

# OceanChain White Paper



**ocean**chain

**OceanChain Team**

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# 1. Project Overview

## 1.1 Background

With the booming development of the global economy, all coastal countries take developing the marine economy as one of their national strategic goals. This allows them to effectively enjoy the full economic benefits the oceans and seas can provide. As the number one industry in the marine economy, marine fishery has a considerable amount of influence on the lives and livelihood of marine fishery practitioners and other coastal residents. Consequently, it plays a pivotal role in the marine industry of coastal countries.

Aquatic products form one of the largest classification of commodities in the global food trade. For many countries, the export of aquatic products is their economic lifeline - it can account for more than 40% of total merchandise trade value in certain Pacific island countries and accounts for 9% of global exports of agricultural products and 1% of the world's total merchandise trade value.

In 2016, the total export value of aquatic products in developing countries was 80 billion U.S. dollars and the net foreign exchange earned from the export of aquatic products reached 42 billion U.S. dollars. Therefore, the deep-sea fishing and high-sea aquaculture industry worldwide is a huge market with many untapped opportunities, invoking comparison to the vast blue oceans.

At present, the total annual output of the fishery and aquaculture industry worldwide is about 100 million tons, of which 81.5 million tons come from the sea. Among the 18 countries with the largest marine fishery industries, countries from the continent of Asia account for the largest output with countries from the Americas coming in second. China contributes to more than 60% of global output of fishing catch,





followed by Indonesia. The most productive area worldwide for fishing is northwest Pacific Ocean where China is located, followed by west-central Pacific Ocean.

The fishery industry and the primary sectors of aquaculture industry employ a total of 56.6 million people worldwide, of which 84% are from Asia. Of the 18 million people engaged in aquaculture activities, 94% are from Asia.

The total number of global fishing vessels has reached about 4.6 million. Among them, there are 3.5 million fishing vessels in Asia, accounting for 75% of global fishing vessels. Among them, 64% are motorised vessels and 64,000 ocean-going fishing vessels of over 24 meters in length are used for offshore operations.

## **1.2 Industry status quo**

At present, there are 3.5 million fishing vessels in the Asia-Pacific region, of which, about 3.346 million are offshore fishing vessels and 64,000 are ocean-going fishing vessels. According to current domestic consumption of maritime communications pilot of offshore fishing vessels, the annual satellite communications cost for each offshore fishing vessel is about US \$1,600, and the cost of satellite and maritime communications for each ocean fishing vessel is about US \$7,000 per year. It is predicted that the market size of satellite communications of offshore fishing vessels in the Asia-Pacific region will grow to around 5.5 billion US dollars and deep-sea fishery satellite communications market will reach around 450 million US dollars in size.

In the year 2016, marine fishing output of China was valued at around 170 billion RMB and the output of marine fishing in the Asia-Pacific region was valued at around 34 billion U.S. dollars, equivalent to about 220 billion RMB. With reference to the above values, under the projection that 40% of these transactions will migrate to the Ocean Chain Platform, online annual transaction volume is projected to be worth around 88 billion RMB.



With an estimated number of 30 million people employed within the marine fishery industry in the Asia-Pacific region as potential users of the OceanChain platform (**OceanChain**), OceanChain is projected to attract more than 6 million registered users.

This potential userbase represents a significant demand in food, clothing, housing, transportation, tourism, shopping and entertainment. Therefore, a wide range of user designed applications for OceanChain are intended to be developed over the course of time. Customised features to serve the needs of marine fishery related employees and related personnel, businesses and government bodies are expected, with the scope of services projected to cover marine communications, information services, e-commerce transactions, financial services, entertainment, emergency medical services, insurance management, government regulation, etc.

## **2. An introduction of OceanChain**

The ecosystem of the Marine fishery sector revolves around various enterprises, individuals. Comprising of myriads of ecosystem scenarios and applications revolving around clothing, food, housing, transportation, tourism, shopping and entertainment based on marine fishery ecosystem.

### **2.1 Ecosystem Roles of Marine Fishery**

Roles of Marine fishery ecosystem can be listed as follows:

- Fishing vessel: fisherman, captain, vessel owner
- Merchant: seafood wholesaler, worker/manager of processing plant, merchant of seafood trading market, service provider and purchaser of marine goods and materials.



- Supervision: national supervision department personnel of marine fishery
- Institutions: content / service providers in other areas of marine fishery, such as medical care, insurance, entertainment, telecommunications, finance, etc.

## 2.2 Ecosystem Scenarios of Marine Fishery

Ecosystem scenarios of marine fishery include information access, sea fishing, fishing trade, fishery services, marine communications, maritime pan-entertainment, medical insurance, financial management, credit checking, etc. details are as follows:

- Information Access, including weather, fishing and flood information, information inquiry of fishing boat / chilled boat / cargo ship real-time location, purchasing price information of fishery harvesting of nearby fishing boats, global seafood and aquatic products market price information, global seafood and aquatic products transaction information, etc.
- Fishery Transaction, including fishing harvesting transactions, releasing information on seafood demand, seafood pre-sale information dissemination, seafood distribution, etc.
- Fishery Service: fishing boat logistics services, service appointment for back to harbor
- Maritime Communications: maritime satellite communications, including offshore and high-sea communications services;
- Maritime Pan-entertainment: satellite television programs, live online, online games, online chess and other entertainment consumption scenes;
- Medical Insurance: medical treatment at sea, first aid at sea, fishery insurance, life insurance, property insurance, etc.
- Financial Management: fishing boat loan, fishery harvesting loan, petty loan, loan repayment, fishing boat finance lease, equipment finance lease, money

management, etc.

- Credit Investigation: credit investigation of fishery enterprises, credit investigation of fishery wholesalers, and credit investigation of fishermen.

## 2.3 Ocean Chain

In the large marine fishery industry, various application systems in the field of marine fishery focus on fund circulation and settlement. Trans-regional production, circulation and transactions need a trustworthy and stable transaction channel and currency with credibility and effective circulation. And on the basis of it, a consortium chain that focuses on three-dimensional marine fishery oriented to clothing, food, housing, transportation, tourism, shopping and entertainment and thin-center-based economic circulating system are to be built. Thus, the OceanChain concept was born for this moment.

## 2.4 Technology Selection of OceanChain

With the evolution and explosive development of blockchain technology, an increasing number of institutions and industry giants have begun to participate in the research and application of block chain technology. Due to decentralisation, tamper-resistance and other technical features, blockchain has been gradually recognised by all sectors of society and all walks of life. Meanwhile, the combination of traditional industries and the block chain technology continuously produces blockchain-technology-based industrial applications.

The marine fishery field including Southeast Asian fishery industry and the global fishery industry, involves diverse and complex ecosystem application scenarios. The design of OceanChain must take full account of local laws, local culture and



participating roles (such as government, enterprises, captains, fishermen, wholesalers, processing plants, etc.) and many technological and non-technological parameter indexes including reliability, stability, security, scalability, etc.

Core needs can be included as follow:

- ✧ Law, supervision and cultural differences
- ✧ Relevance of roles and their demand in marine fishery area.
- ✧ Optimised autonomy and regulatory mechanism with thin-center and multi-node of marine fishery.
- ✧ Multi-scene application demand of marine fisheries
- ✧ Cargo capacity, delay and other performance requirements of the system
- ✧ Data storage security and privacy protection needs
- ✧ Openness, accessibility and accessibility of the system

OceanChain is to be built on the Qtum blockchain as the bottom block chain layer, and will combine the Fabric super ledger with Qtum technology to realise data interflow between the public chain and the consortium chain. OceanChain is planned to become a circulating catalyst for the entire marine fishery ecosystem, for it can form a complete marine fishery ecosystem in combination with the marine fisheries ecosystem application platform based on the Qtum public chain, corresponding token and economic systems, as well as the Ink cross-chain interaction protocol.

## 2.5 Design Principles of OceanChain

OceanChain is being developed around three design principles: expansion principle, stretching principle, privacy principle.

1. Expansion principle: each module of the OceanChain should be loosely coupled in nature to facilitate easy addition of new modules, updating of each individual module should not require any change of any other module.



2. Stretching principle: user access to customer product of OceanChain fluctuates, and access of a node by an overly large number of users will inevitably lead to the collapse of service by the node. Therefore, the node container itself should be able to take automatic deployment so that it is able to realise quick horizontal expansion as under the pressure of user requests.

3. Privacy Principle: The data provided by various data providers, including captains, ship-owners, fishermen, suppliers, purchasers, merchants, customers and other participants of OceanChain ecosystem have to be provided with controllable privacy protection. Participants will have the option to disclose their data according to their own needs.

## **2.6 Solved Problems by OceanChain**

With its intended purpose as a cross-border circulation tool for the marine fishery consumer market, OceanChain is expected to be designed to provide a credible and stable circulation media for all types of consumption at sea, seafood transactions and credit investigation of marine fishery, bringing about industrial innovation for marine fishery, which could comprise of the following aspects:

-Innovation of role relationship: the sub-center mode is expected to effect a change in the business of marine fishery and has the potential to simplify the interactions of people and business entities . As a result, some intermediary functions may become less important or even disappear, which is projected to greatly improve the circulating efficiency of products and therefore create value.

-Innovation of transaction model: cash and money order are currently being used in traditional maritime transactions and fishermen in Southeast Asia still use paper money. The OceanChain team has reached a strategic cooperation agreement with Maybank, Public Bank and BRI, focusing on transforming the current modes of marine



transactions. OceanChain is intended to remove obstacles of marine transaction circulation and sub-center mode is projected to greatly lower the risk of fund circulation for marine fishery employees.

-Real-name traceability: the design and consequent implementation of real-name system services, including the primary real-name certification, advanced biometric testing and certification, etc. This is intended to facilitate the provision of real-name services for different ecosystem scenarios and application platforms and unlocking different capabilities in accordance with the real-name situations.

-Establishing a Credit provision system: in the previous maritime transaction market, real-time supply and demand information is lacking. In terms of credit, there currently is no sub-center organisation or tool to provide adequate credit support for both supply and requisitioning parties. Credit rating and management applications may be developed on OceanChain empowering ship owners, captains, fishermen and other market participants to define limits for temporary credit provision based on the complete data of marine consumption, transaction, and circulation. The short term transfer of purchasing power can then be effected. On the one hand, this could provide protection for the donor for matters regarding fund recovery, on the other hand, sufficient support in the form of temporary purchasing power may be provided to those who require it. By doing this, on the one hand, a more comprehensive means of receivables recovery for the suppliers may be provided, on the other hand, sufficient temporary support may be offered to those who require goods or services.

## **2.7 Establishing Ocean Chain-based marine fishery ecosystem**

Centering on the ecosystem of marine fishery, users can build a series of industry-oriented service platform systems based on the tools provided by Ocean Chain with



communication, entertainment, e-commerce, settlement of transactions, medical insurance and financial services at the core. The various platforms on OceanChain will be able to correlate with one another with mutually reinforcing, forming cross-industry and cross-region ecosystem integration.



**Ocean integrated information service Platform:** Based on satellite network plus Internet, this platform is intended to provide marine fishery practitioners with weather, location, product market price and last-sale information, as well as logistic services for fishing vessels, returning to port booking, loading fishing vessels, equipment procurement, infrastructure, maintenance of fishing vessels and other services, forming high value-added Internet integrated information service industry chain.

**Ocean fisheries E-commerce trading platform:** This platform strives to provide the marine fishery practitioners with the largest offshore market in the world and provide captains, crews, wholesalers, retailers, purchasers and consumers with a reliable, stable, efficient and interconnected trading environment to deal with information isolated islands and information asymmetry of seagoing vessels.



Live entertainment application platform: tens of millions of marine fishery practitioners are the largest consumer groups of marine entertainment. Massive entertainment resources are needed to guarantee the entertainment of employees, including music, games, chess, news, video on demand and so on. As a stable promoter of marine fishery, OceanChain can play a vital role in integrated coordination of life plus entertainment plus work, bringing forth value-added effects.

Multimedia Interactive Platform: Worldwide high-definition source libraries can be integrated to provide high-definition television broadcast and interactive services in various countries. Meanwhile, opening up a mobile multimedia broadcast platform to provide fishery practitioners with various types of live broadcast services that can greatly improve customer loyalty including but not limited to educational live streaming, friend-making live streaming.

Liquidation and settlement application platform for cross-border transactions: OceanChain creates a liquidation and settlement system for global marine fishery to achieve cross-region and cross-sea trade support with multiple-currencies and multiple-tokens.

Government supervision and monitoring system: the system is intended to include a government navigation safety monitoring platform and marine fishery supervisory platform.

Marine telemedicine and first aid platform: Vessels equipped with a telemedicine equipment system for medical treatment and first aid could benefit from the guidance of remote video through satellite communication links.

Marine Fishery Financial Services Platform: Users can provide a platform to provide fishery practitioners and fishery enterprises with fishery-based petty loan service, equipment financial leasing service, wealth management service, fishery industry funds and fishery insurance, etc.

Fishery Credit Investigation Platform: A user made platform collating fishery data



that covers fishery transactions, bulk supply and demand, loan repayment, consumption, communications, etc. Through scientific and rational calculation models, credit information of fishery enterprises and employees can be investigated, which provides authoritative and effective reference data for financial services Platform, trading platform, fishery enterprises and practitioners.

## **3. Technical Framework of OceanChain**

### **3.1 Technical Features of OceanChain**

OceanChain boasts three major technical features: multi-system linkage, node tracking, ecosystem token function, which together are able to provide solutions to multiple difficulties faced by the current marine fishery industry, such as complicated transaction settlement involving multiple currencies, chaotic scenarios of maritime payment, insufficient maritime credit investigation data, the lack of cultural interaction activities and so on. Under such circumstance, OceanChain is designed to be the catalyst for creating the maritime business ecosystem of the future.

OceanChain is intended to include technologies including but not limited to smart contracts, cross-link agreements and lightning networks for the purpose of becoming a platform intended to facilitate the provision of key business functions such as digital payment, entertainment and credit investigation supervision and administration on the high seas. In addition, OceanChain may also facilitate functions such as the publicising of aquatic products, traceability of transactions and credit marking, etc. With these functions, fishermen of all countries may engage in fishery production on the high seas in an easier way. Fishery companies and governments of all countries can realise convenient and fine-grained tracing, supervision and operation of their domestic fishery



production and management with the help of OceanChain. Fishermen, institutions and government agencies can improve the efficiency and quality of their business through OceanChain. At the same time, business risk will be lowered and revenue will be increased due to the usage of OC.

## **3.2 Module Composition**

### **3.2.1 OceanChain Token**

OceanChain is mainly composed of consortium chains. The actual application will be based on the consortium chain features and the completion of cross-link agreement. OceanChain token will be issued based on Qtum, which mainly includes following modules and contracts:

1. QRC20/233 Ocean Chain Token

QRC-20 token standard describes methods and items that token contracts on the Qtum blockchain must implement and follow, and standardisation is helpful for different components to share infrastructures.

OceanChain, is symbolised as OC and its precision is set as 8 bits, according to the recommendation of Qtum system.

OC will be used as a generic equivalent and fuel, units of payment and settlement as well as service charge for some systemic functions in Dapp and the ecosystem on OceanChain.

2. Smart contracts related to OceanChain, including Dapp establishment, pledge with physical assets, distribution of rights and interests.

3. Supporting flexible management of encrypted currency accounts, such as multiple signatures, account locking, account in escrow, etc.

4. Digital payment network ledger accounts contributes to the access directly to



different applications, entertainment platforms, the main body of institutions, trading market, etc., which allows these roles to directly carry out cross-subject and cross-border revenue split, and reduce intermediate redundancy.

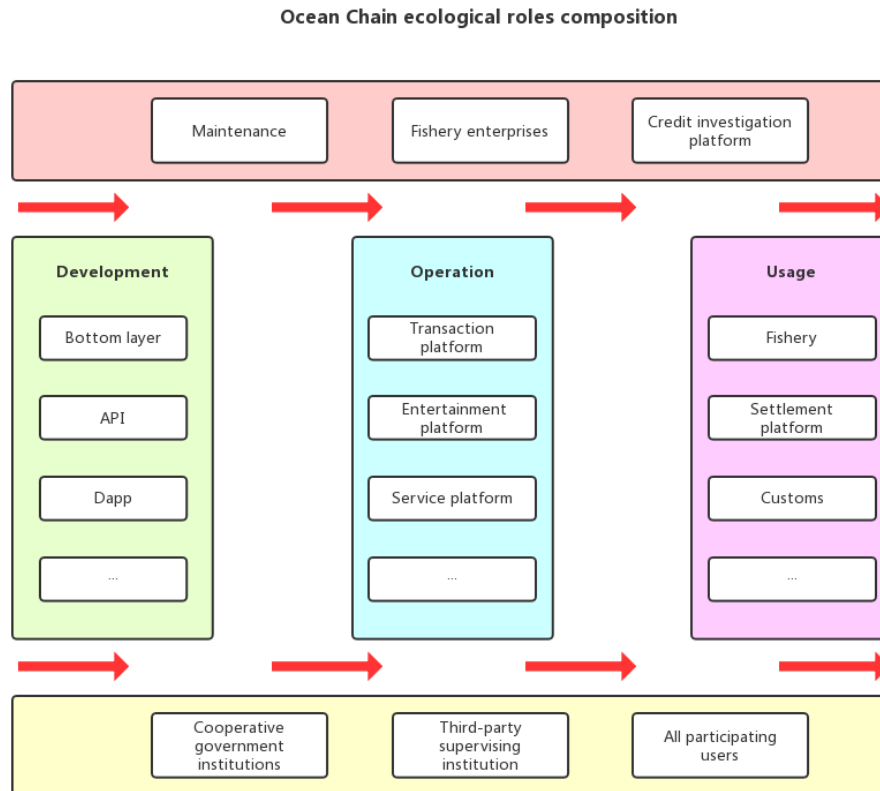
### 3.2.2 API

OceanChain encourages ecosystems and communities to build OceanChain-based tools and applications, including but not limited to:

- Contract and account browser. The browser allows users to easily browse status, originator and recipient of each OceanChain transaction.
- Supporting Payment API and traceability management. With API and traceability system, a convenient payment of OceanChain under the account and inquiring all chains in upstream and downstream transactions of each fishery transaction can be achieved.
- Market supervision API. Market supervision API allows market regulators to view and monitor OceanChain transactions in the market through a user-friendly interface.
- Social intercourse and data APIs. OceanChain can support the operation and payment of social intercourse and data network on the high seas, collect data from the system and arrange the data in a rational way for further analysis so as to enrich the spiritual life of fishery practitioners.
- Fishery index and artificial intelligence analysis. Through big data and artificial intelligence analysis, the system can easily generate accurate reports of fishery activities on the high seas, which is expected to improve accuracy and fairness of fishing programs of various countries and solve the plight of mutual restraint between the living of fishermen and environmental protection by changing fishermen's fishing traditions for thousands of years.



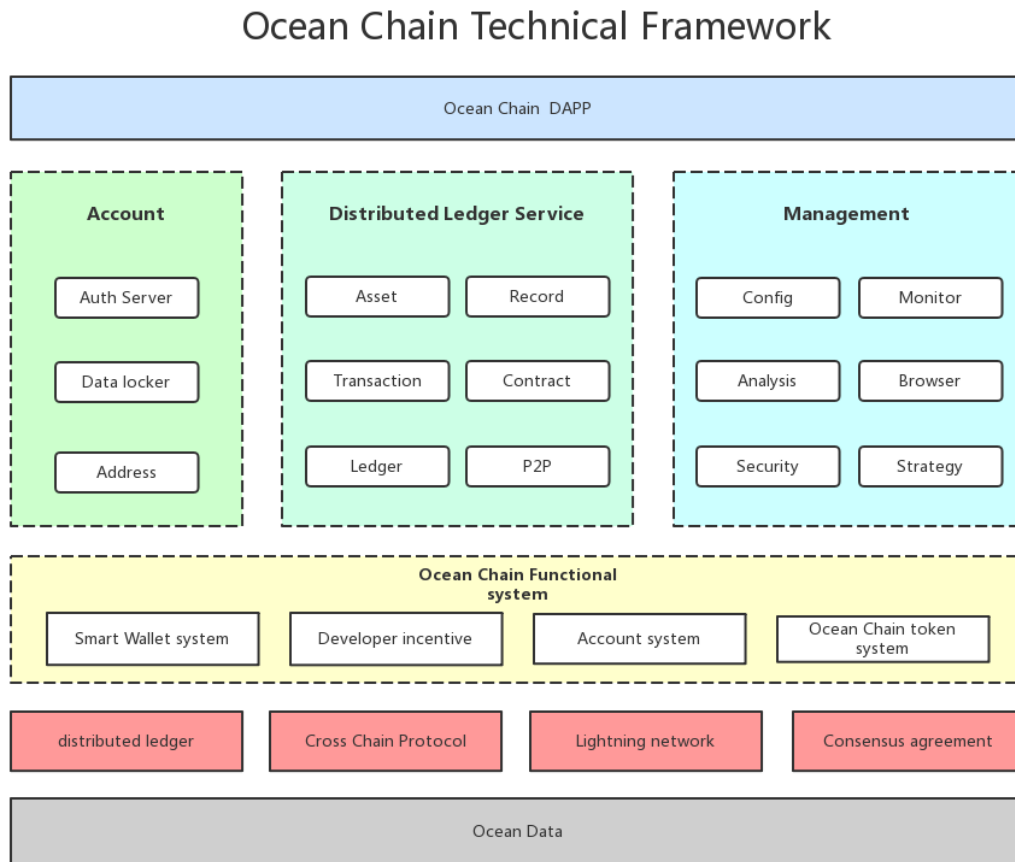
### 3.3 Roles composition



OceanChain ecosystem consists of five roles, namely: supervision, maintenance, development, operation and usage. Developers are responsible for obtaining tokens as rewards through developing and improving OceanChain. Operators serve users of OceanChain through the operation of their platforms or applications. As for supervisors and maintainers, they will make a full participation to ensure well running of OceanChain project under fair, just and open supervision and maintenance.

These five types of roles will form the ecosystem closed loop of OceanChain, and maintain a high degree of augmentability.

### 3.4 Technical Framework

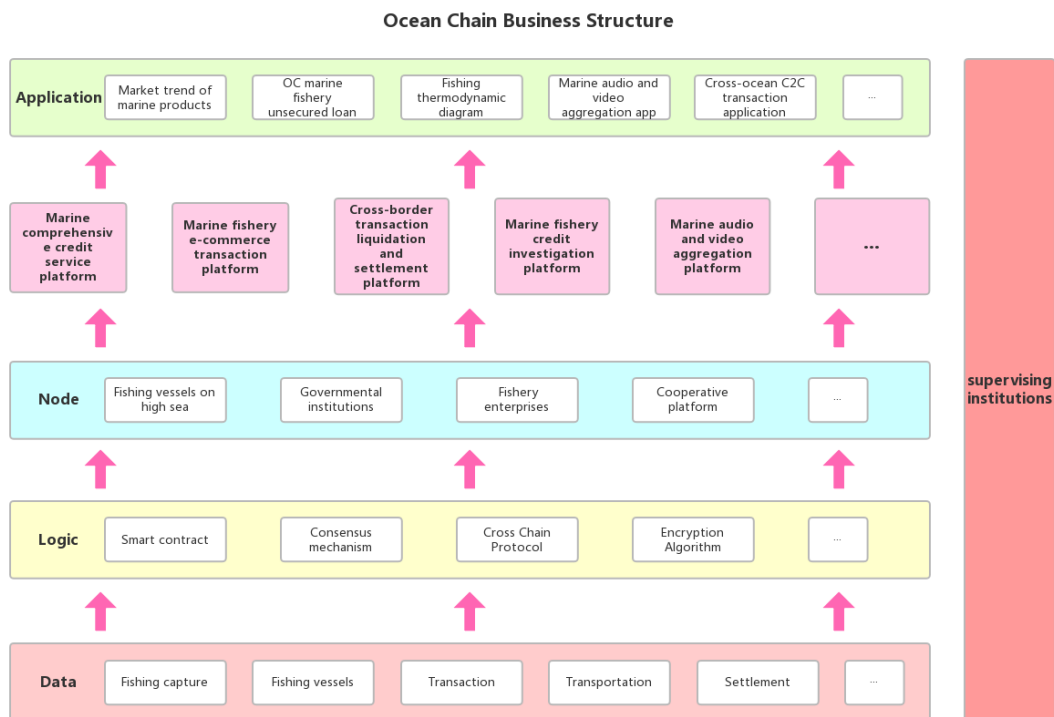


Following the design specifications and standards of the consortium, OceanChain's technical composition has extended certain technical boundaries on the basis of ensuring its high performance and stability. In addition, the OceanChain's technical composition carries out a series of independent modifications and development enhancements according to typical high seas application scenarios of OceanChain.

Given that OceanChain's application scenarios in reality may involve many countries, enterprises, transaction objects and even different communication protocols, highly complicated data exchange situations will be faced during landing and practical usage. Therefore, network compatibility and operability will be ensured through

flexible pluggable modules and smart contracts in the OceanChain bottom-layered design. In the regard to compatibility, Multi-protocol features will be supported, compatible with the BIP protocol and the POS smart contract platform. Moreover, compatibility is allowed between different protocols, including consensus mechanisms, authority management, accounting management, data structures, etc.

### 3.5 Business Structure



## 4. Introduction and Application of Token

### 4.1 An introduction of Token

The native digital cryptographically-secured token of OceanChain (OC) is a major



component of the OceanChain platform. The core role of OC is to solve the problem of legal tenders in transnational and cross-ocean payment and exchange. OC is a non-refundable functional utility token which will be used as the unit of exchange between participants on OceanChain. OC does not in any way represent any shareholding, participation, right, title, or interest in the Foundation, its affiliates, or any other company, enterprise or undertaking, nor will OC entitle token holders to any promise of fees, revenue, profits or investment returns, and are not intended to constitute securities in Singapore or any relevant jurisdiction. OC may only be utilised on OceanChain, and ownership of OC carries no rights, express or implied, other than the right to use OC as a means to enable usage of and interaction with OceanChain.

In particular, you understand and accept that OC:

- (a) is non-refundable and cannot be exchanged for cash (or its equivalent value in any other virtual currency) or any payment obligation by the Foundation or any affiliate;
- (b) does not represent or confer on the token holder any right of any form with respect to the Foundation (or any of its affiliates) or its revenues or assets, including without limitation any right to receive future revenue, shares, ownership right or stake, share or security, any voting, distribution, redemption, liquidation, proprietary (including all forms of intellectual property), or other financial or legal rights or equivalent rights, or intellectual property rights or any other form of participation in or relating to OceanChain, the Foundation, the Distributor and/or their service providers;
- (c) is not intended to be a representation of money (including electronic money), security, commodity, bond, debt instrument or any other kind of financial instrument or investment;
- (d) is not a loan to the Foundation or any of its affiliates, is not intended to represent a debt owed by the Foundation or any of its affiliates, and there is no





expectation of profit; and

- (e) does not provide the token holder with any ownership or other interest in the Foundation or any of its affiliates.

OceanChain will fully embrace the payment and settlement functions of OC so as to provide convenient payment and settlement exchange carriers for fishermen and other users of marine fishery in various allocation scenarios of marine fishery ecosystem, improve the transaction circulation efficiency marine fishery, speed up the further development of marine fishery and promote comprehensive and efficient integration of marine fishery ecosystem applications. In fact, the project to develop OceanChain would fail if all OC holders simply held onto their OC and did nothing with it. OC are designed to be consumed, and that is the goal of the OC token sale.

## **4.2 Application and Operation of Token**

OC can be used for consumer transactions in various scenarios of marine fishery ecosystem, including information acquisition of marine fishery information, fishery transactions, payment of fishery services, payment of maritime satellite communications expenses, sea pan-entertainment, medical insurance payment and financial wealth payment.

In order to promote the development of OceanCoin, the OceanChain team will work with various application service providers to implement preferential activities. More discounts and OC rewards will be obtained by using OC to buy communication services, entertainment consumption, and insurance payment.



## 5. Issuance and distribution plan of Token

### 5.1 Issuance of Token

The Distributor of OC shall be an affiliate of the Foundation. The approximate issuance of OC is expected to be 10 billion. The initial issuance is 7.5billion and the remaining issuance of 2.5 billion decreases year by year according to issuance curve and distributes to participants who are making contribution to OceanChain through ecosystem development incentives.

### 5.2 Token Distribution Plan

Purpose	Ratio	Number	Remark
<b>Private Placement</b>	20%	2billion	Oriented to influential professional institutions active in the marine fishery industry.
<b>Presale</b>	15%	1.5billion	Oriented to target users and early supporters of OceanChain project.
<b>Token Public Sale</b>	20%	2billion	Sale to public purchasers.
<b>OceanChain Team</b>	20%	2billion	Distributed to the team, non-transferrable for one year from the date OC is tradeable on exchanges. From the commencement of the second year, 25% will be made transferrable every quarter. Team members are required to publicize wallet address.
<b>Motivation, Promotion and Community Operation</b>	25%	2.5billion	Used for Ocean Chain ecosystem incentive, maintenance, promotion and community operation contributors.

### 5.3 Token Sale Rules

At the private placement stage, the raising ratio is 20%, 2 billion OCs in total. It is expected to raise 20 million US dollars (approximately 1,200 BTCs or its equivalent in ETHs, QTUM or INK) at a 40% discount off the public sale price.



At the presale stage, the raising ratio is 15%, 1.5 billion OCs in total. It is expected to raise 20 million US dollars (approximately 1,200 BTCs or its equivalent in ETHs, QTUM or INK) at a 20% discount off the public sale price.

The OCs sold at the private placement are expected to be made transferrable within three months after the date OC is tradeable on exchanges. The number of OCs made transferrable will be 33.33% of total quantity every month.

At the public sale stage, the raising ratio is 20%, 2 billion OCs in total.

The contributions in the token sale will be held by the Distributor (or its affiliate) after the token sale, and contributors will have no economic or legal right over or beneficial interest in these contributions or the assets of that entity after the token sale. To the extent a secondary market or exchange for trading OC does develop, it would be run and operated wholly independently of the Foundation, the Distributor, the sale of OC and OceanChain. Neither the Foundation nor the Distributor will create such secondary markets nor will either entity act as an exchange for OC.

## 6. Development Process and Future Planning

### 6.1 Development Process

Time	A Brief Introduction of milestones
Year 2016-2017 Q1	1. Initial layout of marine fishery ecosystem area and business filtering into fishery industry in Asia-Pacific region
Year 2017	1. Completion of building marine fishery internet comprehensive



<b>Q2</b>	<p>information service application platform</p> <p>2. Starting strategic cooperation partnership with communication operators and maritime satellite communication services providers in Asia-pacific region, establish high-throughput broadband Internet satellite and terrestrial high-capacity data communications network system covering global oceans with gradual popularisation.</p>
<b>Year 2017</b> <b>Q3</b>	<p>1. Creating the world's largest offshore market and completing the application platform for marine e-commerce transactions on the internet</p> <p>2. The establishment of marine fishery industry alliance</p> <p>3. Deep cooperation with CITIC Ocean to improve the foundation of marine fishery ecosystem</p> <p>4. Conducting all-round cooperation on content and resources with dozens of internet media, pan-entertainment services enterprises in such countries as China, Singapore, Malaysia, Indonesia, Thailand, etc.</p> <p>5. The establishment of OceanChain blockchain laboratory</p>
<b>On October, 2017</b>	<p>1. Building offshore financial life service application platform</p> <p>2. Building maritime entertainment service application platform, open to fishery practitioners</p> <p>3. Gradual installation and coverage of fishing vessels board communication equipment</p> <p>4. Official setup of OceanChain team, covering blockchain technology, marine fishery industry authoritative experts, management, operation, maintenance and other fields</p>
<b>On November 2017</b>	<p>1. The Establishment of trans-border liquidation and settlement allocation platform.</p> <p>2. Gradual installation and coverage of onboard telemedicine</p>

	Equipment fishing vessels in Asia-pacific region.
<b>On December 2017</b>	1. The completion of OceanChain white paper v1.0 issuance.

## 6.2 Future Planning

Time	A Brief Introduction of milestones
<b>2018Q1</b>	<ul style="list-style-type: none"> <li>—— Starting OC token sales plan.</li> <li>—— Starting OC token private placement and public sale.</li> <li>—— The completion of R&amp;D of OceanChain based on Qtum public blockchain and issuing token.</li> <li>—— Setting up OceanChain promotion and operation team.</li> </ul>
<b>2018Q2</b>	<ul style="list-style-type: none"> <li>—— In-depth cooperation with marine fishery department of countries in Asia-pacific region centering on circulation and application of OC.</li> <li>—— In-depth cooperation with coastal cities in China on “Maritime Silk Road”</li> </ul>
<b>2018Q3</b>	<ul style="list-style-type: none"> <li>—— OC will go live in third-party exchange of Australia and North America.</li> </ul>
<b>2018Q4</b>	<ul style="list-style-type: none"> <li>—— The establishment of marine fishery industry fund.</li> <li>—— Gradually expanding the access to ecosystem applications and promoting OceanChain worldwide.</li> </ul>
<b>2019Q1~Q2</b>	<ul style="list-style-type: none"> <li>—— Cooperating with insurance companies, banks and other financial institutions of Hong Kong, Malaysia, Indonesia, Singapore and Thailand.</li> <li>—— Opening the docking with the marine fishery-related ecosystem application platform, expanding access number of application.</li> </ul>
<b>2019Q3~Q4</b>	<ul style="list-style-type: none"> <li>—— OC will go live in third-party exchange of Australia and North America.</li> <li>—— Gradually integrating the settlement function of OC into various</li> </ul>

	ecosystem applications. ——Completing installation and coverage of onboard satellite communications, telemedicine equipment on more than 90% of the fishing vessels in the Asia-Pacific region.
2020~	——Promoting OceanChain in an all-round way and achieving efficient circulation and application of OC with fully infiltration and integration and with various sectors of marine fishery.

## 7. Team and Partners

### 7.1 Founder

**Nick Trudgen:** Co-founder of OceanChain. Director of Global Partnerships at SpaceChain and Ink. Deputy Director of International Department at Beijing DHH Law Firm and Founder of the DHH Blockchain Group. Fellow at the China Policy Institute at the University of Nottingham. PhD in Intellectual Property Law, Shanghai Jiao Tong University.

**Harry Lukmito:** Co-founder of OceanChain. Bachelor of Management Studies, Stanford College, Singapore. President of Indonesia Marine Fisheries Association. President, PT Sekar Bumi Tbk. As of June 2017, Sekar Bumi's sales in 2017 reached 92.7 billion Indonesian rupiahs (US \$ 6.9 million), an increase of 32% from 74 billion in the same period of last year. It is estimated that sales will grow to 30% by the end of 2017.

**Gao Zhenfeng:** Core developer at OceanChain. Tsinghua University, Department of Automation PhD candidate. In March 2017, the "Regional Medical Alliance Chain" project won the first prize of Wanda & IBM "48-hour blockchain hacking".



## 7.2 Partners



SAIF Partners



CollinStar



Blockchain Ventures



Nood Capital



Ink Foundation



SpaceChain Foundation



SpaceChain Foundation



SpaceChain Foundation

## 7.3 Consultants

**Patrick Dai:** Founder of Qtum. Graduated from Draper University and Chinese Academy of Sciences before working for Alibaba Group. He has devoted himself to the development and research of blockchain technology and has rich experience in the development of the blockchain industry.

**Martian:** Founder of Australian Bank Capital, A famous investor in the blockchain industry, nicknamed Martian Ryan. Member of Bitcoin Development Foundation, Member of Asian DACA Blockchain Association and Member of China Bitcoin Roundtable Forum.

**Duan Xinxing:** Founder of Bytom Blockchain. The former senior engineer of Bell Labs Lucent Technologies and the Former vice president and chief researcher of OKcoin, the largest bitcoin exchange worldwide. He is the CEO of 8BTC and the winner of the Gates Foundation scholarship.

**Xu Chong:** MBA, Accounting and Finance. He has nearly 10 years of investment experience in the field of investment. He worked in the Manzi Fund, Bohai Securities, China Happiness, Wuzhong Ventures and other institutions involved in nearly 120 venture capital projects investment decisions and investment. After management, with



particular attention Internet finance, blockchain, big data, consumer upgrades, artificial intelligence and other fields.

**Qu Lei:** Energo Labs CEO and Founder. Serial entrepreneur with years of payment systems and blockchain technology experience. Has been engaged in blockchain technology for many years and has developed cross-border trading applications based on Ripple. In addition, involved in Master Bitcoin, Ethereum and Lisk, and master different blockchain platforms.

## 7.4 Project Consultant

**Chen Qiang:** Founder of Ostrich Venture Media.

**Malaysian Natural Resources Association:** The Malaysian Nature Association is headquartered in Kuala Lumpur, the capital of Malaysia. It was established 17 years before the independence of Malaysia. The Association conducted Malaysian Heritage and Scientific Expeditions under the auspices of Azlan, Malaysia's supreme leader. On September 15, 2007, Azmi, Minister of Natural Resources and Environment of Malaysia, announced the removal of shark fins from the Malaysian government menu. This is also one of the outcomes of the Malaysian Association of Nature's Shark Conservation Campaign. The Malaysian Nature Association has played an important role in the area of nature and environmental protection for many years. At the same time, it is also the largest environmental organisation in the Malay Peninsula.

**Mr Muhaimin Iskandan:** The Awakening of Indonesian Islamists, the country's largest Islamic group, now boasts 100 million Christians and 40% of Indonesia's Muslim population. The Church has its own television station and streaming media broadcast, providing television and Internet communication services to a large number of Indonesian Christians

**Wu Ji:** Chairman of Hua Ying Group and vice chairman of Sino-US-Asia Federal





Association of Commerce.

**Mr Kanokporn Sapraserit:** Chairman of the Thai National Fisheries Association

**Wu Trade President:** Myanmar Fisheries Association

**Vietnam Fisheries Association:** Vietnam Aquaculture Association occupies favorable natural conditions for aquatic products and plays an extremely important role in Vietnam's import and export economic development.

## 8. Risks

You acknowledge and agree that there are numerous risks associated with purchasing OC, holding OC, and using OC for participation in OceanChain.

### 1. Uncertain Regulations and Enforcement Actions

The regulatory status of OC and distributed ledger technology is unclear or unsettled in many jurisdictions. It is impossible to predict how, when or whether regulatory agencies may apply existing regulations or create new regulations with respect to such technology and its applications, including OC and/or OceanChain. Regulatory actions could negatively impact OC and/or OceanChain in various ways. The Foundation (or its affiliates) may cease operations in a jurisdiction in the event that regulatory actions, or changes to law or regulation, make it illegal to operate in such jurisdiction, or commercially undesirable to obtain the necessary regulatory approval(s) to operate in such jurisdiction.

After consulting with a wide range of legal advisors and continuous analysis of the development and legal structure of virtual currencies, the Foundation will apply a cautious approach towards the sale of OC. Therefore, for the crowdsale, the Foundation may constantly adjust the sale strategy in order to avoid relevant legal risks as much as



possible. For the crowdsale, the Foundation is working with Tzedek Law LLC, a boutique corporate law firm in Singapore with a good reputation in the blockchain space.

## 2. Failure to develop

There is the risk that the development of OceanChain will not be executed or implemented as planned, for a variety of reasons, including without limitation the event of a decline in the prices of any digital asset, virtual currency or OC, unforeseen technical difficulties, and shortage of development funds for activities.

## 3. Security weaknesses

Hackers or other malicious groups or organisations may attempt to interfere with OC and/or OceanChain in a variety of ways, including, but not limited to, malware attacks, denial of service attacks, consensus-based attacks, Sybil attacks, smurfing and spoofing. Furthermore, there is a risk that a third party or a member of the Foundation or its affiliates may intentionally or unintentionally introduce weaknesses into the core infrastructure of OC and/or OceanChain, which could negatively affect OC and/or OceanChain.

## 4. Other risks

In addition to the aforementioned risks, there are other risks (as more particularly set out in the Terms and Conditions) associated with your purchase, holding and use of OC, including those that the Foundation cannot anticipate. Such risks may further materialise as unanticipated variations or combinations of the aforementioned risks. You should conduct full due diligence on the Foundation, its affiliates and OceanChain team, as well as understand the overall framework and vision for OceanChain prior to purchasing OC.



## 9. Conclusion

In the wave of rapid blockchain development, OceanChain will promote marine fishery industry innovation based on blockchain technology, making the life of global marine fishery practitioners more simple and convenient and bringing about explosive growth in the marine fishery industry.

The OceanChain Team hopes to contribute to the progress of blockchain technology and the development of marine fishery through OceanChain.

## 10. Contacting Us

OC is on the point of public sale oriented to the whole world, if you want to know more details about the project, please contact us in following ways:

Facebook : <https://www.facebook.com/oceanchain>

<https://www.facebook.com/ocn.chain/>

Twitter : [https://twitter.com/ocean\\_chain](https://twitter.com/ocean_chain)

Medium : <https://medium.com/@oceanchain>

LinkedIn : <https://www.linkedin.com/company/13623171/>

Official Email : support@oceanchain.club

