



# Response to EIOPA consultation on the discussion paper on blockchain and smart contracts in insurance

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# Questionnaire

**Q1.** 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?

Insurance Europe welcomes the opportunity to share the views of the insurance industry on the European Insurance and Occupational Pensions Authority's (EIOPA) discussion paper on blockchain and smart contracts. Insurers across the EU and beyond are currently developing blockchain initiatives and use cases to explore its potential to streamline business operations and to better serve their customers.

Blockchain technology is characterised by a broad range of different protocols that are widely used, with very different technical and governance characteristics. However, experience with proofs of concepts and use cases in the insurance sector so far have demonstrated the potential that blockchain technologies and smart contracts can offer both consumers and industry in the future. This being said, blockchain and smart contract deployment are still very much in the early stages of maturity, and as yet do not generally appear to offer more compelling alternatives to existing options.

A range of different insurers are currently developing and working on their own potential use cases and it is important to ensure that this trend can continue effectively. The industry should be given time to explore the viability of the technology and its potential applications and use cases before any further steps are considered by regulators or policymakers. Any further steps that may be considered in the future should be based on continuous dialogue between insurers and regulators. The aim should be to ensure an innovation-friendly regulatory framework and remove unnecessary obstacles.



**Q2.** Please describe your own blockchain/smart contract use case/business model and challenges you have faced in implementing it, if any.

The German Insurance Association developed a proof of concept (PoC) based on the use of blockchain and smart contracts, which concerned the processing of applications for private pensions ("Rieseter-Rente"). The PoC was developed in cooperation with a federal government body (Zentrale Zulagenstelle für Altersvermögen - ZfA). Several German insurance companies participated. The goal of the PoC was to transfer the mostly analogous Riester-procedure to a digitized and automatic environment on the blockchain. This would allow the participating insurance companies and the ZfA, who is responsible for paying state supplements to the pensions, to avoid redundant and conflicting accounting. It would also accelerate the processes for the policyholder by automating the whole process from application to payment. However, the blockchain use case never went beyond the stage of a PoC, as it faced significant legal uncertainty with regard to data protection legislation. As the EIOPA discussion paper rightly states, many questions remain unanswered with respect to central aspects of the General Data Protection Regulation (GDPR), most importantly the roles of the participants as either controllers or processors. To this day, there is a lack of definitive guidance on whether nodes and miners are to be considered controllers or processors, which is why the accountability obligations under the GDPR cannot be clearly allocated. This in turn determines whether the participant needs a legal basis pursuant to Article 6 GDPR or an agreement pursuant to Art. 28(f) GDPR. Similarly, only controllers are responsible for fulfilling data subjects' rights. Finally, and as also noted by EIOPA, significant legal uncertainty remains with respect to the scope of the right to erasure in a blockchain environment.

In another example from the German Insurance Association, an internal PoC use case of smart contracts was implemented that allowed employees to provide recognition/kudos with virtual currency to colleagues. The technology of blockchain as such was accessible and successfully implemented. However, it did not provide significant advantages over existing technology alternatives.

With regard to the general challenges associated with blockchain uses cases/projects, it has been observed that the benefits are often recognised only once volume and integration are achieved but in the initial stages duplicate processes may result: eg the technical onboarding of a new participating member may duplicate aspects of the existing processes. It could also be the case that participating members of a project develop their understanding and strategies at a very different pace to one another, which may put pressures on whether the group can stay together long enough to succeed. There may also be challenges around the design of suitable incentive models given the relatively low number of experts.

**Q3.** 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.

- Crypto asset funds used as underlying investments The Czech National Bank (CNB) has warned against possible risks resulting from distribution of a unit-linked life insurance product which would have crypto-asset funds as underlying investments. The CNB expects that increased attention will be paid as far as distribution of these products is concerned (mainly the obligation to act with professional care, mandatory information and acting in the best interests of the customer).
- Many PoCs have been conducted (eg first notification of loss, international claims settlement via blockchain, surety insurance) but only very few of them have been implemented/put into operation.



**Q4.** 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? Please explain your response.

Relevant products exist, specifically to protect against losses or theft related to the wallet used for storing crypto assets. Many insurance companies offer products for crime-related losses, particularly if the covered scenarios are comparable to traditional loss situations. There are also new products specifically targeted towards crypto assets, such as the Lloyd's facility "Coincover". Demand by customers is increasing, given market losses experienced and upcoming regulatory scrutiny. However, the capacity provided by insurance companies is small in magnitude, with products evolving slowly and only towards covering technological failures.

**Q5.** How do you think that the investments in crypto assets by insurance undertakings will evolve during the next 3 years? Please explain.

Insurers expect to see a slow, considered development in this area in the coming years, with investments most likely where asset-liability matching is required.

Regarding crypto currencies, insurers share the view that they will not have a major impact on premium payments or as investments assets in the next three years. In their current state, Bitcoin, Ethereum, etc exhibit great volatility driven by the dominance of speculating market actors. As a result, these currencies are rarely used by consumers to pay for goods or services and often do not fit into investment guidelines of financial services institutions.

**Q6.** 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?

N/A

**Q7.** 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?

Insurance Europe notes the possibilities raised in the discussion paper for blockchain to be used by supervisors to support their supervisory review process and make it more flexible and responsive. The industry agrees that blockchain technologies could offer great opportunities for supervisors, as well as helping to facilitate the implementation of RegTech solutions by insurers.

For example, the use of blockchain technologies could offer great potential to help automate regulatory reporting and make it more efficient and transparent, while at the same time helping to reduce the overall compliance costs faced by insurers.

The primary focus in this area should be on the reduction of burden for both the insurance industry and supervisors, and to lower the overall costs associated with regulatory compliance and supervision. Blockchain solutions could also be used to facilitate and further enhance the exchange of data between supervisory authorities.

It should also be noted that real-time access to insurance company's data for supervisory purposes is difficult to achieve and creates many challenges from both the security and practical perspectives. Furthermore, supervisory real-time access to individual contract data does not seem consistent with the EU's supervisory principles, so it is therefore probably not the right starting point.



**Q8.** 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.

N/A

**Q9.** Do you agree the potential risks for a) consumers, b) industry and c) supervisors are accurately described?

While industry acknowledges many of the potential risks identified in the discussion paper, it also has specific comments on some aspects.

The discussion paper indicates that there is a significant financial education gap for consumers that must be addressed, as they may not be aware of all blockchain features (eg management of public-private keys) due to the complexity and novelty of the technology. However, the majority of customer-facing blockchain and smart contract use cases will likely take the form of automatically executed and enforced contracts based on a simple if/then premise: ie if a specified event occurs, such as a flight being cancelled, then a corresponding action is triggered without the need for action by the individual (in this case, payment for the flight cancellation insurance is automatically carried out). In such a scenario, there is clearly a need for consumers to understand the contract into which they are entering, including the coverage and the policy conditions, and to have all relevant information disclosed to them. However, insurers do not see the relevance or the need for consumers to be knowledgeable about blockchain technologies – it is the policy coverage and conditions that is relevant for the consumer in this case, as with traditional insurance products, rather than the features of the technological solution underpinning the contract.

EIOPA also raises risks with regard to increased fraud and money laundering due to a certain level of anonymity that can be inherent in blockchain technologies. However, this is not necessarily something new, as insurers have always had to manage the verification of an insured's identity for any online sales. To meet this challenge, insurers have therefore embedded know your customer (KYC) checks into their processes for online sales, which would continue to be relevant in a blockchain or smart contract context. Moreover, many existing blockchain solutions already have KYC/AML requirements for onboarding customers and use traditional on-off ramps like bank accounts. The industry also believes that the current initiatives of the European Commission to establish a trusted European-wide digital identity will contribute greatly to facilitating KYC checks.

Additionally, insurers do not see any relevant risk of exclusion of consumers preferring more traditional methods of insurance protection. Blockchain-based insurance solutions are still at a very early stage. There is no indication that blockchain solutions could become dominant in important market segments in the foreseeable future. Providers with different business models and innovation strategies are in intense competition for customers. This means that consumers have a broad choice of provider and access channel for insurance products.

With respect to risks for undertakings, some of the potential risks identified in the paper are not so relevant. For example, the existing regulatory framework and governance requirements already prevent insurers from blockchain activities for which they do not have sufficient expertise or governance structures.

With respect to decentralised finance, insurance products cannot be offered in a purely decentralised P2P fashion outside of the regulatory perimeter, as this would not be consistent with the high consumer protection standards and the need to safeguard the integrity and stability of the insurance market. Activity-based regulations and a level playing field for all business models, technological solutions and providers are crucial in this regard.

**Q10.** Are there additional risks? Please explain.



N/A

**Q11.** 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? Please explain.

Financial services legislation, rules or guidelines should be innovation- and digital-friendly, technologically neutral and sufficiently future-proof to be fit for the digital age and encourage digital innovation. Rather than automatically introducing new regulation for the digital age, policymakers should review how the application of existing rules might be adapted to meet these objectives and respond to digital developments without incurring major regulatory change. For example, the GDPR can address many of the issues arising from new technologies, including the use of blockchain technologies. Consumers' rights are considerably strengthened, enabling them to get better control and access to information related to their personal data, while companies are subject to strict accountability rules and substantial fines if rules are not respected. However, certain requirements of the GDPR create legal uncertainty and limit the potential use of blockchain technologies (see response to Q.16). It is therefore worth considering the recommendations of the European Commission Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG), which proposes issuing guidance on the application of the GDPR in relation to the use of new technologies in financial services.

A lack of legal certainty is likely to result in companies being reluctant to adopt blockchain technologies due to concerns around breaching GDPR provisions. At the same time, if the legislation is unclear or ambiguous, it will be left open to interpretation by regulators, supervisory bodies or the courts, which may ultimately lead to problems regarding the proper enforcement of rights.

In the context of smart contracts, the current regulatory and supervisory framework for the insurance sector should continue to be sufficient. Existing conduct of business requirements, for example, are well established and based on principles which would apply regardless of the technology used, making them equally fit for the purposes of smart contracts.

The biggest challenges are likely to arise in the context of decentralised providers, where it will be important to ensure that a level playing field is guaranteed and regulatory arbitrage is avoided. From a consumer protection perspective, it is also important that consumers are aware of the nature of different providers.

**Q12.** Do you agree the potential benefits for a) consumers, b) industry and c) supervisors are accurately described?

The use of blockchain technologies can offer advantages in terms of more secure and faster transactions, low operational costs, greater transparency and reliability of the data and improved traceability.

This carries the potential to make a significant difference for insurers in:

- detecting fraud
- making payments more efficient
- reducing costs
- managing and storing customer data

Many of the potential benefits EIOPA describes are not restricted to blockchain solutions but could also be achieved by other technological solutions and enhanced data sharing. At the moment, it is not clear which approaches / technological solutions will prove most successful in the market.

Insurers do not share EIOPA's view regarding some of the mentioned potential benefits. For the EU, insurers do not take the view that crypto assets can contribute significantly to financial inclusion with respect to so far uninsured persons. However, insurers agree that crypto assets and decentralised finance can certainly contribute to enhancements of insurance coverage and the customer journey.



Insurers would also question the assertion that blockchain solutions will result in insurance pay-outs becoming more generous via a transparency channel.

### Q13. Are there additional benefits? Please explain

In the context of insurance, the use of smart contracts may bring a number of additional benefits:

- Fast claims payments this is particularly important, for example, after natural disasters where liquidity is often needed quickly to minimise the impact on policyholders and to facilitate swifter recovery.
- Employing pre-defined claims settlement figures and/or automating the monitoring and analysis of objective triggers can reduce the cost of loss adjustment. For example, using a trusted third-party oracle as an objective trigger for claims payment may increase the certainty as to whether a valid claim has arisen and its assigned value. Similarly, using objective third-party triggers limits the potential for disputes to arise, thereby reducing possible legal fees for both insurers and policyholders. These reductions in insurers' expenses can ultimately result in lower premiums.
- As there is no 'loss creep' (ie loss estimates increasing over time with respect to a particular loss) with automated parametric products, for example, insurers can have more certainty about their reserving and capital requirements.

#### **Q14.** What can be done to maximise these benefits?

The question of blockchain and smart contracts should be seen in the broader context of digital transformation/innovation in insurance markets. Regulators and supervisors should work on an innovation-friendly supervisory framework that promotes desirable innovations. An important aim should be to remove existing obstacles to the use of innovative technologies like blockchain and smart contracts. At the same time, a central objective of regulation and supervision should be technology neutrality and letting customers and markets decide on which innovative solutions or underlying technologies are most suited.

## **Q15.** Do you agree the barriers highlighted in chapter 7 exist?

#### N/A

**Q16.** What additional regulatory barriers do you see: a) in EU insurance legislation; b) in EU non-insurance legislation?

A further possible existing regulatory barrier might be legal norms requiring paper records of transactions that could become a hindrance for transferring a process to a blockchain. As a blockchain virtually documents, concludes and verifies transactions, producing additional paper records could contradict the simplification it provides.

It will also be important to consider certain consumer protection issues that may arise, for example client onboarding and the related rights of termination or withdrawal from the insurance contract in the context of blockchain-based smart contracts.

It will be crucial to ensure that the application of EU privacy and data protection rules does not create unnecessary barriers to the deployment of blockchain technology solutions in the financial sector. The underlying principles of blockchain technology already raise certain questions with regard to compatibility with existing legislation, particularly concerning the use of personal data. The GDPR, for example, sets out numerous rights for the data subject, such as the right to be forgotten and the right to rectification, as well as requiring data to be kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data is processed. This needs to be reconciled with the fact that blockchain technology is designed to be an immutable and permanent record of all transactions.



**Q17.** What are in your view the main regulatory and non-regulatory barriers preventing the use of crypto assets in insurance?

N/A

**Q18.** 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? Please explain.

As outlined in the response to Q.1, it is important to ensure that insurers can continue to work on developing and implementing use cases without facing any unnecessary obstacles. The industry should be given time to explore the technology and potential use cases before any further steps are considered by regulators or policymakers.

This being said, there would seem to be a need for a coherent European approach to blockchain and a common understanding of how existing rules should be applied. One of the crucial factors for the successful deployment of blockchain solutions in the future will be to have continued cooperation between all the different stakeholders to avoid obstacles arising as a result of standardisation or interoperability issues. It will also be crucial to ensure that the application of EU privacy and data protection rules does not create unnecessary barriers to the deployment of blockchain technology solutions in the financial sector.

Further deployment of blockchain technology could also be stimulated via lighthouse projects by the public and private sector. Joint projects in the area of e-government, for example, could propel the technology by helping overcome uncertainties often faced by early adopters, while initiatives in the area of AML could also help gain the trust of consumers. In this respect, blockchain technology offers an opportunity to connect public and private bodies in a safe and cost-efficient manner. In addition, it is important to facilitate the creation of a suitable blockchain infrastructure.

For the development and implementation of blockchain use cases, highly specialised IT professionals are needed. Further effort is therefore required to ensure that individuals with the appropriate skills and training are available across the EU, including within regulatory and supervisory authorities.

Moreover, a modern, high-speed communication infrastructure is required to ensure that data in blockchain applications can be synchronised without any delay. Insurance Europe therefore welcomes initiatives by the European Commission concerning 5G and high-speed internet.

From a data protection point of view, new technologies may require the collection of personal data on a large scale with potential risks for the rights and freedoms of data subjects. It is essential that risk analyses and privacy impact assessments are carried out in a timely and appropriate manner in relation to new technologies. At the same time, it is important that data protection authorities help to facilitate their uptake by developing opinions or clarifications that provide companies with reasonable legal certainty regarding the use of such technologies.

**Q19.** Do you consider that there is a case for clarifying or updating the prudential rules for in relation to cryptoassets 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.

N/A



**Q20.** Do you agree with the proposed follow-up actions stated in this chapter?

N/A

Insurance Europe is the European insurance and reinsurance federation. Through its 37 member bodies — the national insurance associations — it represents all types and sizes of insurance and reinsurance undertakings. Insurance Europe, which is based in Brussels, represents undertakings that account for around 95% of total European premium income. Insurance makes a major contribution to Europe's economic growth and development. European insurers pay out almost  $\in 1$  000bn annually — or  $\in 2.7$ bn a day — in claims, directly employ nearly 950 000 people and invest over  $\in 10.4$ trn in the economy.