Amendment 12**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Recital C**

*Draft motion for a resolution*

**C. whereas DLT introduces an IT-based paradigm of social value that promotes self-sovereignty, trust and transparency;**

*Amendment*

*deleted*

Or. en

**Amendment 13**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Recital C**

*Draft motion for a resolution*

C. whereas DLT introduces an IT-based paradigm of social value that **promotes** self-sovereignty, **trust and** transparency;

*Amendment*

C. whereas **with the right level of encryption, automation and abilities to agree on contracts without intermediaries**, DLT introduces an IT-based paradigm of **high** social value that **could lay the foundation for a true democratisation of data, enhancing** self-sovereignty, transparency **and mutual trust**;

Or. en

**Amendment 14**  
**Eva Kaili, Ashley Fox**

**Draft motion for a resolution**  
**Recital C**

*Draft motion for a resolution*

C. whereas DLT introduces an IT-based paradigm of social value that promotes self-sovereignty, trust and transparency;

*Amendment*

C. whereas DLT introduces an IT-based paradigm of social value that promotes self-sovereignty, trust and transparency, ***as well as a secure and efficient way for the execution of transactions;***

Or. en

**Amendment 15**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Recital C a (new)**

*Draft motion for a resolution*

C.a. whereas DLT promotes the pseudonymisation of the user but not its anonymisation

*Amendment*

***Ca. whereas DLT promotes the pseudonymisation of the user but not its anonymisation***

Or. en

**Amendment 16**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Recital D**

*Draft motion for a resolution*

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;

*Amendment*

D. whereas DLT is still evolving and it is therefore necessary to ***encourage and facilitate its development, creating*** a framework ***that spurs innovation and***



*promotes high social value while at the same time ensuring safety, consumers and environmental protection* around the applications that have originated from it;

Or. en

**Amendment 17**  
**Rolandas Paksas**

**Draft motion for a resolution**  
**Recital D**

*Draft motion for a resolution*

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;

*Amendment*

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 ***and provide relevant safeguards to investor protection, financial stability and orderly markets;***

Or. en

**Amendment 18**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Recital D**

*Draft motion for a resolution*

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;***

*Amendment*

D. whereas DLT is still evolving and it is therefore necessary to ***check how legal frameworks are affected*** around the applications ***and to update the legal frameworks to allow new business models based on DLT and to overcome loopholes created by DLT.***

Or. en

## Amendment 19

Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michal Boni, Gunnar Hökmark

### Draft motion for a resolution

#### Recital D

*Draft motion for a resolution*

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*;

*Amendment*

D. whereas DLT is still evolving and it is therefore necessary to create *an innovation friendly regulatory* framework *respecting the principles* of legal certainty *and technological neutrality*.

Or. en

## Amendment 20

Nadine Morano

### Draft motion for a resolution

#### Recital D

*Draft motion for a resolution*

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;

*Amendment*

D. whereas DLT is still evolving and it is therefore necessary to create *as soon as possible* a framework of legal certainty around the applications that have originated from it;

Or. fr

## Amendment 21

Barbara Kappel

### Draft motion for a resolution

#### Recital D

*Draft motion for a resolution*

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*;

*Amendment*

D. whereas DLT is still evolving and it is therefore necessary to create *the right legal* framework *to encourage and facilitate the development of these*

*technologies;*

Or. en

**Amendment 22**  
**Eva Kaili, Ashley Fox**

**Draft motion for a resolution**  
**Recital D a (new)**

*Draft motion for a resolution*

*Amendment*

*Da. whereas DLT can provide a framework of transparency, reduce corruption, detect tax evasion, allow the tracking of unlawful payments, facilitate anti-money laundering policies, and detect misappropriation of assets;*

Or. en

**Amendment 23**  
**Carlos Zorrinho**

**Draft motion for a resolution**  
**Recital D a (new)**

*Draft motion for a resolution*

*Amendment*

*Da. whereas in line with the principle of equity, the benefits of DLT must be distributed proportionately to citizens with adequate digital skills;*

Or. pt

**Amendment 24**  
**Eva Kaili, Ashley Fox**

**Draft motion for a resolution**  
**Recital D b (new)**

***Db. whereas DLT makes it possible to ensure the integrity of data. The ability to provide a tamper-evident audit trail allows new models of public administration and helps to bring about improved safety;***

Or. en

**Amendment 25**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Recital E**

*Draft motion for a resolution*

*Amendment*

**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;

E. whereas it is important to develop innovation-friendly regulation based on the innovation principle;

Or. en

**Amendment 26**  
**Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Antanas Guoga, Michal Boni, Gunnar Hökmark**

**Draft motion for a resolution**  
**Recital E**

*Draft motion for a resolution*

*Amendment*

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;***

E. whereas regulating DLT is not optimal as the approach of being ***technology neutral is a key principle*** in regulation;

Or. en

**Amendment 27**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Recital E**

*Draft motion for a resolution*

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;*

*Amendment*

E. whereas *any attempt of* regulating DLT *shall be* technology-neutral *and able* to develop *an* innovation-friendly *ecosystem that shall focus on solutions and methods that are environmentally sustainable;*

Or. en

**Amendment 28**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Recital F**

*Draft motion for a resolution*

F. whereas Blockchain is only one of several types of Distributed Ledger Technologies;

*Amendment*

F. whereas Blockchain is only one of several types of Distributed Ledger Technologies; *some DLT solutions store all individual transactions in blocks which are attached to each other in chronological order to create a chain; Whereas this chain ensures the security and integrity of the data;*

Or. en

**Amendment 29**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Recital F a (new)**

*Draft motion for a resolution*

*Amendment*

***Fa. whereas cyber-attacks are considered less effective on such chains as they need to successfully target many copies rather than a centralised version;***

Or. en

**Amendment 30**  
**Nadine Morano**

**Draft motion for a resolution**  
**Recital G**

*Draft motion for a resolution*

*Amendment*

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.

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 ***and reducing the costs that they incur.***

Or. fr

**Amendment 31**  
**Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Michal Boni, Gunnar Hökmark**

**Draft motion for a resolution**  
**Recital G a (new)**

*Draft motion for a resolution*

*Amendment*

***Ga. whereas questions and concerns related to the application of horizontal regulation and rules, in issues such as data protection or taxation, can inhibit the potential development of DLT in the European Union;***

Or. en

**Amendment 32**  
**Martina Werner**

**Draft motion for a resolution**  
**Recital G a (new)**

*Draft motion for a resolution*

*Amendment*

**Ga.** *whereas DLT applications have the potential quickly to become systemic, similar to how digital innovations have fundamentally changed services in other sectors, such as telecommunication;*

Or. en

**Amendment 33**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Recital G a (new)**

*Draft motion for a resolution*

*Amendment*

**Ga.** *Recital H*  
*whereas DLT introduces a new kind of data storage where citizens can decide what data they want to share through DLT;*

Or. en

**Amendment 34**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Recital G b (new)**

*Draft motion for a resolution*

*Amendment*

**Gb.** *Recital I*  
*In order to make the EU a leader in the field of DLT we have to acknowledge that there is a high number of start-ups in the*

*EU (similar to the USA), but in terms of Number of scale-ups, the EU lags behind the US;*

Or. en

**Amendment 35**

**Henna Virkkunen, Seán Kelly, Dennis Radtke, Krišjānis Kariņš**

**Draft motion for a resolution**

**Recital G b (new)**

*Draft motion for a resolution*

*Amendment*

**Gb.** *whereas the risks and problems of the technology are not yet completely known.*

Or. en

**Amendment 36**

**Dario Tamburrano**

**Draft motion for a resolution**

**Paragraph 1**

*Draft motion for a resolution*

*Amendment*

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***;

1. Stresses that DLT facilitates disintermediation ***in a trust-less environment*** and allows ***the*** peer-to-peer exchange of value that can empower citizens, ***decentralise business*** models, improve ***processes and*** services and reduce costs throughout value chains in a wide range of ***economic sectors***;

Or. en

**Amendment 37**

**Henna Virkkunen, Seán Kelly, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús**



**Draft motion for a resolution**  
**Paragraph 1**

*Draft motion for a resolution*

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;

*Amendment*

1. Stresses that DLT *reduces or removes intermediation costs*, 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;

Or. en

**Amendment 38**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Paragraph 1 – point 1 (new)**

*Draft motion for a resolution*

*Amendment*

*(1) Stresses that legislators are required to keep up with technological developments and one possibility is a forward-looking dialogue with market players which can help regulatory and supervisory authorities to acquire technological expertise;*

Or. en

**Amendment 39**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 1 a (new)**

*Draft motion for a resolution*

*Amendment*

*1a. Underlines the profound impact that DLT-based applications could bring to the structure of public governance and*

*the role of institutions and asks the Commission to carry out a study assessing the potential scenarios of a wider uptake of public DLT-based networks;*

Or. en

**Amendment 40**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 1 b (new)**

*Draft motion for a resolution*

*Amendment*

*1b. Highlights the wide range of DLT-based applications that could potentially affect all sectors of the economy;*

Or. en

**Amendment 41**  
**Henna Virkkunen, Seán Kelly, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michał Boni**

**Draft motion for a resolution**  
**Paragraph 2**

*Draft motion for a resolution*

*Amendment*

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;

2. Underscores that DLT can transform and democratize the energy markets *by allowing* households to produce environment-friendly energy and peer-to-peer exchange it; *such technologies provide scalability and flexibility for plant operators, suppliers and consumers.*

Or. en

**Amendment 42**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 2**

*Draft motion for a resolution*

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;***

*Amendment*

2. Underscores that DLT can transform and democratize the energy markets and allows ***citizens in trust-less and open networks to sell, certify, track and measure the energy that is exchanged in a peer-to-peer mode, especially when produced in decentralized systems;***

Or. en

**Amendment 43**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Paragraph 2**

*Draft motion for a resolution*

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;

*Amendment*

2. Underscores that DLT can transform, democratize ***and help decentralize*** the energy markets and allows households to produce environment-friendly energy and peer-to-peer exchange it;

Or. en

**Amendment 44**  
**Eva Kaili**

**Draft motion for a resolution**  
**Paragraph 2 a (new)**

*Draft motion for a resolution*

***2a. Underlines that DLT can support the production and consumption of green energy and could improve the efficiency of energy exchanges; notes that DLT can transform the grid operation and***

*Amendment*

*allow communities and individuals to provide grid services as well as integrate renewable resources more efficiently; stresses also that DLT can create alternatives to state-sponsored renewable investment schemes;*

Or. en

**Amendment 45**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 2 a (new)**

*Draft motion for a resolution*

*Amendment*

*2a. Highlights how beneficial DLTs can be in terms of protection, trust and inalterability of data that are ubiquitously collected through distributed networks of environmental sensors (polluting particulate, CO2 emissions, noise, radioactivity, seismicity, etc.);*

Or. en

**Amendment 46**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Paragraph 2 a (new)**

*Draft motion for a resolution*

*Amendment*

*2a. Notes that even though the applications of DLT could be energy friendly, the technology itself consumes a lot of energy*

Or. en

**Amendment 47**

**Eva Kaili**

**Draft motion for a resolution  
Paragraph 2 b (new)**

*Draft motion for a resolution*

*Amendment*

**2b. Notes that DLT can facilitate the energy transmission and distribution infrastructure and create a new transaction ecosystem surrounding electric vehicles; Stresses that DLT improves energy reporting and enables accurate tracking of renewable or carbon certificates;**

Or. en

**Amendment 48  
Eva Kaili**

**Draft motion for a resolution  
Paragraph 2 c (new)**

*Draft motion for a resolution*

*Amendment*

**2c. Stresses that DLT can support the electrification of poor rural communities through alternative payments and donation mechanisms;**

Or. en

**Amendment 49  
Dario Tamburrano**

**Draft motion for a resolution  
Paragraph 3**

*Draft motion for a resolution*

*Amendment*

3. Underlines that consensus mechanisms **based on** “proof-of-work” concepts **(like the Bitcoin blockchain) are** energy wasting and environmentally

3. Underlines that **most DLTs are based on** consensus mechanisms **called** “proof-of-work” concepts **that are intrinsically** energy wasting and

unsustainable; Alternative consensus mechanisms (e.g. “proof-of-stake” or “proof-of-authority”) are less energy demanding and *more desirable*;

environmentally unsustainable; *calls for a more rapid adoption of* alternative consensus mechanisms *that are under development, which* are less energy demanding and *therefore necessary evolutions for the sustainability of the wider application and scalability of DLTs networks, both public and private*;

Or. en

## **Amendment 50**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

### **Draft motion for a resolution**

#### **Paragraph 3**

##### *Draft motion for a resolution*

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*;

##### *Amendment*

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 *research should be done in the direction of energy efficient mechanisms*;

Or. en

## **Amendment 51**

**Henna Virkkunen, Seán Kelly, Dennis Radtke, Sorin Moisă, Pilar del Castillo Vera, Francesc Gambús, Michał Boni**

### **Draft motion for a resolution**

#### **Paragraph 3**

##### *Draft motion for a resolution*

3. Underlines that *consensus mechanisms based on “proof-of-work” concepts (like the Bitcoin blockchain)* are

##### *Amendment*

3. Underlines *the need for promoting technical solutions* that are *as less energy consuming, and generally as*

energy *wasting and environmentally unsustainable*; *Alternative consensus mechanisms (e.g. “proof-of-stake” or “proof-of-authority”) are less energy demanding and more desirable*;

environmentally *friendly as possible, while taking into account a balanced approach between costs and benefits*; *encourages the Commission to include an energy efficiency dimension in all its activities related to DLT*;

Or. en

## Amendment 52

Eva Kaili, Ashley Fox

### Draft motion for a resolution

#### Paragraph 3

##### *Draft motion for a resolution*

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*;

##### *Amendment*

3. Underlines that consensus mechanisms based on “proof-of-work” concepts (like the Bitcoin blockchain) are energy *intensive*; *Alternative consensus mechanisms (e.g. “proof-of-stake”, “proof-of-authority”, “proof-of-elapsed-time”, or “practical-byzantine-fault-tolerance (PBFT)”) can be proved less energy demanding*;

Or. en

## Amendment 53

Nadine Morano

### Draft motion for a resolution

#### Paragraph 3

##### *Draft motion for a resolution*

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*;

##### *Amendment*

3. Underlines that consensus mechanisms based on “proof-of-work” concepts (like the Bitcoin blockchain) *make intensive use of* energy; *alternative consensus mechanisms (e.g. “proof-of-stake” or “proof-of-authority”) are less energy demanding and more desirable*;

**Amendment 54**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Paragraph 3**

*Draft motion for a resolution*

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;

*Amendment*

3. Underlines that consensus mechanisms based on “proof-of-work” concepts (like the Bitcoin blockchain) are **highly energy demanding**; Alternative consensus mechanisms (e.g. “proof-of-stake” or “proof-of-authority”) are less energy demanding and more desirable;

Or. en

**Amendment 55**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Paragraph 3 a (new)**

*Draft motion for a resolution*

**3a. Calls for an assessment of governance models within the diverse consensus mechanisms under development, taking into account the potential need of intermediary systems, actors and organisations in order to validate and verify the authenticity of the exchanges and to avoid fraudulent behaviours in due time**

*Amendment*

Or. en

**Amendment 56**  
**Henna Virkkunen, Seán Kelly, Dennis Radtke, Maria Spyraiki, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús**



**Draft motion for a resolution  
Paragraph 3 a (new)**

*Draft motion for a resolution*

*Amendment*

**3a. Highlights that DLT can bring new opportunities to circular economy by incentivising recycling and enabling real-time trust and reputation systems.**

Or. en

**Amendment 57**

**Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michał Boni, Gunnar Hökmark**

**Draft motion for a resolution  
Paragraph 3 b (new)**

*Draft motion for a resolution*

*Amendment*

**3b. Transport**  
**Underscores the potential of DLT in mobility and logistics, including registration and administration of vehicles, verification of driving distances, smart insurance and charging of electronic vehicles.**

Or. en

**Amendment 58**

**Eva Kaili, Ashley Fox**

**Draft motion for a resolution  
Paragraph 4**

*Draft motion for a resolution*

*Amendment*

4. Highlights the potential of DLT to improve the data efficiency and clinical trials reporting of the health sector;

4. Highlights the potential of DLT to improve the data efficiency and clinical trials reporting of the health sector,  
**allowing digital data exchange across**

*public and private institutions under the control of the citizens/patients;*

Or. en

**Amendment 59**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Paragraph 4**

*Draft motion for a resolution*

4. Highlights the potential of DLT to improve the data efficiency and clinical trials reporting of the health sector;

*Amendment*

4. Highlights the potential of DLT to improve the data efficiency, *security* and clinical trials reporting of the health sector;

Or. en

**Amendment 60**  
**Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 4 a (new)**

*Draft motion for a resolution*

*Amendment*

**4a. Recognises the potential to improve the efficiency of the healthcare sector through electronic health data interoperability, identity verification and the distribution of medication.**

Or. en

**Amendment 61**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Paragraph 5**

*Draft motion for a resolution*

*Amendment*

5. Notes that DLT allows citizens to *protect and own their health data, including their use with insurance companies;*

*deleted*

Or. en

**Amendment 62**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 5**

*Draft motion for a resolution*

5. Notes that DLT allows citizens to *protect and own their health data,* including their use with insurance companies;

*Amendment*

5. Notes that DLT allows citizens to *decide which data they want to share especially for research in healthcare purposes, while processing data exchanges more efficiently and better protecting personal and more sensitive information,* including their use with insurance companies;

Or. en

**Amendment 63**  
**Jakop Dalunde**  
on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 5**

*Draft motion for a resolution*

5. Notes that DLT allows citizens to protect and own their health data, including their use with insurance companies;

*Amendment*

5. Notes that DLT allows citizens to protect and own their health data, including their use with insurance companies; *Underlines that future DLT applications should implement mechanisms that would protect the privacy of users and ensure that data can be fully anonymous;*

Or. en

## Amendment 64

Eva Kaili, Henna Virkkunen, Ashley Fox

### Draft motion for a resolution

#### Paragraph 5

##### *Draft motion for a resolution*

5. Notes that DLT allows citizens to **protect and own** their health data, including their use with insurance companies;

##### *Amendment*

5. Notes that DLT allows citizens to **control and have transparency on** their health data, including their use with insurance companies **and the wider health-care ecosystem**;

Or. en

## Amendment 65

Caroline Nagtegaal

### Draft motion for a resolution

#### Paragraph 5

##### *Draft motion for a resolution*

5. Notes that DLT allows citizens to **protect and own their health data**, including their use with insurance companies;

##### *Amendment*

5. Notes that DLT allows citizens to **choose what data they want to share**, including their use with insurance companies;

Or. en

## Amendment 66

Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús

### Draft motion for a resolution

#### Paragraph 5

##### *Draft motion for a resolution*

5. Notes that DLT allows citizens to protect and **own** their health data, including their use with insurance companies;

##### *Amendment*

5. Notes that DLT allows citizens to protect and **control** their health data, including their use with insurance

companies;

Or. en

**Amendment 67**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Paragraph 5**

*Draft motion for a resolution*

5. Notes that DLT *allows* citizens to protect and own their health data, including their use with insurance companies;

*Amendment*

5. Notes that DLT *empowers* citizens to protect and own their health data, including their use with insurance companies;

Or. en

**Amendment 68**  
**Henna Virkkunen, Seán Kelly, Dennis Radtke, Sorin Moisă, Antanas Guoga, Pilar del Castillo Vera, Francesc Gambús**

**Draft motion for a resolution**  
**Paragraph 6**

*Draft motion for a resolution*

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;

*Amendment*

6. Calls on the Commission to explore DLT-based use-cases in the management of health-care systems and identify *benchmark cases* and requirements that enable high quality data-entrances and interoperability among the DLTs, *depending on system, type of institutions and their work process.*

Or. en

**Amendment 69**  
**Barbara Kappel**

**Draft motion for a resolution**

## Paragraph 6

### *Draft motion for a resolution*

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;

### *Amendment*

6. Calls on the Commission to explore DLT-based use-cases in the management of health-care systems and identify **regulatory** standards and requirements that enable high quality data-entrances, **a high level of security** and interoperability among the DLTs;

Or. en

## Amendment 70

Caroline Nagtegaal

### Draft motion for a resolution

#### Paragraph 6 a (new)

### *Draft motion for a resolution*

### *Amendment*

#### **6a. Financial sector**

***Believes that the DLT can have effect on existing banking industry infrastructures, people working in the financial sector, back office related processes, communication and competition while also having the potential to contribute to the development of the economy;***

Or. en

## Amendment 71

Caroline Nagtegaal

### Draft motion for a resolution

#### Paragraph 6 b (new)

### *Draft motion for a resolution*

### *Amendment*

**6b. *Calls on the Commission to closely monitor developing trends and DLT-based use-cases in the financial sector;***

**Amendment 72**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 7**

*Draft motion for a resolution*

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;

*Amendment*

7. Underlines the significance of DLT in improving supply chains, ***seamlessly verifying the*** quality of products ***through better forwarding, tracking and monitoring the origin of goods, including their ingredients and by-products,*** along the supply chains, ***thus ensuring better*** consumers ***protection and more effective prevention of*** counterfeiting;

Or. en

**Amendment 73**  
**Antanas Guoga, Henna Virkkunen**

**Draft motion for a resolution**  
**Paragraph 7**

*Draft motion for a resolution*

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;

*Amendment*

7. Underlines the significance of DLT in improving supply chains, ***visibility and compliance over outsourced contract manufacturing,*** 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;

Or. en

**Amendment 74**

**Eva Kaili, Henna Virkkunen, Ashley Fox**

**Draft motion for a resolution  
Paragraph 7 a (new)**

*Draft motion for a resolution*

*Amendment*

**7a. Notes that DLT can improve transparency by assuring that sustainability and human rights protocols are followed in the place of origin of a product, and reduces the risk of entering of illegal goods in the supply chain;**

Or. en

**Amendment 75  
Antanas Guoga, Henna Virkkunen**

**Draft motion for a resolution  
Paragraph 7 a (new)**

*Draft motion for a resolution*

*Amendment*

**7a. Notes that the application of DLT technology in supply chains in the EU can potentially enhance Europe's position as a leader in responsible manufacturing.**

Or. en

**Amendment 76  
Ashley Fox**

**Draft motion for a resolution  
Paragraph 7 a (new)**

*Draft motion for a resolution*

*Amendment*

**7a. Notes that DLT can provide certainty of origin and be used as a tool by customs officers for counterfeit checks;**

Or. en



**Amendment 77**  
**Seán Kelly**

**Draft motion for a resolution**  
**Subheading 4 a (new)**

*Draft motion for a resolution*

*Amendment*

***Financial Sector***

Or. en

**Amendment 78**  
**Seán Kelly**

**Draft motion for a resolution**  
**Paragraph 7 a (new)**

*Draft motion for a resolution*

*Amendment*

***7a. Calls for a distinction to be made by policy-makers between DLT and virtual currencies/crypto currencies/crypto tokens in order for DLT to be assessed objectively.***

Or. en

**Amendment 79**  
**Seán Kelly**

**Draft motion for a resolution**  
**Paragraph 7 b (new)**

*Draft motion for a resolution*

*Amendment*

***7b. Highlights the potential benefits of DLT to the financial sector including the streamlining of processes, improved transparency, cost-savings, better data management, improved oversight, reduced execution time of operations, greater resilience and enhanced reporting***

*processes.*

Or. en

**Amendment 80**

**Seán Kelly**

**Draft motion for a resolution**

**Paragraph 7 c (new)**

*Draft motion for a resolution*

*Amendment*

**7c. Notes potential challenges in the development of DLT including interoperability, governance and the need for common standards.**

Or. en

**Amendment 81**

**Henna Virkkunen, Seán Kelly, Dennis Radtke, Sorin Moisă, Antanas Guoga, Pilar del Castillo Vera, Francesc Gambús**

**Draft motion for a resolution**

**Paragraph 8**

*Draft motion for a resolution*

*Amendment*

8. Stresses the potential of DLT in encrypted educational certification (e.g. “blockcerts”), **verified accreditation**, and credit-transfer mechanisms;

8. Stresses the potential of DLT in **degree verification**, encrypted educational certification (e.g. “blockcerts”), and credit-transfer mechanisms;

Or. en

**Amendment 82**

**Antanas Guoga**

**Draft motion for a resolution**

**Paragraph 8 a (new)**

*Draft motion for a resolution*

*Amendment*

**8a.** *Stresses that the lack of knowledge about the potential of DLT discourages European citizens to use innovative solutions for their businesses.*

Or. en

**Amendment 83**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Paragraph 8 a (new)**

*Draft motion for a resolution*

*Amendment*

**8a.** *Stresses that encrypted educational certification can only achieve its full potential if all the Educational Systems use the same DLT;*

Or. en

**Amendment 84**  
**Antanas Guoga, Henna Virkkunen**

**Draft motion for a resolution**  
**Paragraph 8 b (new)**

*Draft motion for a resolution*

*Amendment*

**8b.** *Highlights the need of establishing non for profit organizations such as research centres, innovations hubs which would specialize in DLT technology in order to perform educational function about the technology in Member States;*

Or. en

**Amendment 85**  
**Dario Tamburrano**

**Draft motion for a resolution**

## Paragraph 9

### *Draft motion for a resolution*

9. Calls on the Commission to **create** a network that **makes the use of the technology possible amongst** the educational institutions of the Union;

### *Amendment*

9. Calls on the Commission to **investigate the feasibility of creating a EU-wide** network that **allows** the educational institutions of the Union **to adopt this technology for sharing data and information, contributing to a more effective recognition of academic titles and professional qualifications and to better performing and comparing high-stakes testing**;

Or. en

## Amendment 86

**Henna Virkkunen, Seán Kelly, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michał Boni**

### **Draft motion for a resolution**

#### **Paragraph 9**

### *Draft motion for a resolution*

9. Calls on the Commission to create a network that makes the use of the technology possible amongst the educational institutions of the Union;

### *Amendment*

9. Calls on the Commission to create a network that makes the use of the technology possible amongst the educational institutions of the Union **and to encourage Member States to adapt the specialized curricula in universities in order to include studies of emerging technologies such as DLT studies.**

Or. en

## Amendment 87

**Marisa Matias, Neoklis Sylikiotis**

### **Draft motion for a resolution**

#### **Paragraph 9**

### *Draft motion for a resolution*

### *Amendment*

9. Calls on the Commission to **create** a network that makes the use of the technology possible amongst the educational institutions of the Union;

9. Calls on the Commission to **support the creation of a common** network, **highly scalable and interoperable** that makes the use of the technology possible amongst the educational institutions of the Union;

Or. en

### **Amendment 88**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

#### **Draft motion for a resolution**

##### **Paragraph 9**

*Draft motion for a resolution*

9. Calls on the Commission to **create** a network that makes the use of the technology possible amongst the educational institutions of the Union;

*Amendment*

9. Calls on the Commission to **explore the possibility of creating** a network that makes the use of the technology possible amongst the educational institutions of the Union;

Or. en

### **Amendment 89**

**Ashley Fox**

#### **Draft motion for a resolution**

##### **Paragraph 9 a (new)**

*Draft motion for a resolution*

*Amendment*

**9a. Recognises that for DLT to be trusted, awareness and understanding of the technology needs to be improved; calls on Member States to address this through targeted training and education;**

Or. en

### **Amendment 90**

**Eva Kaili, Henna Virkkunen, Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 10**

*Draft motion for a resolution*

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

*Amendment*

10. Underlines that ***for “digitalized”*** creative content ***DLT can enable the*** tracking and managing intellectual property and protect copyrights and patents; ***Emphasizes the DLT can enable greater ownership and creative development by artists through an open public ledger that can also show clear ownership and copyrights;***

Or. en

**Amendment 91**  
**Jakop Dalunde**  
on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 10**

*Draft motion for a resolution*

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

*Amendment*

10. Underlines that DLT ***can enable*** the “tokenizing” of creative content, tracking and managing intellectual property and protect copyrights and patents ***while needing to respond to challenges like the quick changes of ownership and the enforcement of exceptions;***

Or. en

**Amendment 92**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Paragraph 10**

*Draft motion for a resolution*

*Amendment*

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

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

Or. en

**Amendment 93**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 10 a (new)**

*Draft motion for a resolution*

*Amendment*

**10a. Notes how DLT could offer new ways to manage intellectual property rights also in case of additive manufacturing and 3D printing models, especially in those open innovation and collaborative ecosystems where tracking users and authors is necessary to ensure safety and functionality in an open hardware or software;**

Or. en

**Amendment 94**  
**Antanas Guoga, Henna Virkkunen**

**Draft motion for a resolution**  
**Paragraph 10 a (new)**

*Draft motion for a resolution*

*Amendment*

**10a. Notes that DLT might serve for the benefit of authors in order to bring more transparency and traceability of the usage of their creative content as well as to reduce intermediaries in regards to the payment of their creative content;**

Or. en

**Amendment 95**  
**Eva Kaili, Henna Virkkunen, Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 10 a (new)**

*Draft motion for a resolution*

*Amendment*

**10a. Financial Sector and Financial Applications**

Or. en

**Amendment 96**  
**Eva Kaili, Henna Virkkunen, Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 10 b (new)**

*Draft motion for a resolution*

*Amendment*

**10b. Underscores the significance of DLT in financial intermediation and its potential in improving transparency, reducing transaction costs and minimizing the time of operations; Welcomes the initiatives of the banking sector to explore use-cases and invest on DLT applications;**

Or. en

**Amendment 97**  
**Eva Kaili, Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 10 c (new)**

*Draft motion for a resolution*

*Amendment*

**10c. Stresses the capacity of DLT in enhancing and improving financial supervision through RegTech and smart ways that facilitate exchange of information between entities and**



*regulators;*

Or. en

**Amendment 98**

**Eva Kaili**

**Draft motion for a resolution**

**Paragraph 10 d (new)**

*Draft motion for a resolution*

*Amendment*

***10d. Emphasizes the volatility and uncertainty surrounding cryptocurrencies; notes that the feasibility of alternative methods of payment and transfer of value using cryptocurrencies can be examined further; calls on the Commission and the ECB to provide feedback on the sources of volatility of cryptocurrencies, identify dangers for the public and explore the possibilities of incorporating cryptocurrencies in the European payment system;***

Or. en

**Amendment 99**

**Eva Kaili**

**Draft motion for a resolution**

**Paragraph 10 e (new)**

*Draft motion for a resolution*

*Amendment*

***10e. Underscores the potential of DLT and blockchain applications in promoting innovative FinTech solutions that can disrupt financial intermediation models by moving intermediaries, and reducing for the consumers transaction and hidden costs;***

Or. en

**Amendment 100**

**Henna Virkkunen, Seán Kelly, Dennis Radtke, Sorin Moisă, Gunnar Hökmark**

**Draft motion for a resolution**

**Paragraph 11**

*Draft motion for a resolution*

*Amendment*

**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);**

*deleted*

Or. en

**Amendment 101**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

**Draft motion for a resolution**

**Paragraph 11**

*Draft motion for a resolution*

*Amendment*

**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);**

**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) *needing to be further improved in order to make DLT applications fully compatible with the European legislation;***

Or. en

**Amendment 102**

**Dario Tamburrano**

**Draft motion for a resolution**

**Paragraph 11**

*Draft motion for a resolution*

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);

*Amendment*

11. Underscores that DLT enables users to identify themselves while they maintaining the control of their personal data; stresses though that ***a wide range of applications, with different degrees and levels of transparency, exists and that*** data in a public ledger are pseudonymous (not anonymous);

Or. en

**Amendment 103**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Paragraph 11**

*Draft motion for a resolution*

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);

*Amendment*

11. Underscores that DLT enables users to identify themselves while ***being able to*** control ***what*** personal data ***they want to share***; stresses though that data in a public ledger are pseudonymous (not anonymous);

Or. en

**Amendment 104**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Paragraph 11**

*Draft motion for a resolution*

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);

*Amendment*

11. Underscores that DLT enables users to identify themselves while they control ***what*** personal data ***they want to share***; stresses though that data in a public ledger are pseudonymous (not anonymous);

**Amendment 105**

**Eva Kaili**

**Draft motion for a resolution**

**Paragraph 11 a (new)**

*Draft motion for a resolution*

*Amendment*

***11a. Underscores that DLT supports the emergence of new models to change the current concept and architecture of digital identities; as a result digital identity is extended to people, organizations, objects, and further simplifies identity processes like "Know-Your-Customer" while enabling personal control over data;***

Or. en

**Amendment 106**

**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**

**Paragraph 11 a (new)**

*Draft motion for a resolution*

*Amendment*

***11a. Stresses that the management of the personal data implies that the user has the capacity and the technical knowledge and skills to manage their own data; is concerned about the dangers of misusing of their own data and the incurrence in fraudulent schemes due to the lack of sufficient knowledge;***

Or. en

**Amendment 107**

**Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 11 a (new)**

*Draft motion for a resolution*

*Amendment*

**11a. Emphasises that digital identities are imperative to the future of this technology; Notes that member states should exchange best practices on how to ensure the security of this data;**

Or. en

**Amendment 108**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Paragraph 11 b (new)**

*Draft motion for a resolution*

*Amendment*

**11b. Underlines that although DLT promotes the self-sovereign identity, the "right to be forgotten" is not easily applicable in this technology;**

Or. en

**Amendment 109**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Paragraph 12**

*Draft motion for a resolution*

*Amendment*

**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;**

**deleted**

### Amendment 110

Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michał Boni, Gunnar Hökmark

#### Draft motion for a resolution Paragraph 12

*Draft motion for a resolution*

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;**

*Amendment*

12. Notes that **it is of utmost importance that the use of DLTs develops in ways that are fully compliant with EU legislation on data protection, and notably the General Data Protection Regulation (GDPR); calls the Commission to provide for further guidance on this point;**

Or. en

### Amendment 111

Marisa Matias, Neoklis Sylikiotis

#### Draft motion for a resolution Paragraph 12

*Draft motion for a resolution*

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;

*Amendment*

12. **Stresses** that encrypted data that are not accessible **must be** 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;

Or. en

### Amendment 112

Jakop Dalunde

on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 12**

*Draft motion for a resolution*

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***;

*Amendment*

12. Notes that ***only*** encrypted data that are not accessible are compliant with the General Data Protection Regulation GDPR, ***when*** they are located in public ledgers and allow user control of their data through private keys;

Or. en

**Amendment 113**  
**Eva Kaili, Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 12**

*Draft motion for a resolution*

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***;

*Amendment*

12. Notes that encrypted data ***stored on a blockchain should be*** compliant with the General Data Protection Regulation GDPR. ***The use of private-keys by end-users will*** allow greater control of their data ***when combined with blockchain technologies***;

Or. en

**Amendment 114**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Paragraph 12**

*Draft motion for a resolution*

12. Notes that encrypted data that are not accessible are compliant with the General Data Protection Regulation GDPR,

*Amendment*

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;*

*The use of private keys by end-users will allow greater control of their data, which is an advantage over current platforms;*

Or. en

## **Amendment 115**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

### **Draft motion for a resolution**

#### **Paragraph 13**

##### *Draft motion for a resolution*

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;

##### *Amendment*

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; ***Notes that the efficiency of the safeguards is dependent on the proper implementation of the technology, thus calling for technological developments that ensure true safety, enhancing trust.***

Or. en

## **Amendment 116**

**Rolandas Paksas**

### **Draft motion for a resolution**

#### **Paragraph 13**

##### *Draft motion for a resolution*

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;

##### *Amendment*

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 ***and acceleration of the clearing and***



**Amendment 117**  
**Eva Kaili, Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 13**

*Draft motion for a resolution*

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;

*Amendment*

13. Stresses that trust in *permissionless blockchains* is enabled by cryptographic algorithms, *the participants, the network design and the structure, and can* replace third party *intermediaries* through a mechanism that performs validation, safe-guarding of transactions and transactions preservation;

**Amendment 118**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Paragraph 13 a (new)**

*Draft motion for a resolution*

*13a. Raises its concerns about the ability of DLT, and other technologies, to counteract the human creativity at the service of fraud and calls to check for extra safeguards in the applications*

**Amendment 119**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Paragraph 14**

*Draft motion for a resolution*

14. Emphasizes that smart contracts *is a backbone facility* of the DLTs;

*Amendment*

14. Emphasizes that smart contracts *are part* of the DLTs, *requests for a deep assessment of the potential and the jurisdictional risks of using these new agreements*;

Or. en

**Amendment 120**

**Henna Virkkunen, Seán Kelly, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús**

**Draft motion for a resolution**  
**Paragraph 14**

*Draft motion for a resolution*

14. Emphasizes that smart contracts *is a backbone facility of the DLTs*;

*Amendment*

14. Emphasizes that smart contracts *are enabled through DLTs and act as key enabler of decentralized applications*.

Or. en

**Amendment 121**

**Eva Kaili, Henna Virkkunen, Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 14**

*Draft motion for a resolution*

14. Emphasizes that smart contracts *is a backbone facility of* the DLTs;

*Amendment*

14. Emphasizes that smart contracts *is an important feature enabled by* the DLTs;

Or. en

**Amendment 122**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

**Draft motion for a resolution**

**Paragraph 14**

*Draft motion for a resolution*

14. *Emphasizes* that smart contracts is a *backbone facility of the* DLTs;

*Amendment*

14. *Notes* that smart contracts is a *possible application of* DLTs;

Or. en

**Amendment 123**

**Eva Kaili, Henna Virkkunen, Ashley Fox**

**Draft motion for a resolution**

**Paragraph 14 a (new)**

*Draft motion for a resolution*

*Amendment*

**14a.** *Emphasizes that legal certainty surrounding the validity of a digital cryptographic signature is a critical step towards facilitating smart contracts;*

Or. en

**Amendment 124**

**Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Antanas Guoga, Pilar del Castillo Vera, Francesc Gambús, Michal Boni**

**Draft motion for a resolution**

**Paragraph 15**

*Draft motion for a resolution*

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;

*Amendment*

15. Calls on the Commission to *promote the development of* technical standards at ISO *level and by* CEN-CENELEC and *conduct an in-depth analysis of the existing* legal *framework* in individual Member States *in relation to the enforceability of smart contracts; should such analysis show potential barriers in*

*the use of such contracts within the Digital Single Market, asks the Commission to take appropriate measures in order to assess whether such barriers are proportionate.*

Or. en

**Amendment 125**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 15**

*Draft motion for a resolution*

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*;

*Amendment*

15. Calls on the Commission to explore both the *development of the necessary* technical standards at *the relevant international organisations like ITU*, ISO and CEN-CENELEC and *how* the legal frameworks *could be adapted to* permit smart-contracts to be legally enforceable across the Digital Single Market, *rather than flourishing in more uncoordinated national* legal frameworks;

Or. en

**Amendment 126**  
**Jakop Dalunde**  
on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 15**

*Draft motion for a resolution*

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*

*Amendment*

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 *included in a wider harmonised contract law initiative in* the Digital Single Market;

*individual Member States;*

Or. en

**Amendment 127**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Paragraph 17**

*Draft motion for a resolution*

*Amendment*

**17. Notes that interoperability (i) *deleted***  
**between DLTs, (ii) between applications**  
**built on the same DLT, and (iii) between**  
**DLTs and legacy systems is essential to**  
**ensure efficiency;**

Or. en

**Amendment 128**  
**Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 18 a (new)**

*Draft motion for a resolution*

*Amendment*

**18a. Emphasises the importance of**  
**taking a global approach to standards**  
**setting to prevent innovative companies**  
**from being regulated out of the EU**

Or. en

**Amendment 129**  
**Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 18 b (new)**

*Draft motion for a resolution*

*Amendment*

**18b. Recognises the progressive approach taken by Gibraltar in the development of their DLT regulatory framework; urges any future regulation by the Commission to adopt a similar, principle-based approach;**

Or. en

### **Amendment 130**

**Henna Virkkunen, Seán Kelly, Maria Spyraiki, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michał Boni**

#### **Draft motion for a resolution Paragraph 19**

##### *Draft motion for a resolution*

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;

##### *Amendment*

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; ***encourages the creation of DLT hubs across the European Union.***

Or. en

### **Amendment 131**

**Eva Kaili**

#### **Draft motion for a resolution Paragraph 19 a (new)**

##### *Draft motion for a resolution*

##### *Amendment*

**19a. Notes that blockchain technologies can increase the potential of the economy of the Internet of Things by facilitating the exchange of value between humans and machines;**

Or. en

**Amendment 132**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Paragraph 20**

*Draft motion for a resolution*

*Amendment*

20. *Recalls the importance of DLT infrastructure protection;* *deleted*

Or. en

**Amendment 133**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 20**

*Draft motion for a resolution*

*Amendment*

20. Recalls the importance of DLT infrastructure protection;

20. Recalls the importance of DLT infrastructure protection *and suggests that in order to effectively reap the benefits of this technology, the abuse of dominant position shall not be allowed;*

Or. en

**Amendment 134**  
**Jakop Dalunde**  
on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 20**

*Draft motion for a resolution*

*Amendment*

20. Recalls the importance *of DLT* infrastructure protection;

20. Recalls *the special infrastructure needs of DLT and* the importance *ensuring the* infrastructure protection;

Or. en

**Amendment 135**  
**Martina Werner**

**Draft motion for a resolution**  
**Paragraph 21**

*Draft motion for a resolution*

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;

*Amendment*

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 ***as part of the agenda of the EU Blockchain Observatory and to allocate resources accordingly;***

Or. en

**Amendment 136**  
**Rolandas Paksas**

**Draft motion for a resolution**  
**Paragraph 21**

*Draft motion for a resolution*

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;

*Amendment*

21. Calls on the Commission to closely monitor technological developments (such as quantum computers), assess technological risks, support ***resilience to a cyber-attack or a system breakdown*** and data protection projects that ensure the sustainability of DLT platforms;

Or. en

**Amendment 137**  
**Martina Werner**

**Draft motion for a resolution**  
**Paragraph 21 a (new)**



*Draft motion for a resolution*

*Amendment*

**21a. Encourages competent authorities and the Commission to develop stress testing for DLT applications;**

Or. en

**Amendment 138**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 22**

*Draft motion for a resolution*

22. Underlines the efficiency potential of DLT for the public-sector services and management;

*Amendment*

22. Underlines the efficiency potential of DLT for the public-sector services and management, ***especially in view of the enforcement of the eGovernment Action Plan with particular reference to the EU-wide adoption of the digital Once-Only Principle (TOOP), thus further reducing administrative burden for citizens, businesses and public administrations;***

Or. en

**Amendment 139**  
**Antanas Guoga, Henna Virkkunen**

**Draft motion for a resolution**  
**Paragraph 22**

*Draft motion for a resolution*

22. Underlines the efficiency potential of DLT for the public-sector services and management;

*Amendment*

22. Underlines the efficiency potential of DLT for the public-sector services and management ***in regards to reducing bureaucracy;***

Or. en

## Amendment 140

**Jakop Dalunde**

on behalf of the Verts/ALE Group

### Draft motion for a resolution

#### Paragraph 22

*Draft motion for a resolution*

22. Underlines the *efficiency* potential of DLT for the public-sector services and management;

*Amendment*

22. Underlines the potential of *new technologies, like* DLT for the public-sector services and management;

Or. en

## Amendment 141

**Eva Kaili**

### Draft motion for a resolution

#### Paragraph 23

*Draft motion for a resolution*

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);

*Amendment*

23. ***Underscores the potential of DLT to decentralize governance and improve the capacity of citizens to hold governments accountable;*** calls on the Commission to explore the improvement of traditional public services, including ***the digitalization and decentralization of public registries***, land registry, licencing and citizen certifications (e.g. birth-, marriage-certificates); ***calls on the Commission to also explore DLT applications that improve processes related to privacy and confidentiality of data exchanges as well as the access to e-government services with decentralized digital identity;***

Or. en

## Amendment 142

**Martina Werner**

**Draft motion for a resolution**  
**Paragraph 23**

*Draft motion for a resolution*

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);

*Amendment*

23. Calls on the Commission to explore the improvement of traditional public services, including land registry, licencing, citizen certifications (e.g. birth-, marriage-certificates) **and migration management amongst others, in particular by the development of concrete use cases and pilots**;

Or. en

**Amendment 143**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 23**

*Draft motion for a resolution*

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);

*Amendment*

23. Calls on the Commission to explore the improvement of traditional public services, including land registry, **licensing** and citizen certifications (e.g. birth-, marriage-certificates), **including through local pilot projects aimed at properly testing DLT applications for a wider uptake**;

Or. en

**Amendment 144**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Paragraph 24**

*Draft motion for a resolution*

**24. Calls on the Commission to explore the potential of DLT in law**

*Amendment*

**deleted**

*enforcement, tracking of money-laundering and shadow-economy transactions as well as DLT- based tax monitoring;*

Or. en

**Amendment 145**  
**Martina Werner**

**Draft motion for a resolution**  
**Paragraph 24**

*Draft motion for a resolution*

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;

*Amendment*

24. *Is aware of the risks associated with DLT applications, in particular the use of unpermissioned blockchain applications for criminal activities, including tax evasion, tax avoidance and money laundering and insists that these issues are monitored and addressed urgently by the Commission and Member States. For this, calls on the Commission also to explore the potential of DLT in law enforcement, tracking of money-laundering and shadow-economy transactions as well as DLT- based tax monitoring;*

Or. en

**Amendment 146**  
**Eva Kaili**

**Draft motion for a resolution**  
**Paragraph 24 a (new)**

*Draft motion for a resolution*

*24a. Calls on the Commission to monitor the potential of DLT to improve social good and assess the social impact of the technology;*

Or. en

**Amendment 147**

**Eva Kaili**

**Draft motion for a resolution**

**Paragraph 24 b (new)**

*Draft motion for a resolution*

*Amendment*

**24b.** *Calls on the Commission to create DLT based platforms that will allow the monitoring and tracking of the EU funding to non-governmental organizations, and increase thus, the visibility of the EU assistance programmes and the accountability of the recipients;*

Or. en

**Amendment 148**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

**Draft motion for a resolution**

**Paragraph 25**

*Draft motion for a resolution*

*Amendment*

**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;*

*deleted*

Or. en

**Amendment 149**

**Henna Virkkunen, Seán Kelly, Maria Spyrali, Pilar del Castillo Vera, Francesc Gambús, Gunnar Hökmark**

**Draft motion for a resolution**

**Paragraph 26**

*Draft motion for a resolution*

*Amendment*

**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;*

*deleted*

Or. en

### **Amendment 150**

**Barbara Kappel**

#### **Draft motion for a resolution**

#### **Paragraph 26**

*Draft motion for a resolution*

*Amendment*

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;

26. Stresses that European public-sector **blockchains** 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;

Or. en

### **Amendment 151**

**Caroline Nagtegaal**

#### **Draft motion for a resolution**

#### **Paragraph 26**

*Draft motion for a resolution*

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;

*Amendment*

26. Stresses that European public-sector **blockchains** 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;

Or. en

**Amendment 152**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 26 a (new)**

*Draft motion for a resolution*

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;

*Amendment*

**26a. Underlines that EU public-sector blockchains would allow stronger transparency, more streamlined processing of information towards citizens and the development of more secure services for European citizens; stresses how a permissioned blockchain network shared between Member States could be designed to store citizens data in a secure and flexible manner;**

Or. en

**Amendment 153**  
**Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 27**

*Draft motion for a resolution*

27. **Asks the Commission to evaluate**

*Amendment*

**deleted**

*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;*

Or. en

**Amendment 154**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Paragraph 27**

*Draft motion for a resolution*

*Amendment*

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;*

*deleted*

Or. en

**Amendment 155**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 27**

*Draft motion for a resolution*

*Amendment*

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;

27. Asks the Commission to evaluate the efficiency of DLT-based voting *system, aiming at enabling its wider use at* EU level, *also through pilot tests applied to* voting operations in the European Parliament *and other EU institutions, or even* to the European elections;

Or. en

**Amendment 156**  
**Henna Virkkunen, Seán Kelly, Dennis Radtke, Pilar del Castillo Vera, Francesc**



Gambús, Michal Boni, Gunnar Hökmark

**Draft motion for a resolution**  
**Paragraph 27**

*Draft motion for a resolution*

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*;

*Amendment*

27. Asks the Commission to evaluate the *safety and* efficiency of *electronic* voting and *analyse the research conducted by Member States*;

Or. en

**Amendment 157**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 27**

*Draft motion for a resolution*

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;

*Amendment*

27. Asks the Commission to evaluate the efficiency of the DLT-based voting and its *possible* use in the EU level from the voting operations in the European Parliament to the European Elections;

Or. en

**Amendment 158**

**Rolandas Paksas**

**Draft motion for a resolution**  
**Paragraph 27**

*Draft motion for a resolution*

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*;

*Amendment*

27. Asks the Commission to evaluate the efficiency of the DLT-based voting and its use in the EU level *for* the voting operations in the European Parliament;

**Amendment 159**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 28**

*Draft motion for a resolution*

28. Welcomes the potential of DLT to *disrupt* existing value chains *and* transform business models and thus promote innovation-driven *growth*;

*Amendment*

28. Welcomes the potential of DLT to *improve* existing value chains, transform business models and thus promote innovation-driven *prosperity*; *highlights the impact of streamlining supply chains and increasing interoperability among firms*;

Or. en

**Amendment 160**  
**Eva Kaili, Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 28 a (new)**

*Draft motion for a resolution*

28a. *Highlights that open blockchain protocols can lower barriers of entry for SMEs and improve competition in digital marketplaces*;

*Amendment*

28a. *Highlights that open blockchain protocols can lower barriers of entry for SMEs and improve competition in digital marketplaces*;

Or. en

**Amendment 161**  
**Jakop Dalunde**  
on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 29**

*Draft motion for a resolution*

29. Stresses that SMEs can benefit from disintermediation by reducing transaction costs, intermediation costs and red-tape;

*Amendment*

29. Stresses that SMEs can benefit from disintermediation by reducing transaction costs, intermediation costs and red-tape; ***Notes that the use of DLT requires investments in specialised infrastructure or high capacity services;***

Or. en

**Amendment 162**

**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**

**Paragraph 30**

*Draft motion for a resolution*

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;***

*Amendment*

30. Notes that innovative firms and start-ups should be incentivised to create DLT-based projects;

Or. en

**Amendment 163**

**Henna Virkkunen, Seán Kelly, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michał Boni, Gunnar Hökmark**

**Draft motion for a resolution**

**Paragraph 30**

*Draft motion for a resolution*

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;

*Amendment*

30. Notes that innovative ***SMEs*** and start-ups ***need access to funding in order to develop*** DLT-based projects; Calls on the EIB and the EIF to create funding opportunities that support DLT-based entrepreneurial endeavours to accelerate technology transfer;

**Amendment 164**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

**Draft motion for a resolution**

**Paragraph 30**

*Draft motion for a resolution*

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;

*Amendment*

30. Notes that innovative firms and start-ups should be *incentivized* to create DLT-based projects *and look for ways* to accelerate technology transfer *once it has proven its applicability and efficiency in an entrepreneurial environment*;

Or. en

**Amendment 165**

**Dario Tamburrano**

**Draft motion for a resolution**

**Paragraph 31**

*Draft motion for a resolution*

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;

*Amendment*

31. Asks the Commission to *partner* with Member States *to ensure* legal certainty *for investors, users and citizens, both active and passive, while encouraging* harmonization within the Union *and studying the* idea of *introducing* a European passport of DLT-based projects;

Or. en

**Amendment 166**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 31**

*Draft motion for a resolution*

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;

*Amendment*

31. Asks the Commission to promote **research into** 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;

Or. en

**Amendment 167**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 32**

*Draft motion for a resolution*

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;

*Amendment*

32. Underscores that Initial Coin Offerings (ICOs) have **increased exponentially the** potential in funding **DLT-based projects and can benefit** innovation and accelerate technology transfer; ICOs are a distinct asset class with strong potential; Calls on the Commission to **strongly monitor their development and to issue proper recommendations that ensure minimum guidelines especially in terms of investors' protection, while studying to** propose a framework for ICOs;

Or. en

**Amendment 168**  
**Henna Virkkunen, Seán Kelly, Maria Spyrali, Dennis Radtke, Sorin Moisă, Antanas Guoga, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michal Boni**

**Draft motion for a resolution**  
**Paragraph 32**

*Draft motion for a resolution*

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***;

*Amendment*

32. Underscores that Initial Coin Offerings (ICOs) have a strong potential in funding innovation and accelerate technology transfer; ***notes that the lack of clarity with regard to the legal framework applicable to ICOs can negatively affect that potential, including by means of dishonest behaviour, and*** calls on the Commission to ***envisage appropriate steps to increase legal certainty in relation to the use of ICOs within the EU***;

Or. en

**Amendment 169**

**Pirkko Ruohonen-Lerner**

**Draft motion for a resolution**

**Paragraph 32**

*Draft motion for a resolution*

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;

*Amendment*

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, ***at the same time taking account of the risks that they pose to consumers and to the effectiveness of monetary policy, and their use for money laundering, tax evasion or other criminal purposes***;

Or. fi

**Amendment 170**

**Seán Kelly**

**Draft motion for a resolution**

**Paragraph 32**

*Draft motion for a resolution*

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;

*Amendment*

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; ***Highlights the risks noted by ESMA in its 2017 Statement on ICOs and*** calls on the Commission to propose a framework for ICOs ***to ensure necessary investor and consumer protection;***

Or. en

**Amendment 171**

**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**

**Paragraph 32**

*Draft motion for a resolution*

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;

*Amendment*

32. ***Notes*** that Initial Coin Offerings (ICOs) ***may*** have a strong potential in funding innovation and accelerate technology transfer; ***Is concerned about the use of ICOs in fraudulent schemes;*** ***Asks*** the Commission to ***develop a legal and regulatory*** framework for ICOs ***in order to avoid abusive behaviours and to promote more transparency, trust and legal protection;***

Or. en

**Amendment 172**

**Jakop Dalunde**

on behalf of the Verts/ALE Group

**Draft motion for a resolution**

**Paragraph 32**

*Draft motion for a resolution*

*Amendment*

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;

32. Underscores that Initial Coin Offerings (ICOs) have a strong potential in funding innovation and accelerate technology transfer; ICOs are a distinct ***high risk unregulated*** asset class with strong potential ***impact***; Calls on the Commission to propose a framework for ICOs ***in order to increase transparency, accountability and risk-based assessment***;

Or. en

### **Amendment 173**

**Eva Kaili, Ashley Fox**

#### **Draft motion for a resolution Paragraph 32 a (new)**

*Draft motion for a resolution*

*Amendment*

***32a. Emphasizes the dangers related to the ICOs; Calls on the Commission and the related Regulatory Authorities to identify criteria that enhance investor's protection and articulate disclosure requirements and obligations for the initiators of ICOs; Legal clarity is essential for unleashing the potential of ICOs and preventing fraud and negative market signals;***

Or. en

### **Amendment 174**

**Ashley Fox**

#### **Draft motion for a resolution Paragraph 32 a (new)**

*Draft motion for a resolution*

*Amendment*

***32a. Notes that ICOs offer a form of alternate finance and has the potential to enhance funding into SMEs; Notes that standards setting in this area through***



*encouraging information disclosure and fulfilling AML requirements could unlock the potential of ICOs;*

Or. en

**Amendment 175**  
**Eva Kaili, Ashley Fox**

**Draft motion for a resolution**  
**Paragraph 32 b (new)**

*Draft motion for a resolution*

*Amendment*

*32b. Underscores that ICOs can be an essential part within the Capital Markets Union; calls on the Commission to explore the legal requirements that will allow this asset class to be blended with other financial vehicles in strengthening SMEs' funding and innovation projects;*

Or. en

**Amendment 176**  
**Eva Kaili**

**Draft motion for a resolution**  
**Paragraph 32 c (new)**

*Draft motion for a resolution*

*Amendment*

*32c. Calls on the Commission to create an Observatory for the monitoring of ICOs and create a data-base of their characteristics and taxonomy between security and utility tokens; a model framework of regulatory sandboxes, a code of conduct and standards could be the beneficial outcome of this Observatory in helping Member States to explore the ICO possibilities;*

Or. en

**Amendment 177**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Paragraph 33**

*Draft motion for a resolution*

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

*Amendment*

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

Or. en

**Amendment 178**  
**Barbara Kappel**

**Draft motion for a resolution**  
**Paragraph 33 – point 1 (new)**

*Draft motion for a resolution*

*Amendment*

**(1) Highlights that some central banks are already experimenting with virtual currencies as well as other new technologies; encourages the relevant authorities in Europe to experiment as well, in order to keep up with market developments; stresses that such experimentation is and remains an exclusive competence of the member states and falls outside the mandate of the European Central Bank;**

Or. en

**Amendment 179**  
**Carlos Zorrinho**

**Draft motion for a resolution**  
**Paragraph 34 a (new)**

**34a. Urges the Commission and the Member States to develop and pursue digital-skills training and retraining strategies that give rise to European society's active and inclusive participation in the paradigm shift;**

Or. pt

**Amendment 180**  
**Martina Werner**

**Draft motion for a resolution**  
**Paragraph 34 a (new)**

*Draft motion for a resolution*

*Amendment*

**34a. Encourages the European Commission and national competent authorities swiftly to build up technical expertise and regulatory capacity, allowing for rapid legislative or regulatory action if and when appropriate;**

Or. en

**Amendment 181**  
**Martina Werner**

**Draft motion for a resolution**  
**Paragraph 35**

*Draft motion for a resolution*

*Amendment*

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;

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 **and calls on the Commission and Member States to**

*foster convergence and harmonisation of regulatory approaches;*

Or. en

**Amendment 182**  
**Caroline Nagtegaal**

**Draft motion for a resolution**  
**Paragraph 35**

*Draft motion for a resolution*

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;

*Amendment*

35. Underlines that the Union should not regulate DLT. 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;

Or. en

**Amendment 183**  
**Jakop Dalunde**  
on behalf of the Verts/ALE Group

**Draft motion for a resolution**  
**Paragraph 35**

*Draft motion for a resolution*

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;

*Amendment*

35. Underlines that the Union should not regulate DLT per se but should try to bring down existing barriers to implementing *it*. 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;

Or. en

**Amendment 184**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Paragraph 35 a (new)**

*Draft motion for a resolution*

*Amendment*

**35a. Asks the Commission to assess and develop a legal European framework in order to solve any jurisdictional problems that may arise in the event of fraudulent and criminal cases in DLT exchange;**

Or. en

**Amendment 185**  
**Carlos Zorrinho**

**Draft motion for a resolution**  
**Paragraph 36**

*Draft motion for a resolution*

*Amendment*

36. Notes that the use of cases is essential to the development of best practices in the DLT ecosystem;

36. Notes that the use of cases is essential to the development of best practices in the DLT ecosystem **and to the assessment and management of the effects on employment structure of automatising procedures;**

Or. pt

**Amendment 186**  
**Eva Kaili, Henna Virkkunen**

**Draft motion for a resolution**  
**Paragraph 36 a (new)**

*Draft motion for a resolution*

*Amendment*

**36a. Welcomes forward looking research frameworks to better assess potential opportunities and challenges of emerging technologies in support of better decision-making and concretely welcomes**

*the Commission's project  
"Blockchain4EU: Blockchain for  
Industrial Transformations";*

Or. en

**Amendment 187**  
**Marisa Matias, Neoklis Sylikiotis**

**Draft motion for a resolution**  
**Paragraph 36 a (new)**

*Draft motion for a resolution*

*Amendment*

**36a. Welcomes the use of foresight and other forward looking research frameworks to better assess potential opportunities and challenges of emerging technologies in support of decision makers and concretely welcomes the Commission's project#Blockchain4EU: Blockchain for Industrial Transformations**

Or. en

**Amendment 188**  
**Dario Tamburrano**

**Draft motion for a resolution**  
**Paragraph 36 a (new)**

*Draft motion for a resolution*

*Amendment*

**36a. Asks the Commission and the Member States to develop common initiatives to raise awareness and train citizens, businesses and public administrations aimed at easing the comprehension and the uptake of this technology;**

Or. en

## Amendment 189

Henna Virkkunen, Seán Kelly, Maria Spyrali, Dennis Radtke, Krišjānis Kariņš, Pilar del Castillo Vera, Francesc Gambús, Michał Boni

### Draft motion for a resolution

#### Paragraph 37

##### *Draft motion for a resolution*

37. Notes that the post-2020 MFF should ensure funding for research initiatives and projects based on DLT;

##### *Amendment*

37. ***Highlights the importance of research and investment on the DLT.***  
Notes that the post-2020 MFF should ensure funding for research initiatives and projects based on DLT ***as basic research on the DLT is needed, including research on potential risks and societal impact;***

Or. en

## Amendment 190

Jakop Dalunde

on behalf of the Verts/ALE Group

### Draft motion for a resolution

#### Paragraph 37

##### *Draft motion for a resolution*

37. Notes that the post-2020 MFF should ***ensure*** funding for research initiatives and projects based on DLT;

##### *Amendment*

37. Notes that the post-2020 MFF should ***promote*** funding for research initiatives and projects based on DLT;

Or. en

## Amendment 191

Eva Kaili, Henna Virkkunen

### Draft motion for a resolution

#### Paragraph 37 a (new)

##### *Draft motion for a resolution*

##### *Amendment*

***37a. Calls on the Commission to raise awareness about the DLTs, undertake initiatives for the education of the citizens***

*regarding the technology and address the problem of digital gap between Member States;*

Or. en

**Amendment 192**  
**Martina Werner**

**Draft motion for a resolution**  
**Paragraph 39 a (new)**

*Draft motion for a resolution*

*Amendment*

***39a. Recommends that existing and future DLT-related initiatives and pilot projects carried out by the Commission should be closely coordinated, possibly under the guidance of the EU Blockchain Observatory, so as to realise synergy-effects and the creation of real added-value while avoiding costly double-structures. Invites the Commission regularly to exchange with the Parliament on the progress achieved in DLT-related pilot projects;***

Or. en