

EIOPA public consultation on the ‘Discussion Paper on blockchain and smart contracts in insurance’

Fields marked with * are mandatory.

Introduction

1. Background and rationale

European Insurance and Occupational Pensions Authority (EIOPA) is launching a public consultation on the [‘Discussion Paper on blockchain and smart contracts in insurance’](#).

Blockchain and other distributed ledger technologies (DLTs), when properly used, have the potential to transform the functioning of a wide range of industries, including the insurance industry in Europe. Potential impacts are currently being explored across sectors and by a variety of organisations.

EIOPA is expecting from interested parties their views on this Discussion Paper.

EIOPA will assess the feedback to this Discussion Paper in order to better understand blockchain developments in the insurance sector as well as the risks and benefits related to them.

2. Responding to this discussion paper

EIOPA welcomes comments on the [‘Discussion Paper on blockchain and smart contracts in insurance’](#).

Comments are most helpful if they:

- respond to the question stated, where applicable;
- contain a clear rationale; and
- describe any alternatives EIOPA should consider.

Please respond to the questions in the EU Survey Tool by 29 July 2021.

Contributions not provided using the survey or submitted after the deadline will not be processed and therefore considered as they were not submitted.

3. Publication of responses

Contributions received will be published on EIOPA's public website unless you request otherwise in the respective field in the EU Survey Tool.

Standard confidentiality statements in an email message will not be treated as a request for non-disclosure.

Please note that EIOPA is subject to Regulation (EC) No 1049/2001 regarding public access to European Parliament, Council and Commission documents and EIOPA's rules on public access to documents.

Contributions will be made available at the end of the public consultation period.

Data protection

Please note that your personal contact details (such as names, email addresses and phone numbers) will not be published. They will only be used to request clarifications, if necessary, on the information you supplied.

EIOPA will process any personal data in accordance with Regulation (EU) 2018/1725 on the protection of national persons with regard to the processing of personal data by Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC. More information on how EIOPA will treat your personal data can be found in the privacy statement.

Information about the respondent

* First name

Samuel

* Last name

Cywie

* Email

samuel.cywie@institutdesactuaire.fr

* Do you agree that your response is published in EIOPA website?

- Yes
 No

* Country

France

* Name of your organisation

Institut des actuaires (France)

Type of your organisation

- Insurance of reinsurance undertaking
- Insurance intermediary
- Technology company
- Industry association
- Consumer association
- Academia
- Other (please specify)

Questions to stakeholders

1. In addition to those described in this paper, can you report other blockchain and smart contract use cases or business models in the EU or beyond, that might be worth to look at from supervisory/consumer protection perspective?

These cases are representative.

The three biggest developments in the crypto ecosystem are payments, decentralized finance (DeFi) and non-fungible tokens (NFTs).

However, few successful applications exist today. Many uses are BINO, Blockchain In Name Only.

2. Please describe your own blockchain/smart contract use case/business model and challenges you have faced in implementing it, if any.

Institut des actuaires (France) did not contribute directly to any use case.

3. Are you aware of practical examples of crypto-assets use cases in insurance? Please describe these use cases, specifying the types of crypto assets concerned (e.g. payment-type, investment-type, or utility-type) and explain whether they are already being implemented or they are still at a proof-of-concept / early stage of development.

- Yes
- No
- I don't know

Please explain your response

Payment-type :

- ZhongAn Online P&C Insurance and China Construction Bank recently issued the country's first insurance policy paid in digital yuan. <https://www.shine.cn/biz/finance/2012242129/>
- Metromile purchased \$10 million in Bitcoin. Unlike companies like Square or Tesla, however, it is not investing its cash to hedge against inflation. These bitcoins will indeed allow Metromile to offer its policyholders a new payment method. The company will soon offer them the possibility to pay their insurance in BTC, but also to be compensated in crypto for their claims. <https://cryptonaute.fr/un-sinistre-soyez-indemnie-en-bitcoin-et-payez-votre-assurance-en-btc/>
- Axa in Switzerland now accepts payment of insurance premiums in bitcoin. Axa Switzerland's individual clients can now pay their insurance premiums in bitcoin, except for their life insurance policies. This new payment option does not incur any additional costs. If successful, the experiment could be expanded. This new payment option is offered on the statements sent by email to each individual. If the person chooses to pay in bitcoins, he or she will be redirected to the "Inapay" website, a Swiss platform that accepts payments in digital currency, where he or she will be able to complete the transaction. No fees are charged. The cryptocurrency broker Bitcoin Suisse will then be responsible for receiving the assets and converting them into Swiss francs in exchange for a 1.75% commission. As a result, Axa does not hold any bitcoin on its balance sheet. <https://www.usine-digitale.fr/article/axa-suisse-accepte-desormais-le-paiement-des-primas-d-assurance-en-bitcoin.N1083259>

Investment-type :

- Massachusetts Mutual Life Insurance Co. has purchased \$100 million in Bitcoin for its general investment fund, the latest mainstream firm to dabble in digit assets. The mutual insurer also acquired a \$5 million minority equity stake in NYDIG, a subsidiary of Stone Ridge that provides cryptocurrency services to institutions, according to a statement. NYDIG, which already keeps more than \$2.3 billion in crypto assets for clients, will provide custody services for MassMutual's Bitcoins. <https://www.bloomberg.com/news/articles/2020-12-10/169-year-old-insurer-massmutual-invests-100-million-in-bitcoin>
- The VanEck Vectors Bitcoin ETN is a fully-collateralized exchange traded note ETN that invests in bitcoin. The note seeks to replicate the value and yield performance of the MVIS CryptoCompare Bitcoin VWAP Close Index (MVBTCV Index). <https://www.vaneck.com/fr/en/vbtc>

Utility-type :

- Etherisc <https://www.atlas-mag.net/article/plateforme-d-assurance-dediee-aux-petits-exploitants-agricoles-kenyans>
- <https://www.latribune.fr/entreprises-finance/banques-finance/blockchain-la-plateforme-de-place-iznes-depasse-le-milliard-d-euros-d-encours-818086.html>
- Axa's Fizzy

4. Without prejudice of your reply to the previous question, are you aware of insurance products covering the loss or theft of crypto assets being marketed to retail or commercial clients?

- Yes
- No
- I don't know

Please explain your response

Insurance offerings associated with crypto assets on hot storage, which is more vulnerable to theft have grown.

According to AON (<https://www.aon.com/unitedkingdom/insights/keeping-cryptocurrency-secure.jsp>), two types of cover are relevant for companies that provide cryptocurrency storage and exchange services – crime and specie :

- “Crime insurance, a product that has been available for ‘traditional’ financial firms for many years, offers the broader cover. “A crime policy covers the loss, damage, destruction or theft of digital assets in secure premises or in transit or transmission,” explains Jeff Hanson, Director in Commercial Risk Solutions at Aon. “It also covers internal and external fraud, including electronic theft, which would include hot wallet protection.”

- Specie cover focuses on the theft or destruction of assets while stored in secured locations, which would cover insider theft or an employee accidentally destroying private key data. Importantly, it does not cover hacking.”

Lloyd’s : <https://defirate.com/nexus-mutual-future/> <https://www.lloyds.com/about-lloyds/media-centre/press-releases/lloyds-launches-new-cryptocurrency-wallet-insurance-solution-for-coincover>

5. How do you think that the investments in crypto assets by insurance undertakings will evolve during the next 3 years?

- Increase
- Decrease
- Stay same
- I don't know

Please explain

We observe a controversy on whether crypto can be considered an institutional asset class. On one side, there is a rising customer demand. A critical mass of customers and institutions is now engaging with crypto assets despite the price volatility. It's a convenient store of value, a way to hedge against inflation and currency debasement and to diversify their portfolio in the pursuit of higher risk-adjusted returns, and crypto remains in the adoption cycle; sovereign fiat digital currencies are also emerging. On the other side, an asset with no income, utility or relationship with economy fundamentals could not be considered an asset at all. Also, performance does not always seem to be very transparent. The short maturity of crypto assets is not necessarily adapted to a long-term vision of insurance.

Trend is your friend, once you've accepted volatility, the share of crypto investments could be close to the side of crypto in total assets but below 1%.

Investments should rise but it will depend on the reception of the regulator (e.g. Solvency 2) and central banks, black swan technological and security events.

6. How do you think the European Commission's draft legislative proposal on markets in crypto assets (MiCA) will impact the use of crypto assets in the insurance sector?

Clarify and oversee a global arrangement of crypto assets and its associated functions may help answering customer demand with stable guidelines for insurers.

Could the use of cryptocurrencies for money laundering and terrorism be a drag ? KYC helps secure customer knowledge because it is difficult to identify who holds crypto by looking transactions into blocks. The crypto exchange platforms are putting in place control tools but there are questions of knowledge and understanding on the part of the insurers with a need for an increase in competence.

7. In addition to those stated in this Discussion Paper, do you see other blockchain/smart contract use cases in RegTech/SupTech that might be worth to look at further from supervisory/consumer protection perspective?

- Yes
- No
- I don't know

Please explain

Not to date, but we invite insurers and supervisors to stay tuned on these subjects.

8. Please describe your own blockchain/smart contract use case/business model in RegTech/SupTech and the challenges you have faced in implementing it, if any.

We have not managed any use case of our own but we participate in exchanges on the subject.

9a. Do you agree the potential risks for the consumers are accurately described?

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

9b. Do you agree the potential risks for the industry are accurately described?

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

9c. Do you agree the potential risks for the supervisors are accurately described?

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

10. Are there additional risks?

- Yes
- No
- I don't know

Please explain

A particular operational risk, complementary to bugs: the risk of "fork", of duplication of the chain (for instance it happened in 2016 for Ethereum and in 2017 for Bitcoin). Consider a NFT sold for 60 million USD, how to explain that it has duplicated ? It's very difficult in the absence of legal clarity to define the risk of non-uniqueness. What is its protection, what is its return ? There is a governance risk (some consider the fork acceptable) and/or ownership risk. Who owns the duplicated blockchain? Maybe a clarification by the regulator of what would be "the right blockchain" in some contexts could help both the industry and the customers.

a) Consumers

Blockchain does not allow the right to be forgotten and could contravene GDPR.

Which at compatibility with the Insurance Distribution Directive? How to deal with the issue of advice and disclosure on potentially very sophisticated products / technical codes? Financial and technological education is important in this domain and it could increase the digital gap among customers.

The war between encryption and quantum hacking is already underway. There is a real technological risk due to exponential volume and crypto data cracked by quantum computing in the long term (5/6 years).

There is also a risk of "social" price manipulation via social networks and fake news (cf. Elon Musk tweet).

Within the framework of a smart contract, what support should be provided to the client during the sales & claims phases: identifying the insurance intermediary, the risk carrier, etc. ?

Should the supervisor standardize a dedicated Key Investor Information Document for smart contracts?

Define accreditation?

Could consumer protection extend to the creation of guarantees? Or is the protection of the life insurance asset class enough?

b) Industry

The reputation risk is important. If we add crime, cyber risk, solvency requirements... it is not easy to manage in terms of advice, distribution, management... However, this rising topic should be addressed.

Blockchain have no limits on the storage time and could contravene limited time rules. <https://blog.deloitte.fr/la-technologie-blockchain-a-lheure-du-rgpd-conforme-ou-incompatible/>

The risk of volatility will be difficult to take into account in solvency.

An insurer that includes crypto-assets in unit-linked products will find it difficult to define a target market fin product governance.

Blockchain is not green and could lead to penalties for insurers.

c) Supervisors

Using blockchain could be interesting for auditability. However, it's important to ensure that technical burdens do not compromise key processes and customer service efficiency and quality (e.g. <https://www.compliance-insider.com/expertise>).

The public authorities have difficulty in identifying the players on the internet. This issue will become even more acute in the distribution and management of the smart contract in its financial aspects and in its operational implementation. How can the insurer ensure that the code will always work? With misappropriation of money (double compensation).

"Code is law" and it is necessary to protect oneself from a code problem. Insurance is based on a promise.

Adding a technological risk on top of the insurance risk would be moving from an obligation of result to an obligation of means. This type of coverage would go beyond insurance. Would some countries consider this product as insurance while other would not?

If some States oppose Blockchain proof of works, such as forbidding mining, evolution could be halted.

There is also some mathematical research on the subject.

11. Do you consider that the current regulatory and supervisory framework is adequate to capture these risks? If not, what can be done to mitigate these risks?

- Yes
- No
- I don't know

Please explain

see comments and questions above.

12a. Do you agree the potential benefits for the consumers are accurately described?

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

12b. Do you agree the potential benefits for the industry are accurately described?

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

12c. Do you agree the potential benefits for the supervisors are accurately described?

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

13. Are there additional benefits?

- Yes
- No
- I don't know

Please explain

Developing a strong European framework for crypto assets may help to make the European voice heard in the American and Asian concert?
In addition, the fact that industrial customers use blockchain for traceability improves risk protection.
Some new techniques and technologies may help to reduce the energy impact.

14. What can be done to maximise these benefits?

Finding the right balance between regulation and innovation, with regulations that provide security for players and consumers while encouraging innovation.

15. Do you agree the barriers highlighted in chapter 7 exist?

- Yes
- No
- I don't know

Please explain

16.1. What additional regulatory barriers do you see in EU insurance regulation?

Blockchain does not allow the right to be forgotten and could contravene GDPR, which leads to a specific regulatory barrier.

16.2. What additional regulatory barriers do you see in non-EU insurance regulation?

17. What are in your view the main regulatory and non-regulatory barriers preventing the use of crypto assets in insurance?

Faced with transactions deemed risky by some institutions, their customers are denied their bank payments directly. Considering customers as adults, even if it means using a disclaimer, would allow reasoned investments.

The regulatory barrier is that insurers don't know how to deal with it from a Solvency 2 perspective. It is difficult to define a target market and to engage in this volatile market. There is a contradiction between the current regulatory framework of protection and these new assets which require a maturity of the consumer which is prevented by the current regulation.

The current protective regulations do not easily allow new asset classes to enter.

Optimizing and automating the process of signing contractual documentation could make the development of this asset class more fluid.

18. Do you agree there is a need for coherent European approach to blockchain and smart contracts in insurance? What could be done to achieve this and specifically what EIOPA could do?

- Yes
- No
- I don't know

Please explain

EIOPA could integrate French experts and practitioners in their working groups.

19. Do you consider that there is a case for clarifying or updating the prudential rules in relation to crypto-assets if held by insurance undertakings? Please explain your response. In particular, taking into account the developments in international financial reporting standards, are you aware of examples where it is not clear how to apply insurance prudential rules to crypto assets? Please provide those examples and specify the rules which are not clear.

- Yes
- No
- I don't know

Please explain

Having clear and enforceable rules is always preferable for managing and controlling risks. We need not only a European (from EU and other countries such as Switzerland or UK) but also a worldwide coherent and homogeneous approach on qualification, distribution... to avoid distortions of competition and to be sufficiently protect the consumer and the insurance industry.

20. Do you agree with the proposed follow-up actions stated in chapter 8?

- Yes
- No
- I don't know

Please explain

Completed by the above suggestions (integrate French experts...).

Contact

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