



GSCP™

Global Shared
Container Platform

The GSCP ICO white paper by Blockshipping

February 2018



Global Shared
Container Platform

The GSCP ICO white paper by Blockshipping

DISCLAIMER:

To participate in the ICO or the ICO pre-sale you must have read the Blockshipping ApS ICO white paper describing the GSCP, the CCC Token and the ICO in its entirety and have carefully considered the risks involved. By participating in the ICO or the ICO pre-sale you acknowledge, understand and agree that the purchase of CCC Tokens does not provide you any ownership or other interest in Block-shipping ApS or the GSCP; that Blockshipping ApS is solely subject to an obligation of means (in Danish: "indsatsforpligtelse") to develop the CCC Tokens and the GSCP; that you may lose all amounts paid; and that the CCC Tokens may have no value. It is your sole responsibility to ensure that your participation in the ICO or the ICO pre-sale is not prohibited under the applicable legal restrictions in your country of residence or domicile. You are fully responsible for determining your tax position according to your own personal circumstances and reporting to the appropriate tax authorities.

The purpose of this document is to promote Blockshipping and the tokens to be issued by Blockshipping. This document is not a prospectus and does not comply with the EU prospectus regime. This document has not been drafted or verified by attorneys or approved by the Danish Financial Supervisory Authority (Finanstilsynet). Blockshipping carries the sole responsibility for this document and the contents herein.

Table of contents

1	Introduction	4
2	Executive summary	5
3	The shipping industry and the container market	9
	3.1 The intermodal freight container	9
	3.2 Still huge scope for optimisation	10
	3.3 More industry challenges	10
	3.4 An industry ripe for disruption	11
4	The Global Shared Container Platform (GSCP)	12
	4.1 Business model	12
	4.2 Customers	13
	4.3 Competitors	13
	4.4 The cost reduction potential	14
	4.4.1 Savings potential confirmed by experts	15
	4.4.1.1 Empty container repositioning	15
	4.4.1.2 The greybox opportunity	15
	4.4.1.3 Street-turn strategy	16
	4.5 Further savings by embracing the concept of Smart Ports	17
	4.6 Huge CO ² emissions savings potential	18
	4.7 GSCP mitigating issues related to financing of containers	19
	4.7.1 Using the CSC plate (Convention for Safe Containers) system as the foundation	19
	4.7.2 Benefits from a digitised CSC plate	20
	4.8 Blockchain and sensor technologies	21
	4.8.1 Blockchain	21
	4.8.2 Sensor technology	22
	4.9 Roadmap/implementation plan	22
5	The GSCP ICO	24
	5.1 A short ICO history	25
	5.2 Towards a regulated ICO	25
	5.2.1 The first frameworks	25
	5.2.2 The ICO 2.0 Framework	26
	5.3 The Blockshipping ICO token model	26
	5.3.1 CPT: The Internal Token	27
	5.3.2 The external token	29
	5.3.3 Revenue Sharing Model	31
	5.3.4 Market Maker Fund	33
	5.3.5 Trading of CCC	34
	5.4 Token Distribution (CCC)	34
	5.5 Token Sale	35
	5.5.1 The ICO process and setup	36
	5.6 Funding breakdown	36
	5.7 Legal considerations	38
6	The team	40
	6.1 The Blockshipping core team	40
	6.2 The Blockshipping board & advisers	42
	6.3 The Blockshipping ICO service provider	43
7	Conclusion	45
8	FAQ	46

● | 1 Introduction

It might come as a surprise to some that the Scandinavian country Denmark, despite its modest population of fewer than six million people, is the seventh largest seafaring nation in the world. Not only is Denmark the home of Maersk Line, the world's largest container shipping company, but the Danish maritime tradition goes all the way back to the 8th century when the wild Vikings first set out to conquer the world.

Nowadays, Danish shipping is no longer wild in the sense of the Vikings, but considered highly advanced and world-leading when it comes to efficiency, innovation, environmental considerations, and the use of new technology. Director-General, Danish Shipping, Anne H. Steffensen recently gave this characterisation of Danish shipping in The HuffPost:

"Danish shipping companies are active in all segments - from dry bulk, oil tankers, offshore and containers. On top of this we are world leaders in maritime technology, known for our innovative technological solutions, eco- efficient services and maritime safety equipment. This is why most large cargo ships today are equipped with Danish maritime technology, products or equipment. To give an example, more than 70% of two-stroke ship engines installed on vessels worldwide are designed in Denmark."¹

Innovation within shipping is indeed a Danish speciality, but another area in which Denmark has ambition to secure a leading international position is blockchain

technology. The European Blockchain Center is located at the IT University in the Danish capital Copenhagen, and the Copenhagen Fintech Lab has already made a name for itself internationally due to its large number of blockchain companies and blockchain specialists.

In this whitepaper, Danish shipping expertise meets Danish blockchain expertise in a highly innovative global project called The Global Shared Container Platform - or GSCP - that will enable the container shipping industry to achieve savings to the tune of USD 5.7 billion, and avoiding the environmental impact of 4.6 million tons of CO² emissions every year.

Behind the GSCP platform is the Danish company Blockshipping; the core team has more than 75 years of container shipping experience and deep knowledge of blockchain technology.

"The container shipping industry accounts for around 60 percent of all the world's seaborne trade with a total value of approximately USD 12 trillion in 2017."

Blockshipping and the GSCP platform are already funded by private angels, and The Danish Maritime Fund (www.dendanskemaritimefond.dk), and as a supplementary funding method to further accelerate development and adoption, Blockshipping is now planning to run an ICO in April 2018.

In this whitepaper, we will review all the details of the GSCP platform as well as the upcoming ICO. If this should leave you with any unanswered questions, do not hesitate to ask the Blockshipping team for further details.

Happy reading!

Peter Ludvigsen,
CEO, Blockshipping
E-mail: peter.ludvigsen@blockshipping.io

1. https://www.huffingtonpost.com/anne-h-steffensen/tiny-denmark-is-a-maritim_b_12156442.html

● | 2 Executive summary

The problem

The container shipping industry accounts for around 60% of all the world's seaborne trade with a total value of approximately USD12 trillion in 2017². But this hugely valuable industry has been troubled for years by challenges like overcapacity, low rates, security threats, and increasing environmental regulations.

It is a well-known fact in the industry that the global shipping needs increased efficiency, improved processes and a fundamental digital transformation to ensure profitability in the future.

The solution

Blockshipping's Global Shared Container Platform (GSCP) is designed to make key processes in the global handling of containers significantly more efficient and thereby solve some of the most important problems in the container shipping industry today.

First and foremost, the purpose of the GSCP platform is to provide a complete blockchain enabled container asset registry (like a ship registry) where the full global inventory of containers (more than 27 million units³) are registered along with real-time locations of every single container around the world.

"The GSCP platform will enable a savings potential for the global container industry of at least USD 5.7 billion per year."

The goal within three to four years is to achieve a 60% market coverage with 16 million container units in the GSCP blockchain registry.

In addition, the vision for the GSCP platform is to:

- Become the primary platform for managing operational payments clearing between stakeholders related to physical handling (interchange), haulage and sharing of containers
- Become the shipping industry's primary IOT platform for real-time tracking of containers enabling real-time visibility of containers to all stakeholders
- Monetise data insights based on Machine Learning, IOT data, AI, and blockchain data

The technology

Blockchain technology enables full transparency and a shared ledger of container inventories and financial settlements when work orders for intermodal transport are issued, and when containers are interchanged between carriers or street-turned between importers and exporters.

The blockchain-based GSCP platform will enable a wide range of industry stakeholders (Carriers, Beneficial Cargo Owners (BCOs), terminal operators, and transportation companies) to achieve cost savings and reduced container inventories based on real-time information exchange. The technology offers real-time visibility and blockchain enabled smart contracts that automate processes and payments between parties. This enables all parties to significantly reduce internal control/admin functions (costs).

"In the world today, there is no central registry for the more than 27 million intermodal freight containers constantly shifting location, incurring payments, and changing ownership."

2. <https://www.statista.com/topics/1367/container-ship-ping/>
3. <http://www.worldshipping.org/about-the-industry/containers/global-container-fleet>



Greybox

"The greybox concept is a shared pool of containers with no names, managed by an independent company, that would match the demand of carriers in specific locations. This concept is now back on the drawing board of some lines because of the massive costs incurred in repositioning empty containers, due to the significant trade imbalance of key shipping lanes.

Believers in the greybox system say the time is ripe to revive this concept as colours or names are not worth the cost of storing thousands of idle containers all over the world. As the new alliances sort themselves out, there is a unique opportunity for the shipping industry to embrace the 'neutral' container. After decades of colour, container shipping may well benefit from embracing new shades of grey."

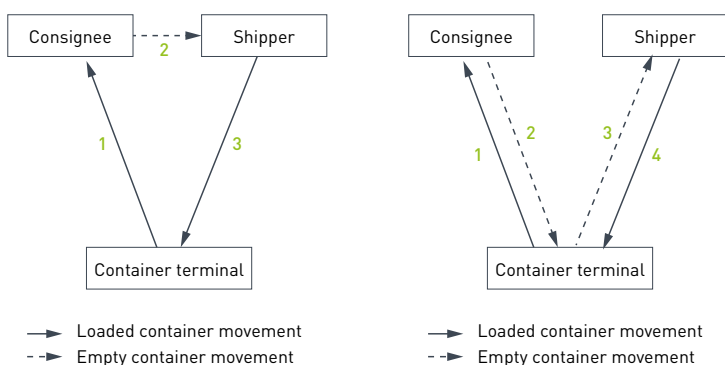
(<https://www.fwd.news/neutral-containers-grey-area-carriers/>)

The savings potential for the industry

The potential for savings via the platform is significant and is due, inter alia, to the following:

- **Greybox opportunity:** Carriers miss out on huge annual savings in empty container repositioning to the tune of USD 3 to 5 billion because of a lack of a trusted platform where deficit/surplus matching of containers can take place
- **Reduced Carrier Haulage ratios:** Carriers have consistently lost out on carrier haulage leaving others to profit on merchant haulage

Street-turn/Triangulation



<https://image.slidesharecdn.com/emptycontainermanagement-170918152912/95/empty-container-management-9-638.jpg?cb=1505749108>

- **Street-turn/Triangulation opportunity:** Due to lack of a neutral trusted platform triangulation and street turn cost savings opportunities for carriers to the tune of USD 750 million per annum are not being realised
- **Container fleet reduction opportunity:** Due to lack of real-time tracking and sharing of container locations global container carriers have inflated container inventories, which could be reduced by 15 to 20% if location data on containers were shared and had real time tracking sensors installed
- **Opportunity for banks and global leasing companies:** Banks, leasing companies and Insurance companies have realised significant losses in connection with bankruptcy or impending defaults of global container carriers. According to industry experts involved in financing investments in containers 10 to 50 % of containers are lost in connection with financial distress of carriers due to the lack of real-time tracking of dry containers. With GSCP, financing and asset insurance cost of containers can be reduced due to improved surety and real time certainty of actual locations of containers at any given time.

In total, the GSCP platform will enable a savings potential for the global container industry to the tune of USD 5.7 billion per year⁴ – most of which will go to global carriers.

The savings potential for the environment

In addition to the economic savings potential, the realisation of the GSCP platform will have an impact on the global environment and thereby benefit not only the industry players, but everyone.

An analysis conducted by the Scandinavian-based consultancy Opsiana⁵ concludes that the GSCP platform is expected to reduce the global CO² emission by at least 4.6 million

4. This figure is based on estimates from several respected analysts. See more on page 12 (4.1)

5. <http://opsiana.com/>

tons yearly. By comparison, Denmark's total CO² emission was 40.8 million tons in 2012. Furthermore, the GSCP platform is expected to reduce the global NOx emissions by 4.900 tons yearly.

The Blockshipping team

The GSCP platform is being designed and developed by the Danish company Blockshipping.

The core team of Blockshipping consists of people with in-depth strategy, market, and technology knowledge and with decades of experience from key positions in the global container shipping industry (see a presentation of the team at page 40).

The Blockshipping ICO

Blockshipping is launching the first shipping related ICO (Initial Coin Offering) in the Nordic region.

The GSCP platform issues two tokens: The internal Container Platform Token (CPT) and the external revenue share token Container Crypto Coin (CCC) issued on the global Ethereum blockchain for the ICO. The internal CPT token will be used by the industry players when utilising the platform for clearing and settlement of transactions between them and is pegged to the US Dollar (USD). These transactions will relate to a variety of services and fees like, 'container exchange fees', 'terminal and depot handling costs', and 'fees collected by carriers'.

A percentage of the revenue generated from the transaction fees on the GSCP platform will go to a Revenue Share Pool. Through an innovative revenue sharing model the funds held in the Revenue Share Pool will be passed on to the owners of the CCC tokens in a way that reward both short-term and long-term token owners.

The mechanics are as follows: Blockshipping will exchange the funds in the Revenue Share Pool, i.e. the internal CPT tokens, to Ether (ETH). Thereafter, Blockshipping will use smart contracts to conduct a Reverse Dutch Auction on the global Ethereum Blockchain, i.e. an auction in which Blockshipping will offer the owners of the CCC tokens a price for their tokens. This offered price will increase in fixed intervals during the auction, until the total amount of available Ether is spent.

This way token owners who choose to sell CCC tokens will receive Ether as payment for these tokens. After the auction Blockshipping will distribute all the CCC tokens acquired from the auction to all the owners of external tokens on a pro rata basis. This way CCC token owners will be rewarded regardless of their decision to sell or keep their CCC tokens.

To give further incentive for buying CCC 45% of the raised funds will be kept in a market maker fund to support the price of the externally traded CCC.

The market maker fund will support a floor price of CCC and token holders can at any time exchange their CCC to USD at the floor price.

Blockshipping and the GSCP platform are already funded by private angels, and The Danish Maritime Fund (www.dendanskemaritimefond.dk), and the ICO is a natural supplementary funding method for a blockchain based company like Blockshipping.

The ICO pre-sale is scheduled for February 2018 and the public token sale will be launched in April 2018 (read the complete description of the ICO, incl. roadmap and token model in chapter 5).

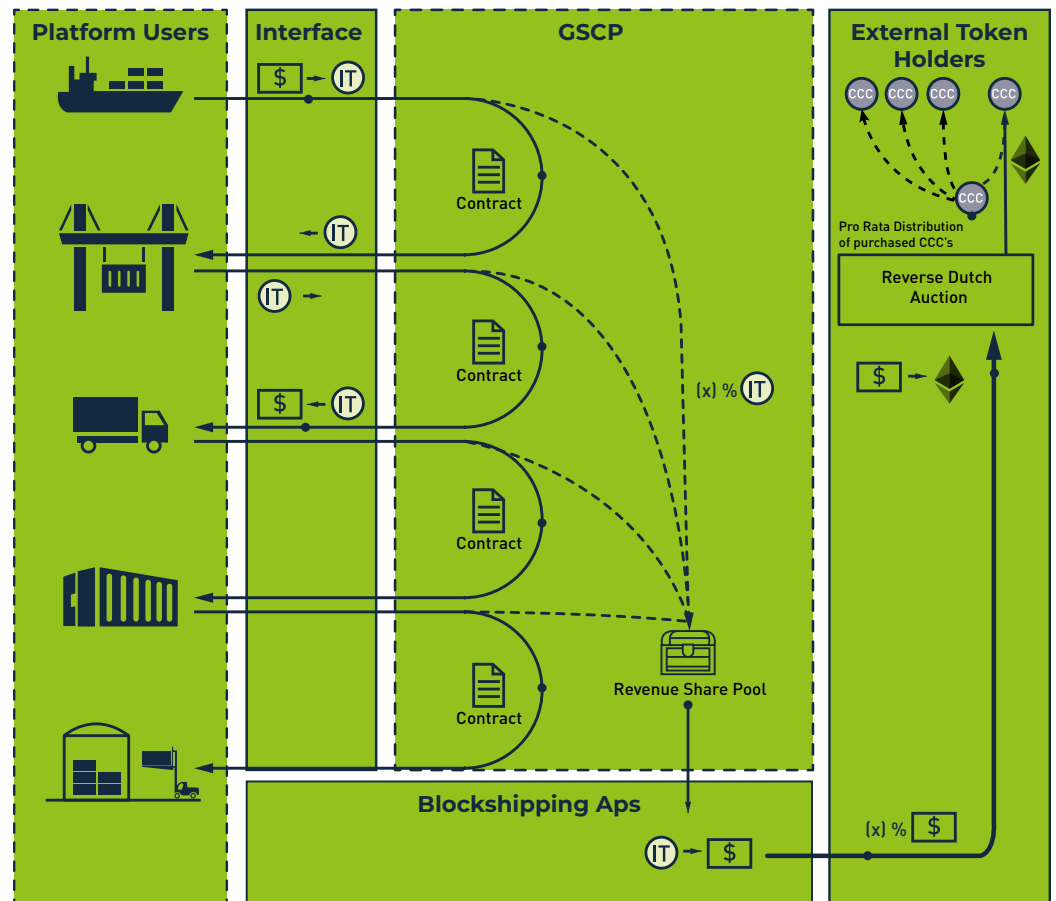
Part of a new ICO framework

The ICO paradigm is radically remodelling project and company funding in a way which offers completely new opportunities for innovative start-ups such as Blockshipping.

[see figure next page>>](#)

“The GSCP platform is expected to reduce the global CO² emission by at least 4.6 million tons yearly.”





A group of Danish experts within law, blockchain, and communications have decided to develop and launch a new ICO framework based on the assumptions that the time is ripe for a new generation of mature, high-quality ICOs which are fully compliant with Danish laws.

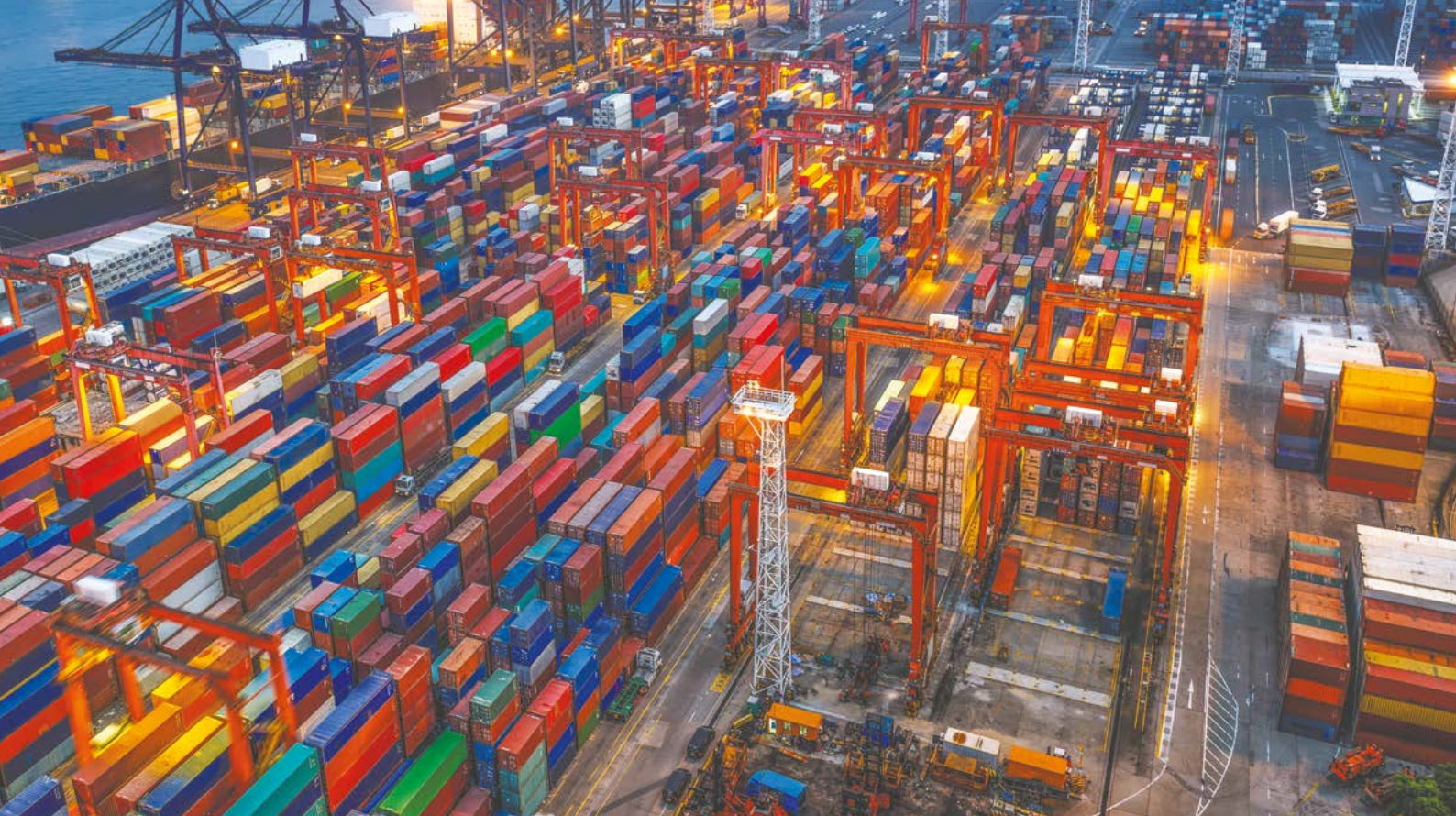
The group behind the new ICO framework – The ICO 2.0 Framework – consists of the Danish law firm Kammeradvokaten/Poul Schmith (kammeradvokaten.com) and the Nordic fintech consulting company, Norfico (norfico.net).

The development of the framework runs in parallel with Blockshipping's GSCP ICO and is based partly on experiences from the conducting of the GSCP ICO and partly on the groups findings from observing and analysing the development of the ICO market (read more about the framework in chapter 5 of this white paper).

Legal considerations

Blockshipping has been assisted by the largest law firm in Denmark Kammeradvokaten/Poul Schmith ("Poul Schmith") regarding the legal considerations under Danish law in connection with the issuance of CCC Tokens during the ICO.

Based on Poul Schmith's understanding of the factual description as stipulated in Poul Schmith's legal opinion, Poul Schmith is of the opinion that the CCC Tokens do not qualify as financial instruments pursuant to annex 5 of the Danish Financial Business Act (Consolidated Act no. 1140 of 26 September 2017 as amended) ("FBA") or section 4(1) of the Danish Capital Markets Act (Consolidated Act no. 12 of 8 January 2018) ("CMA"). More specifically, the CCC Tokens do not qualify as (i) shares or securities equivalent to shares, (ii) bonds or any other debt instruments or (iii) options, futures or any other derivative agreements. ●



● | 3 The shipping industry and the container market

At this very moment, more than 27 million freight containers are either travelling from one destination to another on trucks or rail flatcars, or in container vessels, or they are waiting somewhere in the world at a port, a container depot, or a train hub or a company for a haulier to pick them up and move them to a new destination.

3.1 The intermodal freight container

The idea of transporting virtually all types of goods packaged in standard 20-, 40-, or 45-foot intermodal metal freight containers that can be stacked in large ships and carried on trucks, barge, or rail was fostered by American Malcom Purcell McLean in the 1950s.

Eventually McLean's idea got traction, and the use of intermodal containers spread rapidly throughout the world and became the preferred way of handling goods during the 1960s and the 1970s.

The number of standard sized freight containers worldwide has grown continuously ever since McLean launched the world's first container vessel, SS Ideal X – a converted World War II oil tanker – in 1956 and successfully carried 58 containers from Port Newark to Port of Huston.

The rest is history, and it is no exaggeration to say that McLean's concept has turned out to be among the most revolutionary ideas not only for the development of the shipping industry, but for modern global trade between countries and continents, and for the development of globalisation as such.



3.2 Still huge scope for optimisation

Despite the benefits of standardised intermodal freight containers, significantly optimising previous ways of handling break-bulk cargo goods, the container-based shipping industry still today hasn't fully reaped the potential of the original idea in terms of efficiency and optimised processes.

Even nowadays, more than five decades after the launch of McLean's idea, up to 20% of all containers in the world are unaccounted for at any given time when it comes to precise location, destination and current ownership.

In other words, around five million of all the freight containers globally are, at this very moment, either in transit or waiting for collection somewhere in the world without any one in the shipping industry being able to deliver any precise real-time information regarding their whereabouts.

And furthermore, no one in the industry knows in real-time if they are empty or loaded, meaning that nobody knows if a truck or a train is wasting time and energy driving around with an empty metal box instead of transporting useable goods from A to B.

3.3 More industry challenges

In addition to not knowing the whereabouts of a significant percentage of the world's freight containers, the shipping industry is troubled by several other major problems which nobody so far has been able to solve efficiently, even though the problems have been well known in the industry for years. Those problems are:

- Complicated paper flow for leasing and sale of containers
- Outdated IT systems & processes which are prone to delays and errors
- Considerable waste when "shipping air" - not utilising potentially available empty equipment
- Slow and erroneous collection of fees incurred
- Real-time tracking is, in fact, not REAL time
- Sub-standard customer service to shippers

On top of the challenges mentioned above the global shipping industry has been bothered for many years by overcapacity, low rates, security threats, and environmental regulations.

The respected analysts Drewry Shipping Consultants Limited drew this quite gloomy picture of the economic state of the industry in 2016:

"Many stakeholders point to the fact that bunker prices of for example \$140 per ton in Rotterdam (IFO380) are clearly contributing to lower overall container freight rates, but Drewry believes that a new and worrying trend has become apparent for ocean carriers. Our most recent data suggests that they are no longer able to cut costs faster than the prevailing declines seen in the freight rate market."⁶

To further accelerate the problem of overcapacity no less than ten new ultra-large containerships (ULCs) will be launched in 2018 according to American Shipper and the industry analyst Alphaliner, and 1.5 million TEUs are expected to be operational in 2018 with over 50 percent of that capacity coming from ULCs.

"Most of this capacity is scheduled for delivery in the first half of the year, with over 1.2 million TEUs due before the end of June. These capacity additions, together with a slower rate of container ship scrapping, will put further capacity pressure on the market," according to Alphaliner:

"Shipping analyst BIMCO also noted that new containership orders will make it difficult for shipping lines to address the fundamental imbalance between slot supply and demand in the next two to three years, as it will limit freight rate rises and force shipping lines to seek out cost savings."⁷

6. Drewry, "Container shipping profitability to deteriorate in 2016" (Jan. 2016), <https://www.drewry.co.uk/news/news/container-shipping-profitability-to-deteriorate-in-2016>

7. <https://www.americanshipper.com/main/news/report-ultralarge-containership-newbuilds-hit-record-70230.aspx>

As if that was not enough, the industry is now also going to have to consider a wide range of new technologies.

According to a recent whitepaper by the international shipping industry e-commerce platform provider INTTRA published in 2017 the global shipping industry is facing a massive change fuelled both by a significant need for modernisation and optimisation of processes in the industry and by the arrival of new and revolutionising technologies like blockchain, predictive analytics, and AI. In the whitepaper INTTRA foresees that:

- Ocean shipping will become increasingly interconnected, accelerating business velocity, elevating digital networks and neutral platforms, enabling consolidation of operational/financial flows and raising intermodal visibility and engagement via multiple physical tracking devices
- Digitisation will leverage new integration protocols and technologies, such as blockchain, predictive analytics, and artificial intelligence to increase efficiency and reduce costs
- The industry will adopt an agile, iterative innovation model favouring targeted, short-term ROI technology solutions often delivered by disruptive start-ups
- The digital divide between companies embracing full digitisation and those lagging will widen”⁸

Statista about:

Container Shipping - Statistics & Facts

In terms of value, global seaborne container trade is believed to account for approximately 60% of all world seaborne trade, which was valued at around 12 trillion U.S. dollars in 2017. While the quantity of goods carried by containers has risen from around 100 million metric tons in 1980 to about 1.7 billion metric tons in 2015, vessels have likewise increased their capacity. Between 1980 and 2016, the deadweight tonnage of container ships has grown from about 11 million metric tons to around 244 million metric tons.

As of July 2016, the global cellular container ship fleet had the capacity to carry some 20 million standard containers. With a total capacity of around 3.3 million TEUs (TEU stands for twenty-foot equivalent unit), Danish Maersk Line is currently the largest container-shipping company globally, followed by MSC, CMA, COSCO and Hapag-Lloyd.

Germany's Hapag-Lloyd went public in 2015, although the industry is faced with many challenges such as low freight rates; South Korea's Hanjin was forced into bankruptcy in 2016 and Maersk acquired Germany's Hamburg Süd in 2017.

In 2016, the five leading container-handling ports worldwide were Asia-based. The port of Shanghai was the busiest container port in the world, handling about 37 million TEUs of containerised cargo. In its 2016 fiscal year, the port of Los Angeles handled some 8.4 million TEUs, making it the largest container port in the United States.

<https://www.statista.com/topics/1367/container-shipping/>

3.4 An industry ripe for disruption

In the article 'The Hidden Opportunity in Container Shipping' McKinsey & Company has characterised the shipping industry by saying that: "Shipping companies are deeply conservative; change comes only slowly. Many companies discount anything that is 'not invented here.'"⁹

This characterisation is undoubtedly true in many ways, but do not forget that a great innovator like Malcom McLean was anything but conservative. He had a vision, and he clearly spotted a need. And taking into consideration the vast numbers of serious challenges listed above, the shipping industry, today more than ever, ought to be ripe and ready for new inspiration, new technologies, and new efficient solutions.

And that is why Blockshipping is happy to introduce GSCP - The Global Shared Container Platform based on blockchain technology. ●

8. Blueprint 2032: How Technology Transforms Ocean Container Shipping, Inna Kuznetsova, Jeff L. Howard and Peter Spellman, INTTRA, 2017.

9. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-hidden-opportunity-in-container-shipping>





● | 4 The Global Shared Container Platform (GSCP)

There is currently no central global registry for the more than the 27 million intermodal freight containers constantly shifting location, incurring payments, and changing ownership.

The purpose of the Global Shared Container Platform (GSCP) is to provide a global container asset registry where the full global inventory of containers is registered along with real-time locations of containers in line with these data feeds becoming available over the next 2 to 3 years. To maximise reliability and transparency of this registry it will be built on state of the art blockchain technology.

The overall strategic goals for the GSCP platform are to:

- Become the primary registry and operational payments platform for the global container fleet
- Achieve 60% market coverage with 16 million container units in the GSCP blockchain registry
- Become the leading solution for managing operational payments clearing between stakeholders related to physical handling, haulage and sharing of containers
- Become the shipping industry's primary IOT platform for real time tracking of containers enabling real time visibility of containers to all stakeholders
- Monetise data insights based on machine learning, IOT data, AI and blockchain data

4.1 Business model

The GSCP platform enables carriers, BCOs and terminal operators to achieve cost savings based on real-time information exchange enabled by blockchain technology.

The use of permissioned or private/confidential blockchain enables a “shared ledger” approach to container inventories and financial settlements when work orders for intermodal transport are issued, when containers are changing hands between carriers and companies or street-turned between importers and exporters.

The technology offers real-time visibility and blockchain enabled smart contracts that automate processes and payments between parties. This enables all parties to reduce internal control/admin functions (and thereby costs).

4.2 Customers

A fundamental element in the concept of The Global Shared Container Platform is the fact that the platform should be shared between all types of stakeholders in the container shipping industry, which means that the customers on or users of the platform will be a broad group of carriers, terminal operators, port authorities, leasing companies, BCOs, trucking companies, freight forwarders, NVOCCs (Non-Vessel Operating Container Carrier), and the companies, who manufactures the containers.






In terms of numbers of customers of the platform the total potential should be counted in hundreds and the number of active users in thousands.

Besides being a global registry for containers one of the key functionalities of the GSCP platform will be to enable the users to utilise GSCP as a trading platform for a wide range of services that today are being exchanged between the parties through many other channels, some of which are very inefficient and costly.

4.3 Competitors

Within the container shipping industry today only a few other companies besides Blockshipping are developing blockchain-based solutions. One is the Hong Kong based company 300Cubits, another is the Maersk Line and IBM Blockchain joint venture. None of these have the same focus as Blockshipping and they are not considered competitors to Blockshipping and the GSCP platform. However, both demonstrate and validate the huge potential for blockchain technology in the shipping and transportation industry.

Besides, a number of other companies are offering solutions which have some functional overlap with the Blockshipping solution, but none of these are based on blockchain and smart contracts and none of them is offering a solution as complete as Blockshipping’s platform, they are only able to match smaller parts of Blockshipping’s proposition (see figure below).

	Global Container Ledger	Smart contracts & payments	EDI - “real-time”	Greybox and/or Street turn	Container Analytics	Container Sensors
				✓		
				✓		
					✓	
						✓
	✓	✓	✓	✓	✓	(✓)
✓ = Service offered (✓) = Sensor spec and costs being identified						

What is a smart contract?

A smart contract is a computer program – a piece of code – on the blockchain designed as a self-executing contract.

The idea of smart contracts was conceived by Nick Szabo more than ten years before Bitcoin. In the white paper Formalizing and Securing Relationships on Public Networks he wrote:

“Smart contracts combine protocols, user interfaces, and promises expressed via those interfaces, to formalise and secure relationships over public networks. This gives us new ways to formalise the digital relationships which are far more functional than their inanimate paper-based ancestors. Smart contracts reduce mental and computational transaction costs, imposed by either principals, third parties, or their tools.”

<http://oiphi.org/ojs/index.php/fm/article/view/548/469>



4.4 The cost reduction potential

The potential for savings via the platform for the global container industry is significant and is due, inter alia, to the following points:

- **Greybox opportunity:** Carriers miss out on huge annual savings in empty container repositioning to the tune of **USD 3 to 5 billion** because of a lack of a trusted platform where deficit/surplus matching of containers can take place
- **Reduced Carrier Haulage ratios:** Carriers have consistently lost out on carrier haulage leaving others to profit on merchant haulage
- **Street-turn/triangulation opportunity:** Due to lack of a neutral trusted platform triangulation and street turn cost savings opportunities for carriers to the tune of **USD 750 million per annum** are not being realised
- **Container fleet reduction opportunity:** Due to lack of real time awareness of container locations global container carriers have inflated container inventories which could be reduced by **15 to 20%** if containers had real time tracking sensors installed
- **Business process automation opportunity:** Operational business processes are outdated with lack of integration and based on manual paperwork, e-mails and PDFs resulting in poor customer service, high DSO¹⁰ for suppliers and an inflated workforce of staffs in Shared Service Centers in India, the Philippines and China
- **High financing cost of container new builds:** Financing of new build containers burdens Global Container Carriers with a higher interest rate than would otherwise be possible if containers had real time sensors installed providing actual location of containers

In total, the GSCP platform will enable a cost reduction for the global container industry of at least USD 5.7 billion per year¹¹ – most of which will go to global carriers.

Savings Potential in the Shipping Industry

ID	Who Pays today	Global Business Pain point	Cost US \$M	Savings Potential	Savings \$M
I	Carriers, BCOs and Freight forwarders	Inflated Merchant Haulage and Carrier Haulage Intermodal cost due to inefficient usage of empty containers (Triangulation Savings potential)	5,000	15%	750
II	Carriers, Container Lessors	Unnecessary high global Container Fleet inventory	13,140	15%	1,971
III	Carriers	Unnecessary high empty container repositioning costs due to lack of container sharing between Carriers (Greybox opportunity)	20,000	15%	3000
		TOTAL	\$38.1 Bn		\$5.7 Bn
IV	All supply chain actors	Continued high degree of back office workloads caused by outdated business processes. Very high potential for process automation and streamlining by leveraging Blockchain smart contracts	The global pain point and savings potential is in process of being estimated.		
V	BCOs	Unnecessary supply chain buffer stocks due to lack of real time data on containers and their ETA at destination.		Very high	
VI	All supply chain actors	Master Data fragmentation		Very high	
VII	All supply chain actors	First and last mile Road congestion		Very high	
VIII	All supply chain actors	Idling trucks and empty container trips add to global CO2 foot print		Very high	

10. DSO = Days of Sales Outstanding

11. This figure is based on estimates from several respected analysts. See more in chapter 4.4.1

4.4.1 Savings potential confirmed by experts

The estimates above are directly or indirectly backed by several articles, reports, and books from internationally renowned shipping experts and analysts.

4.4.1.1 Empty container repositioning

In the article “Bringing the sharing economy to shipping” (2016) the Boston Consulting Group (BCG) writes:

“Container repositioning is the bane of every carrier. The expenses associated with transporting empty boxes to locations where they can be loaded with cargo represent 5% to 8% of a typical carrier’s total operation costs and amount to USD 15 billion to USD 20 billion each year for the industry. [...] Today, there is limited transparency into who has how many boxes and where those boxes are. That makes finding interchange opportunities difficult.”¹²

BCG continues in the same article:

“Many carriers use brokers to arrange do-it-yourself deals to interchange boxes among a trusted circle of partners. But those processes rely on small logistics teams that make ad hoc phone and e-mail requests within limited network using incomplete market knowledge. Carriers manage just a small fraction of container imbalances in this way. We believe that digital technologies can help carriers and other container operators manage a considerably larger share of imbalances and thus achieve significant cost savings.”¹³

Finally, in the 2017 article “An inland-depot-for-empty-containers-model for the hinterland” the authors, Stephanie Finke and Herbert Kotzab from the University of Bremen, write:

“The transport of empty containers is often inevitable, as the place where containers are discharged and the place where the loading takes place are generally not the same. Efficient empty container management is therefore very important for shippers because the transportation of empty boxes causes substantial costs, which are nearly as high as the transportation of full containers. Consequently, shippers can generate profits when delivering a full container, but they cannot generate any profit by repositioning of empty containers (Exler, 1996).

According to Drewry Shipping Consultants (2011), each repositioning amounts to USD 400 per container. Overall, most of the empty containers are transported over land (Konings, 2005) and it is often assumed that a container remains empty for more than half of its useful economic life, being under repair, maintenance or in transit (De Brito and Konings, 2008).”¹⁴

4.4.1.2 The greybox opportunity

Over the years, it has been discussed in the container shipping industry whether it would be possible to develop an efficient greybox solution in which all carriers globally start sharing containers across the different companies.

In 2012 Richard Butcher, chief executive of maritime logistics consultancy Invicta Management Solutions, was interviewed by the magazine The Load Star, and he said about the barriers for implementing a global greybox pooling system that:

“The trouble is that commercial departments want to see a box with their logo arriving at the shippers’ premises. It has been the biggest hurdle we have come across. The only other thing that would be critical is that you need a very good centralised IT system that takes care of all the bookings, control and maintenance of the fleet, and the trouble is that there aren’t many such systems out there.”¹⁵

Since 2012 two important things have happened which indicate that a greybox solution is far more realistic today. The first thing is that the shipping industry has experienced some very tough times since 2012 and the players know that at the end of the day saving

“A container remains empty for more than half of its useful economic life.”

12. BCG: “Bringing the sharing economy to shipping”, 2015. <https://www.bcg.com/publications/2016/transportation-travel-tourism-bringing-sharing-economy-to-shipping.aspx>
13. <https://www.bcg.com/publications/2016/transportation-travel-tourism-bringing-sharing-economy-to-shipping.aspx>
14. <http://www.emeraldinsight.com/doi/full/10.1108/MABR-10-2016-0030>
15. <https://theloadstar.co.uk/carriers-could-cut-significant-costs-by-poolingsays-grey-box-pioneer/>





costs and increasing efficiency is a must, and more important than pride and vanity related to a company name on a metal box. But an even more important difference is that since 2012 blockchain technology has matured, and blockchain technology is ideal for the handling of a complex task like a global greybox solution. The users of a greybox solution demand a neutral shared platform where they have full control over which data is exposed to which parties.

In a 2016 article the port and shipping expert Olaf Merk states that after years of discussion the time is finally ripe for implementing a greybox solution in the industry – for three reasons:

1. More than ever before, this is the time for container lines to be ruthless about productivity and utilisation. The alternative is death. So, is your own colour worth the costs of soccer fields of idle containers?
2. Each line offers the same product anyway, whatever the colour, so why be picky about being blue, red or yellow? Moreover, a lot of differently coloured containers nowadays end up on the same ship, as a result of increased vessel size and alliances. The difference between a blue or yellow container has become an optical illusion. If we accept far-reaching vessel sharing arrangements, would the logical next step not be some sort of container sharing agreements?
3. Containers are becoming less dumb. More and more containers are equipped with devices that make it possible to follow where they are, anticipate how they could be best used and by whom. The data exist to arrange for an exchange platform without heavy administrative burdens. The momentum is there, waiting for willingness to act.¹⁶

Yet another key point which speaks in favour of the greybox concept is that many BCOs in the next couple of years will most likely include KPIs that asks carriers to monitor and share past performance numbers on how many empty container trips the carriers had annually or last quarter. Such KPIs could become part of the selection criteria by which large BCOs or freight forwarders select container carriers, which means that they are forced to pay attention to this if they want to do business with environmentally focused BCOs.

4.4.1.3 Street-turn strategy

An additional strategy for more efficient handling of empty containers is the so-called street-turn method, which is also going to be an integrated part of the GSCP platform. A further development of the street-turn method has been recommended by several experts over the years. In the book, *Shipping and Logistics Management*, from 2010, the authors Yue Ha (Venus) Lun, Kee Hung Lai, and TCE Cheng write:

“In the street-turn method, empty containers are directly moved from local consignees to local shippers. The potential benefits of street-turns include reducing the number

16. <http://shippingtoday.eu/grey-container/>

of truck trips and saving the driving times to and from container terminals to avoid congested areas around the gates.”

“The routing of empty container is a costly but unavoidable activity for the container transport chain. The goal of an empty container logistics strategy is to maximize the ability of the port and the intermodal community to reduce the number of vehicle miles travelled for empty containers, to reduce the number of trips to port marine terminals, to minimize empty container storage costs, and to minimize empty container dwell time” (Tioga Group 2002).¹⁷

Several other earlier and later analyses have underlined the need for a better and more efficient handling of the issue of empty container and pointed at an optimised street-turn strategy as a viable and preferred option. In the study, Intelligent Freight Transportation, from 2008 Petros A. Ioannou writes:

“The potential benefits of street-turn are enormous, including reducing the traffic congestion, noise, and emissions, and 2 saving driving times to and from marine terminals through avoiding the congested areas around gates.”¹⁸

Yet another article confirms that street-turn is considered a valuable method worth focusing on as is the case in the GSCP platform. In “‘Street Turn’ Strategy: An Analysis of its Effectiveness as a ‘Green Logistics’ Tool for the Management of Empty Containers for Road Haulage in Malaysia,” 2012, the author, Nur Farizan Tarudin, writes:

“Previous studies show that the implementation of “Street Turn” strategy for ocean carriers, shippers, and trucking companies result in greater equipment utilization, improve operating efficiencies, and reduce empty container mileage. Other than that, terminals can alleviate congestion and its associated problems. Considerable environmental benefits are also attainable, in the form of reduced truck traffic and diesel emission. Besides that, it had significant potential to reduce congestion in port terminals, rail ramps and inland container depots, to lower ocean carriers’ and tracking companies’ costs of dispatching empty containers, and to create greater efficiency for shippers.”¹⁹

4.5 Further savings by embracing the concept of Smart Ports

GSCP enables Global Terminal Operators (GTO) to embrace smart port opportunities. Structural issues and pain points addressed by GSCP:

- Many Port Community Systems (PCS) are local and in need of modernization. Most PCS are not geared to handle real time updates (through APIs and Web Services) to logistics data from customers, carriers, and customs authorities outside country
- Time lag from when container activity occurred and until reflected in carriers and customers’ systems vary from 30 minutes to 36 hours
- VSA²⁰ partners use phone, EDI and email attachments.
- Trucks make appointments online in the best case, but often arrive unannounced.
- Carriers and Terminals operate in information silos. ERP and TOS systems are not linked in real time to PCS and not well integrated.
- Due to the batch nature of EDI random stacking of imports, late gate, change of vessel, change of destination have a much bigger impact on the bottom line than many terminals realise.

A Smart Port Terminal is a connected community where carriers, trucking companies, BCOs, customs authorities and logistic eco-systems collaborate seamlessly within and across networks achieving higher operations efficiency and service levels.

Equipment within the port are connected, able to stream situational data for enhanced sense-making and pre-emptive response. Dry containers are sensorised providing real-time location to carriers, terminals and wider supply chain stakeholders.

Data driven operations enable consistent and sustained high productivity, asset utilisation and customer service levels. And automation of cargo handling and other port operations with TOS/ECS are operating on ecosystem data streams.

17. Shipping and Logistics Management, 2010, p. 161

18. Intelligent Freight Transportation, 2008, p. 213

19. <http://article.sapub.org/10.5923.j.mm.20130301.04.html> “‘Street Turn’ Strategy: An Analysis of its Effectiveness as a ‘Green Logistics’ Tool for the Management of Empty Containers for Road Haulage in Malaysia,” 2012.

20. “A Vessel Sharing Agreement (VSA) is usually reached between various partners within a shipping consortium who agree to operate a liner service along a specified route using a specified number of vessels.” <https://worldmaritimenews.com/archives/151048/term-of-the-day-vessel-sharing-agreement-vsa/>

Towards a Smart Port generation

"Simply put, there are three generations in port development:

1. The first generation port is a loading and unloading port (until the 1960s)
2. The second generation port is an industrial port (until 1980s)
3. The third generation port is a logistics / supply chain port (post 1980s).

Each generation comes with a new function and focus. In the third generation traditional views held that a ports function was less service and regulator oriented and more landlord and facilitator (or cluster manager) focused. What we see today with the increased need for digital integration is that a port is increasing its focus as a service provider, albeit not in physical services like towage and crane operations but more by becoming a data service provider. **This means that phase three is actually followed by phase four**, a digitalisation of port activities where new services either replace or augment traditional port services.

Moving towards a true Smart Port, one which uses the full potential of an IoT network and smart data solutions means that a port must be able to identify and take advantage of new business models within the larger ecosystem. The nature of the business makes this challenging, since it requires integration between the supply and demand side from the T&L sector, assimilating not only logistics firms and suppliers and distributors but also their clients like industrial producers."

<https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/energy-resources/deloitte-nl-er-ports-services-smart-ports.pdf>

4.6 Huge CO₂ emissions savings potential

The single fact that the GSCP platform has an economic savings potential of USD 5.7 billion yearly for the container shipping industry is obviously a very strong argument in favour of the platform. But in addition, the realisation of the GSCP platform will have a significant impact on the global environment and thereby benefit not only the industry players, but everyone.

"The GSCP platform is expected to reduce the global CO₂ emission by at least 4.6 million tons yearly."

An analysis conducted by the Scandinavian-based consultancy Opsiana²¹ concludes that the GSCP platform is expected to reduce the global CO₂ emission by at least 4.6 million tons yearly. By comparison, Denmark's total CO₂ emission was 40.8 million tons in 2012. Furthermore, the GSCP platform is expected to reduce the global NO_x emission by 4,900 tons yearly.

According to the analysis the implementation of the GSCP platform will result in a 15% decrease of the global container fleet, which will account for most of the emissions reduction:

"Implementation of GSCP and the grey box concept will allow for a drastic reduction in empty container repositioning and increased utilization of containers, which will consequently reduce the total demand for containers with estimated 15%. This reduction in numbers of containers will reduce emissions from container production and emissions from raw materials for the containers, mainly steel."

"Assuming that 15% of containers will be removed from the global fleet over a 11 year period, we arrive at an annualized reduction of 2.2 million tons/year of CO₂, arising from the reduced production of containers."²²

On top of this the greybox concept accounts for a further reduction of almost half a million tons of CO₂, and the street-turn (Truck Triangulation) concept account for almost 1.8 million tons of CO₂.

Even though these numbers sound impressive the Opsiana analysis underlines that they are in fact conservative and that the savings potential could be even bigger:

21. <http://opsiana.com/>

22. Emissions assessment of Global Shared Container Platform, by Christian Plum and Fernando Alvarez, Opsiana 2017.

“As GSCP is a novel process, detailed understanding of the implications is not always clear. To evaluate the emissions effect, we have used a lower bound approach on the emissions estimation, giving a low realistic number of the expected reductions. In practice, it may show that these numbers have been too conservative allowing for even bigger GHG²³ emissions reductions.”²⁴

4.7 GSCP mitigating issues related to financing of containers

In addition to the already mentioned functionalities and use cases, the GSCP platform can serve yet another important purpose, which is to reduce the losses for banks and financial institutions financing container boxes.

Global leasing companies and financial institutions providing financing for new container builds pay expensive re-possession insurance due to cumbersome and antiquated processes for recording of ownership. Specialised insurance companies have partly or completely stopped providing insurance coverage for different insurance products e.g. repossession insurance which are critical enablers for financial institutions providing financing of container assets.

With the GSCP platform ownership of container assets are recorded in a global Fort Knox style blockchain container registry. Change of ownership of containers and custodianship is recorded in blockchain smart contracts.

Business processes for LTL²⁵, subleasing, one-way contracts, direct interchange and EIRs²⁶ will be automated through blockchain smart contracts enabling global leasing companies to achieve much improved DSO.

Global leasing companies have a real opportunity to increase their market share because with GSCP global container carriers have less motivation and incentive to invest in own containers.

“Up to 50% of all container boxes cannot be traced by the financing bank or leasing company after a bankruptcy.”

4.7.1 Sensors and digitised CSC plates

Today, between 10% and 50% of all containers cannot be traced by the financing bank²⁷ after a bankruptcy due to the following imperfections:

1. A container carrier in financial distress or a bankrupt container carrier have less management oversight and often loses track of containers
2. Containers have been sold; stolen or declared total loss without fulfilling the legal requirements to repay debt to the financing bank/leasing company
3. The whole flow of containers grinds to a halt because container depots, equipment maintenance and repair shops, terminals and other service providers who are owed money by the carrier in financial distress are reluctant to release the containers

GSCP requirements to mitigate the imperfections:

- re. 1. A tracking device (sensor) to be placed on the container
- re. 2. Digitising the CSC plate (Convention for Safe Containers) system and thereby having a digital registration of title and in addition the financial security interests. This will ensure that banks/leasing companies will be better informed and potentially better repaid in case of a total loss, change of title, etc.
- re. 3. A container register will ensure controls and legal enforceability

Below is an outline of the more detailed requirements to the GSCP platform needed to avoid the above-mentioned imperfections with the purpose to reduce the loss risks for bank and leasing companies financing the container boxes.

The original purpose of the CSC plate is to ensure that the container fulfils the safety requirements. The CSC plate made of metal is glued to the door panel of the container. If the CSC plate is missing or if the CSC safety approval is not valid the container cannot be handled by the various operators in the chain.

23. GHG = Greenhouse Gas (GHG) Emissions

24. Emissions assessment of Global Shared Container Platform, by Christian Plum and Fernando Alvarez, Opsiana 2017.

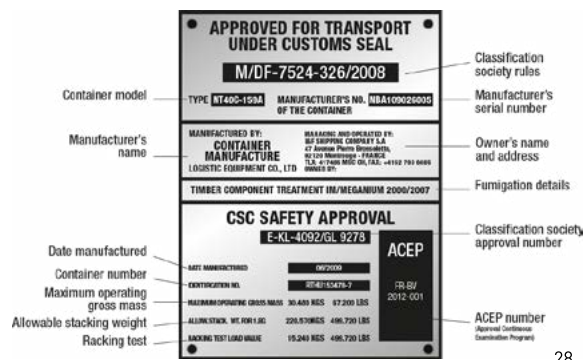
25. LTL = Leasing Long Term

26. EIR = Equipment Interchange Receipt

27. Kyvsgaard Consulting, 2017



The CSC plate also shows the unique identification number of the container, the name of the manufacturer, the name of the original owner (having ordered the container at the factory), and sometimes the operator and the classification society.



In connection with documentation of ownership and security interest the CSC plate in its present form is inadequate because the owner name on the plate often is kept unchanged when title to the container is changed, the container has been declared total loss or the security interest changed, etc.

The CSC plate is very static when it comes to registering changes in ownership and security interest, but

could be a useful tool if it was linked to a way of recording all relevant event over the lifespan of the container including position by using blockchain and tracker technology.

Container Financing Trends

- Huge losses among shipping banks have reduced the appetite for financing to the maritime industry in general
- The Hanjin default has been the Lehman Brothers event within the shipping industry, i.e. banks are now more cautious towards the container industry
- Banks have become more regional and less international
- Growth in alternative sources
- More financing from leasing companies in Asia and less from Europe & US
- Less insurance coverage covering bankruptcy events
- Between 10% and 50% of all containers cannot be found after a bankruptcy.

This will ensure that banks and leasing companies will be better informed and potentially better repaid in case a container is lost, stolen, sold or declared total loss. In this way, the banks and leasing companies can be compensated before a bankruptcy occurs. The ideal outcome would be a digitisation of the plate in a combination with a tracker system based upon blockchain technology.

4.7.2 Benefits from a digitised CSC plate

The digitised CSC plate would be yet another incentive for the players in the industry to jointly support the blockchain based GSCP platform.

When the system is fully implemented the metal CSC plate is replaced by a tracker and through blockchain technology linked to all relevant data on the container not limited to the safety information.

CSC is an international agreement administrated by the governments of the contracting parties (including USA) or by organisations designated by these governments. Approvals under the authority of a contracting party are accepted by other contracting parties. As a result, containers can operate worldwide under a single set of safety regulations.

If this authority can be extended to include enforcement of ownership and security interest as recorded in the digitised version of the CSC plate cf. above the position of banks, leasing companies and security holders has been significantly improved. The strength in this implementation by combining the blockchain and tracker technology with the CSC plate is that it is (in principle) just a natural digitisation of already existing requirements albeit with added relevant information.

The recognised authority resting with CSC will remain unaffected in the digitised version by including the safety aspects and ownership and security interest. The digitised and extended version of the CSC gives a well-defined instrument to reduce the imperfections mentioned above.

28. <https://www.bic-code.org/csc-plate/>

In addition to the digitised CSC plate it is part of the GSCP scope to work for and support the establishment of a more general and objective law regulation by launching a public container register controlled by a public authority. This will ensure better controls of all digitised information and it will ensure a strong foundation for the legal enforceability of the title and security interest in the container boxes. However, a public container registry will require some new laws to be implemented and will take time.

4.8 Blockchain and sensor technologies

4.8.1 Blockchain

Over the last couple of years, the blockchain technology is matured to such an extent that today it is no longer a risky experiment to base a solution like the GSCP platform on this technology. On the contrary, the blockchain technology has never been tampered with, and it has proven to possess a set of qualities and functionalities, which appeal to an industry like the shipping industry and a solution like the GSCP platform.

With the purpose of obtaining an optimal combination of high scalability, undisputed security, maximum control, privacy & flexibility, and low transactions and energy costs, the GSCP platform will be built on a private (permissioned) blockchain.

After analysing several options, the option we are now considering is The Coco Framework from Microsoft, which “is an open-source system that enables high-scale, confidential blockchain networks. It meets all key enterprise requirements, providing a means to accelerate production adoption of blockchain technology. Coco achieves this through the use of trusted execution environments (TEEs) such as Intel’s SGX and Windows Virtual Secure Mode (VSM), enabling the creation of a trusted network of physical nodes on which to run a distributed ledger.”²⁹

Furthermore, the Coco Framework based blockchain is not a standalone solution, it is “designed to be open and compatible with any blockchain protocol.”³⁰ This is important since Blockshipping is issuing both an internal token (based on Coco) and an external ERC20 Ethereum based token for the secondary market.

Basing the GSCP solution on a private blockchain framework like Coco enables a wide range of industry players which do not necessarily trust each other to come together on the same platform and allowing them to exchange services and do fast and large scale transactions in a distributed, decentralised environment controlled collectively by all participating nodes. No trust is needed, and the framework enables a combination of transparency, control and privacy that allow for all participants to gain benefits from using the services and features available on the GSCP platform.

These services and features fall into three main categories:

1. Establishment of the global container registry – thereby optimising greybox- and street-turn-strategies across the industry
2. Recording of change of ownership of containers and custodianship and thereby reducing losses for companies financing containers
3. Internal exchanges of services between users and payments transactions (clearing and settlement) based on an internal GSCP token (see list of expected types of services on the platform on p.29)

By using blockchain technology as a foundation for the GSCP platform Blockshipping aims to resolve – fully or partially – the following well-known industry issues (as mentioned already in this whitepaper):

- Carriers forego huge annual savings potential at the tune of USD 3 to 5 billion because of a lack of a trusted platform where deficit/surplus matching of containers can take place
- Carriers have consistently lost out on carrier haulage leaving others to profit on merchant haulage

29. <https://github.com/Azure/coco-framework/blob/master/docs/Coco%20Framework%20whitepaper.pdf>, p. 4.

30. <https://github.com/Azure/coco-framework/blob/master/docs/Coco%20Framework%20whitepaper.pdf>, p. 1.





- Due to lack of a neutral trusted platform triangulation and street turn cost savings opportunities for carriers at the tune of USD 750 million per annum are not being realised
- Due to lack of real time awareness of container locations global container carriers have inflated container inventories which could be reduced by 15 to 20% if containers had real time tracking sensors installed
- Operational business processes are antiquated based on manual paperwork, e-mails and PDFs resulting in poor customer service, high DSO for suppliers and an inflated workforce of staffs in Shared Service Centres in India, the Philippines and China
- Financing in new build containers burdens Global Container Carriers and Global Leasing companies with a higher interest rate than would otherwise be possible if containers had real-time sensors installed providing actual location of containers.

4.8.2 Sensor technology

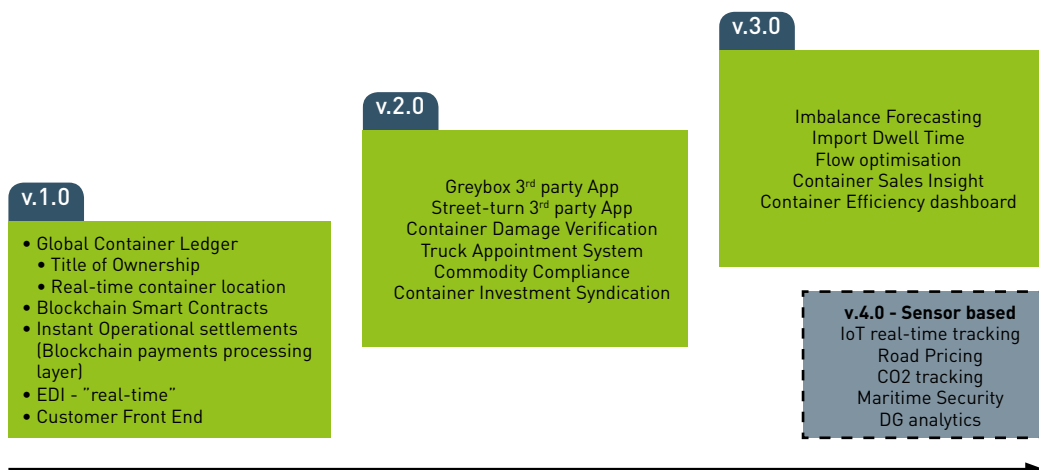
GSCP will accelerate adoption of real time tracking devices of dry containers. Companies like Traxens, Orbcomm, GlobeTracker, Emerson and similar have so far only been successful and achieved any adoption for reefer containers only.

For dry ventilated containers, these vendors are all struggling with demonstrating ROI that would convince carriers that putting a real-time tracking device on dry containers would pay back the investment.

With the GSCP global industry savings potential of USD 5.7 billion we now have a strong case where the carriers and other stakeholders would have a genuine need for real time container tracking data on the GSCP platform.

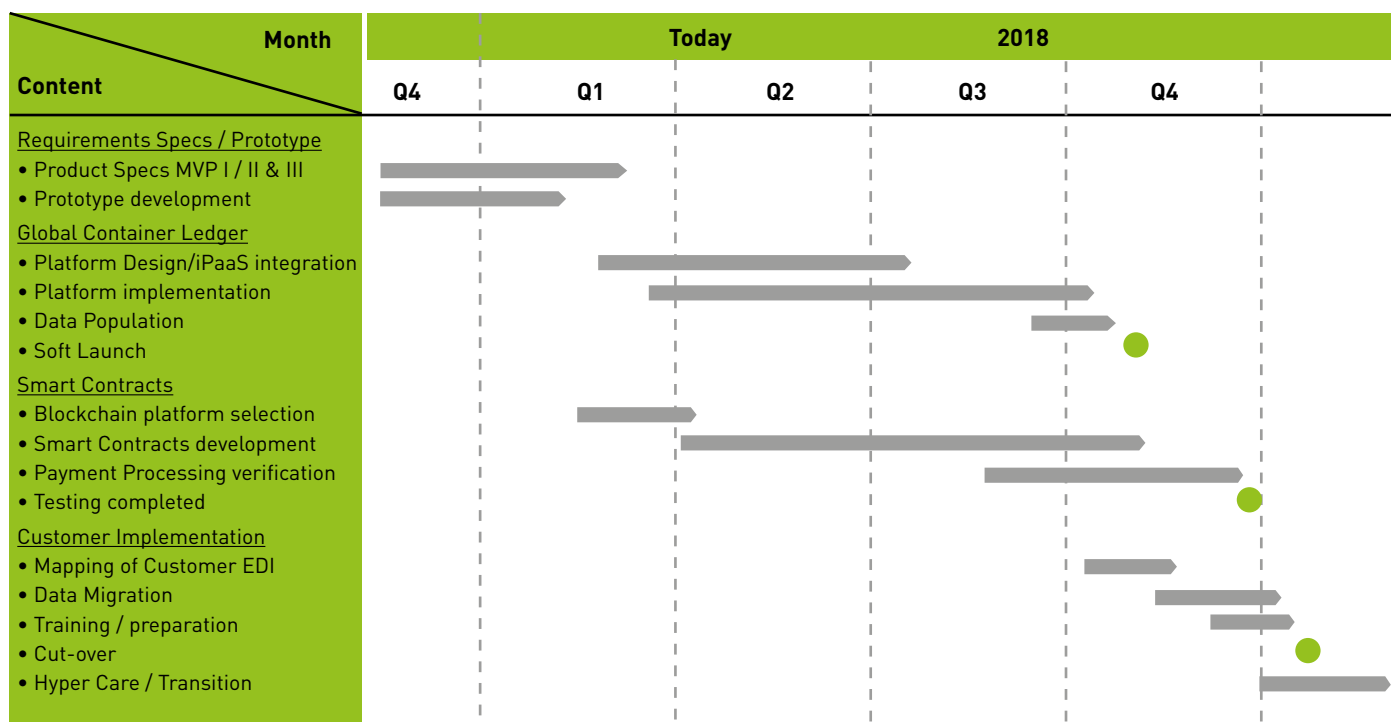
4.9 Roadmap/implementation plan

For our roadmap we have identified four releases in a staged implementation approach, structured to deliver quick wins for the customers of the GSCP portal



GSCP – Roadmap

Development of release 1.0 have already been started and the portal is expected to launch with the first customers in Q1-2019.



Release 1.0 - Development Plan





● | 5 The GSCP ICO

Blockshipping is launching an ICO – Initial Coin Offering – for the GSCP platform.

An ICO is a new and alternative funding model, often compared with crowdfunding, to supplement – and sometimes replace – more traditional funding methods like VC funding for start-up companies.

The ICO crowdfunding model is interesting for at least three reasons:

1. The ICO model is a valuable and efficient alternative to traditional VC funding for start-ups. To some extent, it changes the balance of power between the VC's and the start-ups by enabling the start-ups to take back the initiative of funding through a broader community of potential contributors
2. The ICO model makes it possible for start-ups to raise funding without losing control and diluting the ownership of their project
3. The ICO model is democratising start-up funding in a new and never-before-seen way that allows numerous smaller contributors to support and invest in projects that they sympathise with

Even the Chairman of the U.S. Securities and Exchange Commission (SEC), Jay Clayton, stated late in 2017 that he – even though the SEC is certainly critical of ICOs – do see potential in the further development of the ICO model:

“I believe that initial coin offerings – whether they represent offerings of securities or not – can be effective ways for entrepreneurs and others to raise funding, including for innovative projects.”³¹

5.1 A short ICO history

In 2012, the software developer J.R Willet published The Second Bitcoin White Paper³² in which he introduced a new crowdfunding model that since became famous under the name of Initial Coin Offering. Two years later Willet issued Mastercoin (now Omni³³) and conducted the world's first token sale.

From that point on the idea of democratising the funding of innovative projects (especially within blockchain) by issuing tokens in global crowdfunding-events started

31. <https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11>

32. <https://sites.google.com/site/2ndbtcwpaper/>

33. <http://www.omnilayer.org/>

to spread. Soon it became apparent for the blockchain and crypto community that the newly born ICO model had a genuine potential to supplement, and, in some cases, replace, traditional VC funding. And since capital needs and the dependency on VCs are critical concerns for most (fin)tech startups, the ICO model almost instantly became the new talk of the blockchain town.

The number of ICOs started to accelerate rapidly throughout the world by the end of 2016, and in 2017 – only five years after the publishing of Willet’s white paper – the capital raised globally via ICOs (USD 5.6 billion) surpassed the level of capital raised by VCs.³⁴

The year of 2017 was characterised by a frenzy ICO gold rush and a widespread fear of missing out. And while the ICO model proved to work in practice, the ICO space was repeatedly haunted by frivolous projects and even cynical scammers taking advantage of inexperienced buyers by launching fake ICOs backed by neither a real and substantial project nor the intention of doing anything but collecting the funds and leave the building.

The constant turmoil on the ICO market during 2017 made it clear that sooner or later some kind of ICO standards, benchmarks and common procedures would be necessary. Only to protect the survival and further development of the basic idea of a democratised crowdfunding model for innovative ideas that deserve to be supported not only by venture capitalists but by everyone who likes the idea and wants to give it a helping hand.

5.2 Towards a regulated ICO

This need for clarification became even more evident as the regulatory authorities around the world started to become aware of the growing but still very immature and completely unregulated ICO market.

In November 2017, the European Securities and Markets Authority, ESMA, warned about possible risks related to ICOs and stated the following in a press release:

“ESMA stresses that firms involved in ICOs should give careful consideration as to whether their activities constitute regulated activities. Any failure to comply with the applicable rules will constitute a breach.”³⁵

The perhaps most important – and from the ICO market’s point of view: most scary – initiative came from the US authority SEC (Securities and Exchange Commission) in July 2017 when they concluded that the Ethereum based DAO ICO was illegal due to categorising the DAO coins as securities.

This and other following interventions from different regulatory authorities sent a wave of nervousness through the ICO market and triggered an intense discussion in the global crypto community about the legal status of the ICO model and the practice of issuing and trading cryptocurrencies on the public market.

5.2.1 The first frameworks

In the fall of 2017, this ongoing discussion of the legality of the ICO resulted in the first proposal of a legal framework with the purpose of mitigating the criticism raised by the authorities like the SEC. The so-called SAFT Project was initiated by the New York law firm Cooley, who published their white paper The SAFT Project: Toward a Compliant Token Sale Framework on October 2, 2017.³⁶

However, the SAFT Project did not bring an end to the discussion, on the contrary, and since SAFT was only focusing on US law, it did not add any clarification on the legal status of different kinds of ICO’s and token models in other jurisdictions.

Nevertheless, what the SAFT Project did do was to inspire other groups of ICO stakeholders from jurisdictions outside the US to continue the work and come up with suggestions for national or regional frameworks that would be able to secure the credibility of the ICO funding model going forward. In the UK, the very short so-

34. <http://nordic.businessinsider.com/how-much-raised-icos-2017-tokendata-2017-2018-1?r=UK&IR=T>
35. https://www.esma.europa.eu/sites/default/files/library/esma71-99-649_press_release_ico_statements.pdf
36. <https://saftproject.com/static/SAFT-Project-Whitepaper.pdf>
37. <https://saftproject.com/static/SAFT-Project-Whitepaper.pdf>



called ethical (rather than legal) framework London Fundraising Token Manifesto³⁸ was published in October 2017. In December, the Japanese ICO framework RICO – Responsible Initial Coin Offering³⁹ was launched by the Tokyo based blockchain community DRI. In January 2018 the Swiss-based Crypto Valley association announced a set of short ICO guidelines called The CVA Policy Framework⁴⁰, and shortly after, in February 2018, the Swiss Financial Market Supervisory Authority FINMA launched their ICO guidelines⁴¹.

5.2.2 The ICO 2.0 Framework

Despite these – and other – inspiring efforts, a lot of questions about the future of ICOs are still up for debate, and that is why a Danish group of legal experts, blockchain experts and communication & PR experts are developing a new ICO framework called The ICO 2.0 Framework.

The framework will address not only those companies that wish to implement an ICO but also the potential buyers of the cryptocurrencies issued by the companies, and it will address the authorities that are to decide on the legality of the ICO – and at the same time keep an eye on and evaluate the development of the ICO market as such.

The ICO 2.0 Framework is going to present best practices and give recommendations within four areas:

1. Law
2. Code
3. Security
4. Communication

The purpose of ICO 2.0 Framework is to increase the quality standards for ICOs making sure that future Danish ICOs:

- A. are 100% compliant with Danish law
- B. aim at the highest standards regarding security and quality of coding
- C. promote openness, transparency and honesty
- D. follow a strict code of conduct when it comes to communications and relationship management with the ICO stakeholder groups.

The ICO 2.0 Framework is being created by the largest law firm in Denmark Kammeradvokaten/Poul Schmith in collaboration with the Nordic fintech advisory firm Norfico.

Since Blockshipping's GSCP ICO will be the first ICO to be based on The ICO 2.0 Framework, the GSCP ICO is – of course – required to follow the guidelines and recommendations suggested as part of the framework. The ICO 2.0 Framework is expected to be published in April 2018.

5.3 The Blockshipping ICO token model

One of the most important and highly debated issues when discussing the best and most correct and credible way of designing an ICO is the choice of token model and the legitimacy and credibility of different types of tokens.

For the Global Shared Container Platform (GSCP) Blockshipping has decided to create two tokens:

1. The Container Crypto Coin (CCC): an external ERC-20⁴² Ethereum revenue share token/crypto currency to be sold publicly during the ICO and subsequently traded on the secondary market
2. The Container Platform Token (CPT): an internal utility token for transactions on a private/permissioned GSCP blockchain

The internal and external tokens will be separated, but in an asymmetrical uni-directional way so that the external publicly traded token CCC cannot affect the stability

38. <http://www.longfinance.net/nstm>
39. <https://dri.network/rico/>
40. <https://cryptovalley.swiss/codeofconduct/>
41. <https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/>
42. ERC-20 is the de-facto standard for issuing tokens on the Ethereum Blockchain (<https://github.com/ethereum/EIPs/blob/master/EIPS/eip-20-token-standard.md>)

and price of the internal token CPT, but the internal token can and should support the value of the external token by sharing revenue generated by the transaction volume in the internal system on the GSCP platform with the external token owners.

Additionally, to further support the CCC and its price in the free market, a major part of the collected funds will be locked in a Market Maker fund. Please read more about this fund in the sections below.

The idea of issuing two tokens came from watching what happens when utility tokens become popular on the secondary market and how that tends to invalidate their viability as utility tokens for their originally intended purposes. Transaction prices on the Ethereum platform have gone up significantly as a logical consequence of the rise of the value of Ether. Bitcoin has become completely useless as a means of payments and is now in practice solely a digital asset class, even though Satoshi Nakamoto's original idea was to create "a purely peer-to-peer version of electronic cash [that] would allow online payments to be sent directly from one party to another without going through a financial institution."⁴³

To avoid a situation where a successful reception on the market of a GSCP token would harm its ability to perform internally on the GSCP platform we realised that we needed to make a split into two separated GSCP tokens each with a clear and well-defined role in the GSCP ecosystem.

43. <https://bitcoin.org/bitcoin.pdf>

44. More alternatives are being evaluated but final decision is still pending.

Tokens characteristics

	CPT Container Platform Token	CCC Container (Crypto) Coin
Where	Deployed on the private GSCP blockchain. ⁴⁴	Deployed on the public Ethereum blockchain.
Purpose	To be used to pay transaction fees for using the GSCP platform and for clearing and settlement between GSCP participants.	Raise funding for GSCP development and acquisition of Commercial of-the-shelf (COTS) software and frameworks to be integrated into GSCP.
Who	Only available for GSCP participants i.e. the industry players in need of an efficient and stable system.	Will be publicly traded. Cannot be exchanged directly with CPT Tokens.
Technology	Implemented in Solidity and compliant to the ERC-20 Ethereum Token Standard.	Implemented in Solidity and compliant to the ERC-20 Ethereum Token Standard.
Value	One token equals 1 USD.	Post ICO, the value will be decided by the market via trade on exchanges.
Amount in circulation	Uncapped. Can grow and shrink based on demand. -Exchanging CPT to USD: Destroying CPT. -Exchanging USD to CPT: Creating CPT. I.e. amount of CPT varies with the balance of USD owed to and owned by the participants on GSCP.	Capped. During pre-sale and public sale only a finite amount of 50.000.000 CCC tokens will be issued and sold.

5.3.1 CPT: The Internal Token

The internal GSCP token is a utility token created with the purpose of enabling the participants on the GSCP platform to handle transactions (clearing and settlement) in a cheap and efficient way.

The clearing and settlement system of the GSCP platform can be understood as in principle a blockchain based modern version of a more traditional clearing and settlement system like the Danish "Sum Clearing" that was introduced in Denmark as early as the 1980s. The Sum Clearing⁴⁵ handles daily payment transactions between around 120 Danish banks "or foreign banks with branches in Denmark or otherwise conducting cross-border activities in Denmark."⁴⁶

The system is described as a multilateral net settlement system, "which means that amounts corresponding to the sum of payments to and from the banks' customers are exchanged between banks at fixed times during the day."⁴⁷

The Sum Clearing is a centralised system owned by the Danish Bankers Association (Finans Danmark), and to function it needs the Danish National Bank (all participating banks must have an account there) and a day-to-day operator (which in this case is the Nordic payment company Nets).

The GSCP clearing and settlement system will basically offer the participants of the platform the same functionality as the Sum Clearing offers the Danish banks, which is to ensure that "amounts corresponding to the sum of payments to and from" the users of the platform are exchanged in a correct manner. But compared to the Sum Clearing the GSCP clearing and settlement system will have several advantages since it is a blockchain based decentralised and trustless system:

1. Trust: Because a blockchain system cannot be tampered with, the participants of the platform do not have to trust either each other or a bank or a central system operator
2. Instantaneous: In the Danish clearing system only a minor part of the clearings goes via the so-called Express Clearing, but in a blockchain based system all transactions can be executed as real-time or close to real-time transactions
3. Global: While the Sum Clearing only allows Danish banks or banks with operations in Denmark to participate, there is no geographical limitations in a blockchain based system. Participants on the GSCP will be able to participate regardless of their geographical location
4. Cost-efficient: Cross-border transactions within the GSCP blockchain system will not be more time-consuming or costlier like we know it from today's corresponding banking where a bank transfer may take up to several days to complete and comes with high fees

The internal utility token CPT - or Container Platform Token - should be understood basically as an abstract representation of a US dollar (USD) that allows the users of the platform to avoid having to settle every single transaction in USD through the normal banking channels, avoiding the hassle and cost of taking USD in and out many times daily, and avoid paying the fees that goes with transferring of dollars across borders i.e. utilise all the above-mentioned advantages.

The reason for pegging the CPT to the USD is that the GSCP will be a heavily interconnected platform and most of the touch points will be using USD as currency to settle payment for services as this is the preferred currency in the shipping industry.

By issuing a token to represent an USD for the internal transfers on GSCP instead of just keeping the balances in USD we are able to build-in certain attributes in to the currency itself. An example of this is the revenue share pool presented in the chapter below.

The CPT will be implemented using its own smart contracts. This way we can separate the code for the token from code of the platform, and thereby allowing for future use of the CPT outside of the GSCP, when integrating GSCP with other blockchain enabled solutions or platforms.

45. In addition to the Sum Clearing Denmark has The Intraday Clearing and The Express Clearing, but none of them involves blockchain technology

46. www.nationalbanken.dk/en/publications/Documents/2013/04/Assessment_sumclearing_dec_2012.pdf

47. www.nationalbanken.dk/en/publications/Documents/2013/04/Assessment_sumclearing_dec_2012.pdf

This is because we truly believe that the CPT has the potential to become the primary payment method for ordering and settlement of services related to the physical handling of containers. The market potential covers all the variable cost related to container handling and daily leasing cost of containers.

It will be possible for the participants to deposit or withdraw USD to and from the platform, but transaction fees will also be applied on these transactions to (in combination with the notoriously slow bank transfers) incentivise the participants to lower the number of withdrawals out of the platform and leave the CPTs in the platform to further support the platform's ecosystem.

Blockshipping is also exploring options for GSCP participants, having large balances in their favour to lend out CPTs held on the platform to other participants on short term in return of interests paid in CPT. This will give all participants an additional means to optimise their day to day cash flows.

Additionally, for future use cases where tighter coupling with other platforms is foreseen e.g. by integrating on blockchain level then using CPT as currency across platforms will allow instantaneous intra platform transactions and much lower cost than if normal fiat currencies were to be used.

Sample list of transactions that the internal utility token CPT will be used for

Land Transport of Containers

- Intermodal Trucking of Containers fees
- Trucker stand-by charges
- Transport by Rail fees
- Transport by Barge fees

Container Exchange Fees

- Greybox exchange fee
- Street-turn exchange fees
- Sub-leasing fees

One-way leasing fees

- On-hire charges
- Drop off charges

Servicing and Repair of Containers

- Maintenance and Repair of containers
- Steam cleaning of containers
- Fumigation of containers
- Purchase of Tracking sensor for containers
- Retrofitting of sensors on containers

Terminal and Depot Handling Cost

- Container Yard (CY) Cost
- Discharge and Load Cost
- Container Storage cost

Fees collected by Carriers

- Detention and Demurrage fees

Note: Freight revenues are composed of base freight plus a great number of small add-ons that carriers and their agents charge the exporters, NVOCC⁴⁸ or freight forwarders. Some of these add on charges relate to physical handling of containers, and they will be added to the above list.

48. NVOCC = Non Vessel Operating Common Carrier



5.3.2 The external token

The external token acts as a means to raise the funding to build and further develop the GSCP platform e.g. by acquiring other companies and integrating them into the platform.

So even though CCC does not have a direct use on the platform it certainly does have an indirect utility, since it plays an extremely important part in supporting the building and initial operation of the platform.

Unique beneficial features of CCC

For the CCC to fulfil its part we need the coin to be as attractive for the market as possible, and that is why we have decided to carefully build in several features in our token model that benefits the supporters of the coin.

A. Revenue share coin

For their initial support of the GSCP the holders of CCC will be rewarded with a substantial part of the gross revenue from the transactions performed on the platform

[See the details of this in the next section about the Revenue Sharing Model.](#)

B. Market Maker Fund – a unique beneficial feature

Additionally, to further support the CCC and its price in the free market, especially in the times after the ICO and before the launch of the platform a major part of the collected funds will be locked in a Market Maker Fund. What this means is that IF the price of the CCC on the free market at any time after the closing of the ICO but before the first phase of the solution is launched should fall to a level below a certain percentage of the introduction/starting price, then everyone who have bought CCCs during the ICO will be able to sell back their coins to Blockshipping, if they regret buying the coin. In that case Blockshipping will pay back from the Market Maker Fund.

In fact, by doing so we are offering all our supporters an economic safety net, which is a unique feature on the crypto market.

[See more details in the section below on Market Maker Fund](#)

C. Future utilities of CCC

On top of the current utility of CCC we have a couple of additional innovative ideas and concepts where we can see the possibility to open up and use the CCC for certain functions on the GSCP platform and thus enabling CCC owners to actively be able to get more value for their CCC.

POTENTIAL FUTURE USE CASES

Blockchain container investment syndicates will be able to democratise investment in containers (instead of being reliant on around 20 global leasing companies)

The CCC has the potential to be used as a currency to build new containers. Through introduction of blockchain container investment syndicates, global container carriers are assured of lower leasing cost than if owned and can divest themselves of the need to own containers. This will enable the container carriers to move away from the hassle of having to invest in around 48 % of the global container fleet because they are now able to access and lock in containers short and long term from a lot more sources.

Use of CCC for freight payment (CPT is also an option eliminating the fluctuation in value)

While the CCC and CPT is initially focused on achieving better utilization of containers both CCC and CPT has the potential to be used for freight payments as well.

The bane of the shipping industry with multiple bookings and the constant shopping around for lowest freight rates could become a thing of the past with instant Bill of Ladings (B/L) and freight invoices being issued and paid at time of booking. Carriers will know up front the net contribution for container bookings end to end. Carriers, freight exchanges, freight forwarders (NVOCC) and other slot providers will be able to execute bookings based on knowing upfront the specific container number with freight income and cost of moving containers known and locked in and settled via blockchain smart contracts.

This will be the first time in history where carriers will be able to determine upfront the Profit and Loss (P&L) of an individual container booking and thus provide much more certainty with regard to revenues and cost of operating containers.

We have more concepts in the pipe-line but cannot publish these in detail at this early stage, simply because we do not want others to copy them before we have had the time to finish the development and are ready to implement them in the GSCP system.

5.3.3 Revenue Sharing Model

To reward the buyers of the CCC by sharing part of the gross revenue of the GSCP platform, we have designed a Revenue Sharing Model.

It is designed in a way that ensures the external publicly traded token CCC cannot affect the stability of the internal token CPT, but the internal token can and should support the value of the external token by sharing revenue based on the transaction volume on the GSCP from the last month with the external token (CCC) owners.

Initially 20% of the gross revenue from transaction fees paid in CPT on the GSCP will be distributed to CCC token owners. When the monthly revenue rises above 0.5 million USD the percentage will be gradually reduced following these brackets:

Monthly Total Revenue

Brackets (million USD)	Revenue Share Percentage
0 to 0.5	20%
0.5 to 1.0	15%
1.0 to 1.5	10%
1.5 to 2.0	5%
2.0 to 2.5	3%
2.5 and above	1%

I.e. if the monthly revenue is 0.7 million USD then $20\% * \text{USD } 0.5\text{M} + 15\% * \text{USD } 0.2\text{M} = \text{USD } 0.13\text{ million}$ will be shared with the CCC holders.

Revenue Share Amounts - estimated

Based on the overall Transaction Revenue Model defined and estimated for the GSCP business case we expect the following shared revenue to be generated by the platform during the next five years (2018 – 2022):

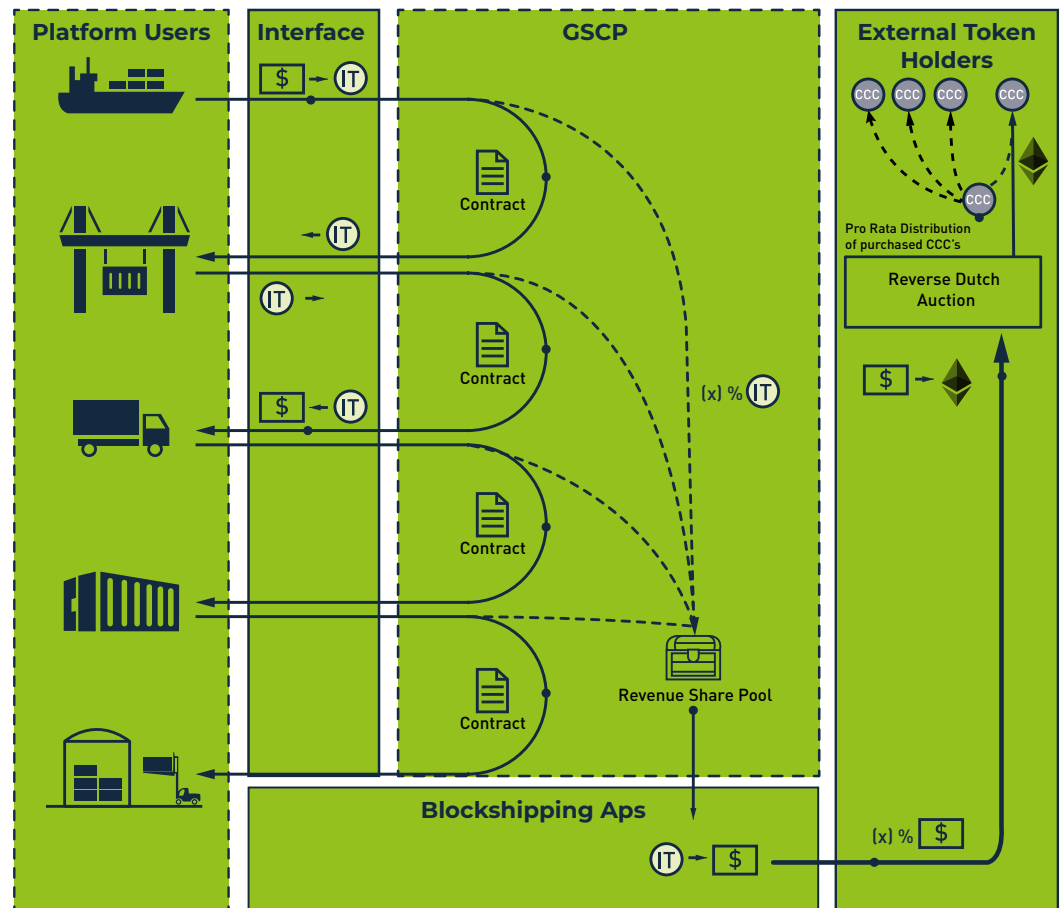
Year	Expected GSCP Yearly Shared Revenue	Payout Per Token (yearly)	Shared Revenue % per Token (yearly)
2018	USD 0	USD 0	0
2019	USD 440,150	USD 0.0088	1.42%
2020	USD 1,368,474	USD 0.0274	4.41%
2021	USD 2,694,242	USD 0.0539	8.69%
2022	USD 3,187,951	USD 0.0638	10.28%

“Shared Revenue % per Token” is calculated against the initial contribution of USD 0.62 per token, so e.g. in 2022 we estimate a share of CCC worth USD 0.0638 per CCC i.e. this corresponds to 10.28% of the ICO price of USD 0.62 per CCC.

Revenue Share Process

The revenue share will be done pro-rata on monthly basis by airdropping CCC to CCC owners holding more than 100 CCC that have completed KYC in our ICO portal. The process for the accumulation of revenue to be shared and subsequently airdropped is shown in the figure on the next page:





Since the amount of CCC is capped and we cannot mint more CCC then to be able to distribute the revenue share collected in CPT we have to acquire existing CCC from the market place. We have given careful consideration on how to implement this process to make it fully transparent and not accidentally affecting the price of CCC in a downward direction or create uncertainty as to the value of CCC.

The process consists of the following steps:

1. Every time a participant on the platform performs a transaction the revenue share part of the transaction fee is added to the Revenue Share Pool
2. The CPT collected in the Revenue Share Pool are continuously exchanged to USD - i.e. withdrawn from the platform - and then traded to ETH on the open market. The ETH will be held in the CCC Auction Wallet
3. To avoid dumping the price of CCC while exchanging ETH to CCC the exchange will be done using a reverse Dutch Auction – read further details of this concept below
4. After the auction GSCP distributes the acquired CCC tokens to all the owners of CCC tokens on a pro rata basis. This way token owners are rewarded regardless of their decision to sell or keep their CCC tokens

Reverse Dutch Auction⁴⁹

To allow all CCC token holders an equal chance to exchange their CCC to ETH, and to avoid dumping the price of CCC while exchanging ETH to CCC, we have decided to do this using a reverse Dutch Auction. Reverse because instead of letting the price fall in fixed intervals it will rise instead.

49. A Dutch auction is one of several similar kinds of auctions. Most commonly, it means an auction in which the auctioneer begins with a high asking price, and lowers it until some participant accepts the price, or it reaches a predetermined reserve price.” https://en.wikipedia.org/wiki/Dutch_auction. PLEASE NOTE that what we are using is a REVERSE Dutch Auction.

The auction will be performed as follows:

- At the start of the auction the public ETH / CCC Trading Price (TP) is locked, based on the average 24-hour trading price on the exchanges listing CCC
- Start times and start price will be advertised on twitter and the webpage
- The start price in the auction will be the TP-5%
- The price will increase four times in five-hour intervals: TP, TP+5%, TP+10%, TP+15%
- The auction is closed when either all ETH in the GSCP Auction Wallet has been spend or 25 hours after the auction was started
- ETH not spent during this 25 hours window will be kept for next auction
 - one month later
- The current plan is to implement the Reverse Dutch Auction in its own smart contract on the Ethereum blockchain. But with consideration to the high transaction fees and times currently seen on Ethereum, alternatives will also be explored i.e. implementing directly in the ICO portal instead
- All CCC token owners can participate in the auction

5.3.4 Market Maker Fund

During the time after the completion of the ICO but before the first launch of the platform in release 1.0 and its subsequent releases of the additional development phases (as shown in section 4.9 – Roadmap) we want to support the stability of the price of CCC by creating a Market Maker Fund.

45% of the funds raised during the ICO will be kept in the Market Maker Fund and it will guarantee a floor price of CCC. Token owners who bought their tokens during the pre-sale or the public ICO can at any time exchange their CCC to USD at the floor price.⁵⁰ It will be possible to claim a refund via the ICO webpage. Each Token Owner will only be able to exchange up to the number of tokens they acquired during the ICO.

As the GSCP platform reaches certain milestones and demonstrates its viability the Market Maker Fund will be gradually phased out and the funds in the Market Maker Fund be released to Blockshipping ApS to further support the development of the subsequent releases (release 2.0 and forward) of the GSCP platform.

These following milestones have been defined:

		% released	Estimated Floor Price USD
Milestone 0	ICO closed	N/A	0.22
Milestone 1	Platform release 1.0 launched	30	0.15
Milestone 2	1,000,000 containers registered on GSCP	30	0.09
Milestone 3	2,000,000 USD revenue shared back to CCC holders during one year (365 days - sliding window)	40	0.00

The calculations are based on a fully funded ICO and that no tokens have been traded back using the market maker fund. If the ICO is not fully funded, then the contributed funding will first cover the other three piles as specified in section “5.6 Funding Breakdown” before filling up the market maker fund.

Any CCC sold back to GSCP via the Market Maker Fund will be held by the GSCP, and used to distribute the funds collected in the Revenue Share Pool or traded on the free market. Any revenue from this sale will be transferred to Blockshipping ApS to be used for development and operation of the GSCP, i.e. it will not be transferred back in to the market maker fund.

50. We are also investigating the possibility to refund in ETH as supplement to USD

5.3.5 Trading of CCC

As an ERC-20 compliant token deployed on the Ethereum blockchain CCC will be tradeable on both centralised exchanges (CEX) and decentralised exchanges (DEX). The decision on which exchange the CCC initially will be listed will be finalised and published after the end of the ICO in order for GSCP to get the best conditions for performing the listing of CCC.

We are favouring exchanges that:

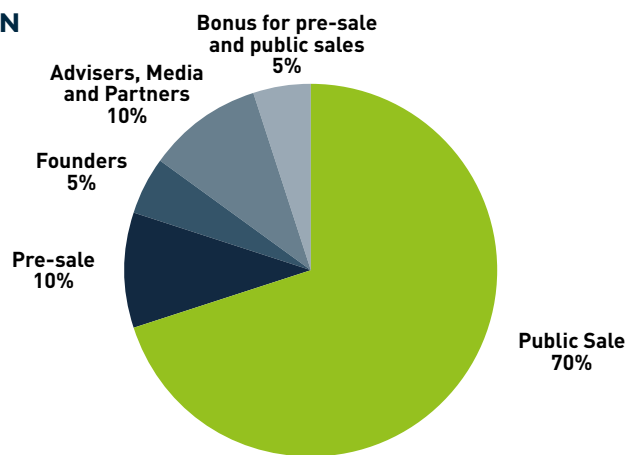
- will commit to further distribute the airdropped Revenue Share Tokens to its account holders holding CCC in their exchange wallets
- have a good reputation
- have a sizeable trading volume and user base
- have a fair fee structure

5.4 Token Distribution (CCC)

A total of 50.000.000 CCC Tokens will be issued. The 50.000.000 is a hard cap and no further CCC tokens will be issued at any time in the future.

The CCC will be allocated as follows:

TOKEN DISTRIBUTION



Token Distribution	%	Number of Tokens
Pre-sale	10	5,000,000
Public sale	70	35,000,000
Founders and employees	5	2,500,000
Advisers and partners	10	5,000,000
Bonus used in pre-sales and public sales	5	2,500,000
Total	100	50,000,000

Pre-sale allocated tokens that have not been sold will be added to the public sale allocation. If we get a large interest for buying tokens during the pre-sale we reserve the right to take up to 10% extra from the public sale allocation and sell during pre-sale.

Any CCC not sold or claimed during the ICO (pre-sale and public sale) will be allocated to GSCP and used to pay out the revenue share at a rate of USD 0.62 per CCC until no further CCCs are left. This means that in this period no reverse Dutch auctions will be held.



The CCC allocated to founders and employees will be locked and released after 6, 12, 18 and 24 months provided they are still working actively on the GSCP platform.

5.5 Token Sale

Due to highly volatile prices of the two main crypto currencies we have chosen to lock in the price of each token to USD 0.62. It will be possible to contribute to the ICO using Ether (ETH), bitcoin (BTC) and bank transfers (USD & EUR). The exchange rate will be locked at the time of the purchase of the CCC and will be based on the average price quoted on the three top ETH/USD, BTC/USD exchanges: bitfinex.com, gdax.com and bitstamp.net.

For example, with a ETH/USD price of 1,000 USD per ETH, USD then the price of CCC will be one ETH for 1,613 CCC.

Minimum buy will be the equivalent of 100 USD i.e. 0.1 ETH at ETH price of 1,000 USD.

During pre-sale a 20% bonus will apply thus giving per the example above 1,935 CCC for one ETH. Additional 500,000 CCC are reserved as an early bird bonus in the public sale.

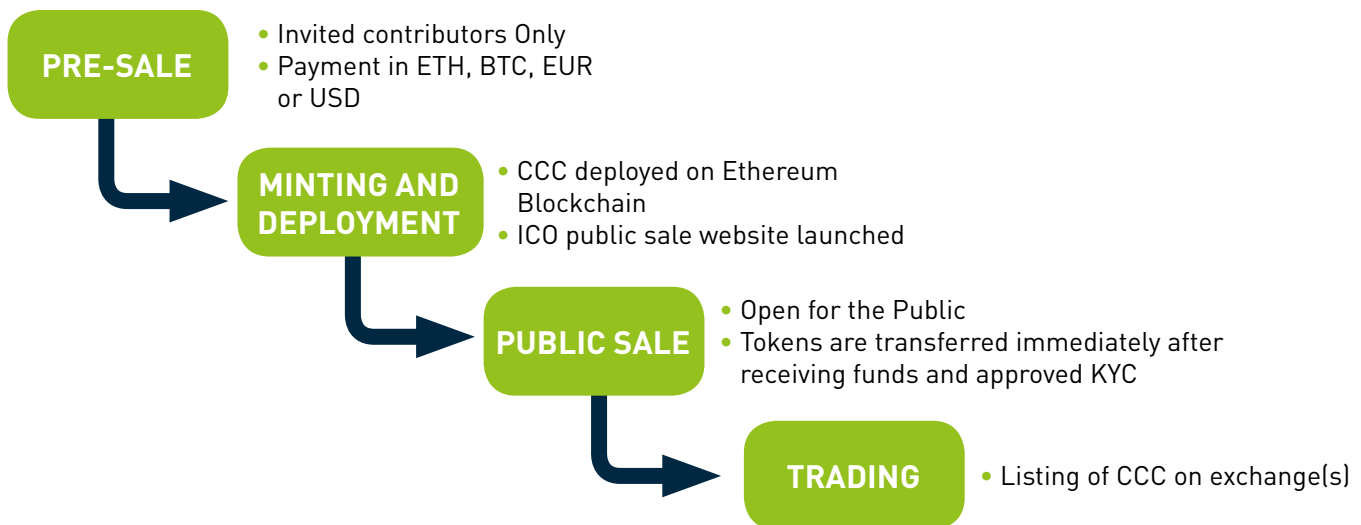
A dedicated sales website will be launched to handle the public token sale and KYC registration process. To give a fair chance for everyone to purchase tokens, allow payment in both ETH, BTC, USD and EUR and to avoid the gigantic transfer fees sometimes seen during pure Ethereum executed ICOs - we will not be using one central wallet to accept contributions. Instead based on the chosen means of payment we will create an individual and dedicated transfer option for each buyer and allow a certain time for the buyer to execute the transfer. If the buyer does not perform the payment in this timeframe, then the CCC will be released back in the sales pool.

There will be much more information and details on the purchase process at the time of the sales website launch.



5.5.1 The ICO process and setup

The ICO for CCC will have four phases:



- Private Pre-sale Phase
 - KYC and AML to be applied
 - Pre-sale bonus of 20% applied
 - Contributors are granted contracts on future delivery of CCC
 - Funds collected during the pre-sale are transferred to Blockshipping ApS
 - Invited Contributors only, but it will be possible to sign up to become an invited pre-sale contributor via the ICO web page
- Minting and distribution phase
 - Deploy CCC to Ethereum Blockchain. CCC are minted and kept in the GSCP wallet
 - Launch of website for token sale and KYC registration process
 - KYC registration can be started for all interested token buyers
 - Distribute all pre-sale tokens
- Public Sale Phase
 - Open for everyone
 - KYC and AML to be applied
 - Early bird bonuses
 - Tokens are transferred at the time of confirmed purchase
- Trading
 - CCC will be listed on one or more exchanges

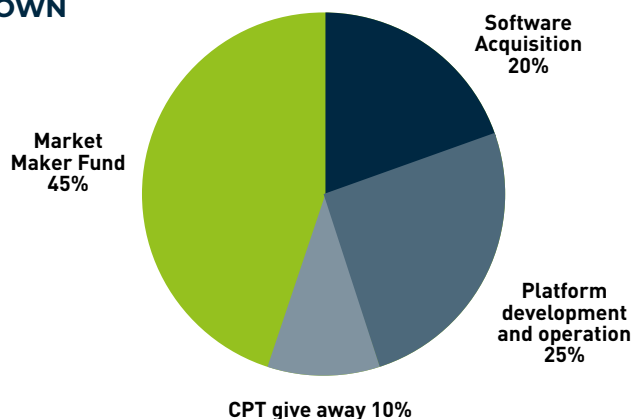
5.6 Funding breakdown

Provided all 40 million public available CCCs are sold during the ICO the following revenue can be expected:

Tokens Sale Revenue	
Tokens issued totally max	50,000,000
Initial offering sold / distributed	42,500,000
Tokens held by founders and advisers	7,500,000
Price per token	USD 0.62
Tokens to be sold in ICO	40,000,000
Total revenue ICO	USD 24,800,000.00

The funding raised during the ICO will be split into four funds allocations:

FUNDING BREAKDOWN



Pile	Description	%	Amount
Platform Development acceleration – acquisition of COTS software modules	<ul style="list-style-type: none">• Container equipment inventory control system for use by container carriers• Empty container depot management system• Empty container repair management system	20	USD 4.9 mill
Platform development	Development of the first GSCP releases including integration of COTS modules	25	USD 6.2 mill
CPT give away	To incentivise usage of the platform the first parties to sign up for using the platform will be given CPT for free to pay for their first transactions and settlements.	10	USD 2.5 mill
Market Maker Fund	Will be gradually released for further development of GSCP. See section above	45	USD 11.2 mill

If the ICO is not fully funded, then the contributed funding will first cover the first three piles before filling up the market maker fund.



5.7 Legal considerations

Blockshipping has been assisted by Kammeradvokaten/Poul Schmith ("Poul Schmith") regarding the legal considerations under Danish law in connection with the issuance of CCC Tokens during the ICO.

Poul Schmith (kammeradvokaten.com/) is the largest Danish full-service "law firm". In addition to advising private Danish and international clients, Poul Schmith has been the preferred legal adviser to the Danish government since 1936. In recent years Poul Schmith has made a strategic move to increase the market share of corporate clients, including banks, pension funds, insurance companies and private equity funds. Furthermore, Poul Schmith is recognized as a leader of the digital transformation in the Danish legal industry.

Based on Poul Schmith's understanding of the factual description as stipulated in Poul Schmith's legal opinion, Poul Schmith is of the opinion that the CCC Tokens do not qualify as financial instruments pursuant to annex 5 of the Danish Financial Business Act (Consolidated Act no. 1140 of 26 September 2017 as amended) ("FBA") or section 4(1) of the Danish Capital Markets Act (Consolidated Act no. 12 of 8 January 2018) ("CMA"). More specifically, the CCC Tokens do not qualify as (i) shares or securities equivalent to shares, (ii) bonds or any other debt instruments or (iii) options, futures or any other derivative agreements. ●



● | 6 The team

We have built up a strong team of highly competent people who either have experience in key positions within the container shipping industry, or expert knowledge and genuine hands on experience with blockchain technology or smart sensor technology and the use of IoT in a shipping context.

In addition, we have built up a first class ICO team consisting of leading Nordic lawyers, and ICO experts within blockchain, smart contracts, KYC/AML, and PR & communications.

6.1 The Blockshipping core team

PETER LUDVIGSEN, CEO & Founder



Peter has 39 years' experience in the shipping industry possessing a unique combination of Shipping Industry background (Liner Shipping, Operations Management, Ports and Container Terminals), with CIO experience, and IT Program Management along with entrepreneurial experience from having founded and managed Bestshore Business Solutions UK Limited for several years.

- Extensive experience in E-Commerce, ecosystems and leveraging business development opportunities in connecting Carriers ERP, Terminals TOS with landside operators
 - 8 years' combined experience as CIO for Maersk Line Europe Region, UASC, Ports America and INTTRA
 - 5 years' combined experience with UASC initially in roles as Management Consultant, Interim CIO and later permanent Group CIO responsible for large strategic IT Projects and head of IT dept.
 - 10 years' experience in Head office IT Dept. at Maersk Line, Copenhagen and London in roles as Project Manager and Business Solution Mover responsible for full lifecycle of large enterprise IT projects. This includes 3 years' experience in the role as CIO for Maersk Line Europe Region
 - Extensive IT projects and Program management experience for large Enterprise IT Projects
 - Managing Director of Terminal/Operations/Intermodal company (120 FTE) in Taiwan responsible for all operations of large North European Carrier including development of large Container Terminal in Kaohsiung
 - Strong trend forecasting ability with proven track record in developing business ideas and solutions which materialise 4-6 years later
-



CHRISTIAN GYNTELBERG, COO

IT Management consultant with Senior Management experience from several positions in Maersk and DHL. Business IT and Shipping/Logistics Management focus. Shipping and Logistics process expert with extensive hands-on experience in leading both commercial and operational departments.

- Proven track record in managing IT-driven change programs through the entire systems lifecycle based on theory and practical hands-on experience
 - Strong track record in digital transformation and Cloud solutions transition management
 - Outsourcing and commercial vendor management expert – including SLA negotiations. Commercial and IT Program and Project Management at Enterprise level
 - Management trainee at Maersk. Executive MBA from Copenhagen Business School
-



JESPER VEEDSBY, CTO

Jesper has more than 20 years' experience as a CTO and technical architect within the shipping, airline and energy sectors.

Jesper has been attached to Bestshore since 2004 and has a wealth of senior executive experience as CIO, Enterprise Architect and senior project manager, across three continents - counting large container terminals, global shipping lines, international airports and telecommunications companies among the clients.

- Having graduated in 1994 with an MSc in neural networks, Jesper initially had roles as IT Systems Architect and hardcore developer. Since then, his passions have been IT management and assessments as well as architecting and integration of large complex systems
 - Jesper holds an MSc in neural networks from DTU, Technical University of Denmark, Copenhagen
-



DAVID GREEN, Business Development Director

David has 40 years' IT experience (Senior Management level for the past 17 years), working for both IT Service Providers (such as IBM, and an IBM Business Partner) and at Senior Level of internal IT departments.

- Possessing a proven record of developing I.T. Solutions, Business Processes, Technical Strategies, and Skilled Delivery Teams. Experience of Leading Commercial Technical teams with responsibility for bottom line profitability, as well as being responsible for internal cost centres delivering proven business values
 - He has worked in the UK, South Africa, Belgium and most recently for a large Shipping Line in Dubai
-

6.2 The Blockshipping board & advisers



JESPER PRÆSTENSGAARD

30+ years in Shipping as CEO and Board Member, Currently MD of Humanostics and chairman of Unifeeder Board.

- Among other executive positions: Personal Assistant to the Chairman and CEO, Mr. Mærsk Mc-Kinney Møller, Maersk Group (Jul. 1991 – Nov. 1992); Senior Vice President, Maersk Singapore; Group Vice President, A.P. Moller Maersk A/S; Chief Executive, Asia Pacific Region, Maersk Line; Chief Commercial Officer, Hapag Lloyd AG; Non-Executive Director, New York Shipping Exchange, Inc.



FRANCK J. KAYSER

Captain Franck J. Kayser started his career as a cadet in Maersk A/S in 1982 and has served as Captain on different ships until permanently settling ashore in 1998.

- Capt. Kayser has worked international shipping for more than 30 years for companies such as Maersk, CMA-CGM, TCC, UASC and NileDutch Africa Line
- Capt Kayser has held a number of senior management positions in the fields of: Maritime Transport, Marine and Port operation, Infrastructure development
- Technical Management, Ship Management, Mergers and Acquisitions
- Capt. Kayser is a board member in various shipping related businesses
- Capt. Kayser holds a Masters from Copenhagen Nautical Academy and has received additional education at INSEAD, IMD and Duke University



BO HEMBÆK SVENSSON

Bo Hembæk Svensson is currently serving as Blockchain Business Development Manager at the leading Nordic payments group Nets A/S.

- Bo is a seasoned Software Business Executive with 30 years of experience from the IT industry. He has co-founded several businesses within software solution development and served as a member of IBM European Software Advisory Board 2001- 2012
- He is experienced in concept development, software- and project designs and has been engaged in “Digital Workplace” and “Digital Transformation”
- In recent years, Bo has been engaging in blockchain technology, and he is currently establishing a Blockchain Services Practice to drive development and usage of blockchain-based applications in the Nordics



BRIDGET COSGRAVE

Bridget Cosgrave is the Founder and President of Every European Digital through which she is active as an adviser, entrepreneur and angel investor for companies with Internet of Things (IOT), E-Commerce and Telecommunications platforms and services. Since 2016, she is focused on the Internet of Ships.

- Ms Cosgrave acts as an Adviser to Visma consulting, www.visma.com. She is a director and shareholder in Finnish Ukkoverkot OY, www.ukkoverkot.fi, and in Every European Digital www.everyeuropeandigital.com - an Internet of Things sensor and network company in Poland. Bridget is a seed investor in Blockshipping
- Ms Cosgrave was the founder, CEO, and Chairman of BICS www.bics.com. She has previously advised the CEO of INTTRA www.inttra.com, the global e-commerce platform for container shipping; the Chairman & CEO of KPN, in collaboration with McKinsey; Etisalat, in collaboration with Booz; and the CEO of Omantel of Oman
- Ms Cosgrave has a BA Hons Queen’s University in Canada, and an MBA from London Business School, and she is currently enrolled at the World Maritime University in Malmo, Sweden. Ms Cosgrave is based in Brussels

6.3 The Blockshipping ICO service provider

KAMMERADVOKATEN/POUL SCHMITH – Legal

Kammeradvokaten/Poul Schmith is one of Denmark's largest and leading full-service law firms. The firm has been the preferred legal adviser to the Danish government for more than 80 years - <http://en.kammeradvokaten.dk/>

Please note for the avoidance of doubt that Poul Schmith has not drafted or verified the contents of this document.



TANJA LIND MELSKENS, Attorney, LL.M, Senior Manager.

Tanja leads Kammeradvokaten/Poul Schmith's Fintech department, which assists clients operating in the area between the financial sector and the IT sector. The department advises Fintech start-up and large financial companies in areas such as crowdlending, equity crowdfunding, digital payment solutions, cryptocurrencies, including Bitcoins and blockchain technology.

- Tanja advises companies on corporate law, finance law and financial regulation, including the interpretation and application of payment regulation, anti-money laundering regulation, securities regulation and the data protection regulation
- LL.M., Banking, Corporate and Finance Law, Fordham University, School of Law. Master of Law, University of Copenhagen



HENRIK KURE, Partner, Attorney.

Henrik advises banks, pension funds and other financial institutions in all kinds of financing transactions.

- Henrik also advises financial institutions and fintechs on financial regulatory matters, including regulatory capital, corporate governance of financial institutions, payment services and anti-money laundering regulation
- Henrik has published in Danish and English on a variety of banking and finance related legal topics, including a text-book on corporate finance law, which is mandatory reading in corporate finance courses at the leading universities across Denmark
- LL.M., Banking Law and Financial Regulation, London School of Economics and Political Science. Master of Law, University of Copenhagen

NORFICO – Token model, smart contracts, PR & communications.

Norfico is the first agency in the Nordic region to combine advisory services across communication, technology and strategy within fintech - www.norfico.net



MICHAEL JUUL RUGAARD, Partner & Co-founder of Norfico

Fifteen years' experience as a strategic communications adviser for brands and public organisations such as IBM, Lenovo, Maersk Line, Nets, Teller, Discovery Channel, Animal Planet, The Danish Ministry of Education, The Danish Ministry of the Environment, The Transportation Council, The Danish Technological Institute.

- Press Manager and press spokesperson for Nets A/S and Teller A/S from 2010-2015
- Longstanding experience as an editor and author of books, magazines, white papers, and reports (some recent examples: <https://issuu.com/norfico>)
- Master's degree from the Department of Scandinavian Studies and Linguistics, University of Copenhagen

>>



KRISTIAN THURE SØRENSEN, Partner & Co-founder of Norfico

Kristian's work within financial services has made him an acknowledged fintech thought leader and a frequent speaker at conferences worldwide.

- He is ranked on Fintech.Finance's "Silver Power List", Rise Global's "100 most influential people in fintech"; Planet Compliance's "Top 50 Regtech Influencers"
- Instech London's "Insurtech Power 100" and was shortlisted by PayExpo for the 2016 "Payments Power 10"
- Kristian has 15+ years of experience with digital financial services and serves as strategic adviser to leading banks and financial technology providers
- Master's degree in Communication and Psychology



THOMAS BERG VON LINDE, Senior Technical Adviser

Thomas Berg von Linde has a deep understanding of and genuine practical experience with blockchain technology and design of smart contracts.

- He is an experienced application & integration architect with very strong skills in hands-on system development. He has many years of experience with business logic on large distributed systems focusing on integration
- Thomas has worked intensively with insurance systems and financial companies from 2008 to 2017, and he has gained strong understanding and knowledge of financial transactions and integrations. He has been responsible for large solutions in companies like DNB (Norway), Accenture, Nordea, Codan (RSA Scandinavia), TIA Technology, and Nokia Siemens Network
- MSc, Information Technology, IT University of Copenhagen. BSc, Computer Science, Technical University of Denmark



CHAINALYSIS

CHAINALYSIS

Founded in 2014, Chainalysis is the leading provider of Anti-Money Laundering software for cryptocurrencies.

With offices in New York and Copenhagen, Chainalysis works with global financial institutions, like Barclays and Bitcoin exchanges to enable every stakeholder to assess risk in this new economy. Chainalysis' customers have checked over \$15 billion worth of transactions using the platform.

Through formal partnerships with Europol and other international law enforcement agencies, Chainalysis' investigative tools have been used globally to successfully track, apprehend, and convict money launderers and cybercriminals.

For the Blockshipping GSCP ICO, Chainalysis will deliver a detailed analysis of the source of funds of the bitcoin and ether raised during the ICO. ●



● | 7 Conclusion

2017 was a wild year for ICOs all over the world. Everything seemed possible, and in a hyped market affected by FOMO and gold fever, critical thinking was often weakened or anaesthetised.

Thus, during 2017 we saw several examples of ICO projects which should never have been started, either because the projects and the companies behind them did not have much of value to offer, or because they simply did not worry about complying with applicable laws or behave in a responsible, ethical manner.

Luckily, these unfortunate cases did not disqualify the ICO model as such, but they certainly impacted the market and made it evident that something needed to change for the ICOs to gain credibility and be able to develop going forward.

That is why 2018 will most certainly be a very different year for ICOs. What we see now is a clear trend in the ICO space among potential contributors as well as market analysts, journalists and others towards much sharper critical thinking, and a significantly higher demand for quality projects as well as teams able to justify their existence.

Likewise, among the number of the companies preparing for or running ICO's we see a new acknowledgement of the necessity of transparency, credibility, compliance with legislation – that being securities legislation, KYC / AML, and marketing legislation as well as other relevant regulatory areas – and a much stronger focus on relevance and value in terms of what they are bringing to the table. Companies doing an ICO need to think hard about their business model and make sure that they solve substantial problems, deliver important new and valuable services, and have a broad relevance. And furthermore, their token model, as well as their use of blockchain technology, must be genuine and indisputable.

At Blockshipping we are proud to say that the GSCP project fulfils these requirements: The business case of the GSCP project is extremely strong; the project has global relevance to the container shipping industry; the cost reduction potential as well as reduced CO² emissions, are substantial; the use of blockchain technology as well as smart sensor technology and other innovative technologies on the platform is genuine; the growth potential for the GSCP platform is significant; and the highly competent and experienced team behind the GSCP platform honour Nordic values of transparency and is fully available for dialogue and discussions about any possible aspect of the GSCP project.

For all these reasons, we believe that we – with sound conscience – can invite potential contributors to support Blockshipping's GSCP ICO. Thank you very much in advance for your interest in the project. ●



● | 8 FAQ

Table of contents

A. The GSCP platform	46
B. The GSCP ICO	49

A. The GSCP platform

1. What is the GSCP project all about?

Blockshipping's Global Shared Container Platform (GSCP) is designed to make key processes in the global handling of containers significantly more efficient and thereby solve some of the most important problems in the container shipping industry today. First and foremost, the purpose of the GSCP platform is to provide a complete blockchain enabled container asset registry (like a ship register) where the full global inventory of containers (more than 25 million units) are registered along with real-time locations of every single container around the world. The goal within 3-4 years is to achieve a 60% market coverage with 16 million container units in the GSCP blockchain registry.

2. What are Blockshipping's strategic goals for the GSCP project?

- 1) Become the primary blockchain registry and operational payments platform for the global container fleet within 2020.
- 2) Achieve 60% market coverage of the global container registry with 16 M container units in the GSCP blockchain registry within 3-4 years.

3. Who are the target groups for GSCP?

The blockchain based GSCP platform will enable a wide range of players like container Carriers, Beneficial Cargo Owners (BCO), terminal operators, port authorities, leasing companies, trucking companies, freight forwarders, and NVOCCs (Non-Vessel Operating Container Carrier) to achieve cost savings based on real-time information exchange. The technology offers real-time visibility and blockchain enabled smart contracts that automate processes and payments between parties. This enables all parties to significantly reduce internal control/admin functions (costs).

4. Who are the competitors?

In the container shipping industry today, only a few other companies besides Blockshipping are developing blockchain-based solutions. One example is the Hong Kong-based company 300Cubits; another is the Maersk Line and IBM joint venture. None of these has the same focus as Blockshipping, and they are not considered competitors to Blockshipping and the GSCP platform. On the contrary, they help to confirm that the idea of using blockchain technology in the shipping industry is right and relevant.

Furthermore, a small number of other companies are offering solutions that have some functional overlap with the Blockshipping solution, but none of these is based on blockchain and smart contracts, and none of them is providing a solution as complete as Blockshipping's platform, they are only able to match smaller parts of Blockshipping's proposition

5. Are you competing with companies/projects like CargoX and 300Cubits that recently conducted their ICOs?

The GSCP project and ICO have been under preparation for a long time, and we didn't know anything about these other ICOs at that time. Besides, it doesn't matter since the GSCP platform is not competing with any of these projects/companies. Even though we are all operating within the container shipping industry, our projects are not overlapping. In our opinion, it just goes to show how much this industry needs new and innovative solutions to optimise currently inefficient processes and solutions. And what the GSCP platform offers is critical for the industry to survive and develop further in the years to come.

6. What is the underlying technology of the GSCP?

With the purpose of obtaining an optimal combination of high scalability, top security, maximum control, privacy & flexibility, and low transactions and energy costs the GSCP platform will be built on a private (permissioned) blockchain.

7. Do we need new systems, solutions, or platforms in the shipping industry – isn't the industry already highly efficient?

The development of the intermodal freight container in the 1950s was a revolution. But despite the huge success of the container, it has become clear over the years that in the complicated process of transporting freight around the world, there are still plenty of opportunities to streamline a wide range of processes. And with the advent and maturation of blockchain technology, we are now facing the beginning of a new era, which may turn out to be as revolutionary as the era that Mclean began with the introduction of the intermodal metal container.

8. Execution is everything – does Blockshipping have the skills and the capacity to realise the idea of the GSCP platform?

Obviously, we believe that The Global Shared Container Platform should and will be developed and launched by Blockshipping, and for that purpose we have built up an incredibly strong team of highly competent people with either long experience in key positions in the container shipping industry or with expert knowledge and genuine hands-on experience with blockchain technology or smart sensor technology.

9. When do you expect the first client on the GSCP platform?

We are in negotiations with several large carriers about joining the platform and expect to be able to announce more details shortly. In addition we are in discussion with a container leasing and sales company in Asia where the GSCP platform will be leveraged to support real-time tracking of containers equipped with sensors.

10. How are you going to secure a critical mass on the platform?

We intend to pursue carrier alliances who are already sharing vessels also to share containers. Also, based on feedback from container leasing companies we expect a positive response based on being able to achieve improved cash flow and tracking of assets.

11. When do you expect the platform to start earning money?

Our development roadmap anticipates being able to launch release 1.0 latest on 1 January 2019 meaning that transactions and revenue should start to flow from this date. We expect to run the platform for approximately 18 months before break-even is achieved, however this, of course, depends on market penetration.

12. What is new about GSCP?

It's news that carriers and other stakeholders can start to share containers through a neutral third party platform that safeguards data and transactions using blockchain technology. This creates the missing ingredient of trust between parties that has been missing in earlier attempts to implement container sharing in high scale volume.



13. When will the GSCP system be ready?

Release 1.0 is expected to be completed 1 January 2019.

14. What do you see as the main risks in the project?

We see three main areas of risk:

- Possible delay of platform implementation. We do our utmost to prepare for all possible contingencies. However, it can never be ruled out that situations may arise which cause minor delays. But we are aware of this risk.
- A certain lack of knowledge about blockchain technology in the shipping industry that causes some scepticism towards blockchain based solutions. However, what we experience now is that this scepticism is rapidly declining as the technology matures and even some of the biggest players in the industry now publicly recognise that blockchain is going to be an integrated part of the industry going forward.
- Uncertainty amongst the industry players regarding the sharing of a platform. However, the GSCP platform is 1) fully neutral (it is not owned by one of the big players in the industry), 2) the players don't have to trust each other because of the use of blockchain technology, and 3) the platform has a potential of cost reductions in the tune of USD 5.7 billion yearly. And for these reasons, we have already experienced an overwhelming interest from a wide range of industry players.

15. What is the risk that your idea will be copied by one of your competitors without you being able to do anything about it?

We consider that very unlikely. The main reason for the greybox concept not to have taken off earlier is that the Blockchain technology now available delivers the missing ingredient of being able to generate trust among carriers/stakeholders without letting go of data-ownership. Being a neutral third party Blockshipping can guarantee that no carrier gains an unfair advantage or higher degree of transparency than other stakeholders. Being independent and using modern IT standards combined with our longstanding shipping experience hopefully means we can deliver a compelling solution – faster than others who would like to be working within larger organisations with many political considerations to be made.

16. How significant is the risk that it will be impossible to persuade the market players (carriers, leasing companies, and terminal groups) to use the same platform?

Being part of the industry for 30+ years, we have seen several “asset-sharing” initiatives fail over time. The primary reason has always been lack of trust and one or more stakeholders seeking to gain an advantage. In this case, we are using blockchain technology to create trust between parties that don't necessarily trust each other, and the GSCP platform can act as a neutral party, which is a significant advantage. However, the main reason we believe vital stakeholders will join is the continued overcapacity of container-slots coming into the market during 2018/9 which will force carriers and leasing operators alike to seek operating efficiencies given low margins. ●

B. The GSCP ICO

17. Why are you conducting an ICO for the GSCP platform project?

The GSCP platform is already funded by private business angels and The Danish Maritime Fund (www.dendanskemaritimefond.dk), and the ICO is a natural supplementary funding method for a company like Blockshipping developing a blockchain based platform like the GSCP platform. The ICO model makes it possible for innovative projects to raise a significant amount of money in a relatively short time, and the GSCP is undoubtedly an innovative and essential project.

18. What are the calculations behind the cap of USD 24.8m?

The cap is based on careful calculations of the costs of:

1. a full development of the GSCP platform during the next three-year period, and acquisition of software and existing solutions to accelerate the development and deployment of the platform
2. the running and maintenance costs of the platform in the initial period before reaching break-even, and 3) costs of marketing the platform across the shipping industry to obtain the necessary critical mass of users in due time.

Even though USD 24.8m is a large amount of money, we can assure everyone that all the money will be used for purposes relevant to the GSCP platform and that Blockshipping will act transparently regarding the use of the funds collected during the ICO.

19. How many CCC tokens are you issuing?

A total of 50.000.000 CCC Tokens will be issued. The 50.000.000 is a hard cap, and no further CCC tokens will be issued at any time in the future.

20. What does the CCC token distribution look like?

The CCC will be allocated as follows:

- Pre-sale: 10%
- Public Sale: 70%
- Bonus for pre-sale: 5%
- Advisers, Media and Partners: 10%
- Founders: 5%

21. Another shipping ICO – CargoX – had a cap of only USD 7 million.

Why are you asking for more than three times as much money?

The CargoX project and the GSCP platform are two entirely different projects, and you cannot draw a line from one to the other regarding the need for funding. We have no insights into the CargoX financial calculations, but we know that in the case of the GSCP platform, we have calculated carefully that USD 24 million is the appropriate figure for the realisation of our planned activities.

22. Is there a minimum contribution for the public token sale?

Due to highly volatile prices of the two main cryptocurrencies (bitcoin and ether), we have chosen to lock in the price of each CCC token to 0.62 USD. It will be possible to contribute to the ICO using Ether (ETH), bitcoin (BTC) and bank transfers (USD & EUR). Minimum buy will be the equivalent of 100 USD.

23. Will it be possible to send ETH to the ICO from an exchange?

In most ICOs so far it has not been possible to send donations from exchanges. But for the GSCP ICO, we have designed a highly user-friendly process that enables participants to decide whether they want to contribute with Ether (ETH) or bitcoin (BTC) via an exchange or a private wallet. Or if they prefer to make their donations via bank transfers (USD or EUR).



24. What is the procedure for participating in the ICO?

To participate in the public sale of the ICO then you will have to register on the ICO sale webpage beforehand or during the ICO and go through the KYC process to become approved as an investor.

After being approved as an investor then through the ICO sale webpage, and the ICO public sale has started, it will be possible to purchase the CCC using Ether, Bitcoins or bank transfer.

You will select the amount you want to contribute, and the corresponding number of tokens will be locked and allocated to you. You will then have a period (will vary depending on chosen means of payment) to transfer the funds to complete your purchase.

Detailed instructions will be provided on the ICO web sale for how to perform the transfer of the Ether, Bitcoins or "normal" money.

If you have not performed the transfer in time, then your purchase order will be cancelled and the tokens allocated will be unlocked and put back in the stack to be offered for other contributors. The ICO sale webpage will be launched after the pre-sale have concluded.

25. When will we know the exact details on gwei and gas limit?

If you choose to contribute using Ether, then guidance will be given on how to set gwei and gas limits as part of the purchase process, as the gas price can vary on a daily basis.

Since we will allow some time for Ether transfers to be performed (we will hold your allocated tokens for a number of hours), it will be possible to set lower gas prices than what has been seen at other Ether based ICOs.

26. Should I send transaction few mins before the token sale starts?

No. Any Ether or Bitcoins received (having transaction timestamp) before ICO public sales start will be returned to sender's wallet (minus the transaction fee). If an exchange owns the sender's wallet, then we can't guarantee they will end back at your account at this exchange.

27. I have just realised that I have given my XYZ Wallet address to you for the ICO tomorrow and not ZYX address. Is there a way for me to change this on the sales page as XYZ does not accept all tokens?

You can update your wallet address until the time you have confirmed your buy order on the ICO sale webpage (after the ICO tokens sale has started). If you have created your buy order but not yet done your transfer of Ether, Bitcoins or bank transfer. Then you can cancel your buy order and then do the update.

Please note though by cancelling your buy order you will also lose your token allocation, and you will have to request a new allocation when creating a new buy order.

28. Is it going to be like with other ICOs - people will be able to contribute 1 minute before? How do you ensure the timelines and activate the contract?

We are only going to accept contributions where a prior buy order has been created on the ICO web sales page first.

Depending on the interest of purchasing our tokens in the public sale we will look at introducing a queuing system to secure the fairest and orderly access to the sales web page.

It will not be possible to create buy orders before the ICO opening time, and any transfers of ether, bitcoins or bank transfer done without a buy order will be returned to the sender minus the transaction fee.

29. What happens if the ICO sells out before the ICO public sales period end?

Then the ICO sale is closed, and no further buy orders can be created.

30. Are tokens distributed immediately?

Pre-sale tokens are first distributed in the period between the pre-sale is closed, and the public sale is opened.

Tokens purchased during the public sale will be distributed continuously as funds are received in the GSCP wallets and bank account. Ether and bitcoin transfers are cleared automatically.

The transfer of tokens might be slightly delayed if the Ethereum blockchain experiences a high volume of transactions in the same period. It will be possible to check the exact status of your purchase order on the ICO sale webpage including whether funds have been received and tokens have been transferred yet.

31. Since the tokens are both distributed immediately, when do we get a confirmation? Will we see it on our account, or just accept that our transaction has gone through and wait?

See 30.

32. I missed registration and KYC. Are there any ways I can buy tokens if I miss registration and KYC?

No. KYC is a pre-requisite for buying tokens in the ICO. Afterwards, it will be possible to purchase tokens on an exchange, and KYC might not be needed for this.

Please notice though that to be eligible to receive the revenue share of the tokens then KYC for the account holding the CCC is pre-requisite also.

33. What is the CCC to ETH conversion rate?

This rate will fluctuate as the token price is quoted in USD, and each token will be sold for 0,62 USD. At an ETH/USD price of 1100 USD on ether will correspond to $1100/0.62 = 1774$ CCC per 1 ETH.

34. What is the likely circulating supply?

42,500,000 tokens are sold during the ICO and will be circulating after the ICO is closed. 5,000,000 are distributed to Advisers, Media and partners and has no lock up meaning they can circulate after the ICO has closed also.

2,500,000 are allocated to founders and employees and will be released 6, 12, 18 and 24 months after the ICO closing date in equal portions, ie. 625,000 per time.

35. At the ICO time, we don't need to log in or anything but just send ETH to the address provided, right?

No.

36. When is CCC listing on exchanges?

The CCC will be listed on exchanges after the public sale has concluded. We don't have an exact timing of this yet, but we will strive to make sure no more than a month will go by before the first exchange opens up for trading CCC.

37. How do I participate in the token sale? Do I send ETH to my MEW wallet and wait for it to start?

See 24.



38. On which page will the purchase happen?

On the ICO sales webpage. The URL will be made public after the pre-sales have ended. Please sign up for the email newsletter to be notified of when this happens.

39. Will you be using one central wallet to accept all contributions?

No! A dedicated website will be launched to handle the public token sale and KYC registration process. To give a fair chance for everyone to purchase tokens, allow payment in both ETH, BTC, USD and EUR and to avoid the gigantic transfer fees sometimes seen during pure Ethereum executed ICOs - we will not be using one central wallet to accept contributions. Instead based on the chosen mean of payment we will create an individual and dedicated transfer option for each buyer and allow a certain time for the buyer to execute the transfer. If the buyer does not perform the payment in this time frame, then the CCC will be released back in the sales pool.

40. Which exchanges will CCC be listed on?

As an ERC-20 compliant token deployed on the Ethereum blockchain CCC will be tradeable on both centralised exchanges (CEX) and decentralised exchanges (DEX). The decision on which exchange the CCC initially will be listed will first be finalised and published after the end of the ICO for GSCP to get the best conditions for performing the listing of CCC.

We are favouring exchanges that:

- Will commit to further distribute the airdropped Revenue Share Token to its account holders holding CCC in their exchange wallets.
- has a good reputation
- has a sizeable trading volume and user base
- has a fair fee structure.

41. When do you expect CCC to be listed?

The decision on which exchange the CCC initially will be listed on will first be finalized and published after the end of the ICO for GSCP to get the best conditions for performing the listing of CCC.

42. What does your token-model look like?

The GSCP platform issues two tokens: The internal Container Platform Token (CPT), which is a utility token, and the external revenue sharing token Container Crypto Coin (CCC) issued on the global Ethereum blockchain for the ICO.

The internal CPT token will be used by the industry players when utilising the platform for clearing and settlement of transactions between them. These transactions will relate to a variety of services and fees like 'capital purchase', 'container exchange fees', 'terminal and depot handling costs', and 'fees collected by carriers'.

A percentage of the revenue generated from the transaction fees on the GSCP platform will go to a Revenue Share Pool. Through an innovative revenue sharing model, the funds held in the Revenue Share Pool will be passed on to the owners of the CCC tokens in a way that rewards both short-term and long-term token owners.

43. Why should anyone invest in the GSCP ICO by buying your CCC coins?

We believe that the market will welcome CCC for at least three reasons:

- 1) To reward the buyers of the CCC by sharing part of the gross revenue of the GSCP platform, we have designed a Revenue Sharing Model. Initially, 20% of the gross revenue from transaction fees paid in CPT on the GSCP will be distributed to CCC token owners.

2) Additionally, to support the CCC in the free market before the launch of the platform a major part of the collected funds will be locked in a Market Maker fund. This means that IF the price at any time after the closing of the ICO but before the first phase of the solution is launched should fall to a level below 33% of the introduction/starting price, then everyone who has bought CCCs during the ICO will be able to sell back their coins to Blockshipping. In that case, Blockshipping will pay back from the Market Maker Fund 33% of the introduction price.

3) Even though the CCC as a starting point is not a typical utility coin, we do have a couple of innovative ideas and concepts going forward where we can see the possibility to open up and use the CCC for certain functions on the GSCP platform and thus enabling CCC owners to actively be able to get more value for their CCC.

44. What is the purpose of the Market Maker Fund in the ICO?

The Market Maker Fund offers everyone who buys CCC coins during the ICO a financial safety net, which is a unique feature of the crypto market.

45. Why are you issuing two tokens?

The idea of issuing two tokens came from watching what happens when utility tokens become popular on the secondary market and how that tends to invalidate their viability as utility tokens for their originally intended purposes.

Transaction prices on the Ethereum platform have gone up significantly as a logical consequence of the rise of the value of Ether. Bitcoin has become completely useless as a means of payments and is now in practice solely a digital asset class, even though Satoshi Nakamoto's original idea was to create "a purely peer-to-peer version of electronic cash [that] would allow online payments to be sent directly from one party to another without going through a financial institution."

To avoid a situation where a successful reception on the market of a GSCP token would harm its ability to perform internally on the GSCP platform we realised that we needed to make a split into two separated GSCP tokens each with a clear and well-defined role in the GSCP ecosystem.

46. Why is it important to keep the internal CPT and the external CCC separate?

The internal and external tokens will be separated, but in an asymmetrical unidirectional way so that the external public traded token CCC cannot affect the stability and price of the internal token CPT, but the internal token can and should support the value of the external token by sharing revenue generated by the transaction volume in the internal system on the GSCP platform with the external token owners.

47. What is the exact purpose(s) of the internal token, CPT, on the GSCP platform?

The internal GSCP token is a utility token created with the purpose of enabling the participants on the GSCP platform to handle transactions (clearing and settlement) in a cheap and efficient way (please read more in chapter 5.3.1 of our white paper).

48. Why is it a good idea to issue a new token for clearing and settlement between the users of the platform? Why not just use fiat-currencies – USD or EUR – for transactions on the platform?

The internal utility token CPT - or Container Platform Token - should be understood basically as an abstract representation of a US dollar (USD) that allows the users of the platform to avoid having to settle every single transaction in USD through the normal banking channels, avoiding the hassle and cost of taking USD in and out many times daily, and avoid paying the fees that goes with transferring of dollars across borders (please read more in chapter 5.3.1 of our white paper).

49. Which - and how many - types of transactions should the CPTs be used for on the platform? Could you give some examples and publish a list?

A list of examples is published in our white paper – please see p. 29.



50. Do you believe that industry as conservative as the shipping industry want to start using a new token for internal payments?

In these years, the shipping industry is gradually getting used to the idea of blockchain based solutions, so now they are more curious than sceptical. Furthermore, the fact that the GSCP platform has a cost reduction potential for the global container industry of at least USD 5.7 billion per year makes the industry players very interested.

51. Can you guaranty that launching the CPT doesn't introduce new kinds of risks?

You can never guarantee anything, but security is paramount to the GSCP platform, and we feel very capable of handling possible risks.

52. As I understand it, you intend to keep the value of the CPT stable – pegged to dollars. Why is that?

The reason for pegging the CPT to the USD is that the GSCP will be a massively interconnected platform and most of the touch points will be using USD as currency to settle payment for services as this is the preferred currency in the shipping industry.

By issuing a token to represent a USD for the internal transfers on GSCP instead of just keeping the balances in USD, we can build-in specific attributes into the currency itself. An example of this is the revenue share pool described in chapter 5.5.3 of our white paper.

53. Are there any other advantages of using a token on a blockchain instead of paying for the transaction with fiat? Is it possible to make faster transactions – real-time transactions? Is it possible to avoid the costs and the waste of time that we know from corresponding banking today?

Yes, there are several advantages of using a token on a blockchain:

- Because a blockchain system cannot be tampered with, the participants of the platform do not have to trust either each other or a bank or a central system operator.
- In a blockchain based system, all transactions can be executed as real-time or close to real-time transactions.
- There are no geographical limitations in a blockchain based system. Participants on the GSCP platform will be able to participate in and make transactions regardless of their geographic location.
- Cross-border transactions within the GSCP blockchain system will not be time-consuming and costly in the way we know it from today's corresponding banking where a bank transfer may take up to several days to complete and comes with high fees. ●



www.blockshipping.io

Blockshipping ApS

Agern Allé 24, 2970 Hørsholm
www.blockshipping.io



Global Shared
Container Platform