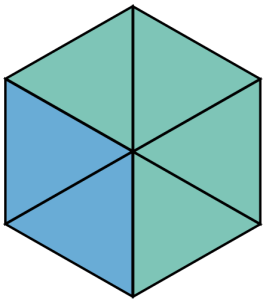

ASURE

OPEN DECENTRALIZED AUTONOMOUS INSURANCE PLATFORM

www.asure.io

WHITEPAPER

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EXECUTIVE SUMMARY

Worldwide, there are over 4.1 billion people without access to social security systems[1] (2.5 billion without financial access[2]). Together with the governments around the world, we are improving existing social security systems and are introducing them to reduce poverty and illness. We provide all people with access to the insurance market, improve people's lives and make our vision come true.

“People around the world enjoy their lives without having to worry about any risks or losses.“

At the same time, the conventional insurance industry including a number of InsurTechs shows - there is currently no other company that solves major problems that the insurance industry faces today or will face in the nearest future. The aforementioned challenges include:

- lack of transparency
- lack of automation
- confusing legal terms
- high agent fees
- high administrative expenses
- conflict of interest between an insurer and an insured
- legal restrictions (national/ international)
- related relationship to local financial markets

The insurance industry, the second largest financial sector, offers great growth potential in developing countries due to the increasing access to the Internet and the financial market. The increasing digitization in highly developed countries, on the other hand, offers enormous potential for new products.

The core of all our efforts is the freely available Asure protocol and our open decentralized autonomous platform "Asure platform”. It enables individuals and insurance companies to design, develop, sell, support, and reinsure a wide variety of insurance products and services.

The ASR(Ⱥ) token is the native ERC-20 / ERC-223 utility token of the Asure protocol and provides access to the Asure platform and services. The demand for ASR tokens is increasing as more and more providers want to offer their services on the platform. Also, they have to stake more ASR tokens as the use of their services increases.

The latest worldwide achievements in technology including Blockchain, Artificial Intelligence (AI), and Machine Learning (ML) make it possible to create transparent, resilient, tamper-proof, robust and smart systems that answer the challenges of scalability, single point of failure, trust, and privacy in a consistent way. The value proposition we offer comes through decentralization and automation via AI and other technologies.

Our team has already successfully implemented various insurance systems at major insurance companies. The know-how that the team brings - including risk management, claims management, product design, technical expertise in software development, will enable us to create a next-generation insurance platform.

Asure Foundation is a non-profit organization. Profits made in insurance are in the hands of the service provider which finance the operation of the Asure platform and thus ensure its continued improvements. We believe that a non-profit organization achieves the greatest acceptance in the broader community. We are working hard to become the largest insurance community in the world.

Be part of this journey, and join our Token Generation Event - we are looking forward to welcoming you aboard!

FUNDAMENTALS

Before we go into depth about our project, it is important to understand the fundamentals of blockchain, artificial intelligence, social security systems, insurance and reinsurance systems.

Blockchain

The disruptive potential of blockchain becomes increasingly apparent. Blockchain technologies enable decentralization of the platform allowing individuals to join and transact directly with the platform. Every node in the system has a copy of the blockchain, thus removing the single point of failure therein. After the invention of the blockchain, the world was given the tools necessary to build real decentralized autonomous organizations (DAO). In such system, multiple authorities control different components and no single authority is fully trusted by all others.[3]

When built with blockchain, insurance products can be represented as smart contracts and be stored in transparent, distributed databases, protected from tampering, deletion or editing. Every transaction, every payment and every job inside the autonomous system will be digitally recorded and signed, which can be validated by any party in the blockchain. With those possibilities many layers of intermediaries like lawyers, maklers, and underwriters become redundant. By eliminating these intermediaries blockchain helps drastically reduce insurance costs for the end customer.

In order to analyze the potential strategic value of the blockchain technology, note the elaborated SWOT analysis:[4]

Table 1: Blockchain SWOT Analysis

	Positive	Negative
Internal	Strengths ● Fast and low-cost money transfers ● No need for intermediaries ● Automation (by means of smart contracts) ● Accessible worldwide ● Transparency ● Platform for data analytics ● No data loss / modification / falsification ● Non-repudiation	Weaknesses ● Scalability ● Low performance ● Energy consumption ● Reduced users' privacy ● The Autonomous code is an attractive target for hackers ● Need to rely on external oracles (Data Providers) ● No intermediary to contact in case of loss of users' credentials ● Volatility of cryptocurrencies ● Still in an early stage (no "winning" blockchain, need of programming skills to read code, blockchain concepts difficult to be mastered) ● Same results achieved with well-mastered technologies

External	Opportunities ● Competitive advantage (if efforts to reduce/hide the complexity behind blockchain are successful, or in case of diffusion of IoT) ● Possibility to address new markets (e.g., supporting car and house sharing, disk storage rental, etc.) ● Availability of a huge amount of heterogeneous data pushed in the blockchain by different actors	Threats ● Could be perceived as unreliable yet ● Low adoption from external actors means lack of information ● Governments could consider blockchain and smart contracts "dangerous" ● Medium- to long-term investment ● Not suitable for all existing processes ● Customers would still consider personal interaction important

With time blockchain-based insurance will guarantee a higher level of trust in comparison to traditional insurance. Capgemini's 2017 World Insurance Report states that both Microinsurance market and Peer-to-Peer Insurance have high capabilities required to implement new business models.[5]

The market of low-income consumers ready for microinsurance is about as huge as it is unnoticed by the classical insurance companies. The biggest challenge for these is the processing cost, it is often way too high for them to be interested in such a market. Fraud, high level of claims and inability to operate microinsurance on a profitable basis are also listed among market challenges. At the same time microinsurance has a substantial impact on the low-income customers. Research has shown, that children in Pakistani families that hold microinsurance policies have a higher school attendance rate and a lower child labor rate.[6]

By utilizing smart contracts based on blockchain, customers will be provided with a platform that manages claims in a transparent, irrefutable and responsive way. In short, we are within reach of the near-complete automation of the insurance process. Smart contracts collaborate and can be used to automate processes in various ways.

Artificial intelligence

How much the world has changed since the turn of the millennium can be seen from the fact that one can hardly imagine how one lived 17 years ago: without Facebook, Amazon, Netflix, Google and smartphones.

With these services, artificial intelligence (AI) has also found its way into our everyday lives. We have long since become accustomed to the highly complex, constantly learning algorithms of phrase searches, additions and context-related suggestions.

The next time you call your insurer, chances are good that a humanoid robot - or artificial intelligence - will be on the other end of the line.

Artificial Intelligence (AI) and its machine learning sub-sector are nothing more than software that has been trained to think and act like a human being. Relatively rudimentary forms of this technology are already capable of performing simple tasks, such as checking insurance cases for indications of fraud. But soon future generations of artificial intelligence will be able to solve even complex problems and - like humans - make decisions.

AI is designed to increase productivity by automating simple tasks and efficiently analyzing data. According to our estimates, technologies such as Blockchain and AI will probably take over the insurance and reinsurance industry by more than 30 percent by 2035.

Social security systems

Social security systems absorb many life risks, prevents extreme hardship and thus creates a social balance. In this way, it ensures social peace in the country.

There are various models of social security and social security financing. Social insurance can cover pension insurance, health insurance, unemployment insurance, care and accident insurance. And the financing can be realized by itself, tax, pay-as-you-go(PAYG) or a mixture of these.

In social insurance, PAYG refers to an unfunded system in which current contributors to the system pay the expenses for the current recipients. In a pure PAYG system, no reserves are accumulated and all contributions are paid out in the same period. The opposite of a PAYG system is a funded system, in which contributions are accumulated and paid out later when eligibility requirements are met.

Research results show that social security plays a central role in economic and political development in developing countries. People who do not have access to social security systems are at risk of falling into poverty if they are struck by a stroke of fate such as illness, crop failure or disability. They may then have to liquidate savings, sell livestock and other means of production and send their children to work instead of the school in order to finance daily expenses. [7]

People who enjoy basic social security are more willing to invest in education and physical capital, which entail additional risks, but also the prospect of income improvements. Empirical studies suggest that the existence of social security systems, especially in the informal sector, strengthens the propensity to invest and thus promotes economic growth precisely where this best contributes to poverty reduction. [8]

Insurance

By definition, insurance is a promise made by an insurance company to the insured to hedge against any significant potential losses, in exchange for a periodic or non-periodic payment the insured makes to the insurer.

Insurance represents a noble industry, it is there to help in case bad things happen. All care for one and one cares for all. It is a way to manage risk, to safeguard you and/or your property against the risk of loss, damage or theft (such as flooding, burglary or an accident). There is more than enough risks in our everyday life, there's always a chance that you'll be involved in a traffic accident, slide and injure your leg, or that your home will burn down. Despite the fact that risks of such occurrences are small, if one of them were to happen, the effects could be catastrophic. Without having an insurance, you'd be solely responsible for anything that happened in that traffic accident and had to take care of your broken leg all on your own.

Without a functioning and innovative insurance industry, people, especially in poor communities, face extraordinary material deprivation simply because you'd have to set aside considerable funds in order to get protected against every possible bad thing that might happen. Apart from that insurance provides people with a great tool for helping people to assess, manage and reduce their risks.

Insurance Pools

Insurance pooling is a simple concept in which groups of insurers join together to increase the total number of policyholders, to spread the risks of the few across the entire group and

thus reduce the risk to a single unit. This practice is primarily used for securing the insurer's stability, increase depth and width of coverage and provide a larger array of services.

Premiums Calculation

It pays to understand how insurance rates will be calculated so that you can choose the fairest and the most efficient insurer on the market. The calculation of the insurance premium lies at the heart of any insurance.

Insurance premiums are calculated according to the risk posed by the individual. Insurers assign that individual certain level of risk.

The insurance premium (Pa) represents the sum of money that the insured will pay to the insurer, in the exchange of the insurer taking the risks from the insured. Premiums can be calculated in the following way:

$$P_a = (Amount\ of\ Loss \times Chance\ of\ Loss) + expenses + profit + safety\ margin$$

There are two mechanisms of premiums collection: mutuality and solidarity.

- Mutuality is the principle of private, commercial insurance. Individuals enter the pool for sharing losses and pay according to the best estimate in respect of their individual risk.
- Solidarity is the principle of social insurance, the total of premiums is spread equally over individuals concerned with payment related to income or some other scheme.

Most insurance contracts incur especially high losses in the first year because of large first year expenses, such as:

- Agents' commission
- Developing new contracts and policies
- Administrative expenses

Reinsurance

The fundamental principle of insurance is to spread risk from an individual to a pooled group of risks. As people need insurance to take care of their risks, insurers need reinsurers in order to do the same but on a higher level. Reinsurance allows an efficient reduction of the insurer's required capital.

Reinsurance companies, as well as insurers, take serious risks, but on both microeconomic and macroeconomic levels, they are highly relevant. Insurance companies transfer some of their risks to reinsurance companies thus leading to increasing diversification of risks within the economy itself.

Catastrophe bonds are risky securities that transfer a certain number of risks from a sponsor to investors. Catastrophe bonds arose from the need of reinsurance companies to mitigate some of the risks to which they would be exposed in the event of a major catastrophe, which would lead to losses that they could not cover with the premiums received through premiums and investment income.

MARKET POTENTIAL

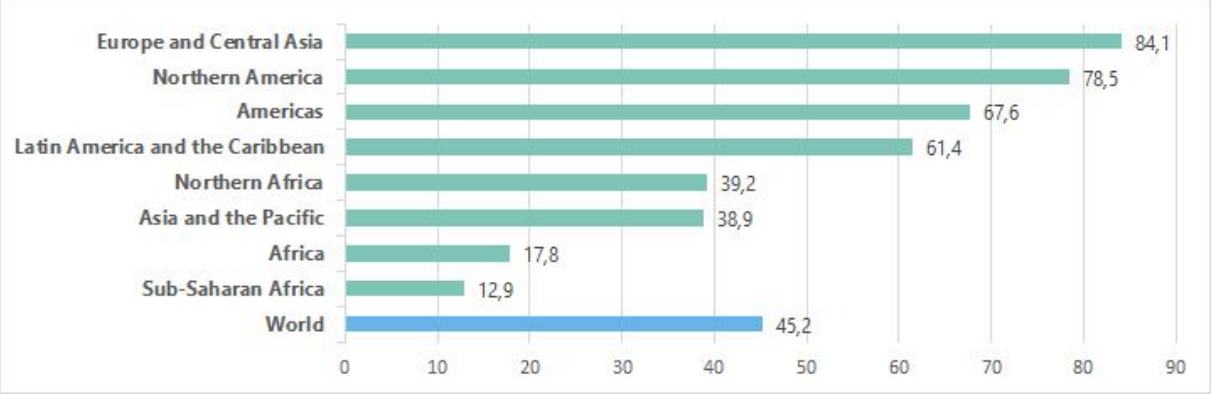
The insurance industry is the second largest financial market in the world right after the banking industry.

Social security systems

Social security systems around the world vary widely. Only 45.2% of the total world population are covered by at least one social protection benefit. That means there is a total of 4.1 billion out of 7.6 billion people which are not protected by at least one social security. Until the year 2056 the world population is estimated to grow up to 10 billion people, which shows significant requirement for global, working and tamper-proof pay-as-you-go social security systems. [9]

A funds-backed social security system can not come up for such a high increase of the total population.

Whereas Europe and Central Asia have a covering rate of 84.1%, the developing regions only have a coverage of 12.9% to 39.2%. [1]



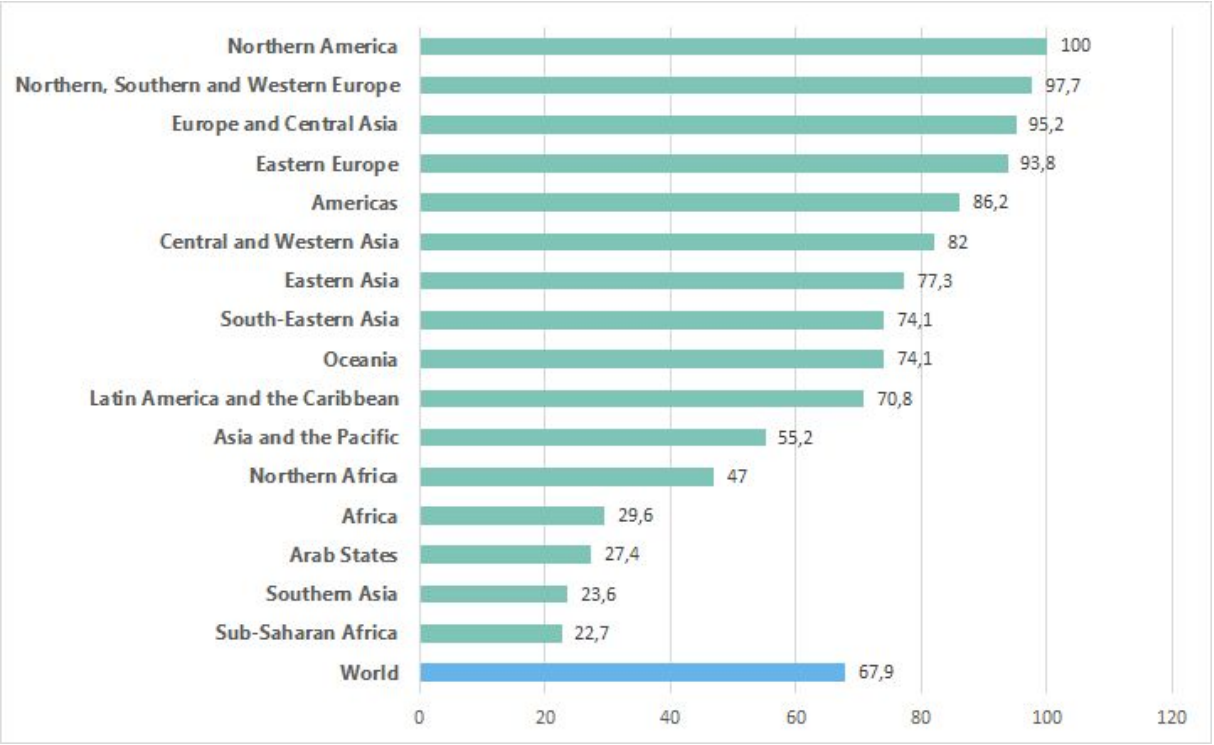
Percentage of the total population covered by at least one social protection benefit

Pension

Although pension for older men and women is the most widespread form of social security in the world with a global level of 68%, there are a lot of low-income countries where less than 20 percent of older persons over statutory retirement age receive a pension. Comparing the global coverage rate of 68% with regional coverage rates of 22.7% in Sub-Saharan Africa, 23.6% in South Asia, 27.4% in the Arab States and 29.6% in Africa, we can see the huge potential for building up pension coverage in those areas.

Comparing this values to the population growth rates which are 3.08% in Middle Africa, 2.69% in Sub-Saharan Africa, 2.52% in Africa, 1.20% in South Asia and 1.09% worldwide as estimated by worldpopulationreview.com there are perfect conditions to integrate a pay-as-you-go pension system from this point-of-view. [10]

The higher the population growth rate, the better a pay-as-you-go pension system can work because more younger people will come up for less elder people. To keep it working in the long-run it is necessary to reduce the costs of the system itself and prevent corruption at the expenses of the social security system which can be effectively done by the expertise of Asure in implementing pension systems on Distributed Ledger Technology.

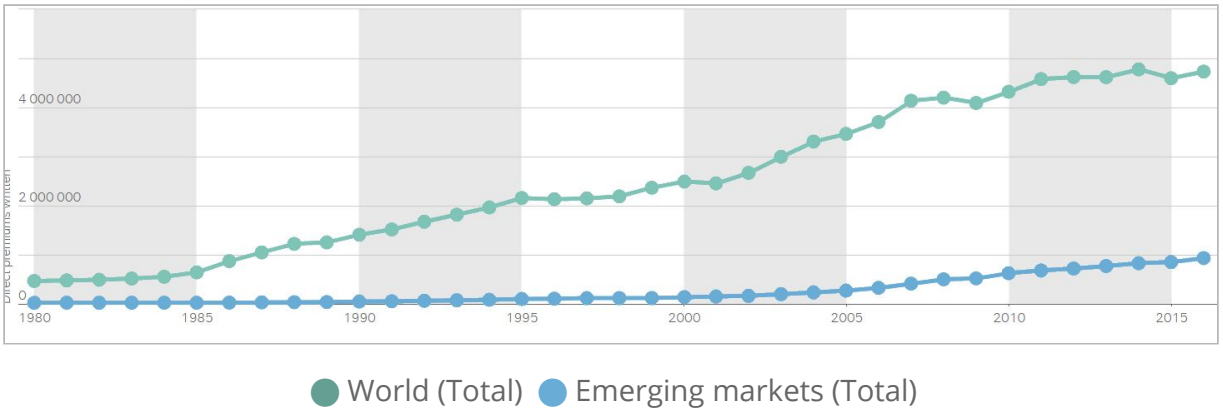


Percentage of persons above statutory pensionable age receiving a pension

By providing social security systems to countries and their citizens, we also enable these citizens to participate on the Asure platform to create a working insurance economy which will benefit the countries social systems, it's economy and the Asure platform itself.

Insurance

For 2016 the global market capitalization of the insurance industry totals approximately 4.7 trillion USD with a global annual growth rate of 3.7% and a growth rate of 13.5% in the emerging markets. [11]



Written premiums of the global and emerging insurance market in billion USD since 1980.

More than 50% of premiums paid around the world belong to the six big markets USA, Japan, UK, China, France and Germany which shows the great growth potential of insurance in completely new markets. According to studies the Chinese market will grow from about

348 billion USD in 2015 to the second largest market with an estimated market capitalization of about 1,090 billion USD in 2025.

Property-casualty insurance in the emerging markets is closely linked to the future development of these countries, which can be expected with good prospects like the overall market outlook shows[3].

	2005	
1	USA	846
2	Japan	323
3	UK	285
4	France	179
5	Germany	158
6	Italy	110
7	South Korea	68
8	Canada	63
9	Spain	49
10	China	48
11	Netherlands	48
12	Australia	41
13	Thaiwan	39
14	Belgium	34
15	Switzerland	34

	2015	
1	USA	1.152
2	Japan	413
3	China	348
4	UK	299
5	France	208
6	Germany	194
7	South Korea	151
8	Italy	147
9	Canada	102
10	Thaiwan	85
11	Australia	79
12	Netherlands	75
13	India	67
14	Brazil	59
15	Spain	57

	2025*	
1	USA	1.579
2	China	1.090
3	Japan	526
4	UK	411
5	France	284
6	Germany	224
7	Italy	217
8	South Korea	215
9	Brazil	173
10	India	149
11	Canada	128
12	Thaiwan	120
13	Australia	112
14	Netherlands	98
15	Spain	81

*historical data influenced by exchange-rate effects

Local markets recent capitalization in 2005, 2015 and appreciated capitalization in 2025.

In 2017 natural disasters like hurricanes, earthquakes and wildfires caused total economic losses of 306 billion USD, which are almost double 2016's losses of 188 billion USD, resulting in higher needs for coverage in our society. That could be satisfied by a global decentralized autonomous insurance organization backed up by AI[12].

The same goes for the actual political situation resulting in higher amounts of damage caused by political disputes like war, protests or terrorism which indicates a global need for coverage of those cases too. According to the Institute For Economics & Peace, the economic impact of violence was 14.3 trillion USD or about 13% of the global economy in 2016.[13]

Our society is in need of better coverage that costs less and is independent of where you are in the world. By creating a global working insurance mechanism based on modern technologies we are in a perfect position to reduce administrative expenses and serve a fair coverage to everybody.

Actual raising interest rates in the advanced[14] and in most emerging markets[15] indicate a positive trend for life and annuity insurance as proven in the past.[16]

The main difficulties of the present insurance industry from a customers' point of view are the centralized organizations' juggernaut which people tend to mistrust and the high amount of fraudulent actions which altogether lead to a lack of technological innovations, a lack of new business products and especially very high administrative expenses.

Considering the enormous potential of our society; at no other point in our history people, as a collective were more powerful than today, we can finally become independent from old rigid structures and build a strong self-assured collective, without any boundaries to money-wasting corporations.

InsurTechs are already trying to solve these problems by developing more transparent, innovative models, but the majority of these undertakings aren't really disruptive as they're still backed up by classical insurance companies not taking the first step to independence.

By creating Asure we take all the aforementioned trends into consideration.

Reinsurance

During 2018 to 2022 the global reinsurance market is expected to grow at a CAGR of over 4%. [17]

As estimated by Aon Benfield the global reinsurance capital stood at 600 billion USD at September 20, 2017, [18] which shows the huge size of this market compared to the world market in 2009 with a volume of around $157 billion in large premiums written.

Munich Re made a profit of 733 million EUR (~852 million USD) in the last quarter and a profit of 1,290 million EUR (~1,500 million USD) in the first half-year of 2017 which shows the enormous profit potential of these companies. [19]

Overall, an increasing concentration can be observed. The ten largest reinsurers already had a market share of over 40% in the years 2000-2006.

Reinsurance companies are now among the largest insurance companies in the world, which show some great use-cases for decentralization. The decentralized organization of the Reinsurance market makes it easier to bring together products, reinsurers and investors to achieve a much higher awareness of the insurance even among each individual participant, as they can benefit directly from it.

Through dividing the risk of reinsurance by a lot of different parties, the individual risk for each reinsurer can be reduced to a significant extent. It will cause more people being involved in the role as reinsurer which can lead to much lower premiums and a stronger reinsurance in general.[20]

MARKET PARTICIPANTS

Our market participants analysis at the conventional insurance market and a number of InsurTechs shows - there is currently no other company or product that solves major problems that insurance industry faces today or will face in the nearest future.

The aforementioned challenges include:

- lack of transparency
- conflict of interest between an insurer and an insured
- confusing legal terms[21]
- high agent fees
- high administrative expenses
- automation
- legal restrictions (national/ international)
- related relationship to local financial markets

We identified a high margin of inefficiency in the industry.

Below we list a comparison of the Asure platform to other insurance platforms and InsurTechs.

Table 2: Market participant comparison

Topics / Industry	Traditional insurance and dependent InsurTechs	Blockchain InsurTechs	Asure platform
Centralization vs. Decentralization	Rigid and slow because of a centralized nature. No or only partially usage of the blockchain to improve certain products	The Blockchain is a core and in some cases an essential part of the platform, network, and marketplace	The Blockchain is placed at the core of the Asure platform
Transparency	Lack of transparency concerning financial information, terms, and coverage	Transparency is guaranteed by blockchain technology itself	Transparency is guaranteed by blockchain technology itself and the open-source code that we develop
Economy	Highly coupled with local financial markets	Most lack an economic system completely, thus making them unreliable in a long-term	Asure's independent economic system with provides a stable and healthy ecosystem
Automation	Most processes are of manual and outdated nature, whereas some are semi-automated	Mostly limited to a Chatbot and a semi-automation system. But the most of our competitors outsource technical hurdles to traditional insurance organizations becoming dependent on them	Full automation is our main target. With AI and ML being one of our major skills, these will be applied to address any kind of manual labor that can be automated
Payroll	Agents and intermediaries	Insurance companies and agents are the essential part of an insurance	No insurance companies, agents, intermediaries, agents or brokers required
Scalability	New markets can be hard to break into because of restrictions on foreign ownership and licenses	Limited scalability due to infrastructure location and dependence on third-party companies and actuary/underwriting staff	Global market coverage looks easily achievable thanks to the digital nature of the insurance platform
Price	High price for services because of agent fees	As most InsurTechs indirectly work for insurance companies, the price reduction is very limited	Low cost because of the lack of intermediaries and massive automation
Rules	Insurers set all the rules without asking the insured ones	Rules are defined by InsurTechs and in some cases are written in smart contracts	Rules are encoded in smart contracts, important decisions are made with the help of the community proposals (AIPs)
Damage assessment	Damage evaluation is being done by insurers, which automatically makes them biased against clients	Many blockchain based InsurTechs ignore the complexity of damage assessments	No conflict of interest: damage assessment are lead by smart contract, AI, and community experts votings
Claims and payment	Participants confirm claims and payment requests	Payment requests are confirmed by the smart contract	Payment requests are confirmed by the smart contract
Reinsurance Model	The Insurer makes a decision about reinsurance by himself	Reinsurance of reserves are provided by third-party insurance companies	Reinsurance is provided within the own economic system, where all participants can

	without asking clients' opinion		purchase product risks and get rewards accordingly
Premiums	After the expiration of a product coverage, the whole amount of paid premiums stays with the insurer	Participants redeem their shares and percentage by the end of the covered period if the reserves were not used	Payback by the coverage expiration in case there were no claims payments requested
Communications	Tons of paperwork for staff and customers	Less paperwork due to partial automation	Chatbot assistance in Telegram, Facebook, Slack, and Skype. Mail and phone voice support automation services with AI

This analysis shows business potential for blockchain based insurance products and in particular for the Asure platform.

Traditional insurance and dependent InsurTechs

Big players in the insurance industry are attempting to use the latest technologies as part of their innovations program so that they can get better than their competitors. However, most only try to improve existing profitable products and cannot afford enough time, resources and especially the will to change the current status of the insurance market. As those corporations are slow to adapt, most innovative efforts will be left stunted. Such companies only think in terms of profits and losses, they fear disruptive innovations instead of embracing them.

InsurTechs are typically small technology-driven companies able to innovate much faster than traditional insurance companies offering new approaches to industry challenges.

Existing InsurTechs can be categorized in the following manner:[22]

Table 3: Overview of InsurTech Categories

Description	What They Offer
Comparison Portals	Enable online comparisons between various (insurance) product and provider types
Digital Brokers	Brokerage of insurance policies through web-based portals or mobile apps
Insurance Cross Sellers	Offer insurance as complements to products (typically at the point of sale or in an own app)
Peer-to-Peer Insurance	Bring together private parties for mutual insurance coverage
On-Demand Insurance	Offer coverage for selected periods of time
Digital Insurers	Offer fully digital insurance solutions that are only accessible via online channels
Big Data Analytics & Insurance Software	Provide software solutions
Internet of Things	Enable data collection via smart devices
Blockchain & smart contracts	Create solutions for a tamper-proof distributed database system for transactions

The closest competitors are the ones operating as a Peer-to-Peer Insurance, On-Demand Insurance or Digital Insurers.

Traditional insurance:
AXA, Allianz, American International Group (AIG), Ping An of China (PNGAY), MetLife (MET)

Traditional reinsurance:
MunchRe, SwissRe, Hannover Rueckversicherung AG, Berkshire Hathaway Inc., Lloyd's

InsurTechs:
Picsure, Slice, Trov, Friendsurance, nest, wefox, GetSafe, Yolo.

Blockchain InsurTechs

There are some InsurTechs that aim to offer networks or marketplaces, some are even independent from traditional insurance companies. For most of them though, market entry is only possible through the traditional insurers. We consider this a weakness because it limits their scalability. They always have to look back at their insurance partners.

Some try to develop a DAO but without using AI and Big Data, picking a single product for a narrow group of clients. We deeply believe that organizations that ignore the trend of AI and new technologies will soon fall behind more flexible competitors.

The industry is still very young and offers so much potential that we are happy about every competitor that makes this market even more open. We join alliances and working groups so that we can learn from each other and develop common models and concepts.

Blockchain InsurTechs:
AiGang, BITRUST, Black Insurance, Blocksure, Etherisc, InsurePal, Insureum, iXledger, Rainvow, Teambrella, Vernam

Blockchain GovTechs

The projects and startups in this area are in the process of developing ideas about what is possible for the public good. There's nothing to show for social security systems.

ASURE PLATFORM

Our analyses of the market and of the market participants have shown that the existing challenges in such a large and important market are not being properly met. With our experience and expertise we want to create a solution that sets new standards and radically disrupts the industry.

The Asure platform enables true decentralized autonomous organizations (DAO) and companies (DAC) in the insurance sector. It provides the necessary protocol that enables standardized and automated business processes, services and products in the insurance industry and will reduce administrative costs to a minimum. The Asure protocol uses the strength of blockchain technology and offers the perfect foundation to enable highly integrated business processes even across company boundaries and industries.

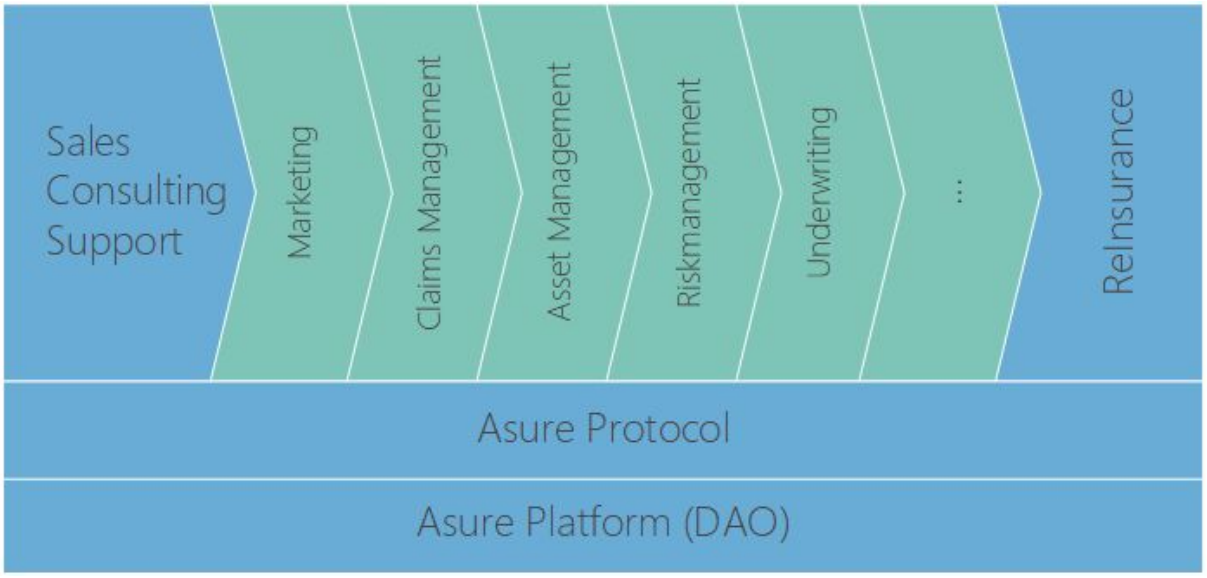
We want to rethink the basic idea of a collective and with the help of the latest technologies and sociological thoughts like radicalmarkets we can even improve it and provide the insurance industry with the help of the Asure platform where social justice can be ensured by quadratic voting[23]. We are considering using radicalmarkets concepts in the marketing and advertising of the products and using quadratic voting for the improvement of the Asure protocol itself.

The Asure platform encourages providers to offer services and products. These could be used by others to create new services and products. The collaboration of many small service providers allows specialization and will gradually replace the large insurance companies within the ecosystem.

The Asure platform essentially consists of three core areas, which are social insurance systems, insurance and reinsurance. Each of them has its own unique requirements and needs which will be fulfilled by the Asure platform and protocol.

Business services

A successful insurance product includes jobs like risk measurement, risk management, underwriting, reinsurance, claims management, marketing, sales and, support. These jobs require very special skills and have their own needs which will be supported by the Asure platform. We want to provide a free and easy to use platform where insurance experts can provide and consume exactly the services they need and a way to collaborate and offer these services to their customers.



Business services

To support these features, the Asure platform features a modular design. The interaction of different jobs, services and products will be specified through the Asure protocol. Future development of the Asure protocol will happen through a standards process which we call Asure Improvements Proposals (AIPs).

Asure applications

The Asure Foundation will develop a service explorer - a website similar to etherscan.io which can be used to inspect deployed services and products and corresponding transactions within the Asure platform.

Also, the Foundation will enable the creation of a variety of surrounding applications like a comparison platform (mobile app / web app) that supports the consumer in finding a suitable insurance policy.

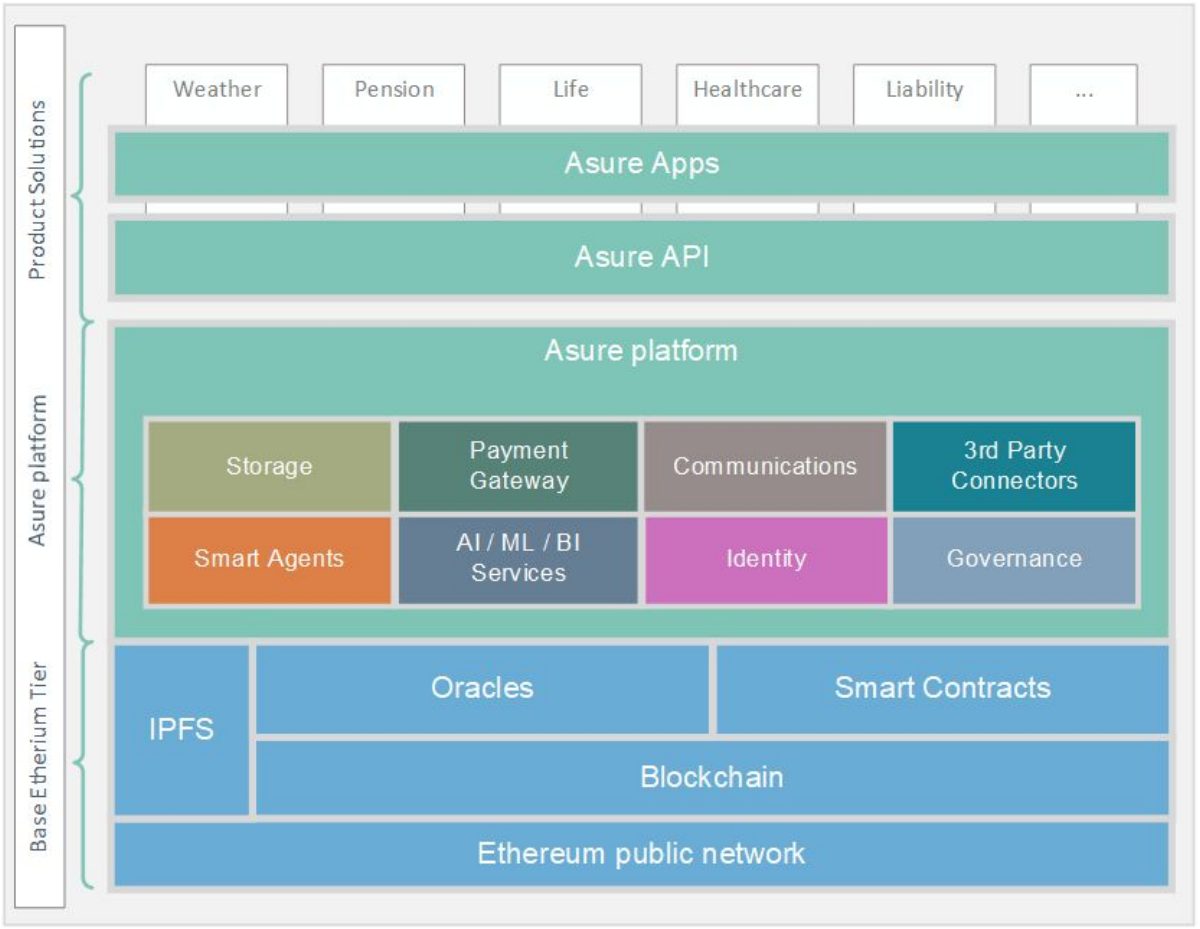
To implement these applications, the Asure SDK will be used. The development of services and products will be supported by our Asure platform services, API and SDK which will be introduced in the next chapter.

Architecture

At Asure, we believe in the Web 3.0[26] and its advantages. To fulfill our promises of the Asure platform we are building the platform on top of Web 3.0 technologies. Where it is still impossible, we are researching appropriate solutions. This process takes time, that is why for non-existing parts, we may fallback to Web 2.0 solutions to deliver value in a timely manner.

Public blockchains are a perfect fit for Asure as Asure aims for as much transparency and openness as possible about our processing of business transactions and processes. Everybody will be able to track and verify business operations, decisions that were made and can participate. On the other hand, the Asure platform has to make sure that personal information belonging to our users stays private and can't be linked to any publicly available data on the blockchain. All sensitive customer related data will not be stored within the public available blockchain but in the Asure platform.

Asure platform provides common services and the necessary infrastructure to support smart contracts within the public Ethereum blockchain and surrounding ecosystem. We are leveraging existing Web 3.0 solutions for payment, storage, computing, identity, messaging, access control, IOT and AI where possible. Where not possible yet we are providing the necessary Web 2.0 infrastructure for the time being. All core services are made available through a unified Asure API. The Asure API is part of our SDK and will greatly simplify the development of insurance products and applications.



Asure platform architecture

In the following we will outline core services of the Asure platform:

Storage

In order to store uploaded data, Asure will support many decentralized storage systems, such as IPFS, Swarm, or Filecoin. Such systems enable developers to efficiently create secure decentralized file storage for a user data upload.

Computing

Not every computational task can or has to run as a smart contract. We will leverage one of the general purpose computation services within the Web 3.0 such as Golem or iExec.

Identity

Decentralized identity management, verifiable claims and attests are at the core of Asure Platform. Verifiable claims are used in every part of the platform whether it is to fulfill KYC requirements or insurance or reward claims. A complete ecosystem of verifiable claims will

be publicly available. Asure platform is built around the latest standards developed by the W3C Credentials Community Group and Decentralized Identity Foundation (DIF).

Messaging

In some cases, communication between the user and the system is needed. For this scenario, Asure is going to integrate an AI-based bot functionality realized over different communication-channels like Skype, Phone, WhatsApp, Telegram and a platform integrated instant messenger.

AI/ML & BI Services

The growth of internet connected devices and sensors, which are projected to reach 50 billion by 2020, will have a significant impact on the availability of real-time information – a trend often referred to as 'big data'. Insurers who can exploit this information for better pricing, underwriting and loss control will have a distinct competitive advantage over their peers[24]. One of the ways to reduce insurance costs is automation of claims processing. That's where our AI experience is going to help us to develop a robust, but flexible mechanism that allows achieving the best accuracy by adjusting, through training and added data.

Oracles

The concept of "blockchain oracles" was introduced to solve a built-in limitation of blockchain protocols: the challenge of interacting with an external context. Simply put, an oracle can be described as a translator for information provided by an outside part of the platform. We will use different types of oracles to provide external data for the blockchain smart contracts.

Smart Agents

Smart Agents are autonomous jobs which will be integrated to trigger oracles or product smart contracts in case a related event occurs.

3rd Party Connectors

To allow for easy integration into existing software in the insurance ecosystem, we expose adapters to industry standards like BiPRO and ACORD where useful. BiPRO and ACORD standardise many common business processes like buying an insurance policy.

Governance

Asure underlies processes such as reinsurance, compensation, identity management, application for products, claims submission and rewards that some my need to be regulated via Asure platform governance functions.

Privacy by design and data privacy

Privacy by design is an approach to projects that promotes privacy and data protection compliance from the start. Data protection is a key consideration in the early stages of any project, and then throughout its lifecycle. To assure the completeness of our security policies, we follow the ISO 27001 architecture as a baseline, and then supplement it with portions of other recognized security architectures.

Asure treats the privacy of our user's data as a top priority. Global privacy regulations differ a lot, so our approach is that protecting to the most stringent standards is best. Asure

established a privacy policy and makes it publicly available. We regularly review the privacy policies of different countries and make sure our controls comply with the most restrictive standards for any incoming and outcoming information and for the data we store. By complying with the EU-US Privacy Shield framework we show our commitment to all the platform participants to utilize the highest security standards.

Public Ethereum Blockchain

Asure platform will be based on top of the public ethereum blockchain. Ethereum has one of the largest ecosystems and support from the community. We are aware that as of today (Q2 2018) Ethereum has scalability and privacy issues which are being actively worked on. We are actively tracking the progress in these areas and believe that these issues will be solved within the next few years by the community. To protect personal data of our customers even further we are evaluating recent achievements in zero-knowledge proof methods like zk-snarks within the Ethereum platform.

Smart Contracts

Smart contracts are written in Solidity, enabling Asure to support any blockchain that supports Ethereum Virtual Machine (EVM). These contracts provide the logic for the platform functionality and implement the mechanisms required by the platform.

To ease the development of smart contracts we use Truffle framework. Truffle framework provides a development environment to efficiently develop, test and deploy smart contracts.

Asure platform places the utmost emphasis on the security of the smart contracts and the gathered funds. Therefore, a number of innovations are being implemented in order to ensure the highest security of the operating code and funds, such as formal verification of the contract code, test suites, and migration paths. We are also looking into Viper - an experimental programming language next to Solidity to write safer and easier to verify smart contracts.

Key benefits

Overview of Asures features and benefits in a short list:

Table 5: Asure's features and benefits

Customer centric	★ Clear communications ★ Predictive analytics to anticipate and understand customers' needs ★ Relationships based on changing life events
Decentralization and Resiliency	★ Working on Blockchain ★ Resiliency through the use of smart contracts
Real-time	★ Real-time transactions
Transparency	★ Transparency of information (e.g. assets, transaction, actions) ★ Audit trail and full transaction history ★ The platform code will be open-sourced
Automation	★ Big Data and Predictive Analytics for product and risk management ★ Artificial Intelligence and Machine Learning for automation ★ Automated validation, claims, communications ★ Autonomous agents, smart contracts and (later) increased levels of artificial intelligence and AI algorithms will provide self-sustainability in operations and value creation at the platform

Availability	★ 24/7 availability
Economy	★ Has its own economic system
Independency	★ Not tied to any traditional insurance organization
Variety	★ Various products from a single source
Utility Token	★ Utility Token for own economic system
Security and confidentiality	★ Security and confidentiality by design ★ Data protection guidelines are observed
Efficiency	★ Through decentralization and automation ★ Flexible, cost-effective infrastructure for assets and operations management ★ Services-oriented architecture business model
Globalisation	★ Most of the products will be designed for the global market ★ In cooperation with governments, products will function on a local market level ★ Internationalization through Artificial Intelligence
Price	★ Administration costs can be reduced up to 98% ★ Premiums will cost up to 40% less than in classic policies (depending on insurance product)

The analysis shows business potential for blockchain based insurance platforms. In particular, it makes clear in what way Asure platform is different in comparison with competitors.

Asure Improvement Proposals (AIP's)

We will establish a continuous, community-driven platform improvement process similar to the EIP process for the Ethereum platform.

The Asure Improvement Proposal repository

Github: github.com/AsureFoundation/AIPs

Asure Blockchain

We plan to set up on the Ethereum platform, but are open to support or change others if it meets our needs more. Should we notice during our investigation that the existing blockchain platforms are not sufficient for us and it makes sense to develop our own blockchain, we promise here that we will develop a blockchain according to our requirements and do a token-swap.

SOCIAL SECURITY SYSTEMS

We will enable governments around the world to establish pay-as-you-go social security systems and assist in migrating existing ones to the Asure platform so they can take advantage of the blockchain technology. With the focus on pension systems we are aiming to reduce old-age poverty worldwide.

Blockchain technology has the potential to revolutionize social security. Social security systems can be implemented more user friendly, transparently, securely and cost-effectively. The administrative costs of social security are in the billions. A large part of these costs can be saved by a high degree of automation with the help of the blockchain.

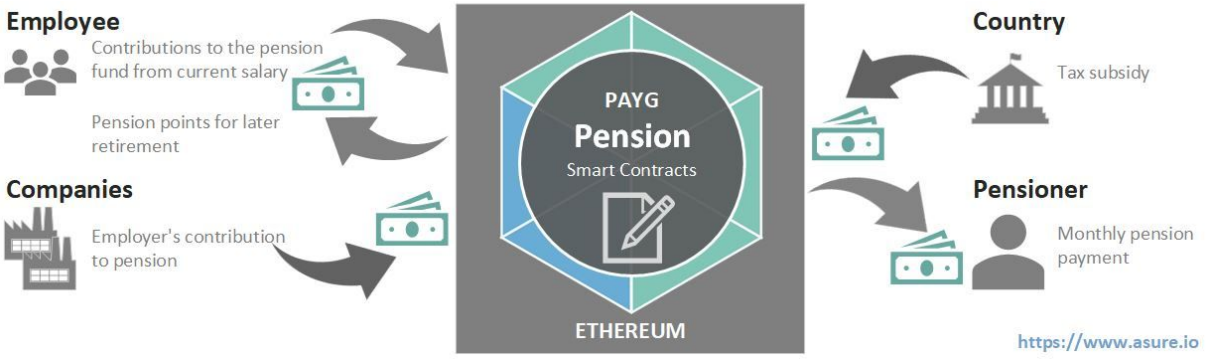
Pay-as-you-go (PAYG)

Pay-as-you-go systems are successfully used to fund social security systems. Premiums will be used to pay benefits directly and no or a small reserve is build. Countries, in difference to private insurance companies, can guarantee continuous premiums by making social security systems mandatory and therefore don't need coverage capital.

Since no capital has to be saved with pay-as-you-go systems, the first generation is also directly entitled to payouts without ever having paid premiums (unfunded liability). Therefore, pensions can be paid immediately after introduction.

Proof of Concept

In order to demonstrate the potential of blockchain-based social insurance, we're creating a Proof of Concept (PoC) based on the model of the german statutory pension system, which is financed by a pay-as-you-go system.



German statutory pension system (PAYG)

The PoC sheds light on various technical, organisational and institutional issues and provides proposals for their solutions. Some of these issues include:

- How can new or existing social security systems be gradually migrated?
- How can blockchain-based social systems be reformed?
- How is it determined who can carry out reforms?
- To what extent are social systems implemented on the blockchain?
- For example, are only the pension points managed with the help of the blockchain or are contributions also paid in a cryptocurrency?

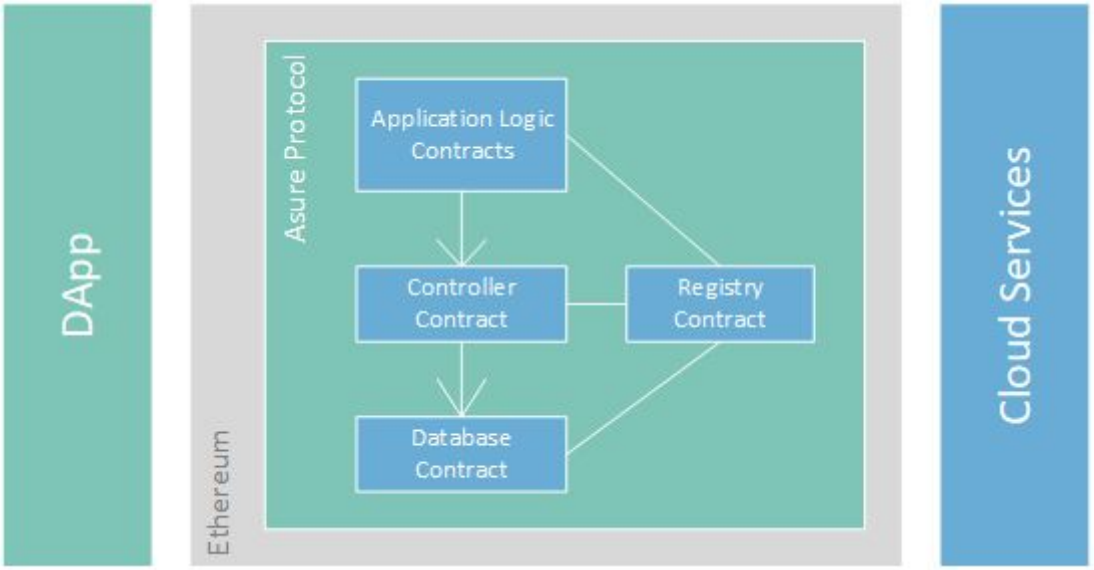
- If so, what currency? Is a stable coin used? For example, would euro states accept a stablecoin that couples to a FIAT currency other than the euro?
- Which oracles are needed and who provides them?
- How are identities and claims managed?
- Which data should be stored in the blockchain and which not?
- What must be taken into account with regard to data protection?
- How does a blockchain based solution scale? As of 2018, Ethereum can process 15 transactions per second. German pension insurance, for example, has 53.8 million insured persons and 20.9 million pensioners which would require many more transactions per second.

Features

Our PoC consists of the three components Smart Contract System, a centralized program which drives the simulation of insured persons, pensioners and payments, and a DApp which acts as a pension system portal.

Smart Contract System

The Smart Contract System lies at the heart of our PoC. It features a set of Smart Contracts written in the Solidity programming language and will be deployed to one of Ethereum's public testnets. We use the "5 Types Model" pattern to ensure the reformability of social insurance and the associated Smart Contract System [25]. The Smart Contract System itself will be responsible for managing the pension points, accepting payments from insured persons and paying out money to pensioners. It also provides oracles which provides the necessary data to calculate the pension of each pensioner.



Asure PoC pension system architecture

Simulation backend

To increase the usability of our PoC, most of the interactions will be executed by a separate program. Over time, these features will also become available in the DApp to allow a more realistic, but also more time consuming interaction with the pension system.

The simulation is implemented as a Node.js program which is run on a central server. It uses the web3.js framework to communicate with the Smart Contract System. It includes commands to

- add a new insured person to the pension system
- create a work contract between an insured person and a company
- let a company pay part of the loan into the pension system on behalf of an insured employee
- send insured person to pension
- getting pensions out of the pension system on behalf of a pensioner
- removing dead pensioners out of the pension system
- control oracles and their data

DApp

The DApp is a Progressive Web App (PWA) and is hosted on IPFS. It will show detailed statistics about the past, current, and future state of the pension system by querying the Smart Contract System. It includes

- statistics about the global state of the pension system
    - monthly amount of money paid in by insured persons and a corresponding payment history
    - monthly amount of money paid out to pensioners and a corresponding payment history
- statistics about the individual state of a insured person / pensioner
    - forecasted pension
    - total and monthly amount of pension points and a corresponding history
- insured persons / pensioners / payments are managed automatically by the PoC

Our proof of concept will be available on GitHub and on the public ethereum testnet.

GitHub: https://github.com/AsureFoundation/poc

ASR TOKEN

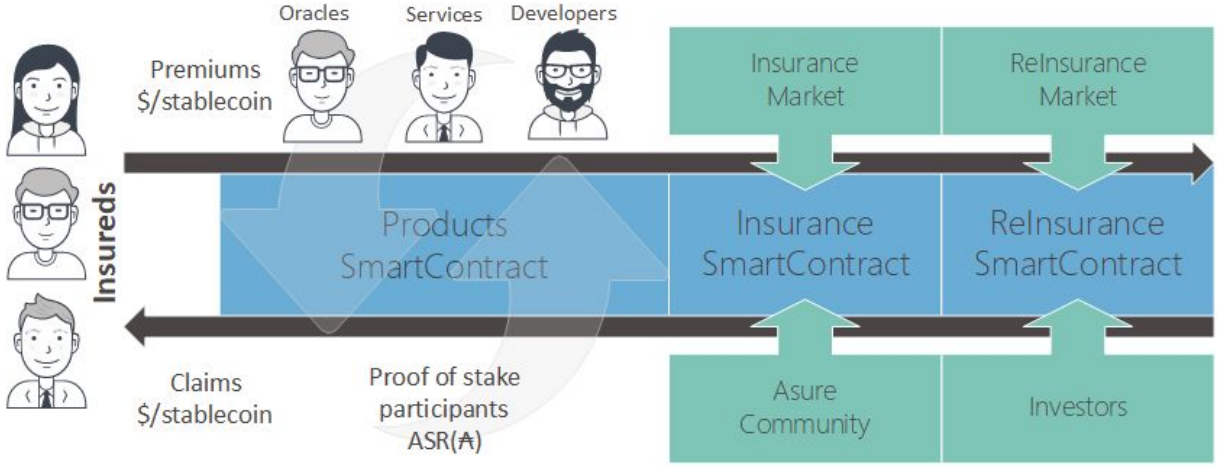
The ASR(Ⱥ) token is the native utility token of the Asure protocol and provides access to the Asure platform and services. It is implemented as an Ethereum smart contract and supports the ERC-20 / ERC-223 token standards.

The ASR(Ⱥ) token serves as an incentive for service providers within the Asure platform to work correctly and as advertised wwin their SLA's. Service providers must deposit ASR(Ⱥ) tokens which are retained in the event of non-compliance with the corresponding SLA. This is also commonly known as proof-of-stake algorithms. A service within the Asure protocol could be e.g. oracles, products, reinsurance and sales activity.

Demand for ASR tokens will be created by the two following mechanisms:

1. With the growth of the Asure platform, more service provider will need to stake ASR tokens.
2. The more service provider earn with their services, the more ASR tokens must be staked.

The ASR(Ⱥ) token will be listed on crypto exchanges for public trading so that service providers of the Asure platform can buy and sell ASR tokens.



ASR TGE

The ASR TGE will happen in two rounds. The first round will take place in Fall 2018. The second round will happen later in 2019. Tokens will be ERC20 / ERC223 compatible and limited in supply by 100.000.000. In total, we will sell 25% of all ASR tokens through the TGE.

First round: 5% of all ASR(Ⱥ) tokens will be sold.

Second Round: 20% of all ASR(Ⱥ) tokens will be sold.

Table 6: Token Issue summary

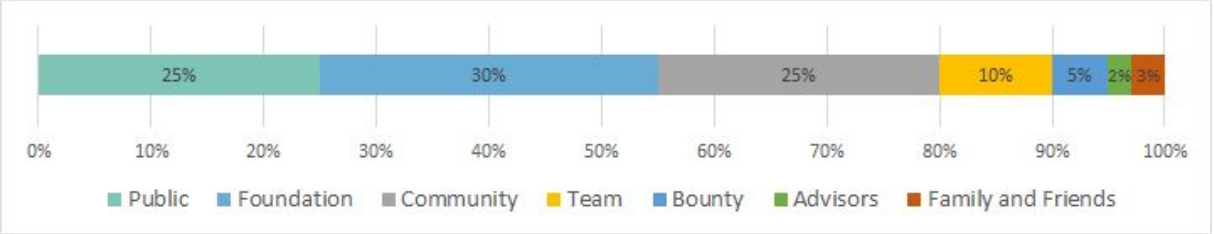
Token name	Asure Token
Ticker	ASR
Symbol	Ⱥ
Token issuer	Asure Foundation
Token type	Ethereum ERC20 / ERC223

Total token supply	100.000.000 ASR
Hardcap	$ 35.000.000
Timeline	Registration for individuals opens 1st September 2018 Round 1: **1,00 ASR(Ⱥ) = $ 1,00** Round 2: **1,00 ASR(Ⱥ) = $ 1,50** Start: Fall 2018
Trading	Trading on exchanges commences End 2018

The ASR(Ⱥ) tokens are non-refundable pre-functional utility tokens and do not in any way represent any shareholding, participation, right, title or interest in Asure or any other company, enterprise or undertaking; nor will ASR(Ⱥ) tokens entitle token holders to any promise of fees, revenue, profits or investment returns, and are not intended to constitute securities in any relevant jurisdiction.

Token distribution

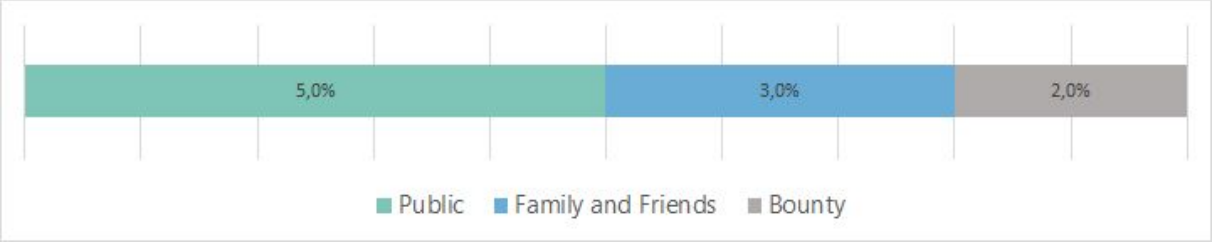
It is very important that the community understands how the Asure's funds are going to be invested in the future in order to contribute to the idea of creating a world with an open decentralized autonomous insurance system. See below how the investments will be allocated.



Total distribution

Round 1:

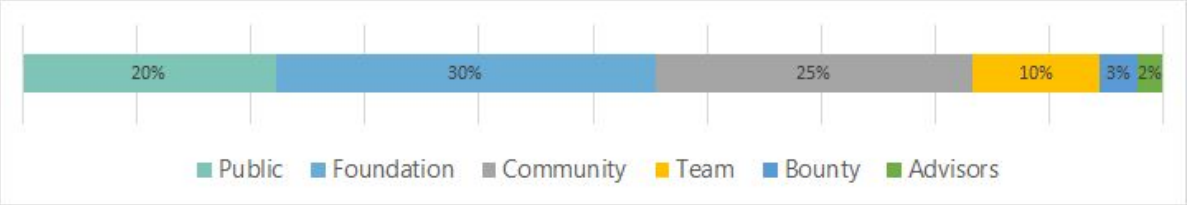
The first round will distribute 10% of all ASR(Ⱥ) token.



5%	Public	Contributions will be used to develop the platform, and to build bigger community.
3%	Family and Friends	Family and Friends receive their tokens as part of their compensation package.
2%	Bounty	Asure provides compensation for a number of tasks spread across marketing, bug reporting or even improving aspects of the Asure platform.

Round 2:

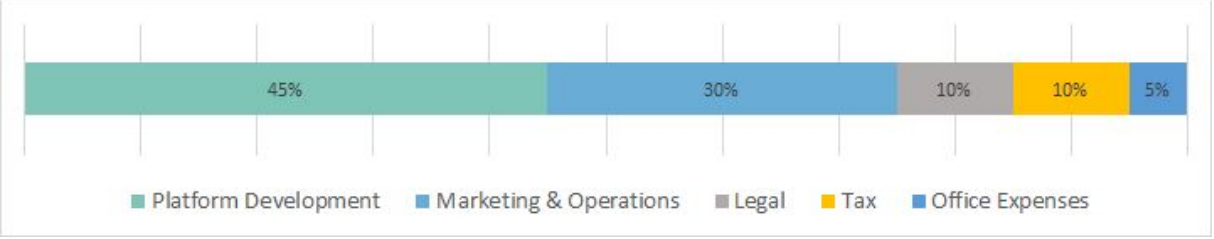
The second round will distribute 90% of all ASR(Ⱥ) token.



20%	Public	Contributions will be used to develop the platform, and to fund security, legal and operational needs.
30%	Foundation	Comprises foundation development and education initiatives, incentives to developers and to research new insurance AIPs.
25%	Community	Comprises education and community building initiatives, incentives to developers and to research new insurance AIPs.
10%	Team	These are placed to acknowledge the time, effort and resources contributed to the Asure platform. The Asure team receive their tokens as part of their compensation package, and team tokens will be vested.
2%	Advisors	Advisors receive their tokens as part of their compensation package.
3%	Bounties Public	Asure provides compensation for a number of tasks spread across marketing, bug reporting or even improving aspects of the Asure platform.

Application of funds

We envision that all ETH derived from the sale of Asure utility tokens ("ASR") will be allocated in the following manner:



45%	Platform Development	A large part of the budget will be applied in three areas: ★ The creation of ongoing development of our smart contract insurance products ★ Development of autonomous artificial intelligence system (Machine Learning) ★ The end-user experience for iOS and Android applications as well as the Asure platform (API, Rest/GraphQL) itself

30%	Marketing & Operations	Additional staff and resources to cover day-to-day operations and prudent management as the organization expands.
10%	Legal	We are acutely aware of the need for rigorous compliance. We will need our own well-resourced legal support. Our principal concern is to fit within complex regulatory frameworks across the globe in order to make the growth of the community legally secure.
10%	Tax	Tax and organization development fees.
5%	Office Expenses	Office expenses and HR activities to build up a team to achieve roadmap goals.

Vesting

According to best practice and in order to protect investors and future participants of our platform, we will lock up our team's tokens. The Asure Team will receive their tokens in twelve equal parts over two years.

The vesting ensures token course stability and commitment of all involved team members. If a holder attempts to transfer more ASR tokens than vested, the transaction will be blocked.

We are going to publish the smart contract to control vesting within our project. Hence, we will prove to the community our long-term commitment.

Burning

All unsold tokens in public TGE will be burned.

KYC/AML

The primary objective of token sale registration is to enforce a mandatory Know-Your-Customer (KYC) check to prevent identity theft, terrorist financing, Anti-money laundering (AML), and financial fraud. It also allows our team to understand our token holders better and manage risks appropriately.

The Asure tokens are not being offered or distributed to, as well as cannot be resold or otherwise alienated by their holders to citizens of, natural and legal persons, having their habitual residence, location or their seat of incorporation in the country or territory where transactions with digital coins are prohibited or in any manner restricted by applicable laws or regulations, or will become prohibited or restricted at any time after this agreement becomes effective ("Restricted Persons").

We do not accept participation from the restricted persons and reserve the right to refuse or cancel the ASR token purchase requests at any time at our sole discretion when the information provided by the purchasers within the KYC procedure is not sufficient, inaccurate or misleading, or the purchaser is deemed to be a restricted person.

Privacy and Security

The security of your data is of great importance to us. There is no "cutting corners" when it comes to security, even under the pressure of running an ICO. As such, please find below the measures which will be employed to ensure your privacy and security:

- All your data will be stored in an encrypted form on our servers
- We don't store your password as we only support external authentication providers like Google and Facebook
- All the information required for the KYC process will be wiped out from our systems once the checks are completed

Asure will never share members' personal data with 3rd parties without prior consent. In order to be on the safe side you should take these precautions:

- Never send any fiat money or crypto coins to any address during the registration process. There is only one public token sale date and it is specified on our website: https://www.asure.io
- Bookmark the registration website, and never get to it following any email links.
- Never trust emails related to the particular sale details (such as the information about soft or hard caps, Ethereum address to send to, etc.). Remember that sender's email address can be easily forged.
- Never reply to our emails. Perform all your operations on our website only. You can check your registration status on our website using your account details.

Excluded participants

Due to legal restrictions citizens and residents from the following countries are not eligible to acquire ASR tokens: American Samoa, Belarus, Burundi, Central African Republic, Cuba, Congo (Brazzaville), Congo (Kinshasa), Guam, Iraq, Iran, Lebanon, Libya, Northern Mariana Islands, North Korea, Puerto Rico, Somalia, Sudan, South Sudan, Syria, United States, US Virgin Islands, US Minor Outlying Islands, Venezuela, Yemen, Zimbabwe.

ROADMAP

The following roadmap reflects our business concept divided into phases to represent our intended future endeavors.

Phase 0: Research in the blockchain field

Our CTO, Fabian Raetz did a research project at the University of Applied Science and Art Dortmund where he analyzed the emerging blockchain technologies and its possible applications.
In 2014 a small team led by Paul Mizel and Fabian Raetz developed their own blockchain based currency as a proof of concept and tested different kinds of blockchain issues and economic systems (NRJ Coin). Their early work can be found here
Github: https://github.com/nrjcoin-project

Paul Mizel has built a team in Kiev late 2015 for AI innovation projects "Insure Assistant" and "Insure Advisor" as full automated chatbots (for support, claim management, etc) with unique learning mechanism and connected to different platforms like Facebook, Telegram, Skype, and others.

Tech stack: IBM Watson, Microsoft Bot Framework, MS Luis, Microsoft .NET.
Algorithms used: Text mining, regression analysis, SVMs, neural networks.

Phase 1: PoC of the German statutory pension system & TGE phase 1

Paul Mizel, Gamal Schmuck and Fabian Raetz founded the Asure Foundation to fulfill their vision of a free, open, and decentralized insurance protocol.

The first of the two TGE phases will take place in Q4 2018 and will finance the research and development of insurance products using Blockchain technology.

To demonstrate the potential of the Blockchain technology in social security systems, we are developing a corresponding proof of concept. It implements the German statutory pension system including smart contracts, a simulation component, and user interface.

Blockchain environment: Ethereum Testnet.

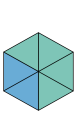
The work is in progress and Proof of Concept can be seen on www.asure.io/poc

Estimated completion target: Q4, 2018.

Phase 2: Build community and partner network & TGE phase 2

At the beginning of 2019 we want to expand our community and cooperations. We will seek discussions with politicians, governments and relevant organizations from many countries around the world in order to enter into cooperation for the implementation of social security systems on the blockchain. Furthermore, we are striving for cooperation with universities, research institutes, insurance companies, and blockchain experts from the broader community to research insurance systems on the Blockchain and to incorporate the results into the Asure Protocol - a free, open, and transparent insurance protocol.

We will continue to expand our PoC into a German statutory pension scheme and develop further solutions to solve advanced challenges.



To finance the development of the Asure protocol and platform, we will complete the second phase of our TGE in 2019.

Estimated time of completion: Q3, 2019.

Phase 3: Launch platform and grow community

In 2020 we will, together with our community, continue the development of the Asure protocol and platform and will release first components in both Ethereum Testnet and Meinnet. We will promote the development of insurance products and services based on the Asure protocol and will support the creation of development tools and applications around the Asure protocol.

In our standardization process we will publish standards (AIPs) for products, services, their interaction and how the ASR-Token will be used in our proof of stake algorithm which incentives behaviour according to their Service Level Agreements (SLA).

We will also promote the development of foundational components of the Asure platform for identity management, claims management and fraud detection using AI/ML algorithms. These can be used by products and services developed on the Asure protocol and platform.

Estimated time of completion: Q4, 2020.

Phase 4: Globalisation and product variety

By 2023, we want to have a variety of insurance products and services running on top of the Asure protocol and platform from a variety of service providers using the ASR token as a stake in our proof of stake algorithm. Also, investors should be earning money by buying risk as part of reinsurance.

The Asure protocol and the Asure platform have found their way into many countries and offers a solid basis for modern, automated, transparent and fair insurance products and services.

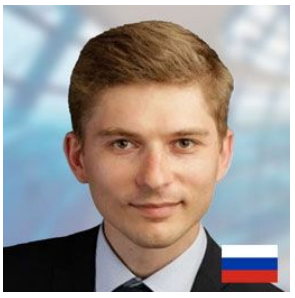
Blockchain environment: Ethereum Mainnet Status: Completion target is Q1, 2023

TEAM

Kersten Lorenz
Blockchain Expert

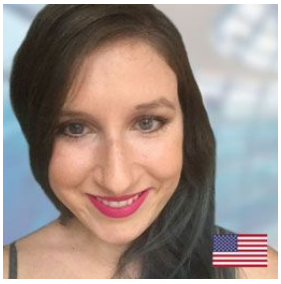
Ramazan Kunas
Blockchain Developer

Wetscheslaw Lipp
Blockchain Developer



Andrey Kuchaev
Community Manager

Eugen Falkenstein
Team Manager



Suzzanah Weiss
PR Manager

Patrick Möller
Marketing

Alexander Grünke
Marketing

Waldemar Stelle
Technical Support

Serhii Kirienko
AI Developer

Anastasia Scherbakova
Full Stack Developer

Serhii Yaremchuk
Full Stack Developer

Igor Gutjahr
Operations Analyst

Anastasia Droganova
Office Manager

We are an international team with most members based in Dortmund, Germany and Kiev, Ukraine. The following people are currently working either full- or part-time for the Asure. After the token generation event finished we are going to hire additional experts and utilize our partners' network to achieve our goals on the roadmap.

Paul Mizel – Founder
Chief Executive Officer

Paul holds a master's degree and is a serial entrepreneur with over fifteen years' of business development experience especially in IT and insurance industry.

The first two start-ups were founded in 2004 and 2005 with the topics mobile marketing and virtual reality.

After his experience in the start-up scene, he began his career in the insurance industry and later acquired BROCKHAUS AG, an IT and business consulting company focused on insurance industry. During this time he held the positions of Chief Knowledge Management and Head of Innovation.

He built the BROCKHAUS Innovation Labs in Kiev, Ukraine, where research and development in the field of artificial intelligence for the insurance industry has been carried out over the last 3 years. He and his innovation teams in Germany and in Ukraine worked on artificial intelligence and blockchain-related projects since 2014.

In early 2018 he faced the new challenges of a radical change in the insurance industry and retired from the operational business of BROCKHAUS AG to establish the Asure Foundation, which combines blockchain technology with artificial intelligence that follows a holistic approach to make the world a better place.
http://linkedin.com/in/pmizel

Fabian Raetz – Founder
Chief Technology Officer

Fabian has been working for more than 10 years at BROCKHAUS AG. In the innovation department, he researched cutting-edge technologies that changed the insurance sector. His bachelor thesis dealt with the implementation of the blockchain for insurance claims. He also supported a number of open source projects.

Fabian had been working with Paul Mizel for over 10 years and shared the vision of achieving something greater, which appealed to him so much that he joined Asure's Mission.
http://linkedin.com/in/fraetz

Gamal Schmuck – Founder
Chief Financial Officer

Gamal has over five years' experience in insurance industry and authorities. He is responsible for the administrative, financial, and risk management operations of the foundation, to include the development of a financial and operational strategy, metrics tied to that strategy, and the ongoing development and monitoring of control systems designed to preserve foundation assets.
http://linkedin.com/in/gschmuck

ADVISORS

Emanuel Kuceradis
Technology advisor

More than 20+ years of experience in software development and 3 years in Big Data and distributed platforms and technology for international markets.
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Dennis has more than 10+ years of experience in insurance industry he brings several years of experience in coching, project management and organisational development.
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ORGANIZATION

The Asure Foundation is a non-profit organization which is based on three main pillars: innovation, collaboration and research with a community of members engaged in research and development of smart contracts for newly developed Smart Products created on Asure platform.

The foundation includes technology researchers as well as insurance experts. The Asure Foundation is an integral component of our work, that lets us coordinate interactions in different parts of the ecosystem.

We are going to work on blockchain projects and on further development of the Asure platform in collaboration with our industry partners. The partners have long-standing experience in the insurance field as well as business process analysis and improvement of various insurance products. With the support of our partner network, we will be able to achieve the top performance.

CONCLUSION

We at Asure believe that the future of insurance will be defined by blockchain technologies, AI, and Big Data in a decentralized context, which creates a whole new insurance experience geared for the digital world. It can only be achieved by using decentralized blockchain platform and artificial intelligence as the basis for creating insurance protocol for any kinds of risks in the world.

With our token sale, we want a wide range of people to participate in this long-term journey and create success story by changing how insurance works in our new digital age.

Be part of this journey, and join our Token Generation Event - we are looking forward to welcoming you aboard!

Web:	**https://asure.io**
Twitter	**https://twitter.com/asure_io**
Telegram:	**https://t.me/asure_io**

LEGAL NOTE

PLEASE READ THE FOLLOWING SECTIONS AS WELL AS THE "TOKEN SALE TERMS & CONDITIONS" (SALE T&C) AND THE "TOKEN REDEMPTION TERMS & CONDITIONS" (REDEMPTION T&C) CAREFULLY.

No person is bound to enter into any contract or binding legal commitment in relation to the sale and purchase of the ASR tokens and no cryptocurrency or other form of payment is to be accepted on the basis of this whitepaper.

AN INVESTMENT IN ASR INVOLVES A HIGH DEGREE OF RISK AND MAY RESULT IN THE LOSS OF ALL OR PART OF THE INVESTMENT.

NOTHING IN THIS WHITEPAPER CONSTITUTES AN OFFER OF SECURITIES FOR SALE IN ANY JURISDICTION WHERE IT IS UNLAWFUL TO DO SO.

THE ASR TOKENS (AS REFERRED TO IN THIS WHITEPAPER) HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE U.S. SECURITIES AND EXCHANGE COMMISSION ("SEC") OR BY THE SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OF ANY OTHER JURISDICTION, NOR HAS THE SEC OR ANY SUCH SECURITIES REGULATORY AUTHORITY PASSED UPON THE ACCURACY OR ADEQUACY OF THE INFORMATION IN THIS WHITEPAPER.

THE ISSUANCE AND SALE OF THE ASR TOKENS HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933 ("THE —SECURITIES ACT") OR ANY OTHER APPLICABLE SECURITIES LAWS AND, UNLESS SO REGISTERED, THE ASR TOKENS MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED WITHIN THE UNITED STATES OR TO OR FOR THE ACCOUNT OF ANY U.S. PERSON, EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND ANY OTHER APPLICABLE SECURITIES LAWS.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Whitepaper includes statements which, to the extent that they do not recite historical facts, constitute forward-looking statements. These statements may be identified by the use of forward-looking terminology, including the terms "believes", "estimates", "forecasts", "plans", "projects", "anticipates", "expects", "intends", "may", "will", "could" or "should" or, in each case, their negative or other variations or comparable terminology, or by discussions of strategy, plans, business prospects, objectives, goals, future events or intentions. These forward-looking statements appear in a number of places throughout this Whitepaper and include, but are not limited to, statements regarding our intentions, beliefs or current expectations concerning, among other things, the business model of Asure platform, development costs, liquidity, prospects, growth, strategies, expectations about development of cryptocurrencies, blockchain technology.

LEGAL NATURE OF ASR AND OF THIS WHITEPAPER

The ASR tokens are not intended to constitute securities in any jurisdiction.

The Whitepaper does not constitute a prospectus or offer document of any sort and is not intended to constitute an offer of securities or a solicitation for investment in securities in any jurisdiction.
This Whitepaper is intended for general informational purposes only and does not

constitute a prospectus, an offer document, an offer of securities, a solicitation for investment, or an offer to sell any product, item or asset (whether digital or otherwise). Asure and token purchasers' interests are aligned to make Asure DAIP a viable platform that truly disrupts the insurance industry.

The potential purchasers acknowledge and agree that they are not purchasing ASR tokens for purposes of investment, speculation, as some type of arbitrage strategy, for immediate resale or other financial purposes.

DISCLAIMER OF LIABILITY

Acquisition of ASR token does not represent the acquisition of any form of security with respect to the Asure platform. By purchasing and holding the ASR tokens, the potential purchaser is not entitled and (or) guaranteed any form of dividend or other revenue right of similar nature. The potential purchaser will not have any influence on the corporate management of Asure and the Platform.

To the maximum extent permitted by the applicable laws, regulations and rules, Asure shall not be liable for any indirect, special, incidental, consequential or any other kind of losses, in tort, contract or otherwise (including but not limited to loss of revenue, income or profits, and loss of use or data), arising out of or in connection with any acceptance of or reliance on this Whitepaper or any part thereof.

RISK FACTORS

The purchase of tokens involves a high degree of risk, including but not limited to the risks described below. Before acquiring ASR tokens, it is recommended that each participant carefully weighs all the information and risks detailed in this Whitepaper, and, specifically, the following risk factors.

A. Dependence on computer infrastructure

Asure's dependence on functioning software applications, computer hardware and the Internet implies that Asure can offer no assurances that a system failure wouldn't adversely affect the use of the sale participants' ASR tokens. Despite Asure's implementation of all reasonable network security measures, its processing center servers are vulnerable to computer viruses, physical or electronic break-ins or other disruptions of a similar nature. Computer viruses, break-ins or other disruptions caused by third parties may result in interruption, delay or suspension of services, which would limit the use of the ASR tokens.

B. Smart contract limitations

Smart contract technology is still in its early stages of development, and its application is of experimental nature. This may carry significant operational, technological, regulatory, reputational and financial risks. Consequently, although the audit conducted by independent third party increases the level of security, reliability, and accuracy, this audit cannot serve as any form of warranty, including any expressed or implied warranty that the ASR smart contract is fit for purpose or that it contains no flaws, vulnerabilities or issues which could cause technical problems or the complete loss of ASR tokens.

C. Regulatory risks

Blockchain technology, including but not limited to the issue of tokens, maybe a new concept in some jurisdictions, which may then apply existing laws or introduce new regulations regarding Blockchain technology-based applications, and such regulations may conflict with the current ASR smart contract setup and ASR token concept. This may result in

the need to make substantial modifications to the ASR smart contract, including but not limited to its termination, the loss of ASR tokens, and the suspension or termination of all ASR token functions.

D. Taxes

ASR token holders may be required to pay taxes associated with the transactions contemplated herein, whether in Germany or in their home countries. It will be a sole responsibility of ASR token holders to comply with the tax laws of Germany and other jurisdictions applicable to them and pay all relevant taxes.

E. Force Majeure

Asure's performance may be interrupted, suspended or delayed due to force majeure circumstances. For the purposes of this Whitepaper, force majeure shall mean extraordinary events and circumstances which could not be prevented by Asure and shall include: acts of nature, wars, armed conflicts, mass civil disorders, industrial actions, epidemics, lockouts, slowdowns, prolonged shortage or other failures of energy supplies or communication service, acts of municipal, state or federal governmental agencies, other circumstances beyond Asure's control, which were not in existence at the time of this whitepaper release. If such circumstances occur prior to the issue of ASR tokens and Asure is unable to issue ASR tokens within one month from the projected date, it may issue a refund at the request of the ASR token purchasers. The refund will be issued in the original amount and form of payment to the same digital wallet or bank account where the funds were transferred from.

F. Disclosure of information

Personal information received from ASR token holders, the information about the number of tokens owned, the wallet addresses used, and any other relevant information may be disclosed to law enforcement, government officials, and other third parties when Asure is required to disclose such information by law, subpoena, or court order. Asure shall at no time be held responsible for such information disclosure.

G. Value of ASR Token

Once purchased, the value of ASR Token may significantly fluctuate due to various reasons. Asure does not guarantee any specific value of the ASR Token over any specific period of time. Asure shall not be held responsible for any change in the value of ASR Token. Assumptions with respect to the foregoing involve, among other things, judgments about the future economic, competitive and market conditions and business decisions, most of which are beyond the control of the Asure project team and therefore difficult or impossible to accurately predict. Although the Asure team believes that its assumptions underlying its forward-looking statements are reasonable, any of these may prove to be inaccurate. As a result, the Asure team can offer no assurances that the forward-looking statements contained in this Whitepaper will prove to be accurate. In light of the significant uncertainties inherent in the forward-looking statements contained herein, the inclusion of such information may not be interpreted as a warranty on the part of Asure or any other entity that the objectives and plans of the Asure project will be successfully achieved. Please note that the Asure project may be subject to other risks not foreseen by its management at this time.

GENERAL ISSUES

ASR tokens do not (and are not intended to) mean any note, stock, treasury stock, security future, security-based swap, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, collateral-trust certificate, preorganization certificate or subscription, transferable share, investment contract, voting-trust certificate, certificate of deposit for a security, fractional undivided interest in oil, gas, or other mineral rights, any put, call, straddle, option, or privilege on any security, certificate of deposit, or group or index of securities (including any interest therein or based on the value thereof), or any put, call, straddle, option, or privilege entered into on a national securities exchange relating to foreign currency, or, in general, any interest or instrument commonly known as a 'security', or any certificate of interest or participation 34 in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing.

The original text of the Agreement is in English. Albeit the Company may place a translation of the Agreement on the Webpage, the English version shall prevail if there is any conflict.

If you are in any doubt as to the action you should take, you should consult your legal, financial, tax or other professional advisor(s).

ACKNOWLEDGMENTS

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Thank you for your attention.

Asure Team

„Be curious. And however difficult life may seem, there is always something you can do and succeed at. It matters that you don't just give up. „
Stephen Hawking

LICENSE

Everything that the Asure Foundation produces will be freely available under the MIT license.

LIST OF SHORTCUTS

ACORD	Association for Cooperative Operations Research and Development
AI	Artificial Intelligence
AIP	Asure Improvement Proposal
AML	Anti-Money Laundering
API	Application Programming Interface
ASR	Asure's Social Revolution
BaFIN	Bundesanstalt für Finanzdienstleistungsaufsicht
B2B	Business-to-Business
B2C	Business-to-Customer
B2G	Business-to-Governance
BI	Business Intelligence
BiPRO	Brancheninstitut Prozessoptimierung
DAIP	Decentralized autonomous insurance platform
DAO	Decentralized autonomous organization
DApp	Decentralized Application
ERC20	Ethereum Stack Exchange - EIP number 20
ERC223	Ethereum Stack Exchange - EIP number 20 extension
EVM	Ethereum Virtual Machine
IoT	Internet of Things
IPFS	InterPlanetary File System
KYC	Know your customer
ML	Machine Learning
MVP	Minimum Viable Product
NLP	Natural Language Processing
P2P	Peer to Peer
PoC	Proof of Concept
REST	Representational State Transfer
RPA	Robotic Process Automation

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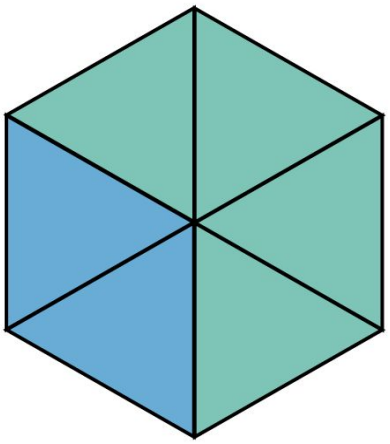

ASURE

A Non-Profit Foundation i.e.

OPEN DECENTRALIZED AUTONOMOUS INSURANCE PLATFORM

www.asure.io

This whitepaper is work in progress. We would appreciate feedback on our ideas from the community so that we can improve ourselves and the Asure project. Please send your thoughts to community@asure.io.

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