

Deco.Network: Building the Economic Layer to our Digital Infrastructure

Attention, Inc
Version 1.3
contact@deco.network

Abstract

Software projects are unbanked entities. Creating financial rails for these projects, as well as a crowd-curated marketplace for code would allow for a greater collaboration in software development without the need for an intermediary to maintain the network. A decentralized registry and repository provides part of the solution by easily letting developers list and use packages, projects and APIs in a format they are familiar with. However, the main benefits are lost if no mechanism exists to curate the supply side of the network and reward contributors and curators with fair value of their contribution. We propose a solution to these problems with a native network token. In addition to the creation of a token, we propose the creation of a smart-contract-powered platform that includes command line tools, a dashboard, and marketplace that enable developers to easily access the underlying registry protocol and decentralized repository.

1 Introduction

The open source movement is one of the most remarkable human achievements. However, there is still an enormous amount of wasted effort in the development community in the form of solved problems which need to be tackled repeatedly for each new implementation. In the case of mobile, consider that 5 million apps are expected to be published in Apple's App Store by 2020 and each of these apps requires significant bespoke development to be created. Failing to use existing building blocks results in a significant loss in opportunity cost. In addition to the number of open sourced and free modules, there are modules that exist but are private, only shared with select communities, unreliable, or have unknown dependencies. The problem is that no incentive system exists to expose existing and future unlisted components. This presents significant negative externalities, and is a less efficient system for development. The solution, two fold, first to establish a new market for reusable code where developers can pay a fee for leveraging a building block or service that has been submitted by another developer. The seller sets the fee to compensate for the value they provide, and the use of modules improves developer's likelihood of building a better

application, faster and more reliably. Second, smart contract-based infrastructure can act as the ‘bank’ for open source software projects. These solutions are implemented in two components: Deco.Network and the Deconet Token (DCO).

Deco.Network is a marketplace and dashboard built on top of a decentralized and smart-contract-based registry and repository. The DCO is the primary unit of membership that network members use to curate the network with. DCO serves two additional purposes by incentivizing adoption and for network parameter setting. Application developers, the demand side of the market, can use any cryptocurrency as the unit of exchange, thus giving the modules a broader appeal.

2 State Change

The purpose of Deco.Network is to solve the problem of wasted or duplicated effort in application development and create an equitability and automated flow of value back to value creators. By solving these problems, we could leverage everyone’s time, effort, creativity, resourcefulness and more in order to create tremendous value through the use of more reusable and reliable components in application development.

2.1 Starting State

The starting state is a world with vast competition among developers, fractured information, and related negative externalities. We can classify this generally non collaborative state into three separate classes, and then assess each class in turn:

2.1.1 Functional Components Are Private

Developing a mobile application takes 3-5 months with the development effort only being leveraged by one app.[2] The generalized process of app development consists of:

- Figuring out what to do next (i.e. next feature to implement)
- Breaking it down into steps
- If a solution for a step is unknown, search for each of those steps and copy/paste/modify code from Stack Overflow to get the desired result
- Test the whole feature to see how it functions
- Repeat

If no open source component exists, developers are forced to rebuild features and solve problems that others have already previously solved. There is no way for developers who release complete features to be rewarded or a simple way for

developers to search and find. The market is currently fractured and incomplete but the need and desire for a robust and complete marketplace is evident and a huge opportunity.

2.1.2 Compatibility Of Components, When They Exist, Is Uncertain

Any seasoned developer has been down the rabbit hole of chasing dependencies. For example, there are two main JS crypto packages, `crypto-js` and `crypto`, and they provide the same function but are a little different. A developer may use two packages in their app, but each one depends on a different crypto package, leading to redundant code being shipped and potential future bugs.

2.1.3 Component Quality or Correctness is Unknown

There is no recourse for an application developer who uses a component only to find out it is broken during testing. If they are feeling helpful, they can comment on the place where a component was pulled from and let the community know, but there is no system in place to reliably see what is working and what is not.

2.1.4 Component Creator Can Not be Compensated

Over 95% of enterprises use open source software. Their motivation is to be free from vendor lock and maintain the ability to customize [6]. The enterprises are limited in the OSS software they can use in property environments, because there are many cases where the open source software is using a copyleft license like the GPL, but no mechanism exists to purchase an exception to the GPL from the open source developer. In these cases, enterprises are paying enormous sums to companies like Red Hat to assume the liability of the lapse in compliance.

2.1.5 Multicontributor Projects Lack Ways to Distribute Financial Rewards

Projects that have multiple global contributors don't have any rails to distribute donations and revenue that flow into projects. There are some non-profits, like Open Collective, that are providing a partial solution, but current solutions leave a lot to be desired in terms of depth of usefulness, level of automation, and transparency.

2.2 Goal State

The goal state is a more collaborative world where developers consider how their work can be useful to all other developers who have a similar, recurring need. A world in which a market for functional and reusable code has been established and participation in the market for components is pervasive and global. With that market established, module creators will be sufficiently compensated for any components they make and share. Moreover, application developers will be

able to build better applications, faster by having access to a wider range of useful modules.

2.3 Path

2.3.1 Components

There are three components to the path between the starting and goal states:

1. Deco.Network - Use this marketplace built on a decentralized registry and repository and requisite dashboard to enable developers to list their modules, packages, APIs, and projects and for companies and other developers to access and pay for code. Sellers can also offer services in addition to code. As more code gets placed on Deco.Network, it will attract more developers
2. Deconet Token (DCO) - Use the DCO as a membership and curation token so that supply side and other network participants can have skin in the game when creating value on the network.
3. Deco.Network Creator Fund - Use Deco.Network Creator Fund to ensure the supply side of the marketplace is world class, thus driving the demand for modules listed on Deco.Network. This fund acts as an extra bonus for the supply side of the network to motivate module creators to list their creations early and often.
4. Deco.Network Financial Rails for Unbanked, Nonperson entities - Use these specialized smart contracts to enable entities like OSS projects to funnel funds to contributors, vendors and the projects they depend on in an automated and transparent way.

2.3.2 Justification

There are two choices that require justification: 1) building a decentralized network, and 2) creating and using the DCO cryptocurrency. For 1), the primary justifying reason to create a decentralized network rather than a conventional platform is to enable "skin in the game" crowd curation of the network supply side. A decentralized network also allows for truly peer-to-peer cryptocurrency transactions that can be confirmed in seconds or minutes rather than days. The use of a blockchain as an underlying technology provides the history of payments to stakeholders on the network which is publicly verifiable. For 2), the justifying reason for DCO is the need for more control over the distribution of tokens.

Leveraging Bitcoin or some other token to enable curation on Deco.Network is infeasible. By creating a new token, we can distribute a much larger portion of the token's total supply in a way that corresponds to contribution to the Deco.Network ecosystem. Another justifying reason to create our own token is that we can raise funds for the ecosystem through selling a portion of the tokens. Yet another justifying reason to create our own token is that the value created

by the global utility of the network can be fairly shared with early adopters and evangelists; the network becomes incentivized to increase its own utility, solving the proverbial "chicken and egg" problem.

2.3.3 Timing

The idea of open collaboration to improve application development has been around for awhile in the form of open source, but it has only recently become possible to create a decentralized market for abstracted components due to the innovation of turing complete blockchains. This breakthrough, combined with the increasing popularity of leveraging components for application development, makes today's environment the right time to create a more collaborative developer community.

2.3.4 Deco.Network

Developers who use Deco.Network can build better applications, faster by having access to a larger array of pre-built and proven functional modules, APIs, and other packages and projects. These modules and microservices abstract away a wide range of complexity for application developers including, but not limited to, third-party services, libraries, users etc. integrating with third party services, libraries, user interface widgets, plugins, and connections to decentralized protocols. Some blockchain-based examples of components include: using Deco.Network to deploy an Ethereum wallet, integrate with a KYC vendor, set up a crypto token based on a Reddit-style comments section, or exchange ERC20 tokens for ETH. Deco.Network is built on Git, the world's most popular version control system, so is not limited to one category of components or one programming language. Developers access these modules via a command line tool and the Deco.Network web portal.

The first iteration of Deco.Network is a decentralized and custom git registry where package creators and API publishers can list their creations in the registry directly from a terminal. Developers can access and purchase modules from the marketplace directly from their terminal. This also enables Deco.Network to be a push-style marketplace where modules are presented at the exact moment they are needed, opposed to requiring a search on a website. This version also includes a web portal and we'll add a chrome extension that will show code listed on Deco.Network while searching for modules on centralized registries, like GitHub, GitLab, and npm. This enables developers to see a greater inventory of modules without changing their workflow at all.

Additionally, Deco.Network will leverage the same open source framework that powers gitlab, so developers will feel right at home and module creators and API publishers can sell code and microservices that are built for package managers such as Composer, NPM, Bower etc.

Later iterations will support specialized service-based offers within the ecosystem so Deco.Network can be used for code customization, developer services, and project management. Furthermore, tokenization can solve some of the ma-

major issues that plague application development in later Deco.Network iterations. For example, if a module creator wanted to take a six month break from maintaining a popular module which is open source, nobody would know if this person would ever return. With the Deco.Network ecosystem, this module creator be able to allow highly rated contributors to approve pull requests, and all parties would be rewarded and paid for their contribution.

The default and recommended license for module creators to apply to their creations will be the very popular GNU General Public License [7]. Deco.Network is the platform for quickly letting module creators sell exceptions to the GPL. Selling exceptions to the GPL is considered to be morally sound by Richard Stallman, the foundational voice of the free software movement [8]. However, module creators are free to apply any license they like. Looking ahead, Deco.Network will consider introducing new software licenses that leverage unique properties of blockchains.

2.3.5 Deconet Token (DCO)

The immutable ledger of a blockchain enables the network and module creators to interact in a trustless way, facilitating greater amounts of interaction and a vast reduction in fees as middlemen are made obsolete and other frictions reduced or removed. Each module and module creator is associated with a unique blockchain address. When module creators want to list a module, participate in setting network parameters, or unlock greater rights on the ecosystem, DCO is required. The blockchain will be used to verify the amount of DCO token holdings a given module creator has. The use of a blockchain also enables the creation of a network token, helping to solve the chicken and egg problem by incentivizing the use of the network before the tipping point of mass adoption is achieved.

The supply side of Deco.Network acts a like a token-curated market with the DCO is used as the token used for curation. The concept for a token curated market is derived from a token token-curated registry. In its most basic form, token-curated registries are decentrally-curated lists in which economic incentives of all participants are balanced by a carefully crafted token design and protocol. [8]. There are four personas in a token-curated market: consumers, candidates, sellers, and token holders.

On Deco.Network, consumers want to have a high-quality registry that helps them to surface the best modules so they can use their time efficiently, for instance by not wasting their attention on irrelevant components, services and so on. Candidates want to receive the attention and funds of consumers and therefore would like to be featured in the market. The higher the quality of the market in aggregate, the higher the value for those candidates who will become featured. Sellers are candidates who successfully have modules featured. In the initial design of Deco.Network, all sellers start as candidates, but this parameter is subject to change if determined by the token holders. Token holders have the intrinsic motivation to maintain a high quality list of sellers by providing curation services. The higher the quality of the market, the more attention it will

get from consumers, the more candidates will seek inclusion on Deco.Network. These factors drive the value of the DCO. Specifically the DCO is used to curate the quality of the network by letting holders of the token use a partial lock token weighted voting scheme for the curation of the supply side of the network.

In addition to curation, the Deconet Token (DCO), an ERC20 token, also functions as the mechanism for network parameter setting and powers the invitation system. As part of network parameter setting, token holders are able to take control over the evolution of the network design, by deciding on factors of such as the amount of tokens needed to stake for candidates and any fee structure. The DCO powered invitation system is used for early supply side user acquisition in the form of referral / invite links only being redeemable by holders of DCO.

In essence, DCO enables decentralized participation in the ecosystem.

2.3.6 Deco.Network Creator Fund

The Deco.Network Creator Fund will be established to bootstrap the network by creating extra incentives for module creators, the supply side of the network, to list their creations.

The reason for this is that marketplaces for code have been attempted in the past with limited success; this is due in large part to the fact that these centralized and non-tokenized networks were not able to solve the "chicken and egg" problem that exists for starting new two-sided marketplaces. We view tokenization as a social technology that will enable Deco.Network to bootstrap the network. Borrowing the model from Satoshi Nakamoto, the DCO in the Deco.Network Creator Fund will be released at a logarithmic rate. The goal of the fund is to incentives networks growth, and weekly caps on the rewards per person as well as changes to the rate of release may need to happen for fraud prevention purposes. The DCO from the Creator Fund is added to the payment and reward that is distributed to the module creators.

DCO from the creator fund is also used to power the user advocate system. When a DCO holder invites a new module creator into the network, the advocate is rewarded with DCOs when the invited user sells access to modules. This reward mechanism is also passed down to referrals of referrals, and so on.

By structuring the reward mechanism in this way, the highest quality module creators are incentivized to join early and invite their most talented friends and colleagues to the network. Network early adopters tend to be the stickiest and will be able to retain the fair value of their contribution as the network scales up, providing psychological buy-in and evangelism.

2.3.7 Module and Module Creator Onboarding

Code and services can be submitted to Deco.Network as easily as adding modules to any registry, like npm or listing an API on a gateway, like Kong. When code is submitted to Deco.Network, the creator may be required to stake DCO in order for a the approval process to take place. Network members can be

compensated for a series of tasks, including, but not limited to, their first approved module, connecting their account to other services, joining the network chat, and referring module creators and developers. The DCO rewarded in this onboarding process is part of the supply side acquisition and not deducted from the Creator Fund.

The default licensing agreement for modules will be morally sound in the view of open source communities via selling exceptions to the GNU GPL[5]. This means when a developer discovers Deco.Network via a module they need, they will be able to use it right away. Module creators can assign whatever license they want to their creations, but using the GPL as a default will enable a more seamless experience for new users.

2.3.8 Smart Contracts

Three interrelated smart contracts govern the Deco.Network ecosystem, and they will run on the Ethereum blockchain. These are the Curation, Commerce, and Project Banking contracts which govern the modules, packages and services that are listed on the marketplace and the framework for accessing them, providing a ‘bank’ for entities like OSS projects, respectively.

The Curation contract, which is based on token curated registries [4] and detailed above, enables DCO holders to curate the modules that are listed on the network. The incentive structure established in the Curation contract will motivate token holders to maintain the highest quality and most appropriate supply side. The Curation contract also governs select parameters in both contracts.

The Commerce contract is what enables the application developers, aka the consumers, to transact in Ethereum or any approved token, including USD pegged stable coins. Upon receipt of payment, the purchase of a license or exception is written to the blockchain.

The Project Banking smart contract enables developers with commit access to be given a project to decide how funds that the project receives will be distributed. Funds arrive either via donation or commercialization. This smart contract is written in such a way that will mean governance projects like Aragon and DAOstack can be layered on top.

2.3.9 Security

Deco.Network has partnered with Rivetz in order to provide a secure execution environment on a wide range of devices, including smartphones. Additionally, when Rivetz and other partners are not applicable, incentives can be aligned by having module creators staking DCOs when they have access to potentially private information. Modules that require access to potentially private information can be audited and sandboxed before being published to the ecosystem. This is part of the automated approval process. Using cryptocurrency as an example, pure React Native JS code cannot read from the device keychain so modules cannot even attempt to read a user’s private key. Another security measure example is the ability to force a modal prompt when a module wants

to spend from a user's balance of a crypto token. With Rivetz, transactions can be signed outside of module execution space. This provides similar functionality to a hardware wallet or hardware secure module, which is widely regarded to be the best solution for securely storing data. Furthermore, certificate pinning protects against man-in-the-middle attacks and ensures that only authorized application developers can leverage the modules they have access to.

3 Roadmap

Our strategy is to invest in product innovation and decentralization so that better and more complex applications can continue to be built faster and more securely with modules from Deco.Network.

3.1 Enterprise

As development continues on Deco.Network and the underlying protocol, it will be architected in such a way to support enterprise application development teams that require in depth provisioning and governance. In addition to an enterprise product focus, the commercial team at Deco.Network will propose product partnerships and integrations with companies like Microsoft who are focused on open source and module development.

3.2 Further Decentralization

The first goal of Deco.Network is to provide value to ecosystem participants in the form of a market for modules with increasing supply of building blocks and increasing the ways module creators can be compensated. The second goal of Deco.Network is to move towards being a fully decentralized protocol as the dependent technologies develop, this includes building on top of decentralized storage as well as deeper integrations with partners and stable coins. We are looking forward to being completely autonomous.

3.3 Open Collaborative projects as DAOs

In the world of open and collaborative software projects, there are three main types of entities: businesses, projects, and individuals. There is a lattice of interaction between these three, for example, individuals grant certain rights over their work to projects and businesses license software from one another. The framework for Deco Network presented in this whitepaper lays the foundation for putting the copyright, licenses, and payments for all these varied interactions on blockchain, which will enable open collaborative projects to function as an organization that is run through rules encoded in smart contracts.

4 Token Details

Deco.Network will mint and distribute an ERC20 Ethereum token, which will be the unit of curation and membership for the Deco.Network ecosystem. The following principles are in place to establish transparency and stability. These principles are not an exhaustive list of interaction regarding Deco.Networks use of the DCO, but in place as a framework for stewardship of the community:

At launch, Deco.Network will mint 100 percent of the 1,000,000,000 tokens. No further tokens can be created.

The token will be available for purchase on Deco.Network

4.1 Distribution

Since tokens are completely functional for their purpose at time of purchase, they will be sent promptly. Please allow for some shipping and handling delays as we aim to enforce strict potential compliance regulations regarding KYC and AML laws.

4.2 Deco.Network Alpha Net and Developers

Developers who join the testnet and are active will be put on a special whitelist that enables them to receive a discount at the time of the Token Generation Event (TGE). Our hope is that the entire token allocation for the TGE is taken by developers who are active on our testnet.

5 Citations

- [1] <https://evansdata.com/press/viewRelease.php?pressID=244>
- [2] <https://www.appsterhq.com/blog/how-long-takes-to-build-a-mobile-app/>
- [3] <https://techcrunch.com/2015/03/26/facebook-open-sources-react-native/>
- [4] <https://medium.com/@ilovebagels/token-curated-registries-1-0-61a232f8dac7>
- [5] <https://www.gnu.org/philosophy/selling-exceptions.html>
- [6] <https://www.blackducksoftware.com/2016-future-of-open-source>
- [7] <https://www.gnu.org/licenses/gpl-3.0.en.html>
- [8] <https://github.com/skmgoldin/tcr>

6 Disclaimer

TO ALL PROSPECTIVE PURCHASERS: THE INFORMATION CURRENTLY PROVIDED IN THIS WHITE PAPER DOES NOT PURPORT TO BE COMPLETE, AND IS SUBJECT TO AND QUALIFIED IN ITS ENTIRETY BY REFERENCE TO THE ACTUAL TEXT OF THE TOKEN SALE MEMORANDUM, AND OTHER RELEVANT DOCUMENTS, WHICH WILL BE PROVIDED TO EACH PROSPECTIVE PURCHASER UPON REQUEST.

PROSPECTIVE TOKEN PURCHASERS SHOULD NOT CONSTRUE THIS WHITE PAPER AS PROVIDING ANY LEGAL OR TAX ADVICE. THIS WHITE PAPER CURRENTLY CONTAINS A FAIR SUMMARY OF DECO.NETWORK'S VISION, AND THE OPERATION AND UTILITY OF ITS TOKEN. FURTHER INFORMATION WILL BE PROVIDED IN ITS TOKEN SALE MEMORANDUM, INCLUDING THE MERITS AND RISKS INVOLVED IN PARTICIPATING IN DECO.NETWORK'S TOKEN SALE. PARTICIPATION IN A TOKEN SALE CAN BE HIGHLY SPECULATIVE AND COULD INVOLVE A RISK OF TOTAL LOSS. A PROSPECTIVE PURCHASER SHOULD THOROUGHLY REVIEW THE TOKEN SALE MEMORANDUM UPON ITS RELEASE AND CAREFULLY CONSIDER WHETHER PURCHASING DCO TOKENS IS ADVISABLE GIVEN THE PURCHASER'S FINANCIAL POSITIONING AND GOALS. THIS WHITE PAPER DOES NOT CONSTITUTE THE OFFERING OF A SECURITY. THE REGULATORY TREATMENT OF TOKEN SALES IS A LIVE AND DEVELOPING ISSUE, AND NO ASSESSMENT IS CONCLUSIVE. DECO.NETWORK TAKES THE POSITION THAT ITS DCO TOKEN IS NOT A SECURITY, BUT A UTILITY TOKEN GIVEN ITS OPERATION AND IMMEDIATE FUNCTIONALITY. AS SUCH, DCO TOKENS, HAVE NOT AND WILL NOT BE REGISTERED OR FILED UNDER THE SECURITIES LAWS OR REGULATIONS OF ANY JURISDICTION. FURTHER, THIS TOKEN SALE IS NOT BEING PROVIDED THROUGH ANY OF THE EXEMPTIONS UNDER THE UNITED STATES SECURITIES ACT. NO REGULATORY AUTHORITY HAS CONFIRMED THE ACCURACY OF DECO.NETWORK'S SELF-ASSESSMENT THAT ITS TOKEN SALE DOES NOT CONSTITUTE A SECURITIES OFFERING. ALTHOUGH DUE DILIGENCE HAS BEEN CONDUCTED, AND DECO.NETWORK HAS TAKEN STEPS TO MITIGATE REGULATORY RISK, GIVEN THAT BLOCKCHAIN IS A YOUNG INDUSTRY, AND TOKEN SALES ARE A NOVEL AND EVOLVING DEVELOPMENT, THERE IS INEVITABLY A DEGREE OF UNCERTAINTY WITH ANY TOKEN SALE. GIVEN THE RAPIDLY CHANGING REGULATORY LANDSCAPE AND WARNINGS SIGNALLED BY MULTIPLE INTERNATIONAL JURISDICTIONS REGARDING THE POTENTIAL FOR TOKENS TO BE VIEWED AS SECURITIES OFFERINGS, THERE IS ALWAYS A RISK THAT THE DCO UTILITY TOKEN MAY NOT BE PRECLUDED FROM SECURITIES REGISTRATION REQUIREMENTS IN THE UNITED STATES OR ANY OTHER JURISDICTION. MANY INTERNATIONAL JURISDICTIONS HAVE INDICATED THAT TOKEN SALES MAY QUALIFY AS SALES OF INVESTMENT CONTRACTS, OR QUALIFY AS CROWDFUNDING SALES UNDER PRE-EXISTING REGULATIONS, AND MAY BE REGULATED AS SUCH. IN VIEW OF THE GUIDANCE RECENTLY RECEIVED FROM THESE REGULATORY AUTHORITIES, IT IS LIKELY THAT A GROWING NUMBER OF JURISDICTIONS WILL BE CLOSELY SCRUTINIZING TOKEN SALES. DECO.NETWORK'S REPRESENTATIONS AND SECURITIES ASSESSMENT IS NOT A GUARANTEE THAT THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION (SEC) OR ANY OTHER REGU-

LATORY AUTHORITY WILL NOT DETERMINE THE TOKENS TO BE SECURITIES SUBJECT TO REGISTRATION. THE DCO TOKENS HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION, ANY STATE SECURITIES COMMISSION IN THE UNITED STATES, OR ANY OTHER REGULATORY AUTHORITY IN THE UNITED STATES. THE SAME APPLIES TO RELEVANT REGULATORY AUTHORITIES IN FOREIGN JURISDICTIONS, INCLUDING, BUT NOT LIMITED TO, JURISDICTIONS THAT HAVE EXPRESSED ANY FORM OF GUIDANCE AS TO INITIAL COIN OFFERINGS AND TOKEN SALES, SUCH AS ABU DHABI, AUSTRALIA, BRAZIL, CANADA, CHINA, DUBAI, GIBRALTAR, HONG KONG, ISRAEL, JAPAN, NEW ZEALAND, RUSSIA, SINGAPORE, SOUTH KOREA, SWITZERLAND, AND THE UNITED KINGDOM. THE FOREGOING AUTHORITIES HAVE NOT CONFIRMED THE ACCURACY OR DETERMINED THE ADEQUACY OF ANY INFORMATION IN THIS WHITE PAPER OR THE TOKEN SALE MEMORANDUM, NOR IS IT INTENDED THAT THE FOREGOING AUTHORITIES WILL DO SO. ANY REPRESENTATION TO THE CONTRARY WOULD BE A CRIMINAL OFFENSE. SHOULD DECO.NETWORK'S TOKENS BE DEEMED SECURITIES BY THE SEC, OR ANOTHER REGULATORY AUTHORITY, DECO.NETWORK AND PARTICIPANTS IN THE DCO TOKEN SALE MAY BE SUBJECT TO CIVIL OR CRIMINAL PENALTIES IF THE TOKENS ARE NOT PROPERLY REGISTERED. AS SUCH, PROSPECTIVE PURCHASERS SHOULD MAKE THEIR OWN INVESTIGATIONS AND EVALUATIONS OF DECO.NETWORK, INCLUDING THE MERITS AND RISKS INVOLVED IN PURCHASING DCO TOKENS. IN COMPLIANCE WITH U.S. AND INTERNATIONAL TRADE LAWS, PROSPECTIVE PURCHASERS LOCATED IN, UNDER THE CONTROL OF, OR A NATIONAL OR RESIDENT OF ANY RESTRICTED LOCATION OR COUNTRY TO WHICH THE UNITED STATES HAS EMBARGOED GOODS OR SERVICES, ARE PROHIBITED FROM PARTICIPATING IN THE TOKEN SALE. RESTRICTED LOCATIONS INCLUDE, BUT ARE NOT LIMITED TO, CUBA, THE CRIMEA REGION OF UKRAINE, IRAN, LEBANON, LIBYA, NORTH KOREA, SOMALIA, SUDAN, AND SYRIA. AS SUCH, THIS WHITE PAPER DOES NOT CONSTITUTE AN OFFER TO SELL, OR A SOLICITATION OF AN OFFER TO BUY, DCO TOKENS IN ANY JURISDICTION IN WHICH IT IS UNLAWFUL TO MAKE SUCH AN OFFER OR SOLICITATION AND IS FOR INFORMATIONAL PURPOSES ONLY. DECO.NETWORK SHALL HAVE NO OBLIGATION TO ISSUE ANY TOKENS TO ANY PERSON WHO IS A RESIDENT OF A JURISDICTION IN WHICH THE ISSUANCE OF TOKENS TO HIM/HER/IT WOULD CONSTITUTE A VIOLATION OF LAW. DECO.NETWORK RETAINS THE SOLE RIGHT, IN ITS COMPLETE DISCRETION, TO ACCEPT OR REJECT TOKEN SALE PURCHASES, IN WHOLE OR IN PART, FOR ANY REASON. ANY REJECTED TRANSACTION SHALL BE REFUNDED. THE INFORMATION CONTAINED IN THIS WHITE PAPER WAS CREATED BY DECO.NETWORK FROM ITS OWN INTERNAL RECORDS AND FROM PUBLISHED AND

UNPUBLISHED SOURCES IT BELIEVES TO BE RELIABLE. NEITHER THIS WHITE PAPER NOR ANY SUPPLEMENTARY DATA PURPORTS TO BE INCLUSIVE, AND, ACCORDINGLY, EACH PROSPECTIVE PURCHASER IS EXPECTED TO CONDUCT HIS/HER/ITS OWN DUE DILIGENCE AND RELY ON HIS/HER/ITS OWN REPRESENTATIVES. NEITHER DECO.NETWORK, NOR ANY OF ITS OFFICERS, DIRECTORS, EMPLOYEES, AFFILIATES, ADVISORS, OR AGENTS, MAKE ANY DISCLAIMER, REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ACCURACY OR COMPLETENESS OF THIS WHITE PAPER OR ANY OF ITS CONTENTS, AND NO LEGAL LIABILITY IS ASSUMED OR IS TO BE IMPLIED AGAINST ANY OF THE AFOREMENTIONED WITH RESPECT HERETO. NO INFORMATION CONTAINED IN THIS WHITE PAPER OR ANY OTHER WRITTEN OR ORAL COMMUNICATIONS TRANSMITTED OR MADE AVAILABLE TO A RECIPIENT OF THIS WHITE PAPER IS, OR SHALL BE RELIED UPON AS A PROMISE OR REPRESENTATION, WHETHER AS TO THE PAST OR FUTURE, AND NO LIABILITY WILL ATTACH. IN ADDITION, ANY PROJECTIONS AND ESTIMATES CONTAINED IN THIS WHITE PAPER INVOLVE NUMEROUS AND SIGNIFICANT SUBJECTIVE DETERMINATIONS. ACCORDINGLY, NO REPRESENTATION OR WARRANTY CAN BE OR IS MADE AS TO THE ACCURACY OR ATTAINABILITY OF SUCH ESTIMATES AND PROJECTIONS. SUCH PROJECTIONS HAVE BEEN PREPARED BY AND ARE THE SOLE RESPONSIBILITY OF DECO.NETWORK AND HAVE NOT BEEN REVIEWED OR COMPILED BY INDEPENDENT AUDITORS. CERTAIN STATEMENTS IN THIS WHITE PAPER CONSTITUTE FORWARD-LOOKING STATEMENTS. WHEN USED IN THIS WHITE PAPER, THE WORDS MAY, WILL, SHOULD, PROJECT, ANTICIPATE, BELIEVE, ESTIMATE, INTEND, EXPECT, CONTINUE, AND SIMILAR EXPRESSIONS OR THE NEGATIVES THEREOF ARE GENERALLY INTENDED TO IDENTIFY FORWARD-LOOKING STATEMENTS. SUCH FORWARD-LOOKING STATEMENTS, INCLUDING THE INTENDED ACTIONS AND PERFORMANCE OBJECTIVES OF DECO.NETWORK, IMPORTANT FACTORS THAT COULD CAUSE THE ACTUAL RESULTS, PERFORMANCE, OR ACHIEVEMENTS OF DECO.NETWORK TO DIFFER MATERIALLY FROM ANY FUTURE RESULTS, PERFORMANCE, OR ACHIEVEMENTS EXPRESSED OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS. NO REPRESENTATION OR WARRANTY IS MADE AS TO FUTURE PERFORMANCE OR SUCH FORWARD-LOOKING STATEMENTS. ALL FORWARD-LOOKING STATEMENTS IN THIS WHITE PAPER SPEAK ONLY AS OF THE DATE HEREOF. DECO.NETWORK EXPRESSLY DISCLAIMS ANY OBLIGATION OR UNDERTAKING TO DISSEMINATE ANY UPDATES OR REVISIONS TO ANY FORWARD-LOOKING STATEMENT CONTAINED HEREIN TO REFLECT ANY CHANGE IN ITS EXPECTATION WITH REGARD THERETO OR ANY CHANGE IN EVENTS, CONDITIONS, OR CIRCUMSTANCES ON WHICH ANY SUCH STATEMENT IS BASED. THIS WHITE PAPER IS NOT INTENDED TO PROVIDE THE SOLE BASIS FOR

ANY EVALUATION OF A TOKEN PURCHASE. PRIOR TO ACQUIRING DCO TOKENS, A PROSPECTIVE PURCHASER SHOULD CONSULT WITH HIS/HER/ITS OWN LEGAL, TAX, ACCOUNTING, AND OTHER ADVISORS TO DETERMINE THE POTENTIAL BENEFITS, BURDENS, AND OTHER CONSEQUENCES OF SUCH A PURCHASE. IT IS THE RESPONSIBILITY OF ANY PERSONS WISHING TO PARTICIPATE IN THE TOKEN SALE DESCRIBED IN THIS WHITE PAPER AND ASSOCIATED TOKEN SALE MEMORANDUM TO INFORM THEMSELVES OF AND TO OBSERVE ALL APPLICABLE LAWS AND REGULATIONS OF ANY RELEVANT JURISDICTIONS. PROSPECTIVE PURCHASERS SHOULD INFORM THEMSELVES AS TO THE LEGAL REQUIREMENTS AND TAX CONSEQUENCES WITHIN THE COUNTRIES OF THEIR CITIZENSHIP, RESIDENCE, DOMICILE AND PLACE OF BUSINESS WITH RESPECT TO THE ACQUISITION, HOLDING, OR DISPOSITION OF THESE TOKENS.