



MAST  
BLUEPRINT





MAST  
BLUEPRINT



# TABLE OF CONTENTS

I.	JV	8
	Introduction and Summary	8
	Legal Considerations, Risk and Disclaimer	9
II.	The Multi-Asset Stable Token	10
	Abstract	10
	Hybrid Stock Exchange	11
	The HYBSE	12
	Proposed Business Activity	13
	HYBSE Software	13
	Why Use the HYBSE?	14
	Advantages of Using and Trading on the HYBSE	15
	HYBSE vs Traditional Stock Markets	16
	GMEX	17
	GMEX Group	18
	MINDEX	19
	MAST Token vs Utility Token	23
	Equity Token/Utility Token	23
	Comparing IBO, IPO & ATO	24
III.	Management/Company Structure	25
	Management Team	25
IV.	Governance	30
	DIM Government	30
	Executive Power: Implementing Laws	30
	Legislative Violence: Passing Rules	30
	Judicial Power: Speak Lawfully	30
	The DIM Federal Assembly	31
	Voting and Turnout	32
	Voting	33
	Voting and Implementation on NEM Blockchain for the DIM-E	33
	Principal Requirements for DIM-E Voting	34
	Stages of DIM-E Voting	35
	Parties and Components of the System	35
	Main Processes	36
	Voting and Vote Verification	36
	Counting of Votes	37
	Verifiability	37





Tax Revenue	38
Organisational Model	39
Human Resources	39
Taxpayer Audit and Verification	39
Tax Rate	39
Token Holders and Co-partners	39
Promoters	40
Ambassadors	41
Surveillance and Governance	43
<b>V. The Ecosystem</b>	<b>44</b>
Ecosystem Description	44
The Ecosystem Overview	44
Ecosystem Objectives	44
How the Ecosystem Works	44
Products	45
Entry Points	60
Merchant List	61
Partners	62
Roadmap	63
<b>VI. Investment</b>	<b>68</b>
Investment Structure (Risk/Medium/Secure)	68
Multi-Asset Stable Token Pack	68
Super Multi-Asset Stable Token (SMAST) Pack	71
Super Equity Pack (SEQ)	72
Initial Blockshare Offering	73
The Legal Background of Exchange Tokens	74
MAST Funds Usage & Distribution	76
Swot Analysis	77
Marketing Plan	78
Target Customers	79
Competition	79
Source of Funds	80
Financial Milestones	81
Financial Description of the DIM-E Network	81
Financial Projections	86
Nature and Limitation of Projections	86
Revenue Forecast	86





Expense Forecast	87
Taxation	87
General Assumptions	87
Projected Profit and Loss	88
Projected Balance Sheet	89
Projected Cash Flow	90
Business Valuation	91
Distribution Strategy	93
MAST Custodian and Escrow Process	94
<b>VII. Legal</b>	<b>95</b>
Summary of the Legal Section	96
Risk Factors	104
Risks Concerning the Issuers and its Business Sectors	104
Risks Related to the Market	109
General Information	113
<b>VIII. Current &amp; Operational Project</b>	<b>117</b>
Micro Credit & Student Financing Model	117
Executive Summary	117
Mission	117
Objectives	118
Organisation Summary	118
Tokenize Students' Performance Token	119
How it Works	119
Services	120
Market Segmentation	120
Software	120
<b>IX. Technical Summaries</b>	<b>121</b>
Blockchain Technology	121
DIM ITX Solutions	122
DGX Processors	123
Payment & Managing Solutions	124
Stand-Alone Highlights	124
Connected Highlights	124
The HYBSE	125
DIM Node Tokens	126
Super Equity Nodes	126
Ticket System	127
Accreditation to Vote	128
Discounts and Promotions	128





Access Control for Events & Expos	129
How Does One get DIM Tickets?	130
<b>X. MAST Annexures</b>	<b>131</b>
Annexure A: DIM ITX Solutions	133
Annexure B: DIM-E Global Exchange (DGX)	143
Annexure C: The HYBSE Software	157
Annexure D: Development Roadmap	171
Annexure E: Glossary	187
Annexure F: References	195
Annexure G: Convertible Bonds	201





## JV

### JV Introduction and Summary

The HYBSE Marketplace Limited consists of MINDEX Holdings Limited (MINDEX), GMEX Group Limited (GMEX) and Hybrid Stock Exchange Corporation Limited (HYBSE). This collaborative joint venture (JV) led to the creation of the HYBSE Marketplace, which functions in an authorised, legal environment as a revolutionary digital asset trading operator.

The company intends to develop a mutually beneficial business for all, by providing SMEs as well as large-scale institutions with a trading platform to trade effectively in a unique digital exchange. This partnership integrates blockchain solutions and technology with traditional financial services to provide a comprehensive, governed ecosystem that digitalises assets onto a cryptographic ledger. The result offers sustainable and ground-breaking solutions for a new era in global financial markets. The HYBSE Marketplace provides business expertise, APIs, and functional growth through an integrated partnership-driven approach. In essence, it functions in financial, public and governmental domains to deliver advanced blockchain solutions. This platform is designed with global consumers in mind, enabling access to the new digital industries at a low cost, and in a secure and transparent way. The HYBSE Marketplace is the first of its kind and is specifically designed for day-to-day use by people in the real world.





## Legal Considerations, Risk and Disclaimer

Before deciding to participate, users should carefully consider their objectives, level of experience, and risk appetite. The Company does not recommend participation for merely speculative investment purposes. Participation does not grant entitlement to any equity, executive governance privileges, voting or similar rights or entitlement in the company or any of its affiliated companies. MAST TOKENS are sold as digital assets, similar to downloadable software, digital music and the like. The Company does not recommend purchasing equity unless the user has prior experience of financial instruments, cryptographic tokens, blockchain-based software, distributed-ledger technology and has obtained independent professional advice. The value of the MAST TOKENS may fluctuate, resulting in clients losing their original investment.

Citizens, nationals, residents (tax or otherwise) and/or green card holders of each of the following countries are not accepted; citizens of Algeria, Austria, Bolivia, Vietnam, Indonesia, Kyrgyzstan, Lebanon, Morocco, Namibia, Nepal, Pakistan, Ecuador, Myanmar, Ivory Coast, Cuba, Iran, South Korea, Syria, Japan, Australia, Singapore, China, Bahamas, Botswana, Ethiopia, Ghana, Serbia, Sri Lanka, Trinidad, Tobago, Democratic People's Republic of Korea (DPRK), Tunisia and Yemen or any other jurisdictions which prohibit the possession, dissemination or communication of similar information and/or prohibits participation in token sales or the purchase of tokens or any such similar activity or any other restricted persons, are not permitted to participate in the token sale. Under no circumstances shall the company or any current or former company representatives be liable for excluded liability matters. Furthermore, nations under the high risk and monitored jurisdictions are also excluded to participate in the token sale.

### Accredited Investor

Under the federal securities laws, a company that offers or sells its securities must register the securities with the SEC or find an exemption from the registration requirements. The federal securities laws provide companies with a number of exemptions. For some of the exemptions, such as Rule 506 of Regulation D, a company may sell its securities to what are known as accredited investors. The term accredited investor is defined in Rule 501 of Regulation D.

### What is an Accredited Investor

In the United States, to be considered an accredited investor, one must have a net worth of at least US\$1Million excluding the value of one's primary residence, or have income at least US\$200,000 each year for the last two years (or US\$300,000 combined income if married) and have the expectation to make the same amount this year. The term "accredited investor" is defined in Rule 501 of Regulation D of the U.S. Securities and Exchange Commission (SEC). Revert to the respective regions for more detail.





# THE MULTI-ASSET STABLE TOKEN (MAST)

## Abstract

This dissertation is a framework for defining and understanding the Multi-Asset Stable Token (MAST). It outlines the implementation of the MAST as well as the benefits of participating in the Asset Token Offering (ATO) and the Ecosystem's suite of products and services. It is the first digital asset token offering, backed by a bundle of blockshares and stable coins. This document presents a comprehensive overview of the MAST ATO.

The MAST is a modern digital asset combining multiple tiers of equities and currencies which are backed by physical allocations of gold. It is the first of its kind and sets a touchstone for the digital asset industry. The MAST is built on a next-generation blockchain exchange engine, which serves as an immutable ledger that allows transactions to take place on a decentralized network. It is transparent, secure and accessible, and provides global growth opportunities for the public.

This ground-breaking digital token offering will enable accredited and public participants to buy and trade different token packages using fiat currencies and/or cryptocurrencies. The MAST ATO is a unique, multiple offering-based solution under the legal framework of Mauritius.





## Hybrid Stock Exchange (HYBSE)

The HYBSE is an online digital cryptonized-equity exchange that offers small and medium-sized enterprises (SMEs) as well as the general market a platform to seek and access global capital.

The HYBSE is a border-less, user-friendly platform where cryptonized-equities and other cryptonized instruments, such as blockshares, can be traded 24/7. Issuers who register on the HYBSE have to undergo a procedure called cryptonization, which is a process of dematerialising tangible certificates or electronic equities held securely by a trustee/escrow agent. The cryptonized equities are referred to as blockshares. Blockshares are crypto-units that are the result of the HYBSE incorporating the NEM blockchain into its functionality.

The HYBSE has been established for 5 years, serving over 20,000 participants, and currently employing more than 100 employees in 5 different countries. Multiple companies, licences and products that have been launched to date may be found on the DIM Ecosystem at [www.dim.foundation](http://www.dim.foundation). HYBSE Marketplace acts as a pilot model for other countries as an asset matching exchange, and further introduces Mauritius as a global crypto market. The HYBSE brings traditional trading through the new in-house developed API into the blockchain. It combines the best of both traditional exchanges and blockchain technology by producing a hybridized next-generation digital trading platform. Because SMEs are the backbone of the global economy, their expansion has a ripple effect that benefits their country of origin and the cryptonized world as a whole. The HYBSE is at the forefront of tomorrow's technological advancements and is ready to implement the unlimited potential of blockchain technology.

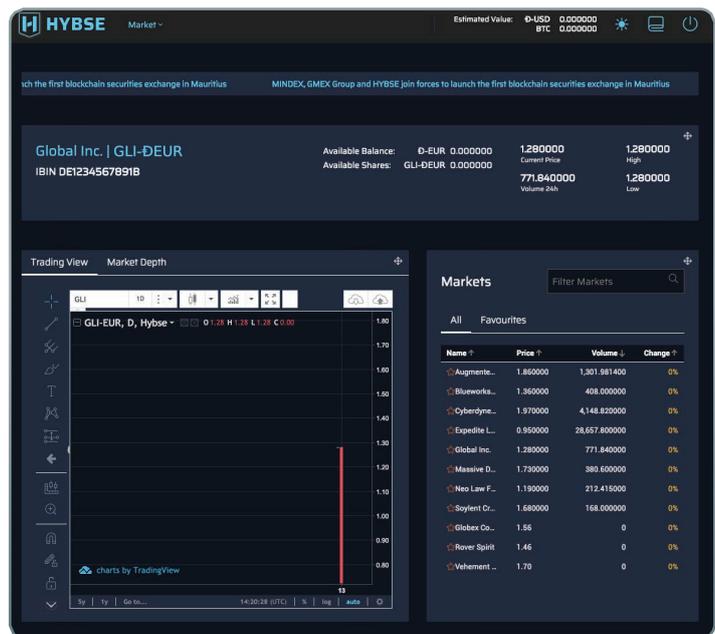


FIGURE 1: THE HYBSE PLATFORM





## The HYBSE

The involvement of numerous intermediaries leads to cost increases while diminishing efficiency and profitability for users. By utilising blockchain technology, the number of intermediaries is massively reduced when the HYBSE is used. The HYBSE is an online digital cryptonized equity exchange, with a legal framework in principle from Mauritius to operate a digital crypto stock exchange and offering small and medium-sized enterprises, secondary bond markets, and movable and unmovable financial instruments or commodities. The HYBSE is a third party independent user-friendly platform where cryptonized equities, and all other cryptonized instruments are traded as blockshares, 24/7. Issuers who register on the HYBSE have to undergo a procedure called cryptonization, which is a process of dematerialising certificated or electronic equities held securely by a trustee/escrow/custodian agent which is independently audited. The cryptonized equities are referred to as blockshares, crypto-units that are the result of the HYBSE incorporating the NEM technology into its functionality.

The incorporation of the NEM technology permits the HYBSE to be a platform where participants can trade in the absence of multiple interferences. Cryptography, the science of securing data, increases the levels of security for blockshares. These features allow the HYBSE to offer participants a secure, transparent and efficient platform. Using blockchain enables the HYBSE to be decentralised, and the NEM blockchain is maintained by a global network of nodes in different locations. If there is an event that affects the functionality of one or more nodes, unaffected nodes in different locations ensure the cryptographic ledger is constantly online.

Businesses that require an introduction to global crypto-capital can apply on the HYBSE for more information or directly access the website ([www.hybse.com](http://www.hybse.com)). Listing requires cryptonized equities or other cryptonized instruments, and an International Blockshare Identification Number (IBIN). The purpose of an IBIN is to display information via the platform regarding blockshares associated with an issuer's specific business. The HYBSE also accepts dual-listing of businesses that are already registered on other exchanges, whether traditional or blockchain based.





## Proposed Business Activity

The HYBSE offers innovative products and services to its market segment and allows accessibility on various levels to the financial world. These services vary from underlying blockchain solutions to full-scale stock exchange products with focusing on API integration and Whitelabel of the HYBSE.

---

## HYBSE Software

The logic trading engine used for HYBSE is similar to most exchanges, so that fundamentals of the HYBSE software do not deviate from the familiar traditional exchanges. The three distinct trading interfaces enable beginners as well as advanced level traders to compete/trade in the same market at the same time albeit at different levels of trading experience. The HYBSE software was developed from utilising decades of the best practices by leading traditional exchanges and cryptocurrency exchanges and improving on them with the latest technology. As a security measure, the electronic software base is separated into multiple parts. These parts increase the number of hurdles for ill-intentioned users and hackers and add additional layers of security.

The software design enables the HYBSE to adapt to fast-changing market conditions, with participants receiving real-time price updates. The concise and easy to use software interface permits issuers to complete the registration process remotely. The software focuses on ease of use, security of funds and providing the right information at the right time for participants.

High-frequency and algorithmic trading of up to 1 million transactions per second are programmes that are included into the HYBSE software in multiple gradual steps, thereby allowing further access points for institutional participants through APIs. With the NEM launch of an update named Catapult, direct end-to-end user trades are possible through smart contract plugins called decentralised swaps. More information is given in the Technical Annexure.





## Why Use the HYBSE?

Businesses and all users get to directly interact with blockshares and well-established financial instruments. There are no restrictions on eligibility to bid, order or hold any amount of blockshares or DIM Currencies and the door is opened for universal participation in a new, fair and transparent market. The company that exposes its business globally attracts more clients for its own business by exposing its new business opportunity on the multi-billion-dollar blockchain market. Holders of blockshares will soon be able to engage in online voting for the businesses where they hold cryptonized equities and other instruments. The HYBSE offers the software that connects businesses to the global crypto-capital market. The platform provides access to everyone globally, by offering high-value in trade and commerce opportunities. The exchange is stable and secure, offering peace of mind to participants. An additional feature under consideration is dividend distribution through blockchain. Matching engine audits and surveillance measures such as Anti-Money Laundering (AML) and Know Your Customer (KYC), as well as anti-fraud measures are included. Businesses preregistered on the HYBSE will be visited by the DIM Ambassador of that respective region, for onsite confirmation. Wallets that are suspected of breaching the compliance procedures of the HYBSE and the DIM-E, are red-flagged and not allowed to interact with the HYBSE and the entire DIM-E.





## Advantages of Using and Trading on the HYBSE

- Access to global markets and funds 24/7
- Geographical, religious and political independence
- Low operating fees
- Three trade interfaces from beginner to advanced are available, enabling ease of trade in large or small volumes
- Transparency
- Fast clearing
- Large pool of unique cryptonized equities and other cryptonized instruments to trade
- Safe and secure
- Open to everyone, including small and medium-sized participants
- Quick processing of businesses
- Stringent and quality due diligence procedures
- Part of the DIM-E
- An alternative source of capital throughout DIM-E networks and the HYBSE Marketplace Ltd.
- User friendly web interface





## HYBSE vs Traditional Stock Markets

Characteristics	HYBSE	Traditional Stock Market
Globally available	✓	✓
Limited by geographical boundaries	✗	✓
High number of intermediaries	✗	✓
Trade transparency	✓	✗
Built on blockchain technology	✓	✗
24 Hour trading	✓	✗
Trade cryptomized-equities and other cryptonized-instruments	✓	✗
Public ledger	✓	✗
Quick clearing	✓	✗
Low operational fees	✓	✗
Decentralised & independent cryptonized-equities and instrument management (DEPOTWALLET)	✓	✗

FIGURE 6: THE DIFFERENCES BETWEEN THE HYBSE AND TRADITIONAL STOCK MARKETS.





## GMEX

The GMEX Group is a well-established set of companies, with a 7-year track record. It offers leading-edge innovative solutions for a new era of global financial markets by being a global provider of innovative multi-asset exchange trading and post-trade business solutions and technology ecosystems.

The GMEX Group's business solutions enable the creation and operation of cost-effective electronic exchanges and post-trade infrastructure in multiple asset classes; including equities, debt, forex, derivatives, commodities, cryptocurrencies and digital tokenised assets.

The GMEX Group operates in both developing and developed markets through the establishment of cohesive business and technology ecosystems. GMEX offers the added benefit of interconnection with multiple partner exchanges, thereby creating global networks of liquidity. Its technology application offering includes the following:



FIGURE 2: GMEX GROUP BUSINESS SOLUTIONS

The GMEX Market Advancement Programme (MAP) is all about partnerships and creating an ecosystem with exchanges and post-trade market infrastructure enabling operators to deliver centralised, decentralised and hybrid solutions collaboratively. GMEX realises that all its clients employ technology to achieve a commercial goal. Thus, GMEX does not merely sell technology, but rather partners with its clients to jointly achieve business goals.





# GMEX Group

## Comprises of Four Main Businesses Namely:

- GMEX Technologies is a provider of multi-asset traditional and digital exchange trading and post-trade technology through a unique partnership-driven approach.
- GMEX Innovation undertakes Research and Development (R&D) in technologically advanced product solutions for exchange trading, clearing and settlement - including hybrid and DLT Blockchain solutions packaged under GMEX Fusion.
- GMEX Services provides strategic consultancy, implementation services and support for exchanges and market infrastructure providers across asset classes, including digital tokenised assets.
- GMEX Investments makes selective seed and early-stage strategic equity and token investments into market infrastructure and related financial technology (FinTech) companies.

GMEX services and GMEX Investments are heavily involved in Mauritius and held by GMEX Holdings Limited (a GBC licenced company). GMEX already has significant long-standing financial, commercial, cultural and social links with Mauritius.

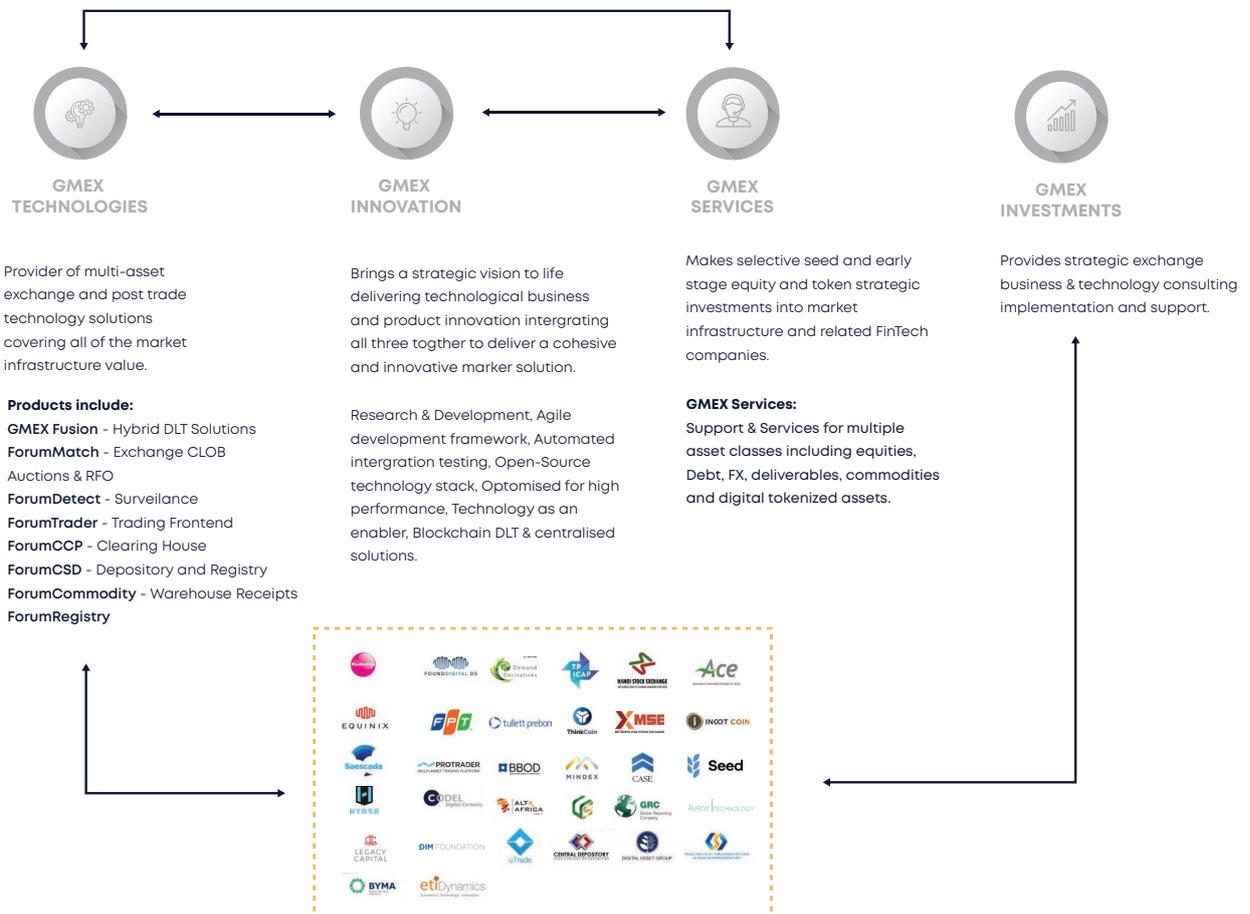


FIGURE 3: MARKET ADVANCEMENT PROGRAM (MAP)





# MINDEX

MINDEX is a Mauritian-based international derivatives and commodities exchange, with a complete ecosystem for gold, from mine to buyer, using blockchain technology. MINDEX can trade traditional securities and derivatives contracts as well as digital assets. The ecosystem includes a world-class refinery and secure physical asset storage facilities.

GMEX provides business expertise, the latest technology, implementation support, connectivity and operational excellence necessary for the successful implementation of the MINDEX Ecosystem. The HYBSE Marketplace Limited is majority owned by MINDEX Holdings Limited.

GMEX has created a comprehensive ecosystem which provides a regulated exchange, clearing house, refinery, office and digital tokenized gold enabled by:

- Trading and clearing technology.
- Electronic Warehouse Receipts Trading, Traceability, and Tracking System (WRTTS).
- Immutable tracing of gold and other assets.
- Tamper-proof record through client and asset blockchain registry.

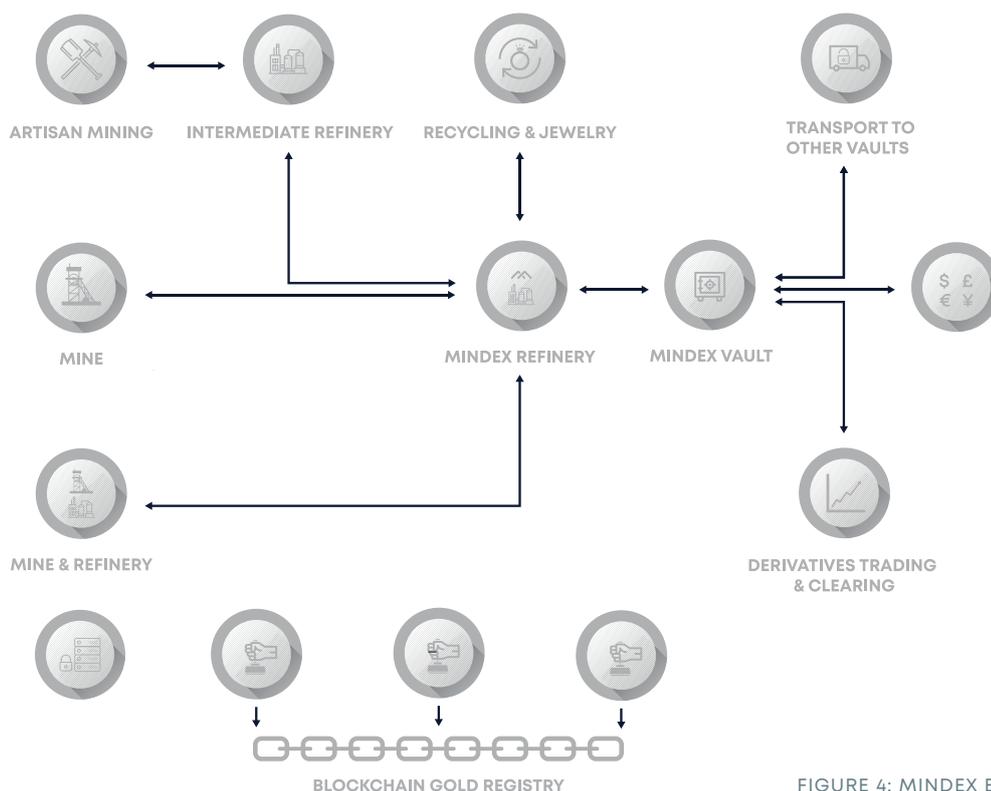


FIGURE 4: MINDEX ECOSYSTEM





## MINDEX

### Comprises of:

- **MINDEX Holdings Limited.** The holding company for the MINDEX ecosystem.
- **MINDEX Clearing Limited.** Operates as the Central Counterparty (CCP) clearing house regulated by the Mauritius Financial Services Commission (FSC) to clear all trades executed on MINDEX Limited.
- **MINDEX Limited.** Operates a multi-asset derivatives exchange regulated by the FSC.
- **MINDEX Spot Limited.** The marketplace for the electronic trading of standardised physical and digital spot commodity contracts for gold, precious metals, and other commodities.
- **MINDEX Vault Limited.** A forthcoming secured storage depository solution for gold and other precious metals.
- **MINDEX Refinery Limited.** A forthcoming service providing world-class smelting, refining and recovery of gold and other precious metals to the highest standards.
- **MINDEX Digital Custodian Limited.** A forthcoming regulated custodian of digital assets offering a complete secure digital asset vault, and cold storage capabilities with the ability to efficiently handle deposits and withdrawals.
- **MINDEX Realty Limited.** The real estate arm of the MINDEX Ecosystem responsible for construction and operation of the refinery, vault, office building and warehousing to facilitate the safe storage of gold, digital assets, and other commodities.

A digital custodian firm, (MINDEX Digital Custodian Ltd (MDC)), will form part of the MINDEX Ecosystem, complementing the exchange by safeguarding digital assets, as well as providing transactional recording and reporting for its users. Much like traditional exchanges, interested institutional participants within the digital assets sphere will require a registered and qualified custodian service.

- **Insurance**

MDC has an established pre-contract status with various insurance underwriting firms specialising in financial products that insure against physical loss or damage to devices which hold private encryption keys. The maximum limit in value per device is likely to be US\$1Million, but users are not restricted to how many devices they may hold.

AmTrust Syndicate is one of the specialist insurance providers offering this underwriting product. A valuation methodology is created for each asset. Most of these assets will be aligned with the market, and therefore easier to validate in the unlikely event of a claim. In the case of privately held assets, valuation and proof of evidence will be validated by one of the top twenty international audit or advisory firms.

The devices will initially be securely housed in the vaults of Brinks Mauritius and later relocated to the vaults of MINDEX, operated by Brinks.





As insurance underwriters examine this new pilot project in order to fully grasp the digital assets market, the actuarial research that is collected, assessed and measured will benefit the future of the industry as products will be priced accordingly.

This paves the way forward for the development of new insurable products with more consistency of scope and application of material data. This will create space for more underwriters in the market leading to an even more competitively priced digital asset industry.

Other alternatives, such as structuring mutual guarantee funds, will also be considered in due course.

#### **Guarantee Fund**

To account for the unlikely risk of loss and theft, a secure digital custody solution backed by a Clearing Guarantee Fund (CGF) is the latest innovation in the cryptocurrency and digital assets ecosystem. A MINDEX custodian solution, enabled by GMEX, will be deployed for the Ecosystem which combines the benefits of instant settlement of trades, for any exchange, as the sole custodian of digital assets which link to external wallet deposit/s and withdrawal/s.

The CGF acts as an additional insurance mechanism of last resort to provide an added level of risk mitigation. The CGF is created through contributions from the HYBSE Marketplace Limited and its trading members and further performs the role of absorbing losses not covered by margin deposits of a member defaulting before settlement

- **Digital Asset Specialist Audit Firm**

A digital asset specialist audit firm will provide validation and valuation requirements for the Asset Token Offering (ATO) process, together with the insurance needs of the digital custodian. This will be undertaken by a leading global accounting firm. While valuation is not an exact science, a methodology will be agreed on with the digital specialist audit firm to ensure that the value of shares reflects their intrinsic value.



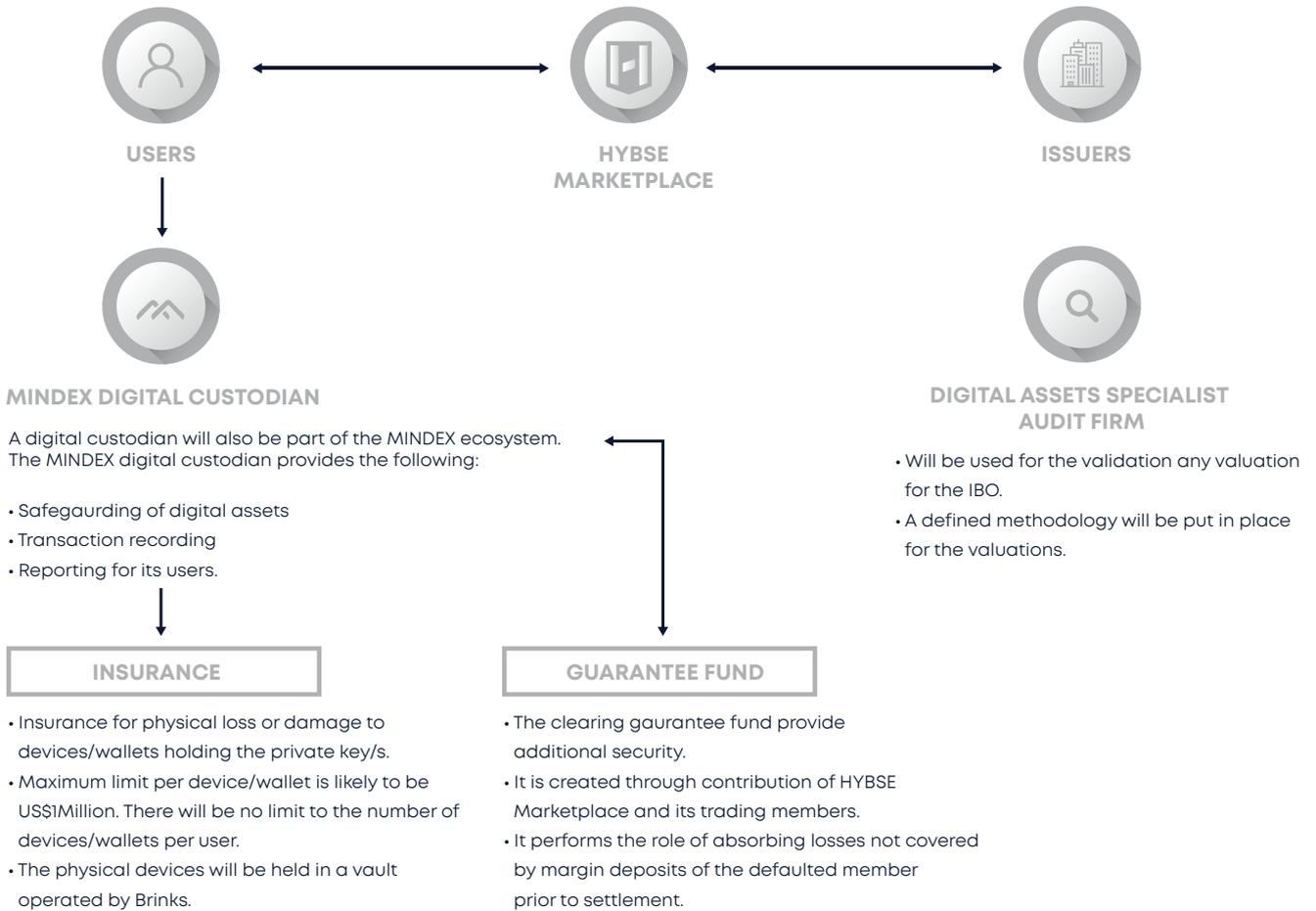


FIGURE 5: MINDEX STRUCTURE





## MAST Token vs Utility Token

### MAST Token

If the crypto token derives its value from an external, tradable asset, it is classified as an asset token and becomes subject to federal securities regulations.

These tokens can be used as a way to reward market makers who create liquidity in the exchange, they can also be used to lower trading fees or to give exchange users some government rights. Different exchanges utilise different subsets of these features of their tokens.

### Utility Token

They serve as prospective access to a product or service and can be best compared to a gift card or software license. Utility tokens represent future access to company's product or service.

The defining characteristic of such tokens is that they are not designed as investments; if properly structured, this feature exempts utility tokens from federal laws governing securities.

---

## Equity Token/Utility Token

### Future of Exchange Token

Exchanges' revenue comes mostly from trading fees. The bigger the volume traded, the more fees generated, and the bigger the profit. The cryptocurrency ecosystem may be expected to continue to grow and attract more participants. Presently, infrastructure in the crypto-ecosystem is being built, and although it has grown considerably since its inception, it's still a long way from being universally available. Nevertheless, the foundation is now outlined and described.

### Positive Signals

- A sector with significant potential for growth, as the crypto ecosystem as a whole shows no signs of slowing down.
- Reward producing tokens, through transaction-generated incoming fees distributed to token holders and co-partners.





## Comparing IBO, IPO & ATO

Characteristics	IBO	IPO	ATO
Built on blockchain	✓	✗	✓
Offers cryptonized-equities and other cryptonized-instruments	✓	✗	✓
Hybridized businesses	✓	✗	✓
High due diligence processes	✓	✓	✓
Purchase using cryptocurrencies	✓	✗	✓
Purchase using fiat currencies	✓	✓	✓
Purchase equities of real businesses	✓	✓	✓
Anti-fraud measures	✓	✓	✓
Discounts on equities	✓	✓	✓
Time limited	✓	✓	✓
Purchase cryptocurrencies	✓	✗	✓
Invest in ideas	✗	✗	✗
Invest in real businesses	✓	✓	✓
Equities stored in blockchain wallets	✓	✗	✓

FIGURE 7. IBO, IPO AND ATO COMPARISON



# MANAGEMENT/ COMPANY STRUCTURE



## Management Team

Management is expected to use resources wisely, operate profitably, pay debts, and abide by all applicable laws and regulations. The company's management philosophy is based on teamwork, responsibility, and mutual respect. The founders have successfully owned and operated a similar business and over a decade have gained the necessary experience in the industry

The Board of Directors of the HYBSE Marketplace Ltd, consist of a team of experts with extensive experience in the diverse field of exchange operations, marketing and financing. The combination of different fields of experience and information resources, underpins the success of HYBSE Marketplace Ltd, enabling it to develop structured and goal-oriented solutions for its customers, investments and issuers. The management team is supported by a core workforce of which each individual was screened and placed under scrutiny in order to achieve the best standards of the ecosystem.

The Board of Directors will consist of a combination of the three entities, namely MINDEX, GMEX and HYBSE:





### Hirander Misra

Chief Executive Officer, HYBSE Marketplace  
 Chief Executive Officer, GMEX Group  
 Chairman, MINDEX Holdings

Hirander is currently the CEO for HYBSE Marketplace Ltd., chairman and CEO of GMEX Group, chairman of GMEX Technologies and chairman of MINDEX Holdings Limited. He is also the chairman of the high-tech firm GMEX Innovation Limited and the managing director of Misra Ventures, a consultancy company providing specialist senior-level advisory services and assisting companies to deliver on change in market structure, trading and regulatory compliance.

Previously he was the co-founder and Chief Operating Officer of Chi-X Europe Limited, instrumental in taking the company from concept to successful launch. At the time of his departure in February 2010, Chi-X Europe was the second largest equities trading venture in Europe, just behind the LSE Group. The company was subsequently sold to Bats Global Markets in November 2011 for US\$365 Million.



### Daniel Liu

Chief Operating Officer of HYBSE Marketplace  
 Executive Operations Officer of HYBSE Vanuatu  
 Executive Operations Officer of DIME Global-X (DGX)

Daniel is the Chief Operating Officer for HYBSE Marketplace Ltd., Executive Operations Officer for the HYBSE Vanuatu Ltd., and Executive Operations Officer for DGX Ltd. Daniel is responsible for coordinating all operational, financial and global needs and functions for HYBSE and DGX. Additionally, he leads the integration planning and execution of global acquisitions and joint ventures, as well as overseeing global marketing and public relations.

Daniel previously served as General Manager of Operations for Janga Group, an Entertainment and Gaming company, a leader in the micro-casino industry in Southern Africa. Prior to that, he served as a Senior International VIP Gaming Manager for Sun International Limited.





## Tony Harrop

Chief Information Officer, HYBSE Marketplace  
 Chief Information Officer, GMEX Group  
 Chief Executive Officer, GMEX Technologies

Tony is Chief Information Officer for HYBSE Marketplace Ltd., Chief Information Officer of GMEX Group and Chief Executive Officer of GMEX Technologies. Tony is also the Managing Director of GMEX Innovation Limited, created by the MBO of the technology team at PLUS Markets.

Tony joined PLUS as Chief Technology Officer (CTO) in 2010, and led their strategic initiative to realign the technology team and build a 'next generation' stock exchange. Prior to this, in 2007 as CTO, he created and launched LiquidityHub, a fixed income platform to serve the interest rate swaps market. As business solutions director at Evolution Consulting, he built a successful financial services consultancy with over 100 staff members and proprietary software.



## Klaus Heeder

Chief Technology Officer, HYBSE Marketplace  
 Chief Technology Officer, HYBSE Vanuatu  
 Chief Technology Officer, DIME Global-X (DGX)

Klaus is the Chief Technology Officer for HYBSE Marketplace Ltd., DGX Ltd. as well as for the HYBSE Vanuatu Ltd. In his role he drives the agile implementation and core technology development, applied technologies and consumer focused implementation within the group of companies.

Prior to his role as CTO, Klaus served as the global business head of outsourcing: Star Alliance Solutions under the Société Internationale de Télécommunications Aéronautiques (SITA) mandate, and also global business head of Global Software Solutions. Prior to that, he was with Vodafone Global, as the Strategic Global Key Account Manager in the Shareholder Accounts Division.





## Jessica T. Naga

Chief Legal Officer, HYBSE Marketplace

Jessica is Chief Legal Officer of the HYBSE Marketplace Ltd., and oversees the HYBSE legal affairs globally, including public company compliance, corporate governance matters while also serving as the HYBSE's key legal advisor.

Jessica was called to the Bar of England and Wales in 2004 and to the Bar of Mauritius in 2007. After completing her pupillage, she practised as a barrister on the London Circuit for a number of years. She then moved to Cape Town, South Africa, to work for a private equity group of which she became the managing director. During this time, she served as the director of various companies in the hotel & leisure industry, and the renewable energy and financial services. She has principally an advisory legal practice including major cross-border transactions, tax structuring, insurance and re-insurance, insolvency/bankruptcy and corporate law.

Jessica is a member of the Society of Trust and Estate Practitioners, UK (STEP), a member of the Mauritius Institute of Directors (MiOD) and a member of the Chartered Institute of Arbitrators, UK (CI Arb).



## Mirco Schmidt

Chief Financial Strategy Officer, HYBSE Marketplace

Chief Financial Strategy Officer, HYBSE Vanuatu  
Chief Financial Strategy Officer, DIME Global-X (DGX)

Mirco is the Chief Financial Strategy Officer (CFSO) for the HYBSE Marketplace Ltd., CFSO of HYBSE Vanuatu Ltd. and CFSO of DGX Ltd. In this role, he is responsible for all aspects of the HYBSE and DGX's product line, including DIM Currency products and capabilities for HYBSE's electronic trading platform. He also oversees the development of initiatives within the HYBSE exchange listing and DGX financial markets.

Prior to joining the HYBSE and DGX, Mirco was a co-founder and Chief Investment Officer of Trading Network International in Switzerland for 13 years, where he was responsible for major asset and fund management portfolios.



## Joy Gautam Neeraye

Advisor

Joy is presently the product and business development manager of Juristax, a leading management company in Mauritius.

During his tenure at the Financial Services Promotion Agency, Gautam has been instrumental in generating the strategic plan for MINDEX. He worked on designing the ecosystem that takes on board best practices from around the world. Together with the then chief executive of FSPA, he led a road show to introduce potential participants and members of the viability of such an exchange in Mauritius. Joy is now working with GMEX to set up a commodities and derivatives exchange in Mauritius based on the MINDEX model.

Graduating from the University of Poitiers in Economics and Management, he also holds a graduate diploma in Development Journalism from the prestigious India Institute of Mass Communications, and is a distinguished recipient of the Press Trust of India Award.



## Scott Riley

Advisor

Scott began his career at Merrill Lynch, implementing the changes required to enable the company comply with the UK's so-called Big Bang Financial Services Act of 1986.

Scott has been instrumental in the development of various start-ups, such as ADX in Australia and Chi-X in Europe. Scott has experienced the transition from floor trading to screen-based technology. This included seeing the end of floor trading and bringing the work 'upstairs', joining new electronic markets and being among the very first to offer and risk manage direct market access in the new electronic trading environment. Scott was a founding director of Chi-X Europe, where he was responsible for the Chi-X post trade market model and all post trade solutions. This included the relationship with Fortis, now ABN Amro, which become known commercially as EMCF, the European Multilateral Clearing Facility. Scott's long professional history and experience in the post trade environment, has seen him being involved in various industry bodies, including the European Commission MOG (Monitoring Group) for the implementation of an improved Clearing and Settlement framework. An experienced market practitioner used to implementing innovation and familiar with proven disruptive technologies, will always have a key role to play in our industry.



# GOVERNANCE

## DIM Government

The DIM democratic government undergoes elections on a regular basis, where different candidates compete against each other. There are different types of democracies, but in every democracy, the people determine who receives power. The DIM Ecosystem empowers a collective group of individuals by shifting power away from individuals to a group of responsible people. In the DIM Ecosystem, the people are the representatives, similar to a parliament. The DIM Ecosystem's direct democracy invites individuals to make direct decisions on proposals, for example, on popular initiatives of a referendum as well as political issues. The DIM Ecosystem introduces the separation of powers with the DIM Ecosystem Constitution of 2019. This form of separation prevents the concentration of power among individuals or institutions and prevents the abuse of power. At the same time, an individual may only belong to one of the three pillars.

### Executive Power: Implementing Laws

The DIM Government is the head of the DIM Ecosystem; it observes, assists and ensures the day-to-day business and implementation of legislative decisions of the DFA. Each of the seven members of the DIM Government presides over one department. Together with the DIM Chancellery, the seven departments form the federal administration.

### Legislative Violence: Passing Rules

The DFA consists of a maximum of 20,000 delegates. The two councils are equal; together they form a reliable assembly. The DFA creates and governs laws which further oversees the management of the Council and the DIM Supreme Court. (DSC) members of the DFA are elected by participants of the ecosystem and are accountable to them.

### Judicial Power: Speak Lawfully

The DSC is the highest court in the DIM Ecosystem, it ensures the uniform application of rules and protects the DIM population. Also, it decides, as the highest authority, on legal disputes between users and the DIM Government and the commercial world.



## The DIM Federal Assembly (DFA)

Each token holder above 1,000+ DIM Tokens is entitled to one full membership of the crypto congress, and holders of 50+, but less than 1,000 DIM Tokens are entitled to only voting rights. The node token holders are elected through the DIM-E voting system and represent not more than one senate seat by proportional representation, and must have the minimum requirements to become a senate member. The 7 Minister-Presidents of the DFA act as the supreme representatives of the entire DIM community and one new President is elected annually. This is the highest position in the DIM Ecosystem; the 7 Minister-Presidents represent the DIM Government and the President acts de facto as head of state. The DIM Senate chamber, the DIM Ecosystem representation (With a maximum of 250 Senate members, 1 million tokens) represent a Senate seat as well as 50 voting rights. The Senate members are elected by DIM Token holders in which the majority of voters decide.

	Requirements:	Description of rights:
Voter	Must hold a minimum of 50 DIM Tokens.	Eligible to vote
Congress Members	Must hold a minimum of 1,000 DIM Tokens to be a member. Must hold a minimum of 5,000 DIM Tokens to create a voting proposal.	Eligible to create voting proposals*. Eligible to vote. <small>*Proposals are considered and voted by senate members.</small>
Senate Member	Must hold a minimum of 250,000 Node Tokens.  Minimum of 2 x node servers. Minimum of 100,000 Node Tokens per server.	Eligable to vote on proposals only. Senate members represent the Node Network.
Minister	Must hold a minimum of 1 Million Node Tokens and a minimum of 25,000 Dim Tokens.	Final acceptance of proposal. Enacts legislation.
Wallet Minister	Must be a founding member of a substantial improvement or creation of the DIM Ecosystem's subsets.	Eligible to cast 2 votes in event of stalemate.



DIM Round Table, and DIM Senate chambers usually meet separately. All legislative projects (constitutional amendments, federal rules, federal decrees, approval of international treaties) are dealt with in both chambers and must be adopted by both chambers. The so-called difference adjustment procedure is employed, and decisions of the chambers are made by achieving consensus. An exception to the separate consultation function of the two chambers is the 7 Minister-Presidents of the DIM HOUSE. The DIM Round Table and the DIM Senate chambers vote together for the 6 ministers originating as a senator member for a 2-year term of service in the DIM Ecosystem. Minister no 7 is Minister of Wallets which represents the founder's interests. Another function of the DIM Government Assembly is the pardon (Concerning any sanctions imposed by DIM Ecosystem's authorities on an individual under DIM Government rules and regulations).

When exercising their mandate, the DIM Round Table and DIM Senate chambers are not bound by instructions from cabinet ministers, political parties or other bodies (so-called instructions are strictly prohibited). The Company's political perspective is guided by the demands of the majority and depends on the interests of DIM groups that enrich and prosper the DIM Ecosystem.

## Voting and Turnout

A minimum of 3 percent of voters in the DIM Ecosystem is required to validate a vote. However, 50.1 percent is needed to pass legislation to the next level until all levels have voted in favour of the topic. This voting process applies to the senator's seats as well. Elections take place every two years and a binding and trust confirming vote takes place twice a year as part of the same appointment process.

# Voting

## Voting and Implementation on NEM Blockchain for the DIM-E

### Annotation

DIM-E voting provides an overview of the technical and organisational aspects of blockchain voting as well as the implementation framework for elections and voting.

### Introduction

Digital cryptography voting (DIM-E voting) enables eligible voters to complete their choice from any web browser or Android device connected to the internet. Voting is conducted using cryptography information technology over the node system of the DIM-E. Voting take place on an international digital basis.

### The Scope of DIM-E Voting

The following principal stages apply to DIM-E voting and elections:

- Declaration of elections
- Registration of candidates
- Vote in the Yes, No, and Abstain wallets (information is visible on the cryptographic ledger )
- Announcement of election results.

The DIM-E voting system is one channel of the voting system made available via the internet and the conditions for participation in the DIM-E Voting system are:

- A minimum of 50 DIM Tokens or 500 Node Tokens and 1 DIM Ticket are required to cast a vote.
- I-votes are counted separately via wallet results, keeping in mind that the qualifying votes of any one person is one DIM Ticket (always electronic and never on paper) and never duplicated.

**A min 50 DIM Tokens or 500 Node Tokens are required with 1 DIM Ticket**



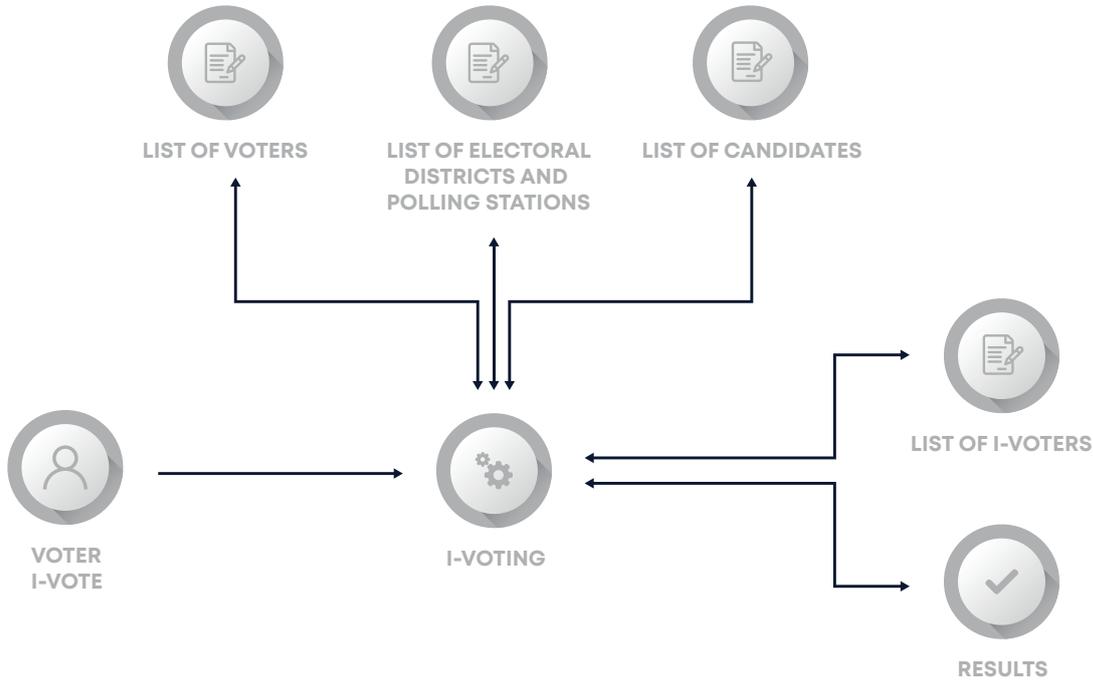


FIGURE 8. IDENTIFICATION OF THE VOTER

## Principal Requirements for DIM-E Voting

The DIM-E voting process must comply with the relevant legislation concerning voting and is therefore required to strictly adhere to voting guidelines and principles. DIM-E voting is visible publicly, meaning that everyone will have a view of votes cast and the information is the public property of all DIM members.

The main difference between DIM-E voting and voting with a paper ballot is that the voter can vote via the internet and that cryptography enables a tamper-free and fair voting process.

DIM-E voting takes place before election day during the period specified by DIM rules and regulations. If something unexpected happens to the DIM-E voting system (such as a large-scale cyber-attack or serious software errors), the organiser of the election may cancel a portion or all of the votes. In such instances, a new poll will be launched.

Another essential requirement of DIM-E voting is casting a vote via a ticket transfer to a desired voting wallet: Yes, No or Abstain.

The DIM-E voting system audits itself through the actions of the votes cast.

DIM-E voting takes place 24/7. Starting from 2019 Q2, as test and beta version, the intention is to accept all votes officially from 2020; all other votes will be considered as suggestions and test runs. The organiser of the election is required to provide the voter with the means to check the integrated information with informative links and documentation.

## Stages of DIM-E Voting

Organisationally, DIM-E voting can be divided into three stages:

During the **voting stage**:

- The system is set and ready for use, and voting takes place, polling dates are set, information sources created, and candidates and/or suggestions are prepared.
- A wallet address is allocated to each voter.
- Data approved for verifying voter eligibility and integrity are published as separate information on [www.dimexplorer.io](http://www.dimexplorer.io).
- During the voting stage, DIM-E voting takes place.

During the **processing stage**:

- The eligibility and authenticity is checked, and whether all wallets that have been cast still exist.
- The votes are sorted and the duplicated votes of one and the same person are annulled.
- Persons who successfully cast double votes are permanently banned on the DIM-E.

## Parties and Components of the System

The most critical role in DIM-E voting belongs to the organiser who appoints the vote for all other members. Generally, the organiser also holds the fundamental secret of the DIM-E voting system, i.e., the private key, and thus performs the role of opening and counting the votes, such like the task of a teller.

The principal parties of the system and their actions are the following:

The **Voter** makes his/her choice through DEPOTWALLET, casting the vote via an encrypted ticket and sending it to the designated wallet collector of Yes, No and Abstain. The voter is able to check if his vote arrived intact with the help of <http://www.dimexplorer.io/>.

The **Collector** is a cryptography server system structure which assists the voter to read the issued list of votes from candidates to the voter and which creates proposals.

The **Processor** processes the votes according to the public script.

The role of the **Creator** is performed by the organiser, who holds the private key. He opens the anonymised votes and tallies the information.



In addition to the principal parties, the system has the following parties:

The **Client Desk** is the party whom the voter contacts in the event of problems. The Client Desk assists the voter with the information received from the **Collection Service**, and registers all the received questions and their solutions in its database.

The **Compiler** and **Updater** of the list of voters compiles the lists of persons with the right to vote, depending on how the elections are organised. The list is public through the wallet address.

The **Collection Service** is the central component of the system, operated by the **Collector**. The Collection Service assists with management of tickets.

### Main Processes

This chapter describes the actions of the parties of the system, explaining the general functionality of the system components and the general requirements for the external parties of the system.

### Voting and Vote Verification

A Voter uses the DIM voter application found on [www.depotwallet.com](http://www.depotwallet.com)

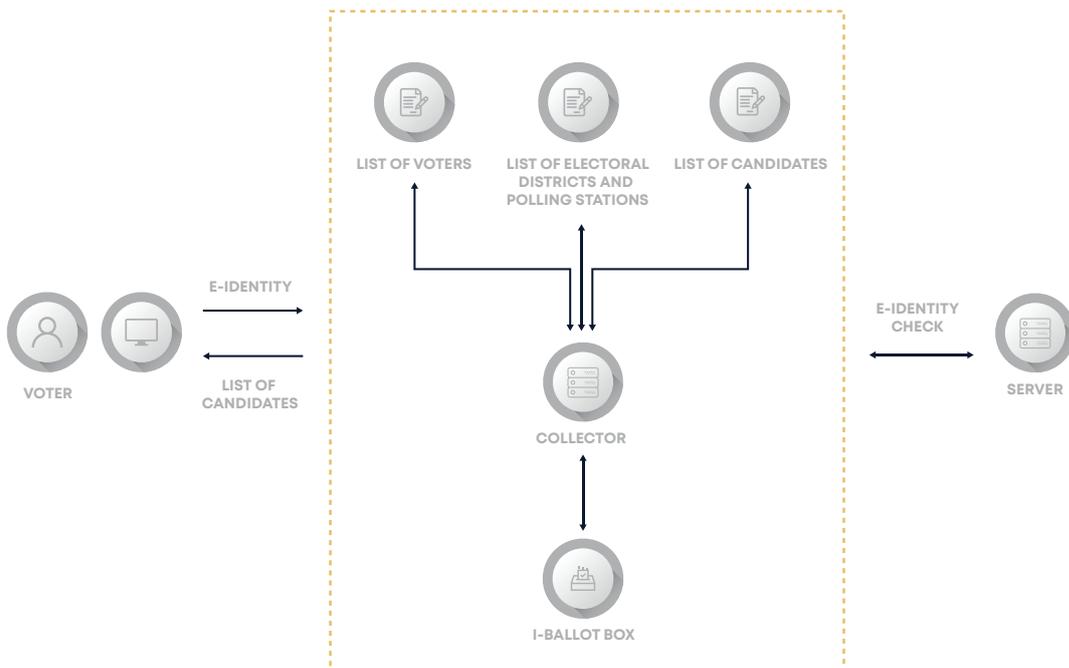


FIGURE 9: IDENTIFICATION OF THE VOTER

## Counting of Votes

Votes are public and counted in the wallet summary. Counting is organised by the Teller together with the public and announced through the DIM Government.

## Verifiability

DIM-E voting consists of several basic processes. The process can be verified by mathematically confirming if the input and output process produce equal value.

The verification process is as follows:

- Individual – checking is carried out by the voter,
- Delegated – checking is carried out by the auditor,
- Public/universal – checking can be carried out by all who are interested.

## Tax Revenue

The DIM Fiscal Affairs Department (DFAD) provides extensive technical assistance (TA) to its member countries to modernise and simplify their tax and customs administration. This service, data collection, validation, and analysis, guides the respective countries that are endorsing the modernisation of legislation for Industry 4.1. DFAD analyses the economic situation and responses, identifying vital elements based on a combination of the analysis of data and relevant documents and meetings with country officials. The DFAD also makes recommendations regarding critical areas in both tax and customs services.

Nevertheless, limitations do exist; for example, some revenue administrations which use a method of flat-rate, are not simple to implement, but requires an additional layer of implementing a collection of tax revenue.

A flat rate tax revenue reduces the cost of collecting tax by a 1000x times and more. The modest tax transaction fee of up to 0.025% of transaction costs, allows public communities to benefit.

A flat rate revenue administrator can track the performance of any individual online and in public. The current tax revenue service (TRS) will then become the auditor of the public ledger which audits all collateral services attached to any coin or token in their countries. This permits governments to keep their public assets under audit and ensure public transparency, which in turns draws new participants and increasing a country's ratings. The DFAD is also the common platform that other international organisations involved in gathering revenue administration data will and can use.

The DFAD aims to:

- Gather and analyse tax transaction fees and administer and distribute tax income annually.
- Make data and analysis available to member countries to enable them to monitor their performance and DIM Currencies themselves via cryptography public ledger.
- Establish mathematical measures for TA programmes of all countries, and provide a detailed data source for a results-based tax revenue management framework.
- Help target countries strategies and improve the quality of TA.
- One essential use of the DFAD is to analyse trends and revenue administration performance in general.

The goal is to initiate the exercise by focusing on developing countries to understand their needs by supporting their strategic management function and improving the DFAD's technical assistance (TA) to these countries. The DFAD will be testing uncharted waters by being the first worldwide to offer and demonstrate these functions.

However, much understanding and effort is required to achieve this response. The DFAD, therefore offers a single solution with a single tax solution for all.

The DFAD is the first of its kind to gather comprehensive tax on a large scale from a substantial number of companies.

## Organisational Model

Tax and customs administration are traditionally organized within the structures of the DIM Ministry of Finance. This organisational approach has been adopted by the DFAD that fully exercises their mandates under this model. However, the DIM Ministry of Finance administers and approves the distribution of the TAX revenue to the country which has endorsed the DIM currency.

## Human Resources

High-performance scripts administer the process according to our smart contract script. Naturally, a tiny workforce size depends on a series of the country. Having appropriate numbers of competent staff will not be a challenge for any revenue administration using this new system.

## Taxpayer Audit and Verification

The audit function lies at the core of the cryptography public ledger which empowers its vital tax administrator of a given country to verify its tax revenue. Although the most significant share of tax revenue is collected through voluntary participation, the self-assessment system only works if there are transactions conducted by users.

## Tax Rate

A total of 20% of all transaction fees are allocated to the DFAD.

## Token Holders and Co-partners

A total of 80% of the fees generated through the system will be distributed to the DIM Token holders.



## Promoters (Secretaries of DIM-E)

The DIM Promoters, among the first participants in the IBO, are all from different countries and backgrounds; however, they share one objective - to promote the DIM Ecosystem and its products and services.

The duties, roles, and responsibilities of the DIM Promoters include sharing articles and posts about DIM products and services. These posts are shared on their social media accounts, cryptocurrency blog sites and various cryptocurrency forums. Promoters create exposure for the DIM Ecosystem by reaching as many people and gaining new members for the group while assisting and supporting the existing ones. Through sharing DIM content, promoters spark discussions in the official group and their regional telegram groups. In turn; they receive valuable feedback which enables the DIM Team to improve their products and services. Additionally, DIM Promoters are administrators of the DIMCOIN Official Telegram group and help maintain a clear, helpful and informative environment for our community.

DIM Promoters help us establish connections and relationships on an international scale through their connections and the ongoing efforts of promoters. This diverse team assists and accommodates all members and participants of the ecosystem by addressing queries, questions, and concerns about DIM products and services, when the DIM Team is subject to time zone constraints. Furthermore, the DIM Promoters play an integral role in testing new products and services before they are made available to the public.

### Regional Telegram Groups Include:

- DIM German
- DIM Russia
- DIM Hispano
- DIM Japan
- DIM Indonesia
- DIM Scandinavia
- DIM India
- DIM Pakistan
- DIM Singapore
- DIM Chinese
- DIM South Africa
- DIM Nigeria
- DIM Colombia
- DIM Netherlands
- DIM Korea
- DIM France
- DIM Turkey
- DIM Brazil



# Ambassadors

## Current and Open Positions

### Description

The role of an Ambassador is to act as a brand advocate and to assist in building the growth of the DIM Ecosystem's global community by connecting potential users and empowering existing participants. The Ambassadors are in constant contact with their target audiences to further build rapport with multiple leads. The Ambassadors are the bridge between the company and all unbanked individuals.

### Mission

- An essential function of the Ambassadors is to create global DIM communities, by forming foundations in their geographic regions and assisting companies to register on the HYBSE.
- Already, 22 Ambassadors cover all regions of the globe, and the aim is to increase this number to 100 during the course of next year (2020).

### Highlights:

- Ambassadors have successfully attracted more than 40 vendors who have implemented DIMPAY as their payment gateway solution.
- Ongoing positive recruitment of companies to register on the HYBSE.



- |   |  |  |   |   |
|---|--|--|---|---|
| <b>01</b> ARGENTINA<br>Gabriel Nicolas Asenjo                     | <b>02</b> AUSTRALIA<br>Hazem Hamdan            | <b>03</b> BELARUS (RUSSIA)<br>Vadim Nkiforov | <b>04</b> BRAZIL<br>Milton Cesar Rossato    | <b>05</b> COLUMBIA/BRAZIL<br>Ayodele Popoola  |
| <b>06</b> GEORGIA/ARMENIA/AZERBAIJAN/POLAND<br>Zurab Zedelashvili | <b>07</b> INDIA<br>Digvijay Maurya             | <b>08</b> INDONESIA<br>Hendra Rukamana       | <b>09</b> MYANMAR (ASIA)<br>Hein Thant Lwin |   |
| <b>10</b> NETHERLANDS<br>Gimo Baram                               | <b>11</b> NIGERIA<br>Thani Mohamed             | <b>12</b> PAKISTAN<br>Riaz UL Hassan         | <b>13</b> PAKISTAN<br>Mian Zeeshan Akbar    | <b>14</b> PANAMA<br>Fernandez Eduardo         |
| <b>15</b> SINGAPORE<br>Jeremy Lin Zhi Peng                        | <b>16</b> SOUTH ARICA<br>Clinton Ndumiso Ngobe | <b>17</b> SPAIN<br>Caceres Franchy Yaye      | <b>18</b> SWITZERLAND<br>Dinescu Constantin | <b>19</b> UNITED STATES<br>Steven Karl Cheffy |

FIGURE 10. MAP OF AMBASSADORS

## Surveillance and Governance

Through a robust governance process and an uncompromising scrutiny of the DIM-E regulations and procedures on KYC, each account on the Ecosystem can provide traceability, accountability, and ownership for any trade ever made. Having multiple KYC collection points across the Ecosystem, enables the DGX partners to cross-reference and even absorb past information into their databases, thereby streamlining the adoption process of existing Ecosystem users. Once KYC data has been screened and vetted, users are further granted a pathway into the Ecosystem that leads to a more significant portion of access throughout the entire product suite.

The physical application of each entry is made by using DGX software and allows any participant to directly transfer or deposit fiat money into the DGX partner account. Here the software autonomously detects, configures and distributes into a respective users account. Once the application has added the balance of the fiat money for the user's disposal, and with a few simple steps, can exchange the user's discretion of their fiat money balance into digital DIM Currencies.

Moving onto other private sector businesses includes a physical interaction with each user, either by entering for the first time or integrating into the Ecosystem. These private sector operations are responsible for assisting users to register and utilise the DGX sub-set application, and further enhances how an exchange can be accomplished. A gold dealer exchanges the price of gold, per weight of measurement, against a DIM USD pairing, thereby ensuring the gold purchase would be directly pegged to the backing DIM Currency issued upon an exchange between the two products.

In another instance, a retailer can accept DIM Currencies as a method of payment by means of a separate custom integration of DGX into the retailers POS terminals; provided that their customers have had obtained DIM Currencies from a DGX partner or DIM X web platform, to spend at the retailer. Should their customer base want to cash out at till from their DIM currency into fiat money, the POS terminal can process the transaction and further assist the retailer in lowering cash handling security and costs. This particular scenario is highly favourable as retailers are multi-regional entities capable of servicing a large proportion of the consumer base while reducing their overhead costs and providing further convenience for their customers with added payment solutions.

The basic method whereby markets can enter the Ecosystem, is via a pivotal and defining sequence that rallies the momentum from DGX partners towards a holistic and mass adoptable application for DIM Currencies to enter and positively impact consumers. All factors from a DGX partnership, coupled with the DIM Ecosystem's high level of security, protection, and transparency, guides users to a safe working and living environment.





# THE ECOSYSTEM

## Ecosystem Description

### The Ecosystem Overview

The Ecosystem is a network of individual participants providing cryptonized equities, cryptonized currencies, commodities, services and products based on NEM Blockchain technology. These and other services can be purchased and sold on a global scale 24/7. MINDEX facilitates gold and licencing in the Ecosystem. GMEX opens doors to financial institutions and provides the gateway to the Ecosystem, including surveillance, and in the future, AI surveillance. This fusion of the blockchain technology with traditional financial industries provides a complete and governed ecosystem that digitalise assets onto the crypto ledger. This allows participants and businesses to interact with an application, service, product, and software development in the Ecosystem.

### Ecosystem Objectives

The objectives of the ecosystem are to attract more users and businesses and institutions with its capabilities; products, services, software developments, the collateral medium of exchange and technology and business solutions. The ecosystem aims to engage with additional applicants, services, brokers (international exchanges), goods and staff and institutional partners. Engagement is accomplished through solutions that the ecosystem offers; (DIM Foundation, HYBSE, DIMPAY, DIM Currency, DIM Wallet, DEPOWALLET, DIM X, MINDEX Spot Limited, MINDEX Vault Limited, Mindex Refinery Limited, accredited participants, extensive market infrastructure and interconnection to multiple partner exchanges). Each of these products and services aims to bring more businesses into the Ecosystem. Products and services within the Ecosystem are highly secure and transparent and enable users to exchange their fiat currency into cryptocurrency and trade it on the blockchain exchange without risk of manipulation. This creates an API that offers real solutions for prosperity, interacts with an international online marketplace, and enables a variety of asset classes and digital business opportunities for all levels of participants.

### How the Ecosystem Works

The Ecosystem works on a public ledger, the NEM Blockchain. The NEM network emphasises security and trusted computing. This blockchain is run by a network of nodes operating together, in a p2p configuration. The HYBSE is the central point of the ecosystem and is underpinned by its technologies, products, and services which function on the NEM Blockchain. MINDEX opens a gateway for precious metals for the use of all participants, including individual partners. The public ledger provides the information to assist in the management of day-to-day operations. Transactions and trading by businesses and participants are more efficient and safer on the blockchain compared to existing traditional financial systems. Transaction costs for sending or receiving payments are low. The Ecosystem works to serve all with a variety of daily operations; business, commerce, finances, investments, utilities payments and payroll, etc.





## Products

depotwallet

Brand name:	DEPOTWALLET
Product name:	Deposit wallet
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	February 2017
Date of release:	July 2017
Web address:	www.depotwallet.com
Contact:	info@depotwallet.com and support@depowallet.com
Social Media:	None
Summary description of product:	Web based blockchain wallet, which allows users to manage their wealth and awards the ability to store all DIM denominated mosaics including access to the voting function. This allows users to command their interaction within the Ecosystem with great ease and security.
Product objectives:	DEPOTWALLET is the most secure and user friendly NEM blockchain wallet, with great functionality and quick first time set-up procedures.
Product users:	End consumers, businesses and institutions are all potential users of DEPOTWALLET.
Product investment to date:	US\$300,000
Cost of development to date:	US\$279,000
Annual management fees:	US\$120,000
Assets:	Source code and security software
Product valuation:	US\$300,000
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	DIM Currencies, Blockshares, DIMCOIN, DIM Tokens, DIM Node Tokens, DIM Tickets, XEM
Important facts:	One of the first products to be pioneered and offers great stability, robustness and safety to all users.





Brand name:	DGX: Global Processor
Product name:	DIME Global-X (DGX) Master Processor
Juristic location:	Seychelles
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	August 2017
Date of release:	October 2018
Web address:	www.dimeglobalx.com (under construction)
Contact:	Under Construction
Social Media:	None
Summary description of product:	DGX serves as the global processor for all DIM Currencies in global circulation and manages the precious metal pools across multiple vault storages around the world. Local DGX processors tie into the global processor for trade and supply of DIM Currencies.
Product objectives:	DGX creates and supplies DIM Currencies for global markets, and controls a stringent trading desk for global precious metal commodities trading.
Product users:	B2B users are the only accredited vendors to the DGX global network. End users connect through any DGX B2B solution such as DIM X, MiCrypto and partner exchanges.
Product investment to date:	US\$500,000
Cost of development to date:	US\$428,000
Annual management fees:	No empirical values as of yet.
Assets:	Source Code and precious metals
Product valuation:	US\$1 100,000
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	Bitcoin, XEM and DIM Currencies
Important facts:	DGX aims to create a transparent and cashless society for all economies, and allow access to funds for the currently unbanked individuals in developing nations.



Brand name:	DIMCOIN
Product name:	DIM speculative coin
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	February 2017
Date of release:	July 2017
Web address:	www.dimcoin.io
Contact:	info@dimcoin.io and support@dimcoin.io
Social Media:	www.facebook.com/dimcoinico and www.twitter.com/dimcoin_?lang=en and https://www.youtube.com/channel/UCT0Sq4kPSYK7oFNbXPiyDng and https://medium.com/@DIMCOIN
Summary description of product:	DIMCOIN is a speculative coin, based on a traditional cryptocurrency topology and the first coin created for the DIM Ecosystem. DIMCOINs hold multiple properties and serve as medium of payment for services on the HYBSE platform.
Product objectives:	DIMCOIN represents true pricing mechanics based on supply and demand through market forces and enables transparency for the coin to reflect the DIM Ecosystem, as DIMCOINs become more valuable to use within the suite of products and services.
Product users:	All users within the DIM Ecosystem have access to DIMCOINs.
Product investment to date:	US\$150,000
Cost of development to date:	US\$128,000
Annual management fees:	US\$5,000
Assets:	None
Product valuation:	US\$2 568,000 Market Cap (as of 01 Feb 2019)
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	DIM Currencies, Bitcoin and XEM



# DIMPAY

Brand name:	DIMPAY
Product name:	DIM pay Android app
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	April 2018
Date of release:	September 2018
Web address:	www.dimpay.io
Contact:	info@dimpay.io and support@dimpay.io
Social Media:	www.facebook.com/dimpayico and www.twitter.com/dimpay_ico and www.reddit.com/r/dimpay
Summary description of product:	DIMPAY is a mobile application built for Android operating devices, and serves as an additional business payment gateway for SME's. This lite client has the ability to raise invoices, and can be scaled for large retailers through a tailored design and integration via points of sale (POS). Payments made to this application are stored on a digital blockchain wallet.
Product objectives:	The DIMPAY app is free to download, with no operating costs tied to the use of the product and allows informal businesses to become formalised, especially in unbanked regions.
Product users:	B2C users, particularly informal businesses.
Product investment to date:	US\$350,000
Cost of development to date:	US\$290,000
Annual management fees:	US\$480,000
Assets:	Source code and security software
Product valuation:	US\$500,000
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	DIM Currencies, DIMCOIN, XEM, DIM Token, DIM Tickets and DIM Node Token
Important facts:	Currently operational in multiple countries, DIMPAY is now widely accepting payments with various DIM Currencies with up to 271 participating stores, and a major retailer is currently in the pipeline for a 2019 roll out.



# DIM Wallet



Brand name:	DIMWALLET
Product name:	DIM wallet Android app
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	August 2017
Date of release:	September 2018
Web address:	<a href="https://play.google.com/store/apps/details?id=com.dimcoin.dimwallet&amp;hl=en">https://play.google.com/store/apps/details?id=com.dimcoin.dimwallet&amp;hl=en</a>
Contact:	info@dim.foundation and support@dim.foundation
Social Media:	None
Summary description of product:	DIMWALLET is light mobile client for Android operating devices, and serves consumers for their day-to-day payment needs, via a secure biometrics ready blockchain wallet.
Product objectives:	The use of DIMWALLET came out of the necessity to be mobile and secure, without having to access a DEPOTWALLET account for every purchase.
Product users:	End user consumers are the primary market for this product, and especially enables the unbanked to access basic wealth management and payment access.
Product investment to date:	US\$45,000
Cost of development to date:	US\$25,000
Annual management fees:	US\$5,000
Assets:	Source code and security software
Product valuation:	US\$50,000
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	DIM Currencies, DIMCOIN, XEM, DIM Token, DIM Tickets and DIM Node Token
Important facts:	Currently adopted by 20,000 global users, and is fast becoming the preferred mobile wallet of choice to interact with the DIMPAY business sector.





## DIM Currencies

Brand names:	DIM Currency/DIM Currencies
Product name:	Multiple currency products denominated with "DIM"
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	June 2016
Date of release:	October 2018
Web address:	www.dimeglobalx.com
Contact:	Under Construction
Social Media:	None
Summary description of product:	DIM Currencies are the first set of digital currencies to be backed by precious metal weighted by 80%. In this traditional sense, each DIM Currency represents a real world currency, specific to a nations denomination, and affords the blockchain with a varying selection of stable coins. The use of DIM Currencies is pivotal as the primary medium of exchange throughout HYBSE and the rest of the DIM Ecosystem.
Product objectives:	DIM Currencies create an environment of wealth, tied to precious metal and permit stability in the digital financial world. Each DIM Currency allows a nation to additionally place another layer of currency into digital circulation, and grants the ability to collect and spend taxes through ultimate transparency.
Product users:	All users within the DIM Ecosystem have access to DIM Currencies.
Product investment to date:	US\$100,000
Cost of development to date:	US\$5,000
Annual management fees:	US\$10,000 for every DIM USD 250,000 in circulation
Assets:	Currently US\$80,000 in precious metal, but subject to varying increases and decreases, depending on supply and demand factors, as well as London Metal Exchange (LME) price fluctuations.
Product valuation:	Currently US\$80,000
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	Bitcoin, XEM, Euros, Mauritian Rupees and 99.99% pure precious metal
Important facts:	Currently gaining market momentum throughout the stable coin market, as traditional cryptocurrency price fluctuations cause rife and allow users to convert their wealth towards stability.





Brand name:	DIM Explorer
Product name:	DIM explorer blockchain ledger viewer
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	June 2017
Date of release:	August 2017
Web address:	www.dimexplorer.io
Contact:	info@dimcoin.io and support@dimcoin.io
Social Media:	None
Summary description of product:	DIM Explorer is a viewing platform that isolates all DIM denominated transactions which occur on the blockchain.
Product objectives:	Allows quick and successful searching of the entire blockchain, but focusses specifically on DIM transactions.
Product users:	All users within the DIM Ecosystem have access to DIM Explorer.
Product investment to date:	US\$10,000
Cost of development to date:	US\$8,000
Annual management fees:	US\$2,000
Assets:	Non-Applicable
Product valuation:	US\$10,000
Regulatory body & license number:	Non-Applicable
Auditor:	Blockchain
Accepted currencies and/or mosaics:	Non-Applicable
Important facts:	Quick search functions for all DIM denominated transactions.





Brand Name:	DIM Tickets
Product name:	DIM utility and accreditation coin “DIM Tickets”
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	October 2018
Date of release:	Q1 2019
Web address:	Under construction
Contact:	Under construction
Social Media:	None
Summary description of product:	DIM Tickets provide a multi-layered service offering, as it serves users for numerous instances including accreditation towards the DIM-E voting system, exclusive discounted rates at partner stores and even access control for events.
Product objectives:	DIM Tickets assist to prevent fraudulent voting to occur on the network, and to provide a full audit with governing aspects within the DIM Ecosystem.
Product users:	All users within the DIM Ecosystem have access to DIM Tickets.
Product investment to date:	US\$110,000
Cost of development to date:	US\$60,000
Annual management fees:	US\$20,000
Assets:	Security software
Product valuation:	US\$250,000
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	DIM Currencies, Bitcoin, XEM, DIMCOIN, Euros and Mauritian Rupees
Important facts:	Upon launch, DIM Tickets will become the first step towards an anti fraud and corruption Ecosystem, which allows for a true and balanced financial environment.





Brand name:	DIM TOKEN
Product name:	DIM ecosystem voting token
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	February 2017
Date of release:	July 2017
Web address:	www.dimcoin.io
Contact:	info@dimcoin.io and support@dimcoin.io
Social Media:	None
Summary description of product:	DIM TOKENs are speculative coins priced against market forces and represent a form rights within the DIM Ecosystem. Each coin does not bare any properties as a static medium of payment, but rather its value is tied with the potential of earnings within the Ecosystem's network fee collection.
Product objectives:	The purpose of DIM TOKENs are to represent an uncontested right to vote for suggestions or changes within the Ecosystem, to ultimately improve the well being of the network. This coin further adds a profit sharing scheme, whereby holders of these tokens receive periodic payouts from total respective fees collected within the Ecosystem.
Product users:	All users within the DIM Ecosystem have access to DIM TOKEN.
Product investment to date:	US\$150,000
Cost of development to date:	US\$138,000
Annual management fees:	US\$5,000
Assets:	DIM DAO voting system
Product valuation:	US\$3 896,000 Market Cap (as of 01 Feb 2019)
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	XEM, DIMCOIN
Important facts:	DIM TOKENs form part of a larger scheme within the Ecosystem, which awards holders of the coin to participate in the worlds first decentralised community governing body, known as the DIM Government.





Brand name:	DIM X
Product name:	DIM online exchange
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	June 2017
Date of release:	October 2018
Web address:	www.dimx.io
Contact:	info@dimx.io and support@dimx.io
Social Media:	None
Summary description of product:	DIM X is a quick and intuitive online exchange platform, which allows users to purchase DIM Currencies with Bitcoin and XEM on a live spot trading system, which further permits exchange between different DIM Currencies. DIM X is the only globally accessible platform with direct connection to the DGX Global Processor, ensuring the best rates and continuous delivery of all DIM Currencies.
Product objectives:	DIM X was born out of needs analysis that global participants would require a quick and on the go exchange platform for users to interchange between their various DIM Currencies, and also to equip users with the need to change out their volatile cryptocurrencies into a stable DIM Currency. DIM X acts as the primary entry point for users to obtain DIM Currencies, for use throughout the entire Ecosystem.
Product users:	All global users have access to DIM X. (KYC/AML/Ts&Cs Apply)
Product investment to date:	US\$300,000
Cost of development to date:	US\$247,000
Annual management fees:	US\$19,000
Assets:	Source code, security software and big data analytics
Product valuation:	US\$650,000
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	Bitcoin, XEM, DIMCOIN and DIM Currencies
Important facts:	DIM X became the first online point of sale to offer DIM Currencies in October 2018, and fast became a torrent for users wishing to swap their cryptocurrency for stable currency.





Brand name:	HYBSE
Product name:	Hybridized blockchain stock exchange
Juristic location:	Mauritius
Product owner/s:	The Hybrid Stock Exchange Corporation Limited
Development team:	DIM Dev Group
Date of conception:	August 2013
Date of release:	Q1 2019
Web address:	www.hybse.com
Contact:	info@hybse.com and support@hybse.com
Social Media:	www.facebook.com/HybridStockExchange and www.twitter.com/hybse?lang=en and www.instagram.com/hybse and https://www.youtube.com/channel/UC0yv0bkweSER_FmH0gJbFHg
Summary description of product:	The HYBSE platform is an online digital stock exchange, equipped with full trading features without any constraints of borders and available on a 24 hour basis. The HYBSE uses elements from traditional exchanges, and encompasses blockchain's limitless potential, to create the worlds first digital asset trading exchange for institutions and the public to engage upon.
Product objectives:	A pivotal role for the HYBSE platform, is to allow SMEs to participate in global capital markets, under a clear regulatory framework, that protects both buyers and sellers of equities. This access to funding for business, allows a spur on effect for economies to grow and further develop itself within the Ecosystem's vast array of products and services.
Product users:	Only certain regions permit users to have access to the HYBSE trading platform (KYC/AML/Ts&Cs Apply)
Product investment to date:	US\$4 500,000
Cost of development to date:	US\$3 340,000
Annual management fees:	US\$480,000
Assets:	Source code, security software, matching engine, anti-fraud detection engine and trademarks.
Product valuation:	US\$22,000,000
Regulatory body & license number	Mauritius Framework (currently under review)
Auditor	Grant Thornton Mauritius





Accepted currencies and/or mosaics:	DIM Currencies, Blockshares
Important facts:	Most development work that has gone into the HYBSE platform, has focused on three main aspects; security, decentralisation and scalability. Each aspect presented own sets of challenges, and have been overcome through rigorous testing and optimised technical architecture.
Disclaimer:	This disclaimer governs your use of all HYBSE and associated company websites and is not designed for or directed at persons under the age of 18 years. Our services include products that carry a risk of loss in investments, these products may not be suitable for all investors. Please ensure that you fully understand the risks involved. All content on HYBSE websites have disclaimers that should be carefully read by users, we strongly encourage users to read these disclaimers on every site the user visits.



IBIN



Brand name:	IBIN
Product name:	International blockshare identification number
Juristic location:	Global - decentralised blockchain
Product owner/s:	The Hybrid Stock Exchange Corporation Limited
Development team:	DIM Dev Group
Date of conception:	October 2015
Date of release:	April 2018
Web address:	www.ibin.io
Contact:	contact@ibin.io and support@ibin.io
Social Media:	None
Summary description of product:	IBIN is a unique and universal identification code which is issued to a business, upon registration of an IBIN, which seeks to list its blockshare's on a digital exchange.
Product objectives:	IBIN allows businesses to be listed on digital blockchain based exchanges with their associated IBIN code and provides a seamless integration with IBIN's database for verification. This verification ensures buyers and sellers of equities, that trading with a unique IBIN code are in fact the correct equity they wish to trade.
Product users:	Issuers on the HYBSE platform have access to registration on IBIN. Users on the HYBSE platform have access to review basic company information associated to each IBIN code.
Product investment to date:	US\$150,000
Cost of development to date:	US\$122,000
Annual management fees:	US\$18,000
Assets:	Source code, security software and database information.
Product valuation:	US\$150,000
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	DIM Currencies, DIMCOIN, XEM and Bitcoin
Important facts:	IBIN is the worlds first internationally standardised identification provider for digital assets and equities.





Name:	MINDEX Gold Token
Product:	MINDEX fully stable gold coin
Juristic location:	Mauritius
Product owner/s:	MINDEX Spot Ltd.
Development team:	MINDEX Spot
Date of conception:	February 2018
Date of release:	Q1 2019
Web address:	www.mindex.mu
Contact:	info@mindex.mu
Social Media:	www.facebook.com/mindexholdings and www.twitter.com/MindexHoldings and www.linkedin.com/company/mindex-holdings
Summary description of product:	The MINDEX Gold Token provides a 100% gold backed coin and allows buyers and sellers to trade digital gold coins across a global presence over the blockchain on a 24hour basis.
Product objectives:	The MINDEX Gold Token achieves the first step to establishing a digital blockchain based ETC for gold on the HYBSE platform, which serves as the ultimate purpose for the token.
Product users:	Users on the HYBSE platform have access to trade MINDEX Gold Tokens. (KYC/AML/Ts&Cs Apply)
Product investment to date:	US\$250,000
Cost of development to date:	US\$12,000
Annual management fees:	US\$18,000 for every US\$250,000 in digital gold circulation
Assets:	Currently US\$40,000 in precious metal, but subject to varying increases and decreases, depending on London Metal Exchange (LME) price fluctuations.
Product valuation:	Currently US\$220,000
Regulatory body & license number:	Mauritius Framework (currently under review)
Auditor:	Virtual auditor – second and third node confirmation
Accepted currencies and/or mosaics:	Bitcoin, DIM Currencies, Euros and Mauritian Rupees
Important facts:	MINDEX Gold Token's allows a digital marketplace to trade and exchange fully backed gold coins.

Coming Soon





Brand Name:	DIM Node Token
Product name:	DIM decentralised network node token
Juristic location:	Global - decentralised blockchain
Product owner/s:	DIME Global-X
Development team:	DIM Dev Group
Date of conception:	October 2018
Date of release:	Q1 2019
Web address:	Under construction
Contact:	Under construction
Social Media:	None
Summary description of product:	DIM Node Tokens are a speculative coin driven by supply and demand factors for the coin. A collection of coins awards users the right to operate a blockchain node, which houses the entire blockchain ledger and enables confirmations to occur throughout the DIM network.
Product objectives:	DIM Node Tokens provide true accreditation on the DIM Node network, as each node will be entitled to portions of the total fees collected throughout the Ecosystem. Increasing the capacity of the network to run more nodes, induces a faster confirmation of transactions, which ultimately leads to more transaction capacity that can occur within the Ecosystem.
Product users:	All users within the DIM Ecosystem have access to DIM Node Tokens.
Product investment to date:	US\$180,000
Cost of development to date:	US\$110,000
Annual management fees:	US\$5,000
Assets:	DIM ITX (internet exchange)
Product valuation:	US\$180,000
Regulatory body & license number:	Non-Applicable
Auditor:	Virtual auditor – second <b>COMING SOON</b> third node confirmation
Accepted currencies and/or mosaics:	Bitcoin, DIM Currencies, Euros and Mauritian Rupees
Important facts:	DIM Node Tokens also form part of a larger scheme within the Ecosystem, as token holders of the coin can participate in the worlds first decentralised community governing body, known as the DIM Government.





## Entry Points

A defining characteristic of any ecosystem is the ability to develop into a fully-fledged, mass adoptable suite for consumers. Entry points are by far the most important entities that define the ability of the DIM-E to succeed.

For DIM-E, two main entries exist and are defined in this section. They are based on foundational networks and localised DGX white label partners in various regions.

Four exchanges are currently enabling direct fiat to DIM Currency trading in Singapore, Brazil, Hong Kong and South Africa. Altogether, Bitker from Hong Kong, Exrates from Singapore and Newcash from Brazil, are stand alone exchanges with direct trading pairs between fiat and DIM Currencies. MiCrypto in South Africa, is currently the first exchange to include a fully white label design which is based on a local DGX processor engine.

Entries are authorised and vetted private sector businesses, such as consumer gold dealers, FOREX exchangers, and dedicated official traders and custodians of gold.

A variety of software applications, web services, and pro-lucrative pricing mechanics allows for swift implementation and quick market penetration, with added white-labelling options available and across the suite of products, for the two chief options.

An underlying foundation linking DGX partners ensures that all regions which adopt DIM Currencies into their respective economies operate in tandem with DGX full-vendor management regarding secondary entry partners. At the same time, a high level of governance is maintained together with KYC procedures for the master licence holder in a particular region. Each region is responsible for the DIM Currencies it subscribes to, with pricing mechanisms that favour the local environment.

Once a DGX partner is fully established, the entity may choose to act as the primary financial institution that will collate, govern and manage the supply of in- and out-bound fiat transactions into DIM Currencies, in their respective regions; or may further sub-let their distribution outlets through ancillary partnerships, and provide an approach that governs from the top. While this model is a primary must for each region, it fully provides for the conversion of fiat money to DIM currency and acts as the main distribution centre for smaller branch outlets. DGX partners may also choose to use high-volume fiat vendors as points of trade. Such vendors can be retailers and/or gaming venues that have high costs related to cash handling fees and often try to reduce their fiat money handling altogether - but yet are still required to hold certain portions of their daily float in fiat money.





## Merchant List

COMPANY NAME	ACCEPTED CURRENCY	COUNTRY
Outwear	DIMCOIN, DIM EUR, DIM USD	Switzerland
Brandico	DIMCOIN	Mexico
Yousafzai Mobile Shewa adda	DIM USD	Pakistan
Yousafzai Mobile Swabi	DIM USD	Pakistan
Sunshine Solar Systems	DIM USD	Pakistan
Sofia Enterprises	DIM USD	Pakistan
Sofia Bikes Dagai	DIM USD	Pakistan
Sofia Bikes Yarhusain	DIM USD	Pakistan
Sofia Bikes Workshops	DIM USD	Pakistan
Tariq Color lab	DIM USD	Pakistan
Tariq Digital Photostudio	DIM USD	Pakistan
Lasting Impressions	DIMCOIN	South Africa
Bandhan Beauty Parlour	DIMCOIN	Pakistan
Srekh Karay	DIM USD	Pakistan
Tayyab Electronics	DIM USD	Pakistan
Fazian Medical Store	DIM USD	Pakistan
SOTAC Services LTD	DIM EUR, DIM USD	Nigeria
IBUMS GID LTD	DIM EUR, DIM USD	Nigeria
Dr Yousaf	DIMCOIN, DIM USD	Pakistan
Aamir Stationery	DIMCOIN, DIM USD	Pakistan
Kakakhel Medicos	DIMCOIN, DIM USD	Pakistan
Shayan Super Store	DIMCOIN, DIM USD	Pakistan
Ashfaq Electronics	DIMCOIN, DIM USD	Pakistan
4 Star Mobiles	DIMCOIN, DIM USD	Pakistan
AI Mobiles	DIMCOIN, DIM USD	Pakistan
AL Haaj Jeweleries	DIMCOIN, DIM USD	Pakistan
AL Muslim School	DIMCOIN	Pakistan
Ashnaghar Travels And Tours Razzar Ranch	DIMCOIN, DIM USD	Pakistan
Iftekhar Shoes	DIMCOIN, DIM USD	Pakistan
Mobile For You	DIMCOIN, DIM USD	Pakistan
SOTAC Services LTD	DIMCOIN, DIM EURO	Nigeria
Megafanship.com AG	DIMCOIN, DIM EURO, DIM USD	Switzerland
Saeed Mobile	DIMCOIN, DIM USD	Pakistan
Kakakhel Auto Parts	DIMCOIN, DIM USD	Pakistan
Dolphin	DIMCOIN, DIM EURO, DIM USD	South Africa
Github	DIM USD	South Africa
Pat Spaza Shop	DIMCOIN, DIM USD	South Africa





## Partners

MINDEX	Midclear	USAVE Blockchain
ALTX Africa	FPT	FoundDigital
SEED	EQUINIX	ProTrader
CASE	uTrade	DIT
Tullet Prebon	Codel	Saescada
TP ICAP	Digital Realty	Legacy Capital
GRC	FinComEco	ETI Dynamics
BBOD	DAG Global	INGOT Coin
Forum Registrars	BYMA	ThinkCoin
ACE	EQI	Central Depository
VSD	Ganga River Basin Management & Studies	Coinbe





# Roadmap



## 2012

### THE IDEA

The idea of a p2p financial ecosystem was born.

### RESEARCH

We researched the licensing, programming and legal requirements.

### ARCHITECTURE

A stock market architecture was created.

### STRATEGY

Research was done into the problems encountered by brokers and traders in the traditional financial markets.

### TEAM

The development team was created and new team members were sourced.

### OFFICES

Offices were opened in Mallorca, Spain.



## 2013

### ECOSYSTEM

An external IT company was approved to help create the ecosystem.

### DOCUMENTATION

The necessary documentation was drafted to help create the ecosystem.

### STOCK MARKET

Stock Market internal guidelines were created.

### OFFICES

Offices in Mallorca became fully operational.

### WISH LIST

A wish list was created: features and possibilities of the ecosystem.

### TECHNICAL PLAN

Technical trading plan was developed.





## 2014

### LICENCES

Stock exchange licenses were requested.

### HYBSE

Programming of HYBSE began, 19 applications were added, 25 changed and 55 fixed.

### HYBSE

Programming of HYBSE continued, 11 applications added, 12 changed and 18 fixed.

### LISTING

Listing servers and trading exchange functions were developed.

### LEGAL

The legal team was created.

### OFFICES

Offices in Mallorca were expanded by 40%.



## 2015

### ENGINEERS

Financial and IT engineers were acquired.

### OFFICES

Office location was moved to Johannesburg, South Africa.

### DEPOTWALLET

Development of DEPOTWALLET began.





## 2016

### — HYBSE

HYBSE programming continued, 4 applications added and 6 fixed.

### — OFFICES

Offices in Johannesburg expanded by 40%.

### — INNOVATE

DIMCOIN and DEPOTWALLET created.

### — LICENCES

Securities dealer license acquired in Vanuatu.

### — ICO

Planning for the DIMCOIN Initial Coin Offering commenced.

### — EDUCATION

Free stock market education Strategy was implemented.



## 2017

### — ICO

DIMCOIN ICO commenced, over \$14 million raised in Cryptocurrencies.

### — HYBSE

Reprogram and redesign of the HYBSE.

### — LISTING

Listed DIMCOIN on major coin exchanges.

### — INTERGRATE

Integrate DIM Wallet into the ecosystem.

### — DEPOTWALLET

Reprogram and redesign of the DEPOTWALLET website.

### — DIM CURRENCIES

Successful creation and backing of initial DIM Currencies.





## 2018

- **OFFICES**  
Offices in Johannesburg fully operational.
- **LISTING**  
DIMCOIN listed on additional major Coin exchanges.
- **DGX**  
Listed DIMCOIN on major coin exchanges.
- **IBIN**  
Release of the International Blockshare Identification Number.
- **DIMPAY**  
DIMPAY showcases it's first transaction.
- **CREDIT**  
Implementation of the DIM micro credit.
- **DEAN SA**  
Programming and design of Dean SA commenced.
- **JV**  
HYBSE joins forces with MINDEX and GMEX Group.
- **GOLD**  
Sign up several Gold Brokers.



## 2019

- **OFFICES**  
Implementation and set up of extended offices in Mauritius.
- **MICRYPTO**  
Integration of MiCrypto into the South African Market.
- **ATO**  
Commence with the Asset Token Offering.
- **DIM GOVT**  
Introduction and build-up of the DIM Government.
- **GOLD**  
Expand Gold traders and all entry/exit points into the ecosystem.
- **EXCHANGES**  
Major exchanges join the DIM Ecosystem as a confirmation gateway.
- **COIN**  
Implementation of the HYBCE Exchange.
- **BROKER**  
Programming broker functionalities into the core of the HYBSE.
- **ECOSYSTEM**  
Programming of a private internet and mobile/web hosting platform.
- **DIAMOND**  
Implement the Diamond Standard into the ecosystem as a confirmation gateway.
- **DIM GOVT**  
Incorporation of the DIM Government.
- **EXPAND**  
Expand the ecosystem into Europe and South America. Set up offices in Abu Dhabi, Malta and London.  
  
Sign up 8 broker firms onto the HYBSE.





## 2020

### API

Programming of a second API interface, based on the FIX protocol, onto the HYBSE.

### EXPAND

Expand the ecosystem into other countries through the DIM Ambassadors.

### OFFICES

Offices in Abu Dhabi, Malta and London fully functional.

### PRESENCE

Influential presence of the ecosystem within the Southern Hemisphere.

### FOOD

Implementation of the Food and Seed Exchange program.

### ELECTIONS

The first official DIM Government elections.



## 2021

### SPORT

Programming of a second API interface, based on the FIX protocol, onto the HYBSE.

### ART

Implementation of the DIM Art Exchange program.

### EXPAND

All banks are able to trade on the HYBSE platform.

### COMMODITY

Implementation of the DIM Commodity Exchange Program.

### PRESENCE

Extensive presence in the Southern Hemisphere.

### TECHNICAL PLAN

Technical trading plan was developed.



# INVESTMENT

## Investment Structure

(Risk/Medium/Secure)

### Multi-Asset Stable Token Pack

The Multi-Asset Stable Token (MAST) packages are new cryptonized token assets awarded through a new multi-utility fundraising model called an Asset Token Offering (ATO). The ATO offers multiple packs and tokens such as; the Super Multi-Asset Stable Token (SMAST) pack, Super Equity (SEQ) pack, DIM Node Tokens (DNT) and DIM Tickets (DT). The SMAST and SEQ packages are both supported by two separate offerings; token pack and utility stable. These separate packages and tokens are purchased using both fiat currencies and cryptocurrencies. The above mentioned tokens provide shareholding in a new hybrid financial ecosystem, comprising GMEX, MINDEX, and the HYBSE. They also offer participants the opportunity to run the ecosystem network as nodes engage in utility functions together with future governance of the ecosystem through a smart electoral p2p voting system. The tokens combine the best of traditional equity markets with the latest offerings from the blockchain industry. All the ATO tokens are created on the NEM blockchain. Participants are required to have a DEPOTWALLET, DIMPAY, DIM Wallet or a NEM Wallet address to receive, store and manage the tokens.

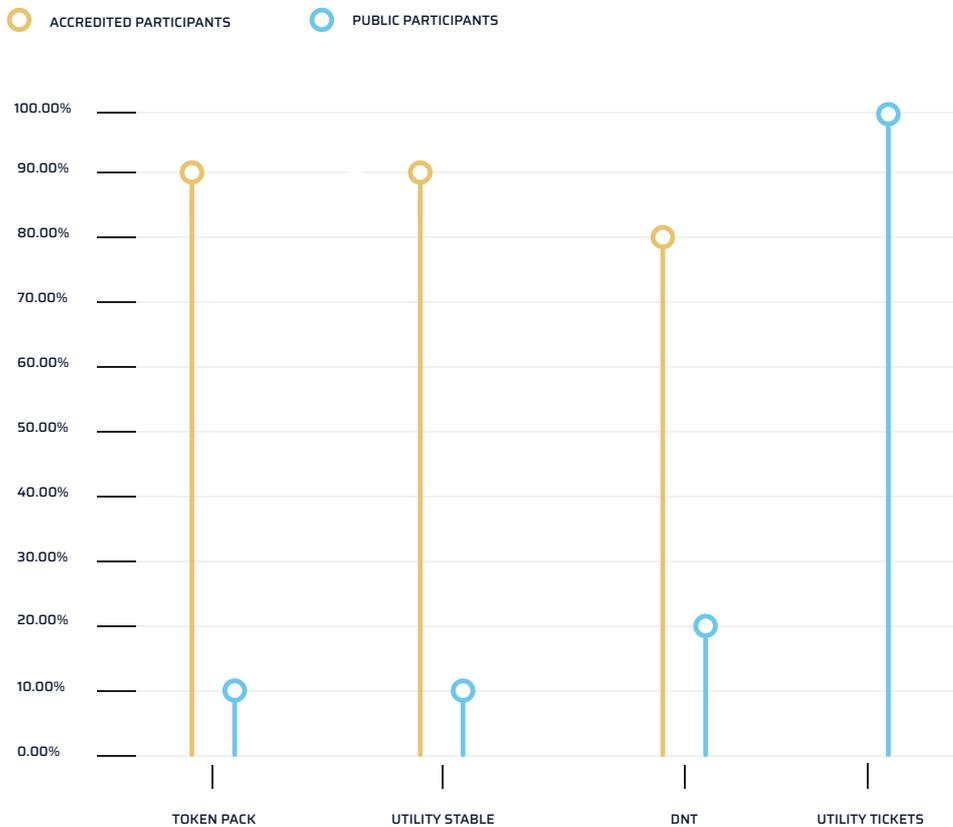


FIGURE 12: MAST ATO COMPOSITION

The MAST ATO is available to both institutional and private participants, but the packages are allocated differently as may be seen in Figure 13.

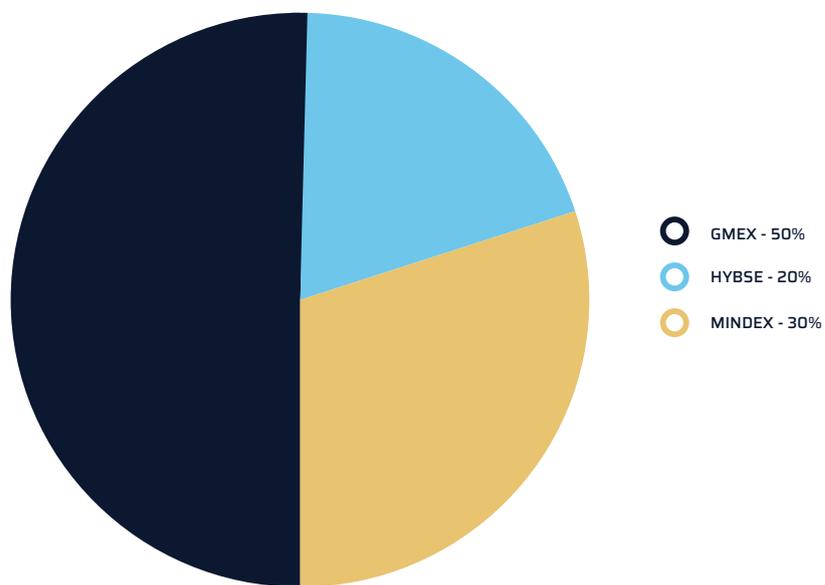


FIGURE 13: MAST ATO PACKAGE DISTRIBUTION

### Token Pack

The Token pack is a package of GMEX, MINDEX, and HYBSE tokens. These tokens are blockshares (tokenized shares) of the participating companies on the blockchain. Some 500 million tokens are available through the MAST ATO. Of the 500 million tokens, 250 million (50%) represent GMEX, 150 million (30%) represent MINDEX, and 100 million (20%) represent the HYBSE. The token pack tokens cost US\$0.12 for both MINDEX Holdings and HYBSE Marketplace, and US\$0.16 for GMEX Holdings. These are available to both accredited participants (90%) and the public participants (10%), bringing the total value to US\$100Million. More blockshares can be created and distributed in the future should the need arises. The maximum number of tokens that can be created is 9 billion due to the NEM network's (blockchain) limitation.

### Utility Stable

The Utility Stable package consists of DIM Currencies which are digital currencies that are a medium of exchange in the ecosystem. Accredited participants receive 90% of the coins offered and the general public 10%. They are stable coins which are 80% supported by gold and 20% by liquid cryptocurrencies such as Bitcoin. DIM Currencies represent the best qualities of currencies on the blockchain, and furthermore allow participants to understand the prices of products or services in the ecosystem. They are an attractive option of conducting business in the new era of digital commerce. The gold underlying DIM Currencies is stored in various locations around the world. Independent auditors vet the gold deposits and reports are issued at specified intervals. The underlying support percentages of DIM Currencies can deviate at a marginal variance of 10% in both directions.

DIM Currencies' Structure	Minimum Acceptable Lower Percentage (%) Allocation	Desired Percentage (%) Weight	Maximum Acceptable Upper Percentage (%) Allocation
Precious Metals	70	80	90
Cryptocurrencies	30	20	10



## Super Multi-Asset Stable Token (SMAST) Pack

MAST consists of the Super Multi-Asset Stable Token (SMAST). The minimum purchase price for each SMAST is US\$100,000. SMAST participation is primarily designed for accredited participants who can buy packages up to the value of US\$5Million. There are three different SMAST Packages; Risk, Medium and Secure.

### Risk SMAST Package

The Risk SMAST package can be purchased from US\$100,000 up to US\$5Million. One Risk SMAST package entitles the holder to:

- 60% - Token pack
- 40% - Utility Stable pack

### Medium SMAST Package

The Medium SMAST package can be purchased from US\$100,000 up to US\$5Million. One Medium SMAST package entitles the holder to:

- 20% - Token pack
- 80% - Utility Stable pack

### Secure SMAST Package

The Secure SMAST package can be purchased from US\$100,000 up to US\$5Million. One Secure SMAST package entitles the holder to:

- 15% - Token pack
- 85% - Utility Stable pack

RISK		
\$1M	\$5M	\$25M
60% - TOKEN PACK 40% - UTILITY STABLE		

MEDIUM		
\$1M	\$5M	\$25M
20% - TOKEN PACK 80% - UTILITY STABLE		

SECURE		
\$1M	\$5M	\$25M
15% - TOKEN PACK 85% - UTILITY STABLE		

FIGURE 14: SMAST PACKS





# Super Equity Pack (SEQ)

The SEQ is a customisable investment package. The public participants can purchase the different offerings from US\$10 up to US\$500,000. The various options within the packages may be selected according to a participant's financial standing and risk appetite. The SEQ consist of Token and Utility Stable packages while also allowing participants to concurrently purchase DIM Node Tokens and DIM Tickets.

## Token Pack

Within the token pack, participants can choose between GMEX, MINDEX and the HYBSE tokens. The token pack combination can be 1/3, 2/3 or 3/3. 1/3 is when only one of the three options are selected, 2/3 is when two of the three options are selected, and 3/3 indicates that all three tokens were selected

TOKEN PACK	
GMEX	
MINDEX	
HYBSE	
\$10	\$500K

## Utility Stable Pack

Utility Stable is a package of DIM Currencies. Participants can purchase DIM Currencies at any amount. There are seven separate DIM Currencies for participants to choose from.

UTILITY'S STABLE (80% GOLD / 20% BTC)	
DIM USD	
DIM EUR	
DIM YEN	
DIM RUP	
DIM RMB	
DIM GBP	
DIM ZAR	
\$10	\$500K

## DIM Node Token (DNT)

DIM Node Tokens award users the right to operate a blockchain node, which houses the entire blockchain ledger and enables confirmations to occur throughout the DIM network. Each token provides accreditation on the DIM Node network as each node is entitled to portions of the total fees collected throughout the Ecosystem. These nodes will run on the new DIM Internet Exchange network.

DIM NODE TOKENS	
TOKEN FOR THE DIM-E BLOCKCHAIN AS A NODE EARNING. HYBSE TOKEN EARNINGS ALLOCATED TO NODE TOKEN. 40% TRANSACTION FEES	
\$10	\$500K

## DIM Tickets

Virtual tickets offering multi-faceted level of opportunities for participation within the Ecosystem. These include accreditation in a voting system, access to exclusive discounts at partner stores and enables users within the Ecosystem to save costs.

DIM TICKETS	
VOTING, DISCOUNTS, ETC.	
\$10	\$500K

Public participants who wish to acquire the SEQ packages should carefully read and understand Annexure E, as this document outlines further terms and conditions of trade under the jurisdiction of Lesotho, via convertible bonds.



## Initial Blockshare Offering

Initial Blockshare Offering (IBO), is the first sale of blockshares issued by a business participants on the HYBSE. An IBO merges elements from both the Initial Public Offering (IPO) and the initial coin offering (ICO) by offering cryptonized equities and other cryptonized instruments from hybridized businesses. Hybridization is the process of replicating and integrating real businesses equities onto the blockchain. An IPO is when privately held businesses open up to the public by offering stocks, thereby allowing the public to get a share of the business and the stocks traded on stock exchanges. The newly distributed cryptocurrencies can also be traded on third-party cryptocurrency exchanges. IPOs deal solely with equities from businesses in the traditional world and IBOs engage via crypto-technologies from businesses that operate in the decentralised world.

IBOs are essentially time-limited offers to purchase set by the issuers at their discretion. All IBO's and other cryptonized instruments such as lock-blockshares from businesses listed on the HYBSE mostly offer special discounts. Lock-blockshares (IBOs) that cannot be traded for a certain time period, or until a specified launch date, is announced for private placements. Reference Figure 6.

## The Legal Background of Exchange Tokens

Globally, governments are still attempting to put in place suitable legal and taxation frameworks to regulate the industry. This means that months and even years can go by without effective regulatory structures being in place to regulate cryptocurrencies. This does not mean that there is an unregulated utopia, as there are many legal pitfalls while cryptocurrencies are being harmonized with the traditional industry as it exists at present. HYBSE will set out its intentions in further cooperation with governments in the near future.

One interesting aspect of the fast-growing cryptocurrency market is the fluidity of the terms used to describe the various products that fall within its ambit. While various cryptocurrencies are similar in that they are primarily based on the same type of decentralized technology known as blockchain with native encryption, the terminology used to describe them varies significantly from one jurisdiction to another. Some of the terms used by countries to reference cryptocurrency include: digital currency (Argentina, Thailand and Australia), virtual commodity (Canada, China, Taiwan), crypto-token (Germany), payment token (Switzerland), cyber currency (Italy and Lebanon), electronic currency (Colombia and Lebanon) and virtual asset (Honduras and Mexico). When a token is subject to security regulations, certain jurisdictions can derive its value from an external, tradable asset, categorized as a security token.

In the context of Mauritius where HYBSE Marketplace is based, the Government is taking proactive steps to put in place the appropriate regulatory environment for blockchain and FinTech to flourish. In September 2018, a Guidance Note was issued by the Financial Services Commission of Mauritius (FSC) regarding the “Recognition of Digital Assets as an asset class for investment by Sophisticated and Expert Investors” (<https://www.fscmauritius.org/media/55003/guidance-note-on-the-recognition-of-digital-assets.pdf>).

In accordance to the Lesotho Legal Notice No. 49 of 2009, Issue of Treasury Bonds Section 5. (1)(2)(3)(4) and (5), convertible bonds do not fall under this governable rule set, and the sale of such bonds are therefore permitted and allowed, under the Companies Act, No. 18 of 2011, Part 1, Section 9. (2)(e).



## Summary

The Mauritius FSC considers as a Digital Asset (DA), any token, in electronic/binary form, which is representative of either the holder's access rights to a service or ownership of an asset. A DA therefore, includes a digital representation of value and the FSC has adopted the definition of the term "cryptocurrency" provided by the Financial Action Task Force (FATF) in its publication *Virtual Currencies – Key Definitions and Potential AML/CFT Risks, June 2014*. According to the FATF, cryptocurrencies, digital assets are:

- A math-based, decentralised convertible virtual currency which is protected by cryptography and used as a medium of exchange and/or a unit of account
- and/or a store of value but do not have legal tender status;
- Used as a medium of exchange, unit of account, or store of value but which is not legal tender, even if denominated in legal tender; Represents assets such as debt or equity in the promoter; or provides access to a blockchain-based application, service or product.
- Generally, when a token is subjected to security regulations and is allowed to derive its value from an external tradable asset, it is categorized as a security token.

In addition, the Government of Mauritius is proposing to introduce a custodian service licence, specifically aimed for Digital Asset (DA) classes. A consultation exercise with stakeholders took place in November 2018, with the HYBSE being in the forefront involvement. The regulatory framework will be effective as from 01 March 2019, positioning the Mauritius International Financial Centre (IFC) as the first jurisdiction globally to offer a regulated landscape for the custody of Digital Assets. Moreover, it was announced in the National Budget of 2018-2019 that a new digital asset marketplace licence would be issued by the regulators in Mauritius. This is also expected to take place in Q2 2019, as HYBSE Marketplace will open its trading first for institutions.

# MAST Funds

## Usage & Distribution

### Primary Development (20%)/HYBSE

Twenty percent of the funds received during the ATOs are allocated for the development of primary entities within the Ecosystem. The API of the HYBSE still require's additional programming as it is currently in beta versions. A detailed description of how the funds are used can be found in the HYBSE Business Plan. A further detailed analysis can be found on the roadmap technical paper.

### Marketing (35%)/DIM Ecosystem

To ensure that the HYBSE and DIM Ecosystem become household names, 35% of the funds gained from the IBOs will be utilised to promote the coin and the ecosystem.

Marketing will be done through social media, direct marketing, partnerships, and affiliate programs. A further detailed analysis can be found in the marketing plan.

### Outreach (25%)/DIM Ecosystem

The outreach funds will be utilised to provide education for the general public on the HYBSE, Ecosystem, and blockchain in general. This can be accomplished through expos, conferences and similar publicity events. The more people become aware of the HYBSE Ecosystem and blockchain, the more they become comfortable with the ecosystem and its technology. It is a win-win situation for both the HYBSE and the public. A further detailed analysis can be found in the marketing plan annexure.

### Administration (10%)/DIM Ecosystem and Mauritius

The expansion of the HYBSE Ecosystem will require capital for day-to-day operational costs. For example, as a financial ecosystem, cryptocurrencies have to be bought to ensure there are sufficient reserve funds to meet the demand for crypto-to-fiat currencies exchanges. There are also expenses that may arise on a day-to-day basis. Ten percent of the funds generated will be reserved to meet these costs. A further breakdown can be found under operating costs in the financial section.



## Legal & Compliance (10%)/DIM Government

Although blockchain-based services are growing at an exponential rate, there is still a great deal of ignorance surrounding them and their potential. This can lead to legal requirements failing to keep pace with the progress of blockchain development, and even becoming a hindrance in the process. In order to roll-out the DIM Ecosystem globally, there are both licencing and legal requirements which need to be met. Therefore, 10 percent of the funds will be allocated for this purpose. Further details can be found in the legal section.

## SWOT Analysis

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Low operational costs. Transparent	Regulatory issues	Pioneers within the market	Competition
Quick clearing	Strong anti-money laundering HM requirements	Attract businesses	Traditional exchanges shifting to blockchain
Friendly and easy web interface	Lack of legal framework	Partnerships	Hackers
P2P account management	Non-retrievable payment	Speed	Unreversible
A large pool of financial instruments to trade	Price devaluation	High Interest	Fraudulent companies

# Marketing Plan

## 2019 Marketing Plan Budget (1st Phase)

- Brand Marketing – US\$250,000 p.a.
- PR Agency expenses – US\$375,000 p.a.
- Events/Promotion/Congress events – US\$500,000 p.a.
- HYBSE Magazine/Promotion material – US\$100,000 p.a.
- Online Marketing campaign – US\$100,000 p.a.
- Print advertising – US\$50,000 p.a.
- Bounty campaign/Ambassadors – US\$150,000 p.a.
- Video advertising/TV spots – US\$250,000 p.a.
- Flagship stores – US\$120,000 p.a.

## 2020 Marketing Plan Budget (2nd Phase)

- Brand Marketing – US\$185,000 p.a.
- PR Agency expenses – US\$125,000 p.a.
- Events/Promotion/Congress events – US\$200,000 p.a.
- HYBSE Magazine/Promotion material – US\$400,000 p.a.
- Online Marketing Campaign – US\$350,000 p.a.
- Print advertising – US\$20,000 p.a.
- Bounty campaign/Ambassadors – US\$150,000 p.a.
- Video advertising/TV spots – US\$85,000 p.a.
- Flagship stores – US\$40,000 p.a.

## Development Budget

- Hacker Bounties – US\$250,000 p.a.
- HYBSE Apps Development – Refer to the Technical Roadmap in Annexure
- DEV Development – US\$800,000 p.a.
- HARDWARE Wallet Partnership – US\$100,000 p.a.
- Research – US\$250,000 p.a.

## Target Customers

The HYBSE has no direct customers, since all the subsidiaries (like HYBSE Marketplace) have partnerships or franchise agreements with companies in equivalent jurisdictions around the world, of which these companies have direct access to customers. The HYBSE customer base consists chiefly of operators and on-sell service providers.

## Competition

As far as we know, the HYBSE Marketplace Ltd does not currently compete with any other companies both locally and internationally. Should competitors emerge, the advantage that the HYBSE Marketplace Ltd would have over them is the extensive knowledge, source codes, patents and technologies already developed by the DIM Team. With dedicated teams and technology development spanning multiple international subsidiaries delivering quality products and services, the Company is far ahead of any other competitive entity world wide.

HYBSE Reserve Public Capital

HYBSE Liquidity Provider

HYBSE Brand Positioning Q2 - Q3 2019

HYBSE DEX Development Q3 - Q4 2019

HYBSE Clearing/Settlement Provider Q2 2020

# Source of Funds

## Short-Term Sources

The company's initial expenses will be financed by the Asset Token Offering (ATO) which will also finance the group of subsidiaries to fulfil their financial obligations for a period not exceeding one year.

## Medium-Term Sources

Since the HYBSE's primary focus is on the development and implementation of blockchain products and services, the income for the company will be derived from the sale of products in the DIM Ecosystem.

This income will sustain the company following the initial funding. The DIM Ecosystem (DIM-E) is a cryptonized ecosystem built on the NEM blockchain. The DIM-E offers multiple products and services such as DIMCOIN, DIM Currencies, DIM Cryptocurrencies, DIM TOKEN, HYBSE, IBIN, DIM X, DEPOTWALLET, DIM Explorer, DIM Wallet, DIMPAY and Mindex. The DIM-E is a solution for the inefficiencies inherent in the traditional systems. The traditional systems have issues such as high fees, red tape, and multiple intermediaries. As a result, a p2p and low-cost cryptonized platform is required to provide an alternative to traditional systems.

## Long-Term Sources

In the long-term, the HYBSE will be funded by dividends and royalties declared by all the subsidiaries.

According to our conservative estimates, the HYBSE is expected to maintain a healthy financial position over the next five years. The HYBSE expects a positive balance by the end of 2020. The company expects to have substantial turnover through the DIM Ecosystem and the API connection.





# Financial Milestones

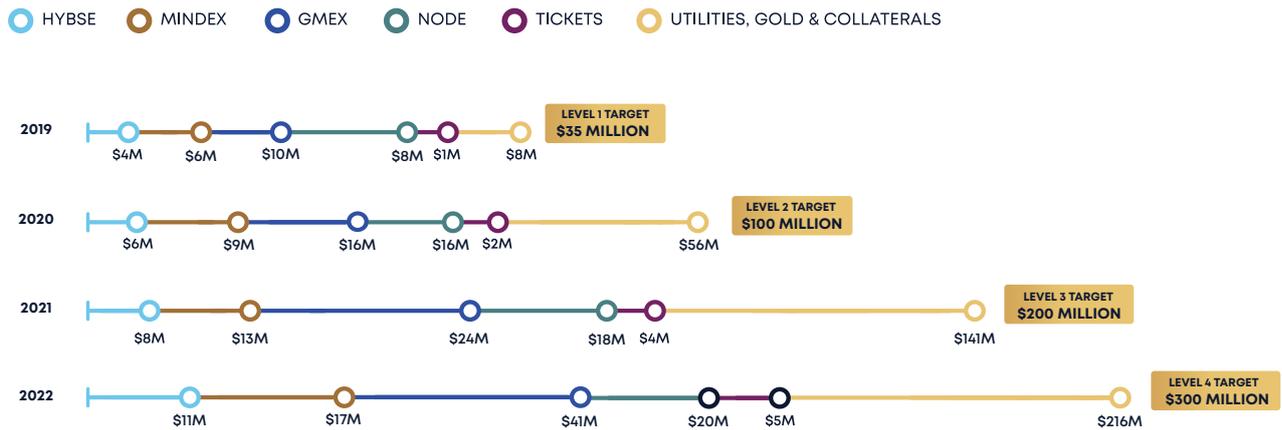


FIGURE 16: FINANCIAL MILESTONES

## Financial Description of the DIM-E Network

The possibility of an increase in uptake on the usage of the DIM-E network and entry points could affect the demand and investment flows of a nation and contribute significantly to economic growth over the medium to long term. In the light of these considerations, the likelihood of acceptance on a broader scale materialising throughout the year is considerable and also straightforward to implement at the same time.

Trade between both developing and stressed economies would increase even at the lowest levels due to the freedom and monumental advantageous properties that the system promises. The substance of the trade and commerce conducted on the blockchain on a global scale increases incrementally and aids in building the economy from the ground up on both a financial and structural level. In addition, the DIM-E has a profound impact on the relationship between trade and economic growth. Generally, trade growth is far more volatile than GDP growth on a global level, even though both tend to rise and fall together. After World War 2, the volume of merchandise traded grew about 1.5 times faster than world GDP as a result of technology having established its dominance.



Most governments experience difficulty keeping abreast of emerging technologies and the DIM-E seeks to bridge this gap and provide integrated solutions in one sphere of natural growth.

The big story in the market today is the vast weakness and volatility of cryptocurrencies and thus the birth of the stable coin (DIM Currencies). These currencies are used as a means of exchange in the DIM-E. All kinds of commodities, goods and financial products are accessible via the blockchain by making use of DIM Currencies where transaction fees are nominal in comparison to traditional transactional methods or channels.

Some world trade statistics reveal the following:

- Developing economies accounted for 34% of total trade in commercial services in 2016.
- Exports of commercial services by WTO members totalled US\$4.73Trillion in 2016.
- The top 10 traders in merchandise trade, account for a little over half of the world's total business in 2016. Developing economies had a 41% share in world merchandise trade in 2016.

DIM-E seeks to provide the balance for all parties and aspires to new heights.

DIM-E seeks to add to these numbers which will increase stability to a developing nation.



2019	US\$1Billion turnover commission	average 0.2% =	US\$200,000 (2% of marginal returns from total investment participation)
2020	US\$5Billion turnover commission	average 0.2% =	US\$1Million (10% of marginal returns from total investment participation)
2021	US\$10Billion turnover commission	average 0.2% =	US\$2Million (20% of marginal returns from total investment participation)
2022	US\$30Billion turnover commission	average 0.2% =	US\$6Million (60% of marginal returns from total investment participation)
2023	US\$100Billion turnover commission	average 0.2% =	US\$20Million0 (200% of marginal returns from total investment participation)

A total investment of US\$10Million in DIM Nodes will offer a collective percentage of profits:

2019	2%	=	*US\$200,000 profit p.a.
2020	10%	=	*US\$1Million profit p.a.
2021	20%	=	*US\$2Million profit p.a.
2022	60%	=	*US\$6Million profit p.a.
2023	200%	=	*US\$20Million profit p.a.

\* A 20% portion is deducted for tax revenue purposes. The tax revenue benefits are for improving, managing and expanding the DIM-E. Financing the DIM GOVT for promoting its status and strengthening relations and partnerships with tax revenue agencies around the world.

Earnings & distribution of the commissions:

DIM NODE TOKEN (DNT) HOLDERS	receive	40% of the Profit
DIM TOKEN HOLDERS	receive	30% of the Profit
TAX REVENUE PURPOSES	receive	20% of the Profit
FOUNDERS FOUNDATIONS	receive	10% of the Profit
		TOTAL 100%



AIRDROP to DIM Token holders:

- More than 1000 DIM Tokens = 1 x DIM NT totalling to 1000 DIM NT
- More than 3000 DIM Tokens = 3 x DIM NT totalling to 9000 DIM NT
- More than 5000 DIM Tokens = 5 x DIM NT totalling to 25000 DIM NT

BTC / ZAR	January 2018	February 2018	March 2018	April 2018	May 2018	June 2018
<b>Expenses (ZAR)</b>	<b>1 318 745,00</b>	<b>2 123 985,63</b>	<b>2 278 465,60</b>	<b>2 549 749,12</b>	<b>2 435 134,87</b>	<b>2 579 958,95</b>
<b>Operations South Africa</b>						
Accounting fees	0,00	0,00	0,00	0,00	0,00	3 800,77
Computer expense	174,00	13 303,00	330 717,80	64 260,70	38 894,99	15 000,00
Fuel expense	6 500,00	7 400,00	8 500,00	6 778,90	17 500,00	8 000,00
Furniture & Fittings	24 000,00	2 412,53	198 966,28	15 490,00	111 889,00	0,00
Insurance	5 919,17	5 919,17	8 071,23	8 071,23	8 071,23	8 071,23
I.T. Infrastructure	16 559,00	88 741,00	126 664,00	82 321,00	85 007,00	85 913,00
Marketing & Advertising	3 600,00	0,00	0,00	329 601,50	27 023,68	30 000,00
Motor Vehicles	1 720,00	80 079,60	26 468,87	5 687,16	4 915,11	120 627,43
Motor Vehicle - Transportation	12 580,00	120 119,40	39 703,30	8 530,74	7 372,66	180 941,15
Office Supplies	15 000,00	12 000,00	21 775,20	17 100,60	12 990,79	15 000,00
Postage & Courier	0,00	2 905,96	0,00	778,41	0,00	0,00
Professional/Consulting Services	250 000,00	300 000,00	100 000,00	200 000,00	350 000,00	300 000,00
Rental & Electricity	42 000,00	372 283,38	311 705,14	366 608,16	380 000,00	400 000,00
Repairs & Maintenance	0,00	52 448,30	48 714,14	54 600,00	7 000,00	25 000,00
Salaries	468 770,12	530 154,15	650 271,63	629 346,51	615 944,72	742 401,28
Stationery	2 661,90	0,00	1 226,70	0,00	0,00	0,00
Staff Training	7880,00	58600,00	14 706,00	59 285,10	0,00	0,00
Sundries	2581,81	22670,14	9 904,99	6 700,21	18 500,00	17 625,67
Telephone	5 500,00	5 500,00	6 500,00	6 500,00	6 500,00	6 500,00
Travel & Accommodation	0,00	6 650,00	0,00	176 049,00	0,00	0,00
Website Hosting & Maintenance	2 799,00	2 799,00	3 766,60	3 766,60	3 766,60	3 766,60
<b>Dev Team South Africa</b>						
Professional/Consulting Services	400 000,00	400 000,00	300 000,00	400 000,00	593970,09	400 000,00
Salaries	40 000,00	40 000,00	70 803,72	104 364,30	145 789,00	178 642,56
Staff Training	10 500,00	0,00	0,00	3 909,00	0,00	0,00
Travel & Accommodation	0,00	0,00	0,00	0,00	0,00	38 669,26
<b>Closing Balance for the period</b>	<b>162 794,21</b>	<b>173 053,21</b>	<b>142 389,07</b>	<b>159 467,86</b>	<b>164 460,86</b>	<b>158 547,75</b>

BTC / ZAR	July 2018	August 2018	September 2018	October 2018	November 2018	(Estimated) December 2018	Total for the year
<b>Expenses (ZAR)</b>	<b>2 489 141,65</b>	<b>1 494 883,08</b>	<b>1 888 433,57</b>	<b>2 393 564,12</b>	<b>1 214 611,28</b>	<b>1 255 068,00</b>	<b>24 021 740,87</b>
<b>Operations South Africa</b>							
Accounting fees	3 600,00	3 600,00	0,00	4 025,00	0,00	0,00	15 025,77
Computer expense	35 792,65	35 792,65	5 684,90	3 500,00	0,00	0,00	543 120,69
Fuel expense	8 500,00	4 000,00	12 000,00	18 000,00	15 000,00	4 000,00	116 178,90
Furniture & Fittings	21 131,02	0,00	0,00	0,00	0,00	0,00	373 888,83
Insurance	18 832,57	18 832,57	18 832,57	18 832,57	18 832,57	18 832,57	157 118,68
I.T. Infrastructure	84 996,00	87 045,00	86 472,00	67 400,00	56 202,00	55 068,00	922 388,00
Marketing & Advertising	42 000,00	0,00	0,00	0,00	0,00	0,00	432 225,18
Motor Vehicles	9 200,00	0,00	20 400,00	8 352,35	5 269,86	0,00	282 720,38
Motor Vehicle - Transportation	13 800,00	0,00	30 600,00	12 528,52	7 904,78	0,00	434 080,55
Office Supplies	15 000,00	17 000,00	16 000,00	17 900,00	0,00	2 000,00	161 766,59
Postage & Courier	0,00	0,00	0,00	0,00	330,00	330,00	4 344,37
Professional/Consulting Services	300 000,00	0,00	100 000,00	100 000,00	100 000,00	0,00	2 100 000,00
Rental & Electricity	509 238,66	449 426,23	450 762,81	512 000,00	0,00	380 000,00	4 174 024,38
Repairs & Maintenance	29 500,00	0,00	7 500,69	2 500,00	0,00	5 000,00	232 263,13
Salaries	731 357,44	671 377,47	632 697,07	801 236,06	539 741,67	500 000,00	7 513 298,12
Stationery	0,00	0,00	0,00	2 000,00	0,00	0,00	5 888,60
Staff Training	0,00	0,00	0,00	0,00	0,00	0,00	140 471,10
Sundries	18 500,00	18 900,00	12 914,00	6 259,08	3 500,00	6 700,00	144 755,90
Telephone	6 500,00	6 500,00	6 500,00	6 500,00	5 920,59	5 000,00	73 920,59
Travel & Accommodation	29 639,89	0,00	9 446,07	124400,59	0,00	70 000,00	416 185,55
Website Hosting & Maintenance	3 766,60	3 766,60	3 766,60	3 766,60	3 766,60	3 770,00	43 267,40
<b>Dev Team South Africa</b>							
Professional/Consulting Services	400 000,00	0,00	242 000,00	350 000,00	220 000,00	4 367,43	3 710 337,52
Salaries	178 642,56	178 642,56	187 302,93	208 763,94	190 717,85	200 000,00	1 723 669,42
Staff Training	0,00	0,00	0,00	0,00	600,00	0,00	15 009,00
Travel & Accommodation	29 144,26	0,00	45 553,93	125 599,41	46 825,36	0,00	285 792,22
<b>Closing Balance for the period</b>	<b>172 542,60</b>	<b>177 077,57</b>	<b>184 604,88</b>	<b>116 045,80</b>	<b>139 823,21</b>	<b>84 755,21</b>	<b>1 835 562,23</b>

# Financial Projections

## (Marketing, Operations, etc. over a 3 Year Period)

This section presents the financial projections for the HYBSE Marketplace Ltd (HML or the Company). The HYBSE Marketplace Ltd will be incorporated in Mauritius, and applying for a digital market place licence. This will be a pilot model which can be duplicated to other countries at extremely low cost. HML will serve as a platform in which the MAST tokens will be listed.

### Nature and Limitation of Projections

The forecasts, projections and other predictive statements represent assumptions and expectations in light of currently available information. These forecasts are based on industry trends, circumstances involving clients and other factors, and they involve risks, variables, and uncertainties. Actual performance may differ from those projected. Consequently, no guarantee is presented or implied as to the accuracy of specific forecasts, projections or predictive statements made by the company.

### Revenue Forecast

The sales forecast is a conservative one to avoid any inflated expectations that may not be obtainable. The first several months will focus on laying the foundations for future revenue. A steady, incremental growth in sales has been projected, as a function of the increased proficiency concerning new listing, trades as well as an increased awareness of HML by the target customers.

The trading fees accounts for the majority of income earned by the exchange. The trading fee has been projected based on research and surveys from institutions such as the World Economic Forum (WEF). Major accounting firms such as Deloitte or McKinsey project that up to 10% of global GDP will be stored and transacted utilising blockchain technology by 2025–27. Based on this, the market value of the tokenized asset is estimated at US\$24Trillion, of which 25% will be in the form of listed equities. Using World Bank historical data on market capitalisation of listed companies globally and their transaction volumes, the level of transactions from tokenized equities has been forecast. While being conservative, an estimation of 6% of these global transactions will potentially trade through the DIM Ecosystem from the 5th year of operation.

The exchange also earns fees from the issuers in the form of membership and listing fees. HML has already established an indicative tariff list of listing and marketing fees as well as listing requirements for the issuers.



## Expense Forecast

HML's expenses are primarily payroll related, accounting for 48% of total expenditures in the first 5 years of operation. The Company will also invest significantly in advertising and public relations to market the exchange and promote it as an attractive venue for listing. Other expenses are calculated according to management's estimates and industry averages.

## Taxation

HML will be subject to corporate tax of 15%, being a domestic company resident in Mauritius. Mauritius does not impose any withholding tax on dividend payments made to local companies or foreign companies. Additionally, any dividend paid to market participants of HML will not be subject to dividend income. No tax is imposed on capital gains on transactions. HML, through corporation tax is estimated to contribute US\$10.7Million to the Mauritius government by the 5th year of operation.

## General Assumptions

The company grows, and with an increase in customer awareness, HML is expected to be a profitable venture from year 2 onwards.

CATEGORY	BASIS	
Maintenance, repair and overhaul	Factor (%) on capital equipment	20%
Asset depreciation	Number of years	7
Tax	Annual tax rate	15%
Inflation	Annual inflation rate	4%
Working capital days	Days receivable	30
Working capital days	Days payable	60

## Projected Profit and Loss

The table below shows the projected profit and loss projections for HML. It is noted that the company will start operations as of 2019 (with the recruiting of staff) and training. Fully-fledged operation will begin in Q1- Q2 of 2019. HML will show a loss in 2019.

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>USD</b>					
<b>Revenue</b>					
Listing fee	206,250	406,875	427,219	448,580	471,009
Membership Fees	150,000	472,500	551,250	636,694	729,304
Trading fee	890,827	3,563,307	14,253,227	35,633,068	74,829,443
VIP Services	750,000	787,500	866,250	996,188	1,195,425
<b>Net revenue</b>	<b>1,997,077</b>	<b>5,230,182</b>	<b>16,097,946</b>	<b>37,714,529</b>	<b>77,225,180</b>
<b>Expense</b>					
Rental	42,000	45,000	48,000	51,000	54,000
Sales and marketing	250,000	260,000	280,800	314,496	364,815
Depreciation	132,000	132,000	132,000	132,000	132,000
Insurance	50,000	52,000	56,160	62,899	72,963
Payroll and Payroll Tax	1,614,600	1,702,500	2,141,568	2,539,380	2,965,591
Website service	600,000	624,000	673,920	754,790	875,557
Maintenance, repair, and overhaul	184,800	192,192	199,584	206,976	214,368
Utilities	350,000	364,000	393,120	440,294	510,742
Administrative fees	240,000	249,600	269,568	301,916	350,223
Franchise fee- HYBSE	240,000	240,000	240,000	240,000	240,000
Other	250,000	260,000	280,800	314,496	364,815
<b>Total expense</b>	<b>3,953,400</b>	<b>4,121,292</b>	<b>4,715,520</b>	<b>5,358,249</b>	<b>6,145,074</b>
Net profit before tax	(1,956,323)	1,108,890	11,382,426	32,356,280	71,080,106
Tax		-	1,580,249	4,853,442	10,662,016
<b>Net profit</b>	<b>(1,956,323)</b>	<b>1,108,890</b>	<b>9,802,177</b>	<b>27,502,838</b>	<b>60,418,090</b>

## Projected Balance Sheet

Total assets are projected to increase from US\$2Million to US\$31Million, with a CAGR of 58%. Shareholders' funds are expected to increase from US\$0.04Million from the first year of operation to US\$30.5Million by the end of year 5. The table below shows the projected balance sheet.

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
<b>USD</b>						
<b>Assets</b>						
<u>Current assets:</u>						
Cash and short-term investments	901,000	(810,613)	172,017	2,360,916	8,977,089	23,993,178
Accounts receivable	-	166,423	435,848	1,341,495	3,142,877	6,435,432
Telephone system & security	65,000	65,000	65,000	65,000	65,000	65,000
<b>Total current asset</b>	<b>966,000</b>	<b>(579,190)</b>	<b>672,865</b>	<b>3,767,412</b>	<b>12,184,966</b>	<b>30,493,609</b>
<u>Property &amp; Equipment</u>						
Computers	400,000	400,000	400,000	400,000	400,000	400,000
Servers	84,000	84,000	84,000	84,000	84,000	84,000
Security Hardware & Software	190,000	190,000	190,000	190,000	190,000	190,000
Office furniture	250,000	250,000	250,000	250,000	250,000	250,000
Less Accumulated depreciation	-	132,000	264,000	396,000	528,000	660,000
<b>Total Property &amp; Equipment</b>	<b>924,000</b>	<b>792,000</b>	<b>660,000</b>	<b>528,000</b>	<b>396,000</b>	<b>264,000</b>
<u>Other assets</u>						
Telephone system	60,000	60,000	60,000	60,000	60,000	60,000
Other long-term assets	50,000	50,000	50,000	50,000	50,000	50,000
<b>Total other assets</b>	<b>110,000</b>	<b>110,000</b>	<b>110,000</b>	<b>110,000</b>	<b>110,000</b>	<b>110,000</b>
<b>Total asset</b>	<b>2,000,000</b>	<b>322,810</b>	<b>1,442,865</b>	<b>4,405,412</b>	<b>12,690,966</b>	<b>30,867,609</b>
<b>Liabilities</b>						
<u>Current liabilities:</u>						
Accounts Payable	-	279,133	290,299	312,192	346,895	398,111
<b>Total current liabilities</b>	<b>-</b>	<b>279,133</b>	<b>290,299</b>	<b>312,192</b>	<b>346,895</b>	<b>398,111</b>
<u>Shareholder's Equity</u>						
Equity Capital	2,000,000			2,000,000	2,000,000	2,000,000
Retained Earnings	-	(1,956,323)	(847,433)	2,093,220	10,344,071	28,469,498
<b>Shareholder's Equity</b>	<b>2,000,000</b>	<b>43,677</b>	<b>1,152,567</b>	<b>4,093,220</b>	<b>12,344,071</b>	<b>30,469,498</b>
	<b>2,000,000</b>	<b>322,810</b>	<b>1,442,865</b>	<b>4,405,412</b>	<b>12,690,966</b>	<b>30,867,609</b>

## Projected Cash Flow

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
<b>USD</b>						
<b>Operating Cash Flow</b>						
Net income		(1,956,323)	1,108,890	9,802,177	27,502,838	60,418,090
Depreciation		132,000	132,000	132,000	132,000	132,000
Accounts receivable		(166,423)	(269,425)	(905,647)	(1,801,382)	(3,292,554)
Accounts payable		279,133	11,165	21,893	34,703	51,216
<b>Cash from Operations</b>		(1,711,613)	982,630	9,050,423	25,868,160	57,308,752
<b>Investing Cash Flow</b>						
Investments in Property & Equipment	(1,099,000)					
<b>Cash from Investing</b>	(1,099,000)	-	-	-	-	-
<b>Financing Cash Flow</b>						
Issuance of equity	2,000,000	-	-	-	-	-
Dividend payment	-	-	-	(6,861,524)	(19,251,987)	(42,292,663)
<b>Cash from Financing</b>	2,000,000	-	-	(6,861,524)	(19,251,987)	(42,292,663)
<b>Net Increase (decrease) in Cash</b>	901,000	(1,711,613)	982,630	2,188,899	6,616,173	15,016,089
Opening Cash Balance	-	901,000	(810,613)	172,017	2,360,916	8,977,089
<b>Closing Cash Balance</b>	901,000	(810,613)	172,017	2,360,916	8,977,089	23,993,178

HML is anticipated to have sufficient funds to sustain its operation while maintaining unimpaired capital requirements. This will be converted by the initial capital raised as well as from operating activities. In the event of a deficit, the parent companies will contribute toward same.

## Business Valuation

A discounted cash flow has been projected based on the anticipated cash flow and financials of HML. As per Macabacus, the discounted cash flow (DCF) analysis represents the net present value (NPV) of projected cash flows available to all providers of capital, net of the cash needed to be invested for generating the projected growth. The concept of DCF valuation is based on the principle that the value of a business or asset is inherently based on its ability to generate cash flows for the providers of capital. To that extent, the DCF relies more on the fundamental expectations of the business than on public market factors or historical precedents, and it is a more theoretical approach relying on numerous assumptions. A DCF analysis yields the overall value of a business (enterprise value) which includes both debt and equity.

For the purpose of this analysis, a discount factor of 25% was applied.

The equity value under a DCF methodology for HML is estimated to be US\$116Million.

MINDEX Holdings Limited (MINDEX) has also been valued using a DCF approach. It consists of the entire ecosystem, including the refinery, vault, commodity and derivatives exchange, digital exchange as well as the property SPV (bundled with the warehouse and office facility) that would be rented out. The project will be partly financed through debt and equity. The DCF methodology gives a value of US\$163Million.

DCF	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
<b>USD</b>						
EBIT	-	(1,956,323)	1,108,890	11,382,426	32,356,280	71,080,106
EBIT (1-t)	-	(1,956,323)	1,108,890	9,802,177	27,502,838	60,418,090
Depreciation	-	132,000	132,000	132,000	132,000	132,000
Capital expenditure	(1,099,000)	-	-	-	-	-
Change in working capital	-	112,710	(258,260)	(883,754)	(1,766,679)	(3,241,338)
Terminal value						254,151,855
Free cash flow (Incl. TV)	(1,099,000)	(1,711,613)	982,630	9,050,423	25,868,160	311,460,607
PV of FCF	(1,099,000)	(1,369,290)	628,883	4,633,817	10,595,598	102,059,412
Total present value of cash flows (enterprise value)	<b>115,449,419</b>					
Net cash	<b>901,000</b>					
Equity value	<b>116,350,419</b>					



MINDEX is anticipating to close two equity deals, one by the end of the year and the other by the start of 2019. The first one will be at a post-money of US\$35Million for US\$7Million and the second one US\$40Million at a post-money of US\$80Million.

GMEX Valuation is also based on a DCF valuation. Given that GMEX also holds an equity investment in various projects, each of those was valued separately, the sum of a part was applied. The valuation includes an equity stake in various exchange platforms as well as the project stratum, a neutral, pan-African serving aggregation data centre offering in Mauritius. The data centre will be one of the largest data centres in the Indian Ocean Region (IOR). GMEX is also actively involved in FinComEco, which concentrates on improving the livelihood of African farmers. It offers African farmers new commercial opportunities, resources, skills, and increased income. It also includes Tokenomics Ltd, an entity majority owned by GMEX which intends applying for an investment dealer licence in Mauritius.

GMEX participation in various ICOs has also been considered, including initiatives such as USAVE, Thinkcoin, and EQI. The USAVE initiative involves creating a sustainable ecosystem built on blockchain technology, which completely reinventing the gold supply chain from mines to consumers. EQI is a regulated bank with an integrated national currency capable of facilitating the crypto and digital assets sectors in a fully regulated banking ecosystem. ThinkCoin is the digital trading token that underpins the TradeConnect network.

	USD Million
GMEX Holdings Limited	410.8
MINDEX	179.8
HYBSE	116.4

Grant Thornton have reviewed the valuation of GMEX Holdings Limited, MINDEX Holdings Limited and HYBSE Marketplace Limited as prepared by the management of GMEX Group Limited.

Grant Thornton have reviewed the valuation assumptions and workings and are satisfied with them. The review was based on management's prepared forecasts based on its expertise and understanding of the businesses. Although Grant Thornton have performed a high-level review of the forecasts, with some of these businesses being early-stage operations, it should be noted that the forecast financials can be subject to ongoing changes and some level of uncertainty subject to the performance of each business.

The above should not be construed as investment advice; specifically Grant Thornton do not express any opinion on the suitability or otherwise of entering into any transaction in relation to GMEX Holdings Limited, MINDEX Holdings Limited or HYBSE Marketplace Limited.

GMEX was included in Q1 2018 Global Top 100 list of FinTech Companies amongst the likes of Amazon and Google. Nasdaq recently acquired Cinnobar, a Swedish tech rival, for US\$220Million. Considering GMEX, hybrid tech solution and involvement in digital assets, valuing GMEX at US\$411Million is equally justified. Participants would be exposed to an entirely new financial ecosystem., which derives the value as non-exhaustible with a unique partnership-driven approach.

---

## Distribution Strategy

### (Including where to Invest and How Much)

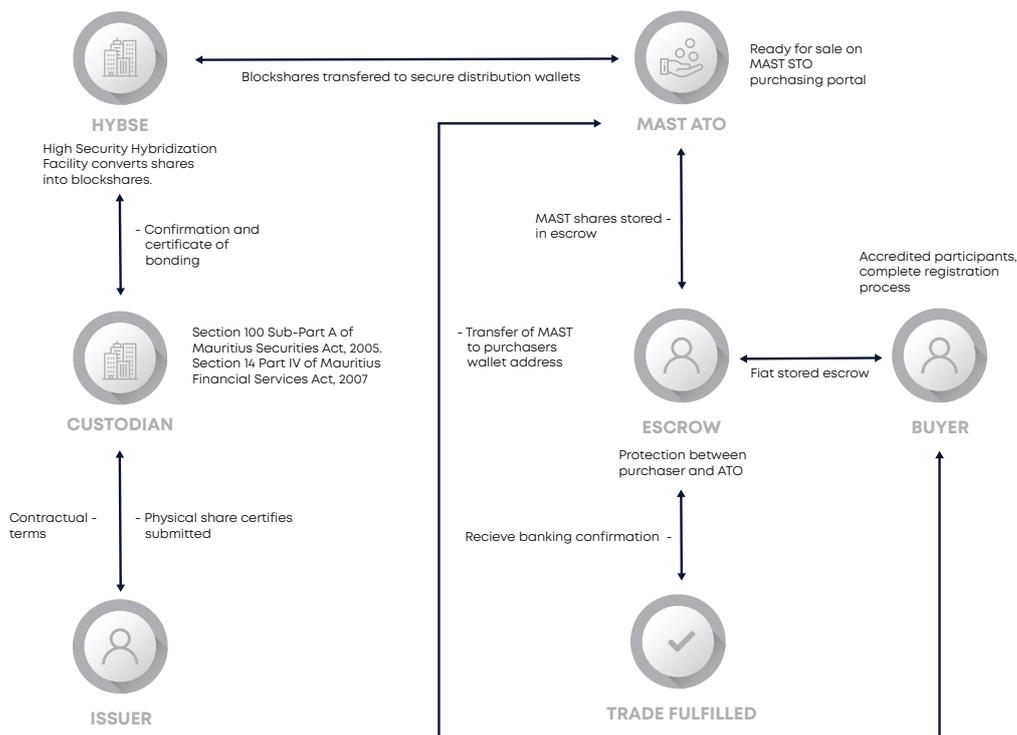
The investment amount flowing from MAST ATO will initially be used in setting up HML for the initial pilot model. Based on estimates, it will cost US\$2Million for capital expenditure, namely computers, servers, security systems and software to set up the infrastructure platform for HML. Subsequently, an additional US\$2Million to be utilised for the initial year of operation. The remaining funds will be used across the 3 JV partners to support the development of various projects.

# MAST Custodian and Escrow Process

Three main entities make up the first cryptonized shares as the world’s first blockchain Issuers, namely MINDEX, GMEX and HYBSE. The process begins with each business submitting their respective physical share certificates to a custodian service for guardianship and assurance. Custodian services offer a permanent solution to securely store certificates and account for a true and irrevocable statement of bonding. By virtue of legal agreement and contractual terms, and in accordance with Section 100 Sub-Part A of Mauritius Securities Act, 2005 and Section 14 Part IV of Mauritius Financial Services Act, 2007, the custodian is the official third party bearer of the shares, and transcribes a confirmation certificate of bonding to HYBSE, where the next process of dematerialising the shares into blockshares begins.

Once the bonding between the custodian and HYBSE is confirmed, a safeguarded technique to evolve the shares into blockshares occurs at a secure Hybridization facility where blockshares are actualized, tested, stored and later introduced onto the blockchain node network. Once registration of the blockshare mosaics are accepted onto the network, all blockshares are transferred to secure distribution wallets and made ready for sale via the MAST ATO purchasing portal.

Institutions and public participants interested in obtaining MAST, are authorized through a simple registration process which captures basic content of ownership. An escrow agent acts as a storage and protection mechanism between purchasers and the ATO. The agent protects the FIAT monies required to settle the trade between the two parties and stores it until confirmation from the blockchain can initiate a successful transfer of MAST to the purchasers unique and secure wallet address. The process is directly reversed to ensure that the integrity of the ATO is not defrauded, by allowing the escrow agent to receive banking confirmation for delivery of all cleared monies, and only then can both parties have the trade fulfilled and executed in delivery.



# MAST TOKEN

## Digital Tokens Blueprint

for the Asset Token Offering (ATO) of (up to) US\$350Million for the entire ATO  
soft cap US\$50Million digital tokens

of

## MAST TOKEN MAURITIUS

International Blockshare Identification Number:

Gmex: MU8196879850B, MINDEX: MU5233924270B, HYBSE Marketplace Ltd: MU2412075530B

SYMBOL: MAST202

Dated 15 January 2019

This document (the **Blueprint** consisting of numerous whitepapers), is a single document which will be released when digital tokens are offered to institutions or admitted to trading. It is drawn up prior to the asset token offering of a registered NEM blockchain technology. This Blueprint was approved by the Central Commission DIM Surveillance (CCDS). The CCDS does not take any responsibility for the economic or financial soundness of the transaction and the issuers' quality and/or solvency. The approved Blueprint can be inspected and downloaded from the issuers' website [www.mast.eco](http://www.mast.eco) and also the website of the Hybrid Stock Exchange: [www.hybse.com](http://www.hybse.com). The digital tokens have not been, and will not be registered under the provisions of the U.S. Securities Act of 1933. They may not be offered or sold within the United States of America or to, or for the account or benefit of, U.S. persons except above US\$1Million investment per individual institution.

Under the federal securities laws, a company that offers or sells its securities must register the securities with the SEC or find an exemption from the registration requirements. The federal securities laws provide companies with a number of exemptions. For some of the exemptions, such as Rule 506 of Regulation D, a company may sell its securities to what are known as accredited investors. The term accredited investor is defined in Rule 501 of Regulation D.

In the United States, to be considered an accredited investor, one must have a net worth of at least US\$1Million excluding the value of one's primary residence, or have income at least US\$200,000 each year for the last two years (or US\$300,000 combined income if married) and have the expectation to make the same amount this year. The term "accredited investor" is defined in Rule 501 of Regulation D of



the U.S. Securities and Exchange Commission (SEC). Revert to the respective regions for more detail.

Any internet sites named in this Blueprint are solely for information purposes and are not a fundamental part of this Blueprint.

---

## Summary of the Legal Section

The summary comprises the individual disclosure obligations, termed elements. These elements are consecutively numbered and divided into Sections A - E (A.1 - E.7). This summary contains all mandatory elements in summary for this type of equity and issuers. Since some elements are not required, it is possible that gaps in the numbering may occur. It is possible that even though an element is required for this type of security and issuers, no relevant information is available for this element. In such instances, a brief description of the element is given followed by not applicable (N/A).

### Section A – Introduction and warning notices

#### A.1. Introduction and Warning Notice

The following summary should be taken as an introduction to the Blueprint for the sale and placement of the digital tokens of MAST (Blueprint).

Any decision to invest in the offered digital tokens should be based on a consideration of the Blueprint as a whole by the participant.

Where a claim relating to the information contained in the Blueprint is brought before a court, the participant may, under the applicable legislation relating to his/her residency, have to bear the costs of translating the Blueprint before legal proceedings are initiated.

Persons who have submitted the summary including any translation thereof can be held liable, but only if the summary is misleading, inaccurate or inconsistent when read together with other parts of the Blueprint or where it does not provide, when read together with other parts of the Blueprint, key information to fully provide participants with the necessary information to make an informed decision whether or not to invest in the offered digital tokens.

## A.2. Additional Information

MAST TOKEN, (Port Louis, Mauritius) (hereinafter also referred to as Issuers) has granted its explicit consent for the use of the Blueprint by all financial institutions which are admitted to the trading of digital tokens in terms of the provisions of the legal framework of the FSC Mauritius. The consent is not subject to any other conditions.

The digital tokens may be resold at a later date or finally placed by intermediaries during the offer period. Each financial intermediary is entitled to use the Blueprint (including any of its supplements) for subsequent resale or final placement of the offered digital tokens during the offer period from [18 February 2019 to 31 May 2019], provided, however, that the Blueprint is still valid according to the laws of Mauritius. The issuers accept responsibility for the information given in the Blueprint as well as for any subsequent resale or final placement of the offered digital tokens.

The Blueprint may only be delivered to potential participants. Any supplement to the Blueprint will be available for viewing in electronic form on the issuers' website [www.mast.eco](http://www.mast.eco).

When using the Blueprint, each relevant further financial intermediary must ensure it complies with all applicable laws and regulations in force in the respective jurisdictions.

In the event of an offer being made by a financial intermediary, the financial intermediary shall provide information to participants on the terms and conditions of the offered digital tokens at the time of that offer.

Any financial intermediary using the Blueprint shall state on its website that it uses the Blueprint following the consent of the issuers

## Section B - The Issuers

### B.1 The Issuers

The legal name of the issuers is **MAST**.

The issuers operate under its legal name, and further under the trading name **DIM-E**.

### B.2 Registered office, legal form applicable law, and country of the issuers

The registered office and head office of the issuers is located in Mauritius.

### B.3 Period covered by the historical financials

HAC Ltd has provided a current 2018 expense report, via the DIM Foundation.

### B.4 Selected key pro-forma financial information

This element is not applicable since no pro-forma financial information is attached.

### B.5 Profit forecasts or estimates

View financials.

### B.6 Qualifications in the audit opinion on historical financial information

This element is not applicable since the audit is optional.

## Section C - The Digital Tokens

### C.1. Type, class and security number of the offered digital tokens

The offered digital tokens of the Issuers. All digital tokens have been fully collateralised.

MINDEX IBIN: MU5233924270B, GMEX IBIN: MU8196879850B, HYBSE MARKETPLACE IBIN: MU2412075530B

Symbol: MAST202

### C.2. Currency

Bitcoin (BTC)/Ethereum (ETH)/NEM (XEM)/Euro (EUR)/Mauritian Rupee (MUR)

### C.3 Number and par value of the offered digital tokens

The total issued token capital of all the companies currently amounts to US\$70Million which is divided into 500 million digital tokens. Each token has a nominal value of US\$0.10.

### C.4. Rights associated with the offered digital tokens

The offered digital tokens are furnished with a full dividend right from the day of the incorporation of the issuers. Each of the offered digital tokens grants its respective owner one vote in a token holders' meeting. There are no restrictions on the voting rights.

The offered digital tokens participate in the potential proceeds. In the event of the liquidation of an issuer, all voting rights of the token holders are revoked pending the outcome of the liquidation.

### C.5 Restrictions on the free transferability of the offered digital tokens

N/A, no restrictions in place.

### C.6 Admittance to the trade at a regulated market, naming of the regulated market

This element is not applicable as there is currently no intention to list the offered digital tokens at a regulated or equivalent market, either domestically or abroad; however, a listing cannot be excluded in the future.

### C.7 Description of the Dividend Policy

The issuers intend to ensure a dividend policy which appropriately considers the interests of the token holders in dividend distributions on the one hand and the interests of the issuers to invest generated profits in its business on the other hand.

## Section D - Risks

### D.1 Risks about the issuers or its business sectors

#### Company-related risks

The issuers are controlled independently and are concurrently not subject to any conflicts of interest.

The issuers current and future capital requirements are considerable investments, and cannot be determined at this time or if sales, consultancy fees and/or dividend distributions, during operations, will be sufficient for future capital requirements.

The issuers' profitability in the future is not guaranteed.

The issuers are in an early stage of development and as yet are not conducting business. The possibility cannot be excluded that it will never become operative and achieve material revenues from its planned activities. The business success of the issuers is currently dependent on the members of the DIM-E as a whole.

The issuers currently provide comprehensive risk management system.

There is the risk that the planned investments will not be possible to implement or only under conditions which would jeopardise the projected revenues or result in a total loss of the invested amounts.

The issuers may go bankrupt, and in the unlikely event, they will not or cannot sell digital tokens (MAST Tokens). To a great extent, the Equity (MINDEX, GMEX, and the HYBSE), in which the net proceeds of the sale of the offered digital tokens will be invested, are not yet specified (blind pool), causing a substantially increased risk to participants in the offered digital tokens. There are specific risks related to the four business sectors in which the issuers intend investing, which could lead to a total loss of the investment. The development of tax law and its interpretation by tax authorities are subject to ongoing changes which could lead to an unexpected and/or additional tax burden.

**Risks related to the market:**

The issuers' business activities and its financial position greatly depend on the development of market prices in its business segments, but also regional and worldwide market trends and developments.

Whether and to what extent the issuers will be successful depends on the development of market demand and requirements.

To date, the issuers are exposed to competition risk.

## D.2 Core Risks Concerning the Offered Digital Tokens

There has been no public market. However, in the near future, there will be a public market for the offered digital tokens in Q1 2019.

Currently, not all token prices have been officially evaluated.

Insolvency of the issuers can lead to the total loss of the capital invested. However, the majority token holders of the issuers may exercise its controlling voting rights in token holders' meetings and overrule the participants.

Should the offer of the offered digital tokens partially fail and, therefore, the issuers obtain fewer net proceeds than required, the net proceeds may then only be sufficient to cover costs and expenses related to the offer; leading to a total loss of the investment in the offered digital tokens. Should the offered digital tokens be listed again in the future, the value of the offered digital token will have decreased if high volumes of digital tokens are sold in a relatively short period after the new listing. The issuers could also fail in the future to attract funding by resorting to the debt and equity capital markets.

The voting rights of participants in the offered digital tokens may be diluted if the issuers decide to increase their token capital or issue convertible bonds. The token price and value of the offered digital tokens can fluctuate because of volatilities in the capital markets.

## Section E - The Offer

### E.1 Total net proceeds, estimated overall costs of the issue/the offer, including the estimated costs to be invoiced to the participant by the issuers or offerers

The estimated overall costs of the offer and placement of the offered digital tokens amount to approx. US\$300Million when there is full placement.

This generates gross proceeds of approximately US\$70,7Million and net proceeds of approximately US\$43Million (Net Proceeds, in each case of full placement). No costs are invoiced to the participant by the issuers or offerers.

### E.2 Reasons for the offer, intended use of the revenues, estimated net proceeds

The offer serves the funding of the intended business activities of the issuers as described in section B.3. above. This amount shall be allocated as follows:

US\$41Million for the acquisition of digital tokens of GMEX Holdings Limited, Mauritius;  
US\$17,9Million for the acquisition of digital tokens of MINDEX Holdings, Mauritius;  
US\$11,6Million for the acquisition of digital tokens of HYBSE Marketplace Limited;  
US\$10Million for the establishment of the global node network;  
US\$5Million for the ticket system for votes/discounts.

Should any of the aforementioned investments not be available or be inappropriate, the participants will have the opportunity to re-invest. If not, all offered digital tokens can be placed and, therefore, the amount of the net proceeds from sales is lower than US\$50Million, the project will continue under fiscal constraints.

#### Offer Terms and Conditions:

The issuers offer 500Million in digital tokens of the issuers respective digital blockshare-tokens and will then be offered globally to qualifying participants in the form of a private placement (Target markets).

The respective offer-price amounts to US\$0.12 for MINDEX Holdings, US\$0.16 for GMEX Holdings and US\$0.12 for HYBSE Marketplace, and the offer is subject to four varying levels of discounted bonuses for early-bird participation.

Each professional participant will be required to purchase for a minimum of US\$100,000. US citizens are specifically required to invest a minimum of US\$1Million in digital tokens.

The offer period during which participants may subscribe for the offered digital tokens commences on [January 2018] and will expire on [May 31, 2019 (12.00 midnight) (Offer period)]. The issuers reserve the right to extend or shorten the offer period. Any reduction or extension of the offer period, as well as further subscription periods or the termination of the institutional offer of the offered digital tokens, will be announced on the website of the issuers. When there is a change to the offer period, a supplement to this Blueprint will be provided.

An participant, who is interested in purchasing and acquiring offered digital tokens, may submit purchase orders to the issuers within the offer period during usual business hours. An participant may also submit an offer via his respective depository bank.

The participants may subscribe for the purchase and acquisition of offered digital tokens online via the issuers' homepage [www.mast.eco](http://www.mast.eco). The participant is required to complete in the requested information for KYC purposes, the number of digital tokens wanted, and the purchase price on the purchase order screen. After electronically submitting the purchase order, the participant will receive an acknowledgement of the receipt in PDF format attached to an email.

The participant has to wire transfer the purchase price for the offered digital tokens, having purchased them in one of the alternative ways mentioned above, to the issuers' bank account, which is named in the purchase order form of the issuers, within 7 banking days in Mauritius (receipt of payment within the last day of the 7th banking day is required). The participant can also pay via cryptocurrency directly on the website. [www.mast.eco](http://www.mast.eco).

The purchased and paid offered digital tokens will, in general, be delivered within 24 hours after the subscription is placed.

### E.3 Key Interests in the Issue/Offering

Offered digital tokens. Delivery and settlement will be made on a delivery versus payment of the

token price basis through the payment system. No rules have as yet been established for the allotment of offered digital case where there is an over-subscription of the offered digital tokens. If an over-subscription occurs, the participants, who have already paid the token purchase price, but who have not yet received their purchased offered digital tokens, will be reimbursed for payments made to the issuers. No other means of repayment of a paid token purchase price is possible.

Whether and under which conditions an participant may withdraw, terminate or reduce his purchase order of offered digital tokens, depends on any agreement made between the participant and his respective depository bank if he launches offers via his depository bank and not directly to the issuers. Stabilisation measures, over-allotment and greenshoe options are not provided.

#### E.4 Person or company offering the digital tokens, the parties of Lock-up Agreements and lock up period

The issuers are the offeror of the offered digital tokens. The issuers permit financial intermediaries as described in A.2 act as offerers. Whether this will take place and who will be involved as an intermediary, has not yet been decided.

#### E.5 Dilution

Not applicable, since new digital tokens will not be issued in the course of the offering of the offered digital tokens and, therefore, a dilution will not be triggered.

#### E.6 Estimate of expenditures to be invoiced to the participant

This element is not applicable because the participant is not being invoiced by the issuers for any expenditure.

## Risk Factors

The material risks, which the company and its future business sectors are faced with are described along with the digital and real risk and its relationship with the offered digital tokens.

Participants, who are interested in the offered digital tokens, should carefully read and consider the following risk factors along with the other information contained in the Blueprint. The occurrence of one or more of these risks could have a material detrimental effect on the net assets, financial position and earning potential of the issuers. The value of the offered digital tokens could significantly decrease if each of these risks materialises and participants could partially or wholly lose their invested capital.

Further risks and uncertainties which are currently unknown to the issuers may also have detrimental effects on the net assets, financial position and earnings of the issuers. The order, in which the risks below are listed, does not implicitly express the likelihood of their occurrence and/or the scope of any economic issues. The selection and the content of the risk factors are based on assumptions, which may subsequently prove to be unfounded.

---

## Risks Concerning the Issuers and its Business Sectors

### Conflict of Interest

The offered digital tokens will be sold as the issuer and as the majority token holder. This position can impose their will at a token holders' meeting unless a qualified voting majority is required. Therefore, participants can be overruled in any meetings. Since individual interests can deviate from those of the other token holders, individual voting rights may conflict with the legitimate interests of the opposing token holders in which case the decision is determined by the majority in favour.

The members of the administrative board of the issuers are also involved in other businesses. Since these businesses do not relate to the business of the issuers, there is no conflict of interest. However, a conflict of interest is possible as the board members do not work solely for the issuers. Therefore, the engagement of each board member may conflict with their other interests working time, motivation and availability.

## Capital Requirements

The issuers will require a significant amount of capital in the future; it will however, receive parts of the future revenues allocated for capital expenditure. Upon the issuers successful sale of all the offered digital tokens, it shall begin to develop the linked businesses within the Ecosystem and later generate such revenues.

The equity capital of the issuers cannot provide a sufficient financial buffer. Operational expenses or costs caused by or related to the administration of the issuers and their investments (including its future running of the business) will surely increase. A liquidity shortage is an additional risk, which could lead to insolvency.

In the event that the business strategy of the issuers includes external financing, such as debt financing, there is a risk that external funding will not be available or that the terms of such funding are less favourable than expected.

Each of these circumstances could have a detrimental effect on the net assets, financial position and earnings of the issuers.

## Profitability of the Issuers

The profitability of the issuers depends on the four supporting columns of its business concept. In particular, that these business sectors generate (i) sufficient income from the operation of the ten nodes or more at the calculated feed-in tariff and, therefore, revenues from feed-in; (ii) adequate revenues from the platforms turnover; (iii) the expected distribution of fees to token holders and/or value increases of products and services within DIM Ecosystem.

Each of these circumstances could have a detrimental effect on the on the net assets, financial position and earnings of the issuers.

## Early Stage Development of the Issuers

The issuers are in an early stage of development and have not yet conducted any full-on business; therefore, it is in the ready to launch mode. The possibility that it will never become operative and achieve material revenues from its planned activities cannot be disregarded. The business success of the issuers depends on its future capability to realise its different investments and successfully distribute licencing of the software and further rollouts of more HYBSE systems. The issuers have not yet begun full-on business activities; therefore, it cannot be predicted whether the capabilities of issuers' management are sufficient to control and manage its different business activities. Given the uncertainty of management's required knowledge and abilities to achieve issuers' business goals, a prerequisite for the business success of the issuers has been put into place to broaden the management basis by adding managers with the required professional competence, to employ internal specialists and engage external advisors and consultants who have the knowledge and skills to achieve the issuers' business goals as soon as possible. The issuers' ability to develop its management and staff basis on time is not guaranteed.

Each of these circumstances could have a detrimental effect on the net assets, financial position and earning situation of the issuers.

## Key Positions

It cannot be excluded that the required qualified persons cannot shortly be found. It is difficult to find qualified personnel in a short period.

Each of these circumstances could have a detrimental effect on the net assets, financial position and earning situation of the issuers.

## Risk Management System

The issuers currently provide a comprehensive risk management system. The development of the issuers' business has an appropriate organisational structure, a risk monitoring system and an appropriate management structure to recognise undesirable events and trends and risks. This is necessary as the issuers follow a very diversified investment strategy comprising of three respective issuing businesses (MINDEX, GMEX, HYBSE) whereby each of them has to be developed and is related to its specific risks. Currently, a comprehensive risk management system which ensures that the issuers will comply with all

applicable laws and regulations of the Regulators and which may recognise, avoid or minimize all economic and actual risks in connection with its future business activities on time does not exist.

Each of these circumstances could have a detrimental effect on the net assets, financial position and earning situation of the issuers.

## Insurances

The issuers are subject to an increased risk with regards to the development of the build-up of the entire Ecosystem and with the development of buildings and other real properties. Furthermore, the issuers are subject to general risks related to their other business activities. However, the issuers have not yet obtained any insurance coverage. Therefore, it is essential that the issuers obtain sufficient insurance coverage for its future business activities. It is not a certainty that the issuers will be able to obtain the required insurance coverage on time. Furthermore, it is not yet certain, under which terms and conditions the insurances will provide the insurance coverage and the amount of insurance premiums is uncertain. The issuers will not be able to obtain the insurance coverage that is required for their kind of business in the future. There is also the case of the cost of this specific insurance coverage. Moreover, there is a possibility that an all risks insurance coverage will not be, therefore, many risks will not be covered and the appropriate insurance coverage will not be sufficient or available on time.

Each of these circumstances could have a detrimental effect on the net assets, financial position and earning situation of the issuers.

## Non-honouring of the Pre-contracts

The issuers have over 150 contractors and substantial partners such as; shop owners, gold traders, universities, and governments. However, there is no assurance that the respective contracting party will honour this pre-contract and will not at all or only under conditions that are detrimental to those, which the issuers expects, conclude the required agreements. Pre-contracts are not binding agreements. They express only a current preparedness and willingness of the respective parties to reach an agreement in accordance with the significant terms and conditions of the pre-contracts. Furthermore, if the counter-parties do not honour the pre-contracts, the issuers will not find alternative contractors or services to replace the existing counter-parties, with which it has concluded the pre-contracts or only to terms and conditions, which are less favourable. Therefore, there is the risk that the planned investments will not be possible and it will have to operate under circumstances which jeopardise the calculated revenues or result in a total loss of the invested amounts.

Each of these circumstances could have a detrimental effect on the net assets, financial position and earning situation of the issuers.

## Blind Pool Risk

The issuers have developed a business strategy which is based on the creation of a diversified portfolio of investments. However, to a high degree, the physical assets, servers, technology in which the net proceeds of the sale of the offered digital tokens will be invested, are not yet specified (blind pool). This relates in particular to the investment in private equity and real properties. Therefore, Participants with the Offered digital tokens bear an increased risk because they have no basis for independently assessing whether the planned investments are useful and provide the expected returns on investment. Finally, it cannot be excluded that the investments, which the issuers intend to undertake, will fail and the investment into the Offered digital tokens will totally get lost.

Each of these circumstances could have a detrimental effect on the net assets, financial position and earning situation of the issuers.

## Risks Related to the Business Sectors of the Issuers

The sectors shall consist of;

1. the assisting, governing, managing the DIM Ecosystem as well as, consulting companies, Governments, general public on the benefits and beverages its offering (private equity; venture capital);
2. the production of sustainable Economy is done through the operation of the DIM Ecosystem
3. the trading in high-frequency environment;
4. the investment in the network, in particular, are made possible through the forked Nem Blockchain. Each of these businesses is exposed to the following vital risks which can have a detrimental effect on the net asset value, financial position and earning situation of the issuers.

## Tax Risks

The development of the tax law is subject to a permanent change; this also pertains to the rules and practices applied by the competent tax authorities. Future changes or amendments of the current applicable tax laws and its interpretations by the relevant tax authorities and the tax courts, which lead to an unexpected additional tax burden, cannot be excluded. This can have detrimental tax effects with

regards to the allocation of generated benefits to companies and permanent establishments which are allocated to the issuers by the respective tax authorities in the different jurisdictions. The application of transfer pricing rules may lead up to partial double taxation. This could occur if the activities in Antwerp and Budapest are treated as the operations of different permanent establishments. A dispute could arise between and among the different countries about the allocation in accordance with the transfer pricing rules because of (i) a different interpretation of these rules, (ii) the non-recognition of the provided transfer pricing documentation or (iii), in case of cross-border transactions, conflicting interpretations of the respective articles of double taxation conventions or, if such does not exist, the application of contradicting national tax rules of the involved countries.

---

## Risks Related to the Markets

### Market Prices

The issuers' business activities and its financial position greatly depend on the development of market prices in its individual business segments.

With the start of its business activities, its economic and financial development and its business results will depend on a considerable extent on regional and worldwide market prices in the individual business segments. In the case of the acquisition of digital tokens in other companies (private equity, venture capital), market price developments in the business segments of the targeted companies are relevant.

Overall, each market is subject to the risk of price fluctuations as well as continually rising or falling prices. Impacts of price changes can have a local, regional or global reason.

Depending on the business segments of the issuers or the companies in which the issuers will acquire a token holding, declining selling prices, as well as rising purchasing price, may have a negative impact on the economic situation of the issuers up to its insolvency. Each of the different business segments corresponds to specific risk exposure. These different risk exposures may accumulate and, therefore, cause the entry of substantial losses which may lead to full loss of the invested amounts and the insolvency of the issuers.

Should any of the above materialize, this may have a material adverse effect on the business, financial position and results of operations of the issuers.

## Competition

The issuers are exposed to risks from competition with other companies. The individual business areas of the issuers are characterised by robust competition. The markets are partly markets with significant growth trends many of which are more extensive, this includes enterprises which are active as well as enterprises subsidised by the state. Such competing companies have, in part, more substantial financial resources, a higher potential of know-how and assets, and have been active in the issuers' business areas for some time. In this way, the competitors may make use of their respective strength or even expand their existing competitive advantage. There is also the possibility that governments indirectly or directly will politically support competitors, a reason for this could be that the governments control them.

Should any of the above materialise, this may have an adverse effect on the business, financial position and results of operations of the issuers.

## Core Risks Concerning the Offered Digital Tokens

**a) No publicly tradable and officially regulated global exchange market for the offered digital tokens currently exists; Mauritius is the first sandbox model to pilot this digital exchange.**

To date, there has been no public market for the offered digital tokens and, it is currently not the intention of the issuers to list the offered digital tokens on a stock exchange to facilitate trading in the offered digital tokens. The investment in the offered digital tokens should be considered to be extremely risky as they are not listed and the issuers is not yet an efficient company and has not generated any profits.

**b) Token price not evidenced**

The Offered digital tokens have respective offer-prices which amounts to US\$0.12 for MINDEX Holdings, US\$0.16 for GMEX Holdings and US\$0.12 for HYBSE Marketplace. However, the sales price amounts to a soft cap of US\$50Million, of which the issuers express its opinion that this investment satisfies its strategy and its future investment opportunities. It has also calculated the price for the Offered digital tokens, based on method of discounted cash flow and realistic projections of future income based on its future revenues.

Therefore, the investment in the offered digital tokens must be considered to be an extremely speculative one, if the investments by the participants in the offered digital tokens fail this could lead to a total loss of the invested capital.

## Insolvency of the Issuers

The insolvency of the issuers can lead to the total loss of the capital invested by the participants. The investment in the offered digital tokens bears the risk of an equity investment. In the case of insolvency, the participation can totally be lost. After the debts or instruments which cause an insubordinated payment claim has been settled, a surplus of liquidity will remain, any such remaining cash will be distributed to the token holders of the issuers.

## Controlling Voting Rights of the Significant Token Holder

In the case that all of the offered digital tokens are sold, the issuers will hold the majority of the digital tokens. Therefore, the issuer as a token holder can assist with the decisions that are made in the elections or voting.

## The Decrease of the Value of the Offered Digital Tokens

(in case of a listing Due to a mass sale of digital tokens)

Currently, the offered digital tokens are not listed on a digital stock exchange. However, the offered digital tokens will be available for trading on the HYBSE platform in the near future. Should the offered digital tokens be submitted to the institutional market by a listing and should an essential number of the offered digital tokens be sold after the listing or during a very short period of time thereafter and should such an event be expected by the market participants, the value of the offered digital tokens could be detrimentally affected. In this case, the participant could consequently not be in the position to sell the offered digital tokens for the purchase price paid and, therefore, realise a loss up to the total amount of the invested capital.

## Difficulties for Future Funding via the Capital Markets

There might be a need for the issuers to use the equity or debt capital markets as a tool for future funding. However, such funding may become difficult for various reasons including a negative capital market, the possible financial situation of the issuers, the fluctuation of the token value of the issuers. The following circumstances can detrimentally affect the value of the offered digital tokens: lowering of the profit projections of the issuers, negative expectations of the market participants with respect to the valuation of the issuers and the capital requirements of the issuers, the decrease of the credibility of the issuers, adverse changes of the business results, the clouding of the economic environment and the developments of the capital markets in general.

All these circumstances can have a detrimental effect on the offered digital tokens.

## Dilution of the Participants

(by a future increase of the token capital of the issuers)

The issuers could require further capital in the future to maintain or develop their businesses or repay liabilities. Should the issuers issue new digital tokens or convertible bonds for these purposes, this could lead to a dilution of the voting rights of the participants in offered digital tokens. In addition, issuing new digital tokens as a consideration for the take-over of another company or the acquisition of digital tokens in another company would have the same dilution effect.

## Token Price Fluctuations

The price of the offered digital tokens may fluctuate and be influenced by shrinking trading quantities of digital tokens in the future. In the past, the capital markets were subject to volatility. Therefore, the value of the offered digital tokens may also decrease. The price of the offered digital tokens will be influenced if the projected business results do not meet the projections, (disclosed in the Blueprint) and will be disclosed to the participants in the offered digital tokens or other market participants.

# General Information

## Responsibility for the Issuers

The issuers are responsible for the content of the Blueprint (which contains multiple whitepapers condensed into one document) and declare that, to the best of their knowledge, the information in the Blueprint, is accurate and that no matters of significant interest were omitted. Moreover, they declare that they have applied the required diligence to ensure that the information provided by the Blueprint is correct to their best knowledge and that no facts likely to change the statements in the Blueprint.

In the event that actions will be brought before a court by reason of the information contained in the Blueprint, the participant acting as the plaintiff will be liable for the cost of translating the Blueprint as a condition for the matter to be heard and in accordance of the legal provisions of the respective country of the European Economic Area specifically.

## The Object of the Blueprint

The object of the Blueprint is a comprehensive collation of technical, legal and risk aspects based on an digital offering in the Republic of Mauritius to the value of US\$350Million, conducted through an Asset Token Offering process. In addition, the digital tokens will be offered to selected Participants from England in the form of a private placement for institutional participants.

The offered digital tokens will not be offered to nations or citizens to amounts below US\$1Million in the United States of America, Canada and Japan (in terms of Rule 501 of Regulation D of the U.S. Securities and Exchange Commission (SEC)).

## Forward-looking Statements

The Blueprint contains forward-looking statements. Forward-looking statements are understood to be statements that do not relate to future historical facts and events. This also applies to statements in the sections on Risk.

Factors including where the Blueprint provides information about the future financial earning capacity, plans, and expectations regarding the company's business, growth and profitability, and regarding the



economic framework conditions to which the issuers is exposed. Forward-looking statements are based on the issuers' assessment at the present time, undertaken to the best of its knowledge. Forward-looking statements of this kind are based on assumptions and factors and are therefore subject to risks and uncertainties. For that reason, it is an essential recommendation to read the sections on RISK FACTORS and BUSINESS OF THE ISSUERS, which contain a detailed presentation of factors capable of having an influence on the business development of the issuers and on the industries, in which the issuers operate. The forward-looking statements are based on the current plans, estimates, forecasts, and expectations of the issuers and on certain assumptions and considerations which, although they seem justified at the present time in the opinion of the issuers, may subsequently prove to be erroneous. There are many factors which might result in the development of the issuers and his business or in earnings or performances, if the issuers is deviating significantly from the development, earnings or performances that expressly or implicitly contained in the forward-looking statements.

These factors include:

- Degradation in the general economies, commercial tax or legal conditions,
- Political or regulatory barriers,
- Changes in the business environment of the issuers,
- Other factors, as set out in more detail in the section on Risk Factors, and
- Factors not currently known to the issuers.

Should risks or uncertainties arise due to these factors in individual or several instances or should the underlying assumptions of the issuers prove incorrect, the possibility cannot be excluded that the actual results will deviate significantly from those assumed, believed, estimated or expected in the Blueprint. The issuers could be prevented from achieving its financial and strategic goals for this reason.

It is the intention to update such forward-looking statements beyond what is required by law and/or to adapt them to future events or developments to prepare and publish a supplement to the Blueprint insofar as important new circumstances arise or an essential inaccuracy with regard to the information contained in the Blueprint becomes known which is capable of influencing the assessment of the issuers' digital tokens being offered and which arises or is identified subsequent to the approval of the Blueprint and before the final close of the institutional offering.

## Notice Regarding Third-party Information, the Source of Market Information and Specialist Terms

Where information from third parties has been included, this is indicated as such. This information has been reproduced correctly and – insofar as is known to and/or can be deduced by the issuers from information provided by a third party – no details have been omitted which could appear the reproduced information incorrect or misleading. Beyond this, no responsibility is accepted for the accuracy of the information presented in the Blueprint which originates from third parties. Additionally, information regarding the market environment, market evolution, growth rates, market trends and the competitive situation in the areas in which the issuers operates or will operate is based on estimates by the issuers. Information derived from this, which has therefore not been taken from independent sources, may be at variance with estimates by third parties such as competitors of the issuers or with future data gathered by independent sources. Specialist terms used in this Blueprint are explained in a glossary following the Blueprint.

## Auditors and Competent Persons

The accounts of the issuers are examined by Grant Thornton Mauritius, the restricted revision in compliance with Swiss standards but according to Mauritius law. Competent persons' reports regarding the valuation of the issuers or its future businesses are not available.

## Notes Regarding Financial Information and Figures

The financial data contained in this Blueprint, which are the object of the company's financial statements, are taken from the issuers' accounts as of the 18th January 2019. The financial information as provided is taken from the annual accounts under commercial law.

The Blueprint contains currency figures in US dollars (USD). Currency figures in USD are identified as US\$ and currency figures in DIM dollars are identified as DIMUSD and rounded. In tables, these rounded figures may not always give a total in accordance with the values in the table.

## Documents Available for Inspection

During the validity period of the Blueprint, the following documents or copies thereof in paper form may be inspected during normal business hours at the business address of the issuers in Mauritius.

## Legal Disputes

The issuers declare that neither entities have ever been subjected to governmental interventions or party to court or arbitration proceedings, which may have an adverse material effect on the profitability of the issuers.

All-risk insurance, covering all possible risks of conducting this IBO, is underwritten and protected in limited capacity for issuers and participants.

The issuers believe that the insurance coverage is adequate, but cannot rule out a situation or event where losses may possibly be incurred, and cannot be covered by the insurance policies or which exceed the insurable coverage limit of the insurance policy/s.

### **Regulatory Framework**

#### **FSC Mauritius**

# CURRENT & OPERATIONAL PROJECT

VII

## Micro Credit & Student Financing Model

### Student Public Sponsor (SPS)

#### Executive Summary

The student cooperative initiative is a collaborative partnership which started as a pilot project in South Africa. The goal of the student cooperative is to provide students with the opportunity of studying at a tertiary institution. Many students in South Africa and around the world cannot afford to pay university fees, and at the same time, traditional sponsorship schemes charge unaffordable high interest rates. The student cooperative provides sponsorships to students to assist them with affordable financing for their studies.

The cooperative uses the traditional micro-sponsorship system, converting part of its software into innovative student financial software, built on the blockchain and operated on a p2p basis. The financial software allows students to self-manage their tuition fees on the blockchain. By using the new software, the student public sponsor (SPS) provides 80% of the financing for tuition fees, provided that parents first contribute 20% of the financing, subject to audit by the cooperative. In addition, the student benefits financially through his/her school performance. This is achieved by the tokenization of their academic/sports performance. This creates an international performance contest around the world as the school's performance, in its entirety, is now directly financially beneficial and visible for the student. The sponsorship offers low repayment interest rates (between 1% - 20%). In the case of sponsorship repayment defaults, an additional interest fee of 5% is added to the repayment, resulting in that particular sponsorship being placed on hold until the agreed conditions have been met.

#### Mission

The mission of the cooperative is to provide sponsorship for students throughout their educational path using a micro-credit system. A blockchain solution provides the answer for the cooperative to find ways of sponsoring tuition and all other fees supporting the student's education. This is accomplished by combining the micro-sponsorship system with blockchain financing software and the student's performance token to display the value of their academic performance. The value of the token increases based on the results of the student's academic performance. Students, therefore, become more credible on both national and international markets. Their track record and value clearly reveals their attractiveness as potential employees.



## Objectives

- Provide students with tuition fees to finance their studies (student cooperative)
- Allow students to self-manage their tuition fees on the blockchain
- Provide low-interest rates compared to traditional sponsorship methods
- Change the traditional sponsorship and micro sponsorship system
- Tokenize student performance for personal capital gain
- Reward students with a higher value token based on their results
- Fair and private micro-credit in a self-existing microcredit system
- Allow students to continually profit from their tokens
- Encourage a high academic performance from students
- Provide a system enabling students to pay their tuition fees
- Allocate low-interest rates
- Students earn value on their tokens
- Trade student tokens on national and international markets
- Create a traceable performance record
- Students become more credible in the market place
- Students become more attractive propositions in various industries

## Organisation Summary

The cooperative is a group of exchanges around the world that come together on the blockchain and financial industries. There are two main members, the DIM Ecosystem and Coinbe which each hold 10%, the remaining percentage is spread among other international coin and stock exchanges, each holding a maximum of 1% to 5%. Voting is conducted democratically over the blockchain.

## Tokenize Students' Performance Token

The student cooperative provides students with an opportunity to utilise the same system to tokenize their performance. Students are granted a fixed amount in tokens according to their academic performance, and the value per token rises as a result. Students who have exemplary academic results are awarded a higher value token. Each student is allocated a secure digital and crypto trunk where all their results are stored. These encrypted trunks are accessible for information seekers (recruiters, CEOs, lecturers, and various businesses). Students become a more attractive proposition in various markets based on the value of their tokens. A performance track record benefits students seeking employment once they graduate.

## How it Works

The cooperative is a global online marketplace for sponsoring a variety of interested parties. The company provides qualifying participants with an easy and transparent way of investing in sponsorships. These are originated from a variety of contributors around the world looking for a p2p sponsorship-based system with no middlemen. The movement of well-managed capital is the essence of an efficient financial system, leading to a variety of investment solutions, from very risky to very secure, being offered.



FIGURE 11: HOW IT WORKS?

Sponsorships also enjoy a secondary market on a p2p basis.

1. Borrowers apply for sponsorship from the entity offering sponsorship
2. The sponsorship originator evaluates the application, sets an interest rate and provides sponsorship from his own funds
3. The sponsorships are then listed on the cooperative marketplace, where prospective borrowers can select loans to invest in, thereafter receiving monthly payments with interest.

## Services

The student cooperative offers students sponsorships to finance their tuition fees. The new sponsorship financial software provides a system suitable for all students and makes student sponsorships affordable for all.

Token prices increase in accordance with academic performance; those with exemplary academic results being awarded a higher value token.

The primary services of the student cooperative:

- Provide students with financing for their tuition fees through a financial sponsorship system, built on the blockchain and operating on a p2p basis. A system whereby one can:
- Tokenize student's academic performance.
- Provide lower interest rates on repayments.

## Market Segmentation

The student cooperative initiative will be launched in South Africa as a pilot project. The aim is to roll-out the student cooperative initiative globally so that the business model can be expanded on using the microcredit model

## Software

Is available and already running in the real market. Ready to go.

# TECHNICAL SUMMARIES

IX

## Blockchain Technology

Blockchain technology is an innovation that was first introduced by the implementation of cryptocurrencies such as Bitcoin and Ethereum. The blockchain is “essentially a distributed database of records or public ledger of all transactions or digital events that have been executed and shared among participating parties.” The blockchain network is retained by vast networks of computers using p2p, thereby eliminating the need for central control. Transactions are recorded cost-effectively, and are verifiable and permanent. Transactions are verifiable because blockchain is transparent, and they are permanent as records are permanent. Once a transaction has been confirmed and entered into the database, it is tamper-proof. Transactions are secured by cryptography. Blockchain creates a world where every agreement, every process, every task, and each payment has a digital record and signature that can be identified, validated, stored and shared. In the blockchain world, intermediaries such as brokers, bankers, custodians, and depositories, may soon no longer be necessary. The efficiency and cost-effectiveness of blockchain technology has the potential to propel stock markets to the next level of their evolution, and the NEM blockchain, in which the Hybrid Stock Exchange is incorporated, is the appropriate technology for this next step.



## DIM ITX Solutions

This platform consists of multiple layers of physical and virtual infrastructure, designed to integrate the full suite of the DIM Ecosystem's products and services; including a vast array of communication connections to global points, while also maintaining a secure database backbone to ensure unbroken continuity of service.

Combining all these services into a collective decentralised allocation, streamlines all the products and services throughout the ecosystem into a swift, efficient and highly capable node structure for all blockchain services (running instantaneously), while providing protection from malicious attacks or damage to the integrity of the DIM Network. Businesses and individuals are granted access and user rights on the DIM Network through a collaborative subscription, that permits additional benefits to be included, and to securely host and communicate within the ecosystem and allow their own business or personal interests to interact with each other in a safe and governed environment.

### Highlights:

- Secure and direct data pipelines for global connectivity and in future via satellite for redundancy purposes.
- Optimised blockchain engine, designed explicitly for milli-second transfer confirmations.
- Strategic partnerships to provide global data centre services, and equalise a stable load balancing.
- DIM Verification is a highly secure method of decentralised storage of data, with multi-step verifying tools to prevent malicious intrusions.
- Encryption of data through cryptography.
- Cryptography is decrypted through OTPs and registered whitelisted devices.
- Secure voice and message communications through DIM API gateways, protected by OTP authentication.
- Secured backup options available, in the event of loss or damage to the registered device/s.
- Hosting & data exchange services with a wide range of affordable opportunities levied in DIM Currencies.

For a more comprehensive understanding of DIM IX, please refer to the technical blueprints, found in Annexure A.



## DGX Processors

The processing engine powering the DGX network has two functions: one governs a global presence as the master processor, and the other localises the processor for a specific region. Both these processors work in tandem to maintain a constant and reliable supply of DIM Currencies throughout the DIM Ecosystem and share accountability via the public ledger and connected wallets.

These processors provide the exchange service between various wallets for DIM Currencies and other cryptocurrencies through systematic integration of back and front-end functionalities within the applications. The system is supported as a whole with semi-autonomy, management overview, and security of earnings. The functionality of this alliance allows for a consumer-friendly and practical front-end solution for all local processors. The alliance is tied with a manageable localised back end, while the master processor governs the entire supply and demand factors of all currencies, and has an impact on total service delivery within the DIM Ecosystem. The DGX engine has the full capability to scale up or down for each connected region while ensuring full protection and governance over the monetary supply of DIM Currencies. All localised processors are designed with a white label front end and carry the variant possibilities to adjust to the consumer's UI/UX preferences for any regional usability or regulatory requirement.

### Highlights:

- Fully transparent for any regulatory jurisdiction
- Distribution, oversight, and management of DIM Currencies
- Adaptive spread calculations
- Automated generation of connected wallets
- Easy and intuitive consumer GUI
- KYC entry point and database collection pool
- Local prefixes on all DIM Currencies
- Swift and trusted confirmations of all funds transferred

## Payment & Management Solutions

A fully secured method of managing all DIM Currencies, digital assets and other cryptocurrencies is done through a suite of stand-alone or connected wallets. Both types of wallets enable a user to participate in a broad range of products and services throughout the DIM Ecosystem and are protected by securing a parallel connection between a user's public and private keys.

For stand-alone wallet solutions, three main products have been created to service three different attributes of a user's day-to-day monetary tasks, wealth anonymity, ecosystem participation or business needs. DEPOTWALLET functions through a web browsing client on any computer, allowing DIM Wallet and DIMPAY to connect through any Android OS mobile device as an App, which all carry its differences, from securing a majority of an individuals' wealth in one wallet to everyday usability on a mobile phone. The potential is limitless. SMEs also have the ability to transact with users within the ecosystem, as a payment process gateway operates as a light application for businesses to scale their needs.

Connected wallets work in conjunction with DGX processors, and differ from stand-alone wallets by having direct access to respective regional and localised DGX processors; they can be accessed via any web browser or Android OS app.

All wallets are transparent in their transaction history and can be located, tracked and audited through the DIM Explorer public ledger viewing tool.

### Stand-alone Highlights:

- Backup and import a wallet with a unique and individual private key.
- Manage multiple wallets through one application.
- Create or scan a unique QR code to receive or send funds.
- Trezor cold/hard wallet application ready.
- Participate in DIM-E voting.
- Manage a wallet address book.
- Two-factor authentication and bio-metric access (Android app only).
- Ability to create invoices.

### Connected Highlights:

- Quick confirmation speeds.
- Integrated and direct access to exchange DIM Currencies.
- User-friendly access.
- Private keys are held in a collective decentralised allocation.



## The HYBSE

The Hybrid Stock Exchange software is an online equities trading platform, built for high performance, robustness and scalable in design, for secure interaction between trading elements and the ability to target the general public. It consists of back-end API software to link institutional investment firms into a blockchain based trading environment.

The front end of the HYBSE is specifically designed to cater for three levels of the consumer's understanding of financial markets. It has a simple interface for quick and straightforward trades, a moderate interface for experienced, but non-frequent traders, as well as a highly intuitive and robust trading feature for the more experienced financial operator. All three levels communicate in the back-end with an intelligent matching engine with the capacity of operating 1,000,000+ confirmed trades per second. This is currently on par with only a very few traditional high-frequency trading exchanges.

Each equity approved to trade on the HYBSE is securely fastened and assured through cryptonization of stocks and becomes a blockshares coupled with an identity code linked to IBIN and is accountable and traceable through the public ledger. All newly registered entities that partake in this innovative marketplace, participate in the Initial Blockshares Offering (IBO) process to issue a pre-sale of its blockshares to a select group of institutions.

The HYBSE further acts as an entry point for KYC procedures to be conducted and vetted for a safe, compliant and regulated environment. All participants are required to register an account with full details kept under strict data protection and governing systems. Trading surveillance software APIs ensure that not only the blockchain's open ledger system is used, but regulatory bodies are fully capable of viewing the transparency of the system's trading logs.

Multiple layers of security protect both the system's integrity and participants in the marketplace through custom designed state-of-the-art firewall monitoring and prevention software/hardware, coupled with a cloud-flare setup on all global server instances. The central server is continuously backed up on multiple failover or slave servers, as part of the "Master Redundancy and Disaster Recovery Plan."

### Highlights:

- A safe and secure trading environment that is governed and regulated.
- Superior and dynamic trading features.
- API integration ready.
- Ease of access and usability of front-end UX/UI.
- High-level protection and failover mechanisms.
- Robust and scalable to any market environments
- Custom built matching engine for all tradable equities.



## DIM Node Tokens

DNT is a cryptocurrency to be built on a new blockchain (network), the DIM Node Network (blockchain), which will support the DIM-E in the near future. Some 25,000,000 DNT tokens will be created and sold for US\$1 per-token during the MAST-IBO. The super equity network is a hard fork from the NEM blockchain, and as a result, is similar to NEM. It is a p2p network envisioned to be a bedrock of a next-generation financial ecosystem. The network's transactions are secured by elliptic curve cryptography, and the transactions initiated from accounts called super equity addresses. Transactions can be sent to any of the generated super equity addresses which are base-32 encoded. Due to the anonymity of the network, there is a possibility hostile node may have been introduced into the network. To counter this possibility, the DIM Node Network uses Eigen Trust++ reputation methodology to identify hostile nodes.

The super equity addresses are assigned an importance score, and a higher score increases the possibility of that account harvesting a block. Because the network is transparent, the value transfers between accounts can be used to determine the rating for the importance of accounts. To prevent hostiles from gaining control of the network, Super Equity utilises NCDawareRank, vested balances, and net decaying out link weights to make importance calculations resistant to Sybil and Loop attacks.

## Super Equity Nodes

Super Equity Nodes support the network by maintaining transaction records. These node accounts will require at least 250,000 DNT tokens per three operating node sites and as a bonus, will receive for each single vote cast, 50 votes. With a total supply of 250 Million theoretically, the total number of nodes will amount to 1,000. The theoretical total number of nodes will most likely not be achieved owing to some wallet addresses having less than the required number of tokens to qualify. Besides confirming transactions, nodes ratify the validity of the information and evaluate if the information is usable. The number of DNT tokens needed to create a node can be revised in the future through a hard fork of the Super Equity Blockchain.

The DNT tokens allow the holding wallet address to receive a portion of the 40% fees collected in the DIM-E according to the percentage of DNT held. Each node is associated with one primary account in order to validate transactions. The super equity network consists of NIS nodes which communicate with each other using a proprietary binary format, and the API support request encoded in binary format or JSON. When a node is launched, it processes the blockchain and caches some data in memory to improve online performance. The launched nodes must still be booted to connect to the network and to associate with an account. Non-booted nodes require a private key of a primary account, or a delegated account for security purposes to connect to the network. Connected nodes then start communicating with other nodes and sharing information. The nodes firstly connect with other nodes that have higher a reputation and then identify more nodes over time.



## Ticket System

A DIM Ticket is a utility coin within the DIM Ecosystem and adds a multi-faceted level of opportunities for participation within the Ecosystem. These include accreditation in a voting system, access to exclusive discounts at partner stores and enables users within the Ecosystem to save costs. This virtual ticketing platform is created and distributed on the NEM Blockchain, which further creates traceability and access to the blockchain open ledger.

A DIM Ticket awards user's with enhanced access to DIM-E partner stores and services, with up to 70 percent discounted rates, and with further offerings from selected food and retail outlets, travel benefits and even digital products and services. With additional use in other lifestyle partnerships, any small to large scale events will have the ability to utilise the DIM Ticket system as a point of high influx control, with post-event auditing that provides accurate and consistent information for any organiser.

As a protection mechanism for the DIM-E, these tickets serve to prevent fraudulent voting on the network coupled with full-scale auditing to assist the governing process of the Ecosystem as a whole.

Three major components make up the DIM Ticket system;

- Accreditation to vote
- Discounts and promotions
- Access control for events & expos
- With more to come.

## Accreditation to Vote

DIM Tickets allow Ecosystem users to cast their vote against a ballot application built on the blockchain, as each ticket is redeemable upon a single voting position (Yes/No/Abstain) per topic of vote. An ecosystem user may participate in any election period regarding any changes or beneficial ideas that can enhance the Ecosystem as it does not discriminate against any one user; all topics requiring a vote will be proposed by the DIM Government and community.

Voting positions are governed by a set of wallets that receive tickets as a vote towards either a wallet representing Yes, No or Abstain. Abstain indicates a user does not want to participate in the voting process.

Using the wallets that each represent a different voting option, means each wallet can be tallied up with complete precision and transparency, and retained in the blockchain for permanent historical record keeping.

### Highlights:

- Flexible voting period
- Borderless voting from any location
- Full transparency, based on blockchain
- Cost efficient
- True democracy

## Discounts and Promotions

Various discounts and promotions are made available for ticket holders and are redeemable against selected items, products or services across the Ecosystem. Multiple outlets advertise their affiliated promotions via push notifications on an Android device with the App installed, or via the DIM Ticket website. Merchants participating in the DIM Ticket system categorise their promotional items and services to ensure consumers have ease of use and low volume of issues requiring troubleshooting. In addition, both a store and consumer's geo-location can be tagged, signalling to the consumer that a nearby deal awaits them. Should the consumer be logged on via a PC, an advertising banner will redirect the customer to the merchants' coupon page where DIM Tickets are redeemed against printable coupons for in-store use.

More features tailored for DIM Tickets include;

- Email or push notification alerts from merchants promoting new coupons or deals.
- Interactive maps that tag locations for specific deals in an area or a chain of stores promoting different deals per store.
- Tourist friendly “Things to Do” in major city centres, that promote better rates for hotels, bars, restaurants, etc.
- Seniors citizens and students are awarded further discounts.
- DIM Ticket Deals, where merchants participate in allowing a “one-day-only” sale of their products.

## Access Control for Events & Expos

DIM Tickets offer a wide range of live events for customers wanting to use the ticket system’s low-cost utility to track, measure and validate access for any size of event. Most DIM Ecosystem-hosted events require DIM Tickets to authenticate and grant access to the event organisers for functions outside of the DIM-E.

Highlights:

- Use a DIM Ticket for any event or function.
  - Events can be scaled: from a 10-place private dinner to 50,000+ outdoor concert; DIM Tickets are the perfect solution for organisers.
- Social media marketing.
  - Market the event through social media plugins with your DIM Ticket, utilising the extensive communication channels available worldwide to DIM Ticket holders.
- Directly sell tickets through organiser’s own web platform.
  - Using the DIM Ticket Widget, allows organisers to include a direct-to-market selling of tickets for their events, with minimal fuss and problems.
- Track event sales figures.
  - Through blockchain ledgering, organisers can track, review and audit their DIM Ticket sales with ease.
- Validation of tickets at entrance.
  - Be in complete control of the guest list by utilising the ticket producer API; guests are validated against a list of approved wallet address.
- Smartphone compatibility and scanning.
  - Accreditation is made easy with DIM Ticket Android scanner which enables full identification of each ticket or wallet.



## How does one get DIM Tickets?

DIM Tickets can be purchased through DIM X at [www.dimx.io](http://www.dimx.io) or via DGX Regional Partners.

\* DIM Tickets are utilised on the Android app with DIM Wallet, or through the computer desktop wallet found at [www.depotwallet.com](http://www.depotwallet.com).

**\*The cost of each ticket is US\$0.10**



MAST

ANNEXURES



# Table of Contents

Annexure A - DIM ITX Solutions DIM Internet Exchange (ITX Solutions)	133
Annexure B - Technical Blueprint: DIM-E Global Exchange (DGX)	143
Annexure C - Technical Blueprint: The HYBSE Software	157
Annexure D - Development Roadmap	171
Annexure G - Convertible Bonds	187
Annexure E - Glossary	195
Annexure F - References	201





MAST

ANNEXURE A

DIM ITX Solutions  
DIM Internet Exchange  
(ITX Solutions)

# Table of Contents

Introduction	135
Infrastructure	135
Communications	139
Access Point Networks (APN)	140
Apn Integration Between Mobile Service And Data Centres	140
Data Centre Gateways To Global Mobile Connections	140
DIM Api Gateway For SMS Service, Via Short Message Peer-To-Peer (SMPP)	140
Voice over IP (Voip)	140
Retail Data Subscription	141
Payment And Transfers	141
Mail And Web Hosting Facilities	142
Mail Exchange	142

## Introduction

A comprehensive study was undertaken on the current DIM Ecosystem which established that there was an urgent need for a stable, reliable and secure deployment for a private and secure internet with overall data connectivity services. Thus, DIM ITX Solutions was born and rapidly began developing a fully manageable yet autonomous digital infrastructure solution that would carry the DIM Ecosystem forward; together with a fully-optimised back-bone solution which interconnects a p2p topology and network engine, and with further capacity to engage with international ASN synchronisation.

Additional applications emerged as DIM ITX solutions was developed, promising a world-class design to be a leader in the ecosystem offering services that can be sold, distributed and ultimately encourage greater participation within the ecosystem. Services such as internet, web and mail hosting, deployment environments and data connectivity will all work towards boosting business interaction for consumers, businesses and globally integrated markets.

Within the design, many elements converge to make up a multi-layered service offering capable of unlocking and enhancing the full potential of blockchain's cryptographic power.

## Infrastructure

In the first instance, an autonomous system number (ASN) has to be created, which is uniquely allocated and identifies each network stream on the internet, since the internet is itself an autonomous system with a collection of connected internet protocols (IPS). These are routed through prefixes under the control of one or more network operators, and also on behalf of a single administrative entity or domain governing a common and clearly defined routing policy.

Specific ASN prefix numbers that are required:

- JINX
- CINX
- DINX
- MINX

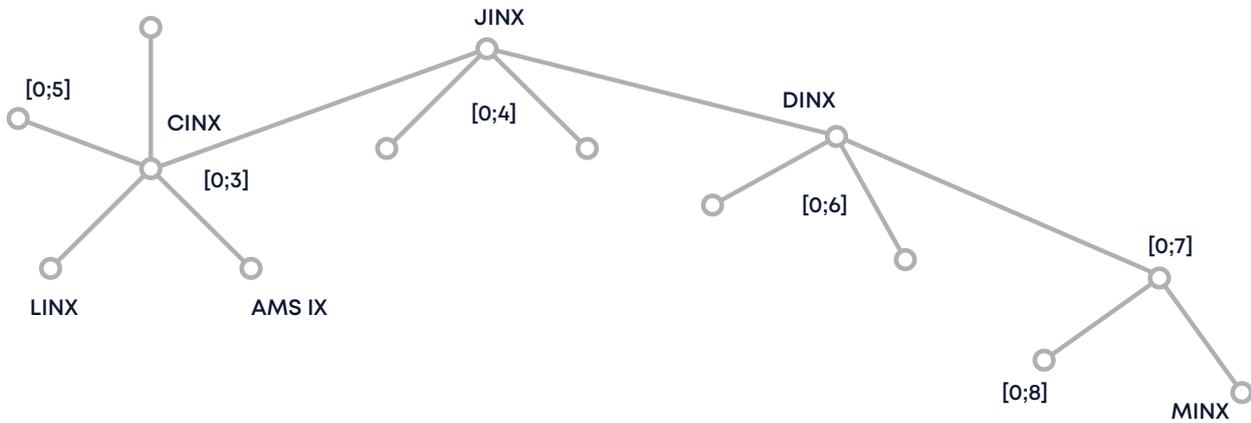


FIGURE 17: ROUTING PREFIXES

A partnership with a domain administrator, which maintains a neutral second layer internet exchange (IX) point, would be able to connect DIM ITX Solutions to a larger pool of the internet, through a single peering point (with multiple accesses), This facility is currently available in a group of Teraco data centres in major cities within Southern Africa.

This is a partner solution for DIM ITX Solutions and the ecosystem, as they provide a robust and safe solution for physical installation and housing of infrastructure for the DIM ITX Solutions to be positioned. From this location, DIM ITX Solutions will have stronger capabilities to host services such as mail, web or node servers. Further NAP partnerships that are to be tied into a complete service stream, are from public IP hosting services which will provide an interface for public participation in DIM ITX Solutions, this service allocates sufficient load balancing throughout the network when the need arises.

A second important service partnership is with a primary DNS provider which will allocate DIM ITX solutions with pointing services into Ipv4 address in 22 sub-nets; these addresses are obtained locally. The combination of all partnerships will greatly assist in communication and connectivity of the Catapult blockchain nodes with any databases within the ecosystem topology, via Virtual Private LAN Service (VLPS) or Multi-Protocol Label Switching (MPLS).

Connecting all the partnerships will create the physical infrastructure within the data centre, and host all the processing and data storage requirements for DIM ITX solutions. Requirements such as eight hybrid servers designed with a capacity of calculating 10 Mb/s per bank of high-intensity data entries on virtualisation for each connected node’s hashing potential. Coupled with this processing power, all server banks will carry a combined value of 1.5 petabytes (PBs) of storage facility. Each node will have direct access to use and run the entire blockchain from storage. The data centre in which the first deployment of DIM ITX Solutions will be built on an optical fibre medium will also house direct attach connection’s (DACs) with multiple telecommunication companies, via ASNs. This will allow a seamless and constant data pipeline between two geographic locations.





A redundancy plan has been designed to cater for the risks associated with physical storage of information, and thus a restore point technology with data duplication will be securely stored in another geographically remote region, running the same physical backbone infrastructure.

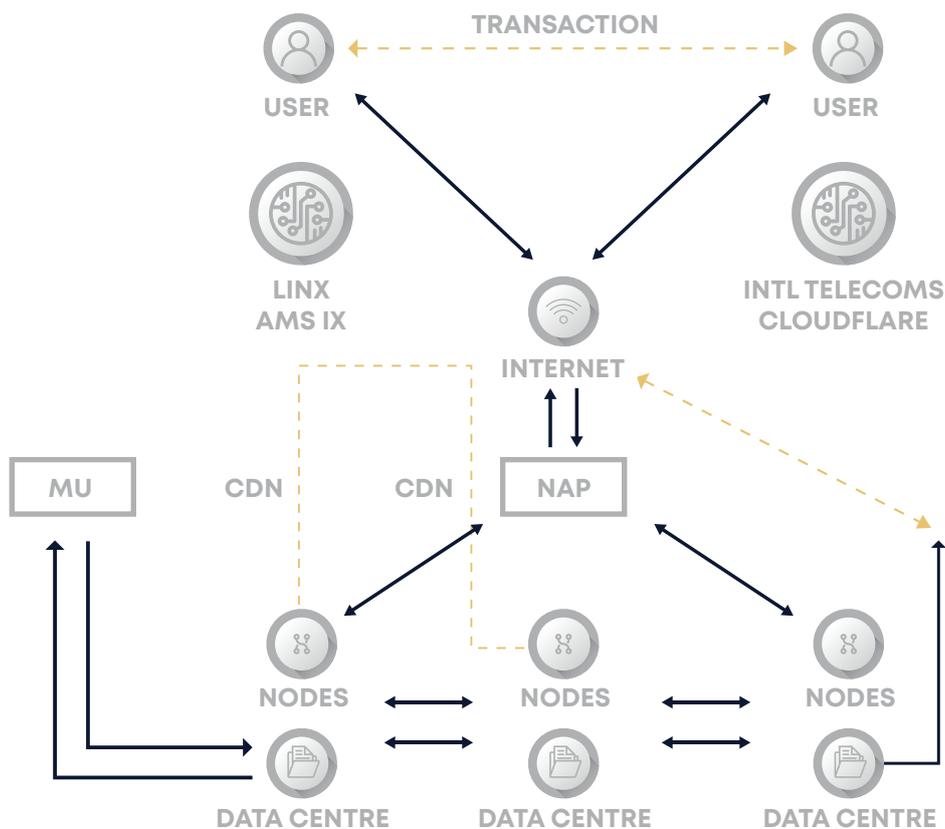


FIGURE 18: NODE NETWORK INFRASTRUCTURE

The above-mentioned will primarily constitute the bulk of the services required for DIM ITX solutions and support it as an underlying infrastructure for the DIM Node network to function, and will eventually be replicated and cloned in multiple diverse locations with similar partners in the identified regions. With this setup of mass infrastructure, all products and services within the DIM Ecosystem will gain access and priority service throughout the network and enhance each transaction conducted on the blockchain with even more secure and faster speeds. Vendors, merchants, and partners of the DIM-E, will be given priority access and first priority subscriptions at discounted rates, allowing these participants to enter the Ecosystem with a fully-fledged and integrated solution for their specific business needs. One example is that of an e-commerce merchant who has DIMPAY on a local DGX processor as the primary payment gateway and linked with their website to receive DIM Currencies for their products or services rendered, while having their website hosted by DIM ITX Solutions.



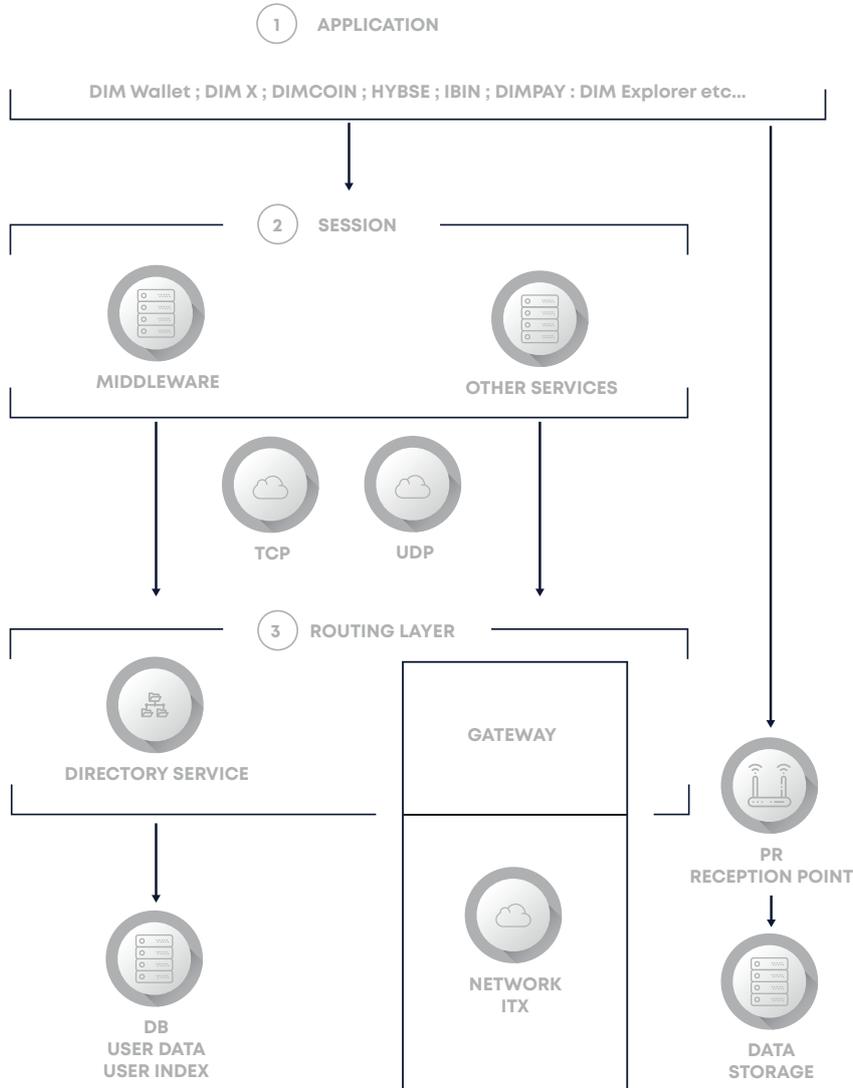


FIGURE 19: OSI

This together with further data pools stored on the DIM cloud from the same merchant. Once this business grows to the requisite size to be registered on the HYBSE, their due diligence process can be rapidly escalated, as data already exists on the DIM ITX solutions network storage and blockchain.

Nodes & Catapult’s blockchain adaptation integrating blockchain technologies is no small feat, as the DIM Ecosystem is fundamentally based on a public and open ledger with high levels of transparency. The Ecosystem will optimise business connectivity on Catapult’s blockchain engine, originating from the NEM blockchain, enabling a new DIM blockchain with a powerful and unique smart contract plugin able to enhance digital asset creations, decentralised mosaic swaps, as well as providing an advanced accounting system and core business logic modelling adaptations.



Benefits of the four layers of the Catapult engine:

- Core blockchain server for p2p transactions
- Mongo database (or alike) and API server connections
- SDKs (JavaScript, C#, Typescript, PHP, etc.)
- NEM based Catapult ready apps and light clients

The Catapult engine is remarkably resilient compared to most other blockchain engines, as the four-tier engine comprises multi-layer failover procedures. Each layer is independent of the other. With this tiered design in mind, developers can conduct work in one layer without compromising the other three. All network traffic protocols are capable of delivering multiple API calls and data queries within a swift and secure timespan.

The nodes which are housed on the physical infrastructure of DIM ITX solutions' global secure data centre environments, will ensure 99.99% uptime of the proposed blockchain which will comply with all ISO rating standards. The DIM ITX solutions network will be connected via a complex and intuitive system of ASNs and fibre backbones; these strings up all the nodes on the network to communicate in the most secure and streamlined method, thus creating the links between DIM Ecosystem's blockchain nodes.

---

## Communications

For users within the DIM-E to gain access within what amounts to a private internet service, specific attributes will have to be established and are discussed further in this section.

The purpose of creating a private internet service is to secure transactions between all DIM E-products while creating a low-cost platform in which to conduct retail of data and VoIP connections.

Main attributes will need to be established:

- Access point name (APN)
- APN integration between mobile service and data centres
- Data centre gateways to global mobile connections
- DIM API gateway for SMS service, via SMPP
- Voice over IP (VoIP)

## Access Point Names (APN)

APNs are a set of protocols defined by a mobile carrier that can be installed on any appropriate mobile device and allows a gateway to be established between both parties via GSM, GPRS, 3G, 4G or 5G cellular tower networks.

## APN Integration Between Mobile Service and Data Centres

A pointed APN protocol towards a breakout server, attached to a mobile network, directly connects all associated telecom providers within a defined localised spectrum of neighbourhoods, cities, regions or countries. An in-house APN will be developed for all users that will connect to the ecosystem via DIM ITX solutions services, that will also host capabilities for telecoms to broadcast to and from end users, nodes and cell towers that will specifically communicate between DIM ITX solutions global data centres and a communication relay for ecosystem products.

## Data Centre Gateways to Global Mobile Connections

Direct attached connection (DAC) protocols between DIM ITX solutions and global cell tower operators and/or mobile cellular operators, will allow global access through Geolocation, but will be subject to negotiated nominal gateway fees paid to infrastructure providers.

## DIM API Gateway for SMS Service, via Short Message Peer-to-Peer (SMPP)

An API gateway connecting web and mobile applications with the DIM ITX solutions private internet service will ensure that safe and secure transactions can be carried out throughout the ecosystem, with SMS authentication and verified with OTP services. The API will communicate through industry's best practice standards by using HTTPS TLS encryption, to recognise each communication in a secure format. OTPs will be sent through an integrated SMPP service gateway, tied into the DIM ITX solutions network. Other failover procedures will be implemented through third party direct plug attach equipment (DPA) to ensure best-effort delivery (BED).

## Voice over IP (VoIP)

A physical hardware hosted server will be housed in DIM ITX solutions data centres, and will have a built-in platform to enable users to use VoIP. This hardware is an add-on function to the existing infrastructure to be built for the DIM ITX solutions network, and allows the users mobile applications to use their data connection for voice calling on a secure hosted network, through session initiation protocols (SIPs) and



computer supported telecommunications applications (CSTA) with multisite distributed call processing (MDCP), all as benefits on the DIM ITX solutions network. This IP-PBX integrated system will provide an umbrella for all connected DIM ITX solutions to subscribers requiring a pure-IP network which can maintain a mission-critical telephony environment.

## Retail DATA Subscriptions

A primary subscription to two key players in the Southern African market for (PoP) IP/MPLS, will ensure a high capacity dedicated DIM ITX solutions backbone and gateway. With this tie-in, DIM ITX solutions can establish data packages for retail distribution at a more affordable cost, and which can be bought with DIM Currencies.

## Payments and Transfers

Users in various geographic locations, able to connect to the internet on any network, will use a purpose designed mobile app for use on the DIM Ecosystem, which allows payments and/or transfers of crypto mosaics.

When a user interacts with a payment process and initiates a transaction to another user, the point of origination will transmit from the mobile application through the internet to the DIM ITX solutions data centre. Upon reaching the data centre, a series of nodes will begin compiling the transaction and confirm the process of validation via the blockchain. The entire transaction will complete its validation in an extremely short time span, and payment will be successfully made to the appropriate wallet. The user's transaction is secured by nature of the blockchain, but is further enhanced by a content delivery network (CDN) that protects against any unwarranted traffic or re-routing, and ensures that each transaction is safely delivered to DIM ITX solutions nodes for compiling.

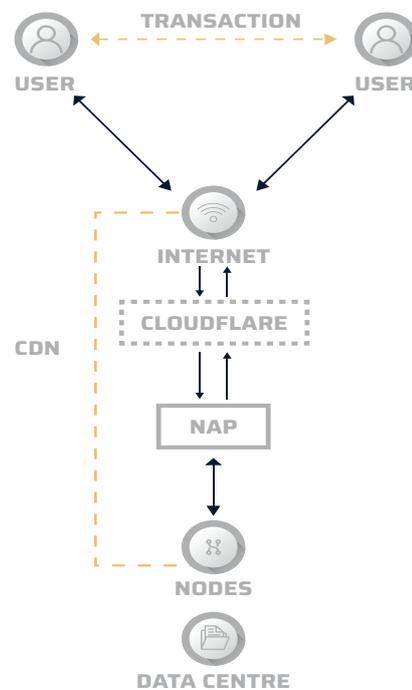


FIGURE 20: INTEREXCHANGE



# Mail and Web Hosting Facilities

## Mail Exchange

Host Panel (HP) offers solutions that are both robust and scalable by design, and are all hosted email offerings which deliver the most competitive and cost-effective service on DIM ITX solutions. This allows a business the best possible uptime and availability with the highest priority rating. HP also offers a multi-data centre failover re-routing service which provides best in class protection against malware, spam, phishing, DHA and DDoS attacks or accidental data leaks and outages.

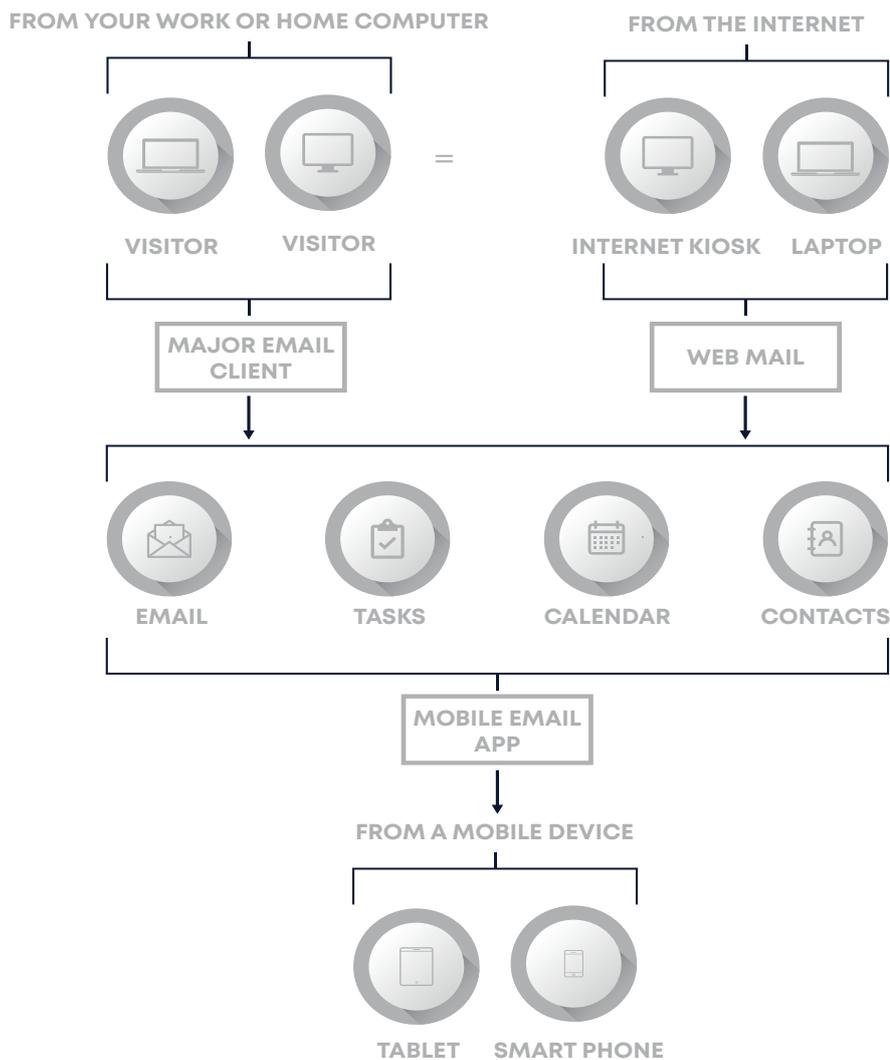


FIGURE 21: HOST PANEL



MAST

ANNEXURE B

Technical Blueprint  
DIM-E Global Exchange (DGX)  
exchange and payment systems

# Table of Contents

Introduction	144
The DGX Solution Set	145
DGX Processors	146
DGX Master Processor Main Functions	147
DGX Local Instance Processor Main Functions	148
Security	149
Scalability	150
Country-specific Initiatives on the Example of DEAN SA	150
Supported Payment Process Flows (Merchant – Consumer)	151
DIM X	152
Security	152
Scalability	152
Wallets	153
DEPOTWALLET (Browser-based Stand-alone Wallet)	153
DIM Wallet (Android-based Stand-alone Wallet)	153
DIMPAY (Android-based Stand-alone Wallet) and Retailer Registration Website	154
DGX Connected Wallets	155
Wallets Functional Positioning	156

## Introduction

This technical blueprint (Blueprint) was compiled to highlight technical and process interdependencies between various services and solutions covered under the umbrella description DIM-E Global Exchange (DGX), which represents the elements of DIM payment systems.

The solutions are divided into wallets; the DGX processors, which are both local and global points of exchange for DIM Currencies, and country-specific specialised solutions built on the DGX processor technology. The wallets make use of custom-generated special purpose mosaics. An example of a country-specific initiative in specialised solutions is the Data Education Aid Network in South Africa, also known as DEAN SA.

The system is supported by a wallet-less exchange process (DIM X) which allows independent (not connected) wallets to exchange BTC to DIM Currencies and vice versa.

Additionally, independent wallets are provided on DEPOTWALLET, a web-based means of making transactions on the NEM blockchain. DIM Wallet and DIMPAY are Android mobile applications which display and make transactions. The user needs an internet connection to make transactions on these applications.

The above mentioned solutions enable users to acquire, exchange and use DIM-currencies as a method of payment; it allows the non-banked population to participate in electronic payment processes without fixed monthly costs, and attract merchants with preferential processes and advantageous costs.

The payment process has two primary adaptation drivers:

- The consumer
- The merchant

**The consumers'** acceptance criteria are different from those of the merchants' and have to be examined independently. The essential points for consumer adaptation are ease of use, wide acceptance, interchangeable funds, stable value, security against theft and loss (highly secure) and low/ no operational costs.

**The merchant** has two main functions to fulfil:

1. Accepting payment in DIM Currencies and
2. Providing a point where consumers can either top up their wallet or exchange their DIM Currencies into the local fiat currency.



Currently, merchants are faced with an accretion of POS costs including, but not limited to, transaction costs, handling costs and average time of payment. Credit card fees are roughly 1.95% of the purchasing value cash, while handling costs are roughly 4.7%.

An average of 10% of potential profit is paid in fees with each transaction. A 1% net reduction in transaction costs with DIM Currencies would lead to a 1% increase in profit margins or an average of 10% increase in profit for the retailer.

## The DGX Solution Set

The solution set is divided on a high level within the following:

**DGX processors** provide exchange services between cryptocurrencies (i.e., BTC), DIM Currencies (stable coins such as DIM USD; DIM ZAR; DIM EUR) and Fiat money (the existing local currency). The interchange between local processors in different countries is technically hosted for.

**DIM X** is a wallet-less processor that provides exchange services between BTC and DIM Currencies.

Stand-alone wallets store DIMCOIN, DIMTOKEN, mosaics of stocks, NEM and DIM Currencies. These wallets are found in DEPOTWALLET (Browser-based), DIM Wallet (Android application) and DIMPAY (Android application). Stand-alone wallets allow for self-determination of maximum users and require a high level of individual responsibility.

Connected wallets store DIM Currencies, local currencies (licenced local DGX processors only), cryptocurrencies and country-specific user group mosaics. Connected wallets are the DGX processor wallets. Connected wallets are easy to operate and can be restored if the user's phone is lost, stolen or broken. It is not necessary for the user to learn the differences between NEM and BTC wallets. User experience is of the utmost importance; therefore, no technical knowledge is required to make use of the connected wallets.

Connected wallets support instant top up functionalities and can complete a payment process in about one (1) second. They are used for DGX LIP solutions such as the DEAN SA initiative.

Local processor solutions are country-specific solutions to support a particular implementation in connection with the DGX – LIP. For example, the student coin initiative, (DEAN SA), in cooperation with the DGX LIP in South Africa, provides a savings/sponsorship plan to secure financing for students' education.



## DGX Processors

The DGX master processor is the technical solution to ensure stability and value backing of DIM Currencies distributed in the DGX LIPs. Some 80% of the distributed currencies are backed with precious metals. The DGX master processor manages the distribution of DIM Currencies and clearing of other currencies from the DGX LIPs. It enhances the DGX LIPs and ensures consistency when balancing the funds.

Additionally, the DGX master processor shares successful implementations of country-specific solutions between LIPs.

The DGX processors, the master instance and the LIPs share the same function set, wallet and ledger system. Dividing the wallet, transaction, ledger and front-end user interface into separate blocks enables the system to grow and accounts for local and global connection of POS solutions in the future.

There is a private API interface which supports the advanced interconnected services.

The DGX LIPs are all alike with the regional customer facing look and feel, language, local T&Cs, required KYC adaptation and adapted ledger. The second adaptation set is the respective DIM currencies, accepted cryptocurrencies and local currencies.

Local market-based fees and the spread between the local and other currencies are locally driven depending on currency and exchange rate stability.

The DGX LIP has a consumer/merchant web interface and an Android application which has a merchant and consumer mode. All of the localised applications and web interfaces are inter-operable.

## DGX Processor Functions

The DGX processors cover all back-end and front-end functionalities needed for currency exchange. Functions are enabled or disabled in accordance with the regional legal system. The local DGX processor is operating in conjunction with the operator of the DGX LIP.

### DGX Master Processor Main functions:

- Management control interface/oversight over all DGX LIPs
- DIM currency distribution and management of currency backing
- Precious metal vault management
- Automatic generation of all connected wallets
- Cross DGX LIPs accounting and clearing
- Provision of an exchange rate feed to all DGX LIPs
- Adaptive spread calculation based on current market criteria
- Fixed fees and payment charges across the DGX LIPs
- Combined ledger of the DGX LIPs.

### DGX Local Instance Processor (LIP) Main Functions

- Provide local consumer interface
- Manage the KYC process
- Support local instance
- Exchange local currency to DIM Currency and vice versa
- Exchange local currency to BTC and vice versa
- Exchange DIM Currencies to local DIM Currency
- Send DIM Currencies to other DGX processor wallets, NEM wallets, DIM Wallet, DEPOTWALLET and DIMPAY
- Send BTC to other DGX processor wallets and BTC based wallets
- Receive local currency, DIM Currencies and BTC
- Fast payment confirmation for connected retailers and consumers

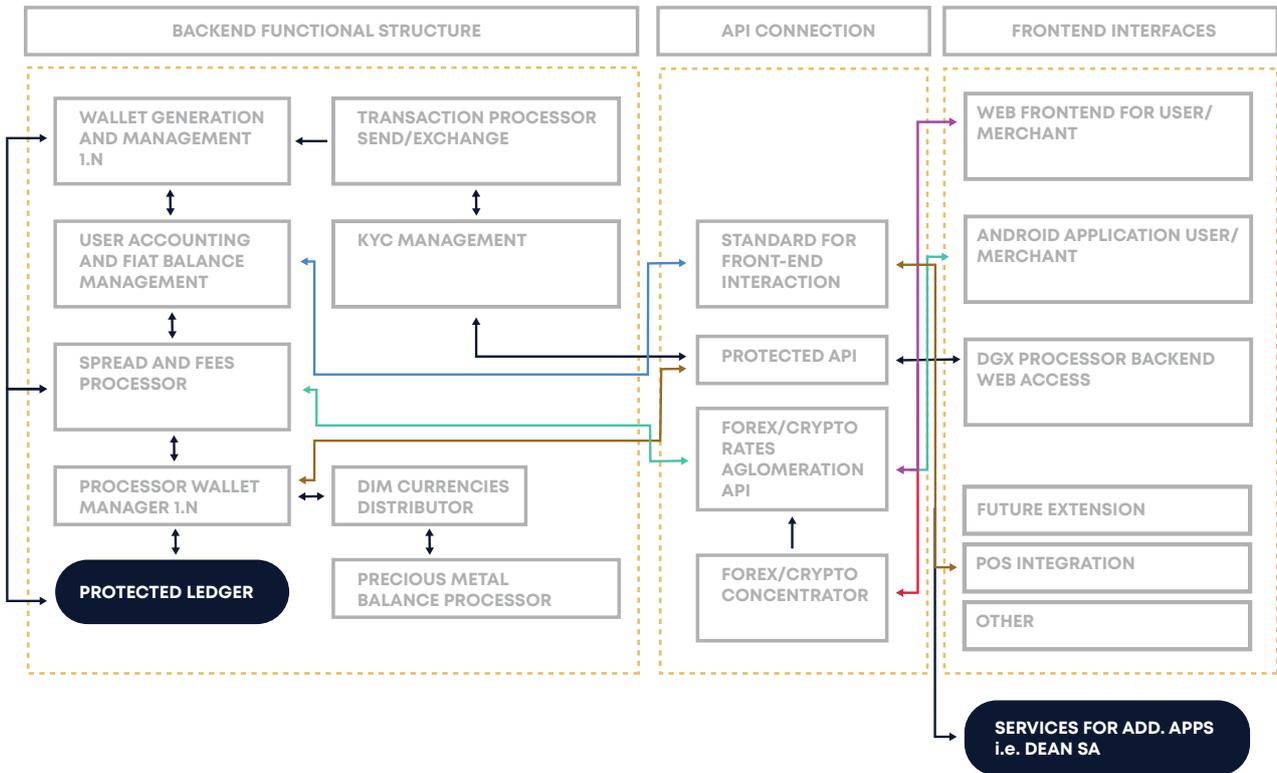


FIGURE 22: DGX PROCESSORS AND FRONT-END DIAGRAM



## Security

The back-end is split into multiple server instances with each one performing functionality specific tasks. The only server instances that are reachable are those connected to the public IP-network. All communication passes through an internal API structure.

Keys are split into parts and encrypted; they are only combined and decrypted at the moment of transfer.

All S2S (server to server) communication is private and encrypted.

Elevated user access is managed with event-based rolling encryption keys.

## Scalability

The system is distributed over a set of servers, each one performing a specific function. The servers are scalable to a certain degree, and additional server instances may be added for each function.

- Yellow lines represent blockchain communication.
- Blue lines represent communication between and with processor instances.

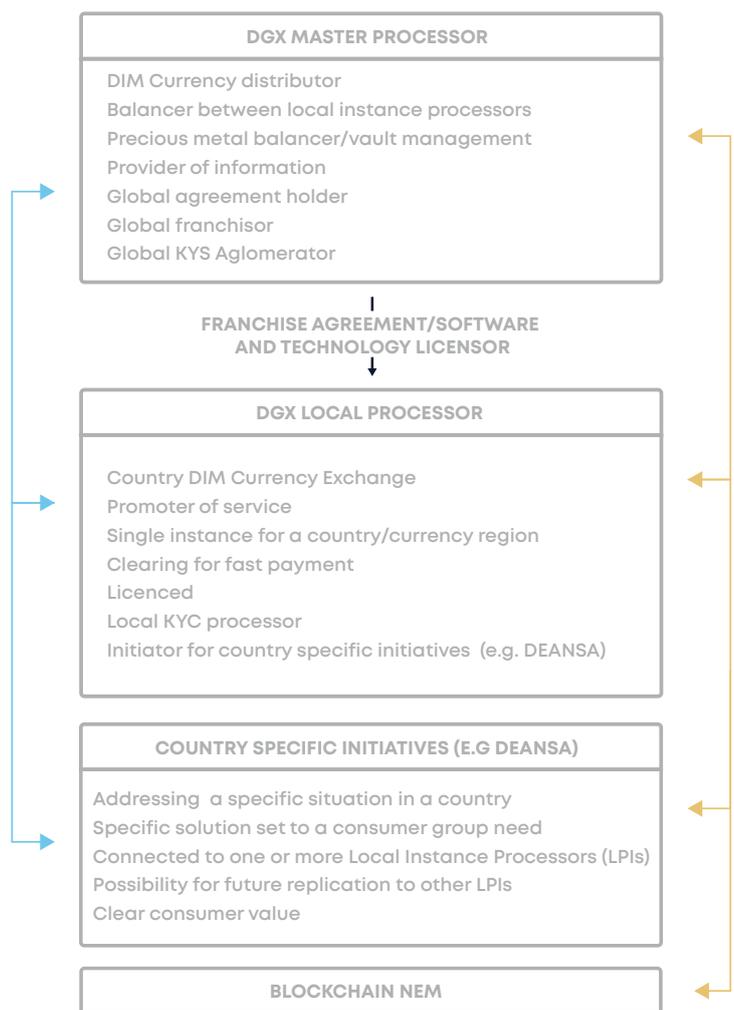


FIGURE 23: SCALABLE DGX PROCESSOR



## Country-specific Initiatives on the Example of DEAN SA

DEAN SA is an initiative that assists parents, relatives, and sponsors in financing students.

It is a tokenised savings plan with an immediate, partial, or monthly pay-out. DEAN SA guarantees tuition fees after purchasing the first token. The plan has two options: a 6-month token option and a 12-month token option.

Each token is purchased for ZAR 5,000, of which ZAR 500 is immediately available to the student as DIM ZAR.

The 6-month token option will provide R30,000 in support allocation

R20000	- provided as DEAN-AR (DEAN Academic Rand) for tuition fees
R3000	- provided as DIM ZAR for food and amenities at any merchant accepting DIM ZAR
R6600	- provided as DEAN-AR for books/accommodation
R400	- provided as DIM ZAR for living allowance

The 12-month token option will provide R60,000 support allocation

R40000	- provided as DEAN-AR for tuition fees.
R6000	- provided as DIM ZAR for food and amenities at any merchant accepting DIM ZAR
R13200	- provided as DEAN-AR for books/accommodation
R800	- provided as DIM ZAR for living allowance.

### Implementation

There is a sign-up and information website for the implementation of the initiative. There are both private sponsor, and business sponsor sign up options on the website.

Three specific mosaics are generated:

- DEAN SA STUDENT COIN represents the payment. A coin is sent to the student's wallet after each monthly payment.
- DEAN SA STUDENT RELEASE COIN is the levy on the DEAN SA Student Coin. Depending on the payment plan selected; three coins are sent after 6 months of consecutive payments, or 6 coins are sent after 12 months of consecutive payments. Provided the DEAN SA Student coins are returned, then the above payments are made.
- DIM ZAR STUDENT COIN is for dedicated payments only, such as payments for text books and accommodation at certified retailers.



At registration with DEAN SA, the registration wallets and payment identification codes are generated. The payment identification code links the student's payments to his/her wallet.

In order for the system to enable a direct payment gateway in the form of pay fast, the DGX LIP has to be amended to display the three additional coins as described above. The sponsor or student activates the secondary registration at the DGX LIP by entering the same email used at DEAN SA. A one-time pin (OTP) is sent to the email and a password may be required also.

### Supported Payment Process Flows (Merchant – Consumer)

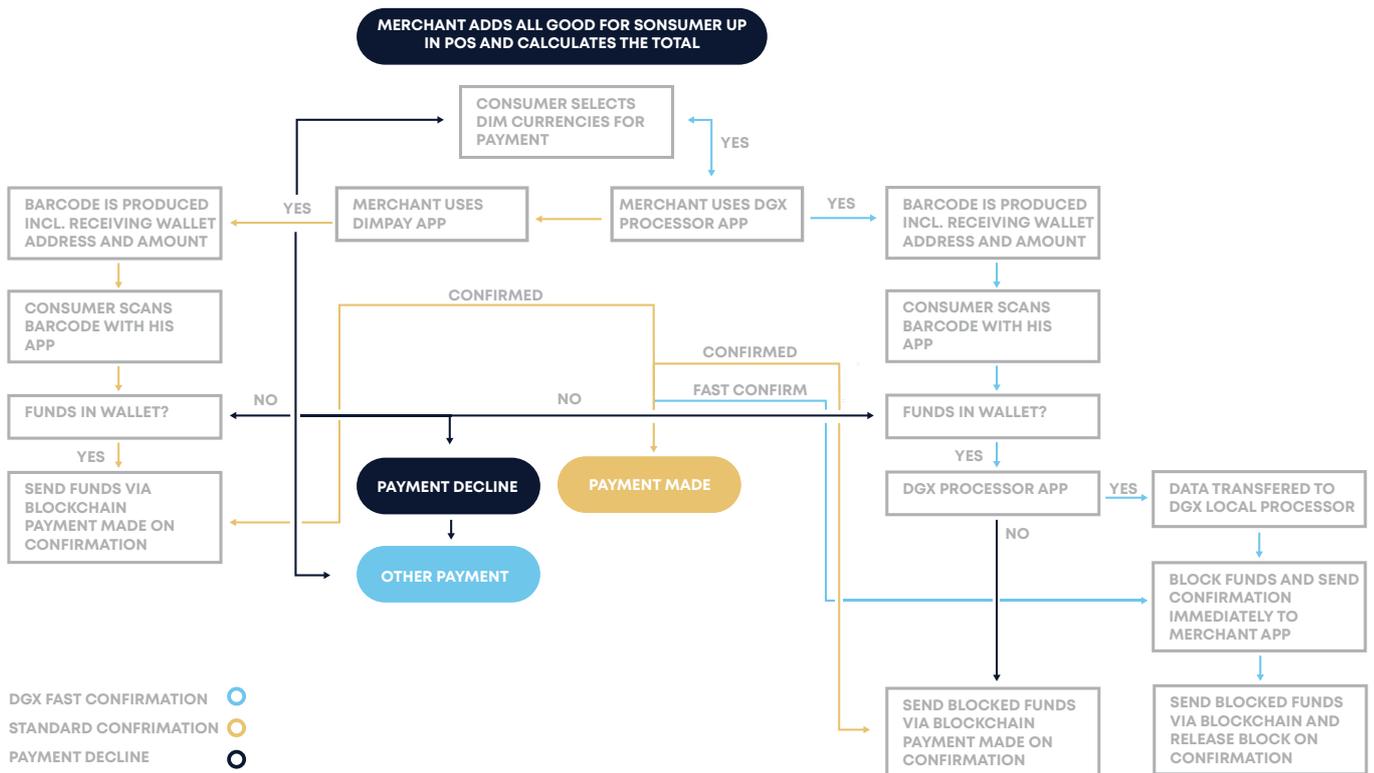


FIGURE 24: SUPPORTED PAYMENT PROCESS FLOW DIAGRAM



The flow-chart (figure 24) displays the transaction flow of the consumer payment process with DIM Currencies in a retail environment. Payment confirmation times are critical in this environment.

In a pure blockchain process, the confirmation time may be unwieldy. The quick confirmation function available between DGX processor users and retailers will enable confirmation times of 1 second, providing consumers and retailers enable a smooth checkout at the POS. If either the consumer or the retailer decides to use wallet-to-wallet for invoicing or payments, it may take extra time, but the process as a whole is still time efficient. Top-up and fiat money pay-out functions can also be processed using the same procedure with participating retailers.

## DIM X

DIM X is a global wallet-less processor that provides exchange services between BTC and DIM Currencies.

### Main Functions

The main functions of the DIM X exchange processor are:

- User registration process
- KYC process based on transaction volume
- Constantly updated exchange rate (BTC <-> USD)
- Receiving BTC, converting to DIM USD and sending DIM USD to a user wallet address
- Receiving DIM Currencies, converting to other DIM Currencies and sending DIM USD to a user wallet address
- Receiving DIM USD, converting to BTC, sending to a user wallet address

### Security

The front-end is decoupled from the back-end, which is split into separate instances. Keys are split into parts and encrypted and only at the moment of transfer are they combined and decrypted.

### Scalability

The system is a pure processor and does not hold user wallets. It allows for a large number of requests to be processed over a short time interval. The virtual server instances may be upgraded if increased response time is experienced.



## Wallets

All stand-alone wallets are wallets for the NEM blockchain and provide the highest degree of user control.

Connected wallets are multi-wallets - a combination of NEM wallets, BTC wallets, other potential wallets and a representation of a local currency account which all appear as one wallet application. This ensures ease of use and an enhanced user experience.

### DEPOTWALLET (Browser-based Stand-alone Wallet)

DEPOTWALLET is a client-side application which runs in a browser. No sensitive information is sent and all transaction sensitive processes (signing of a transaction) are done in the browser on the local computer. The same applies when creating private keys.

#### Main Functions:

- Import wallet with private key
- Import wallet from .wlt file
- Create a new wallet
- Manage multiple wallets
- Store multiple NEM based mosaics in one wallet
- Send DIM Currencies and mosaics
- Create a QR code to receive funds from another person (Invoicing)
- Store all regular addresses in your address book
- View all past and incoming transactions
- Share addresses using copy-paste by any means of communication
- Export wallet file for backup
- Connect to Trezor
- Ready for DIMVOTING

## DIM Wallet (Android-based Stand-alone Wallet)

The DIM Wallet allows users to send and receive DIM ASSETS. It can store and manage DIMCOIN, DIM TOKEN, DIM Currencies, XEM and any other NEM based mosaics. Storage and signing are done in the application so that private keys and passwords are not sent over the internet. DEPOTWALLET is 100% open source and based on the NEM Wallet.

### Main Functions:

- Import wallet with private key or scan private key QR code
- Import wallet from .wlt file (for existing DEPOTWALLET.com and Nanowallet accounts)
- Create a new wallet if user does not have one
- Manage multiple wallets on the same application
- Store multiple NEM based mosaics in one wallet
- Send mosaics with QR code from recipient (No need to type long addresses)
- Create a QR code to receive funds from another person (Invoicing)
- Store all regular addresses in address book
- View all past and incoming transactions
- Share addresses via SMS, Telegram, WhatsApp or other instant messaging (IM) applications
- Export wallet file for backup
- Two-factor authentication
- Biometric access to application

## DIMPAY (Android-based Stand-alone Wallet and Retailer Registration Website)

DIMPAY is a gateway that allows SMEs to transact with customers on the blockchain. It includes all the functions of DIM Wallet but its user interface is targeted towards supporting payment processes with DIM Currencies

The retailer registration website provides a means of finding retailers that accept DIM Currencies with their location and offering.



**Main Functions:**

- Pay suppliers for goods and services and receive import wallet with private key or scan private key QR code
- Store all addresses in address book to easily send funds
- View all past and incoming transactions
- Share addresses via SMS, Telegram, WhatsApp or other IM applications
- Export wallet file for backup
- Two-factor authentication
- Biometric access to application

## DGX Connected Wallets

Connected wallets are wallets that are connected to and work in conjunction with the DGX processors. They differ to the stand-alone wallets because they need secure communication with the DGX Processor system to function. They will allow transactions on all wallets and display NEM, BTC, and local currencies.

The functions are available as a website application and as an Android application.

**Main Functions:**

- Receive local currency, DIM Currencies and BTC
- Send DIM Currencies
- Send BTC
- Exchange local currencies to DIM Currencies and vice versa
- Exchange local currencies to BTC and vice versa
- Exchange DIM Currencies to local DIM Currency
- Fast payment confirmation for connected retailers and consumers
- Create invoices, and receive fast (1 second) payment confirmation for DGX users (Android application in merchant mode)
- Pay for goods and services at accepting retailers

## Wallets Functional Positioning

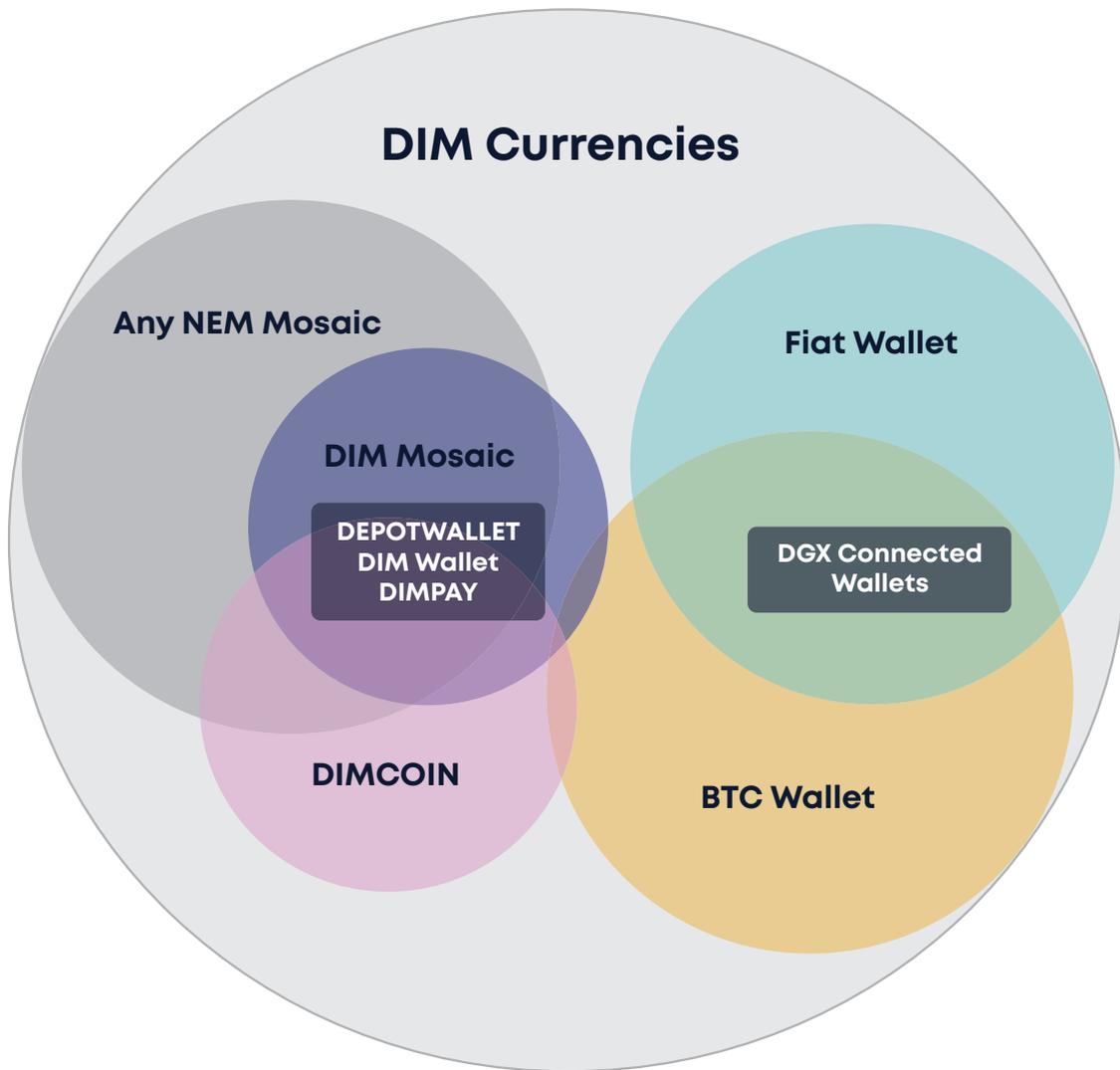


FIGURE 25: WALLET POSITIONING



MAST

ANNEXURE C

Technical Blueprint  
The HYBSE Software



# Table of Contents

Introduction	158
Purpose	158
Intended Audience And Pertinent Sections	158
Project Scope	158
Document Convention	158
Description	160
Product Perspective	160
Features	160
Registration	160
User Wallet	160
KYC	161
IBO	161
Market Creation	161
Trading	161
Demo Trading	162
Order Matching	162
User Overview	162
Operating Environment	163
Documentation	163
Assumptions/Dependencies	163
System Features	164
Requirements	167
User Interfaces	167
Hardware Interfaces	167
Software Interfaces	167
Communication Interfaces	167
Additional Nonfunctional Requirements	168
Performance	168
Safety	168
Security	168
Software Quality	168
Appendices	169





# Introduction

## Purpose

The Hybrid Stock Exchange (HYBSE) platform is a high performance, robust and scalable interface that allows user applications to interact with it and participate in the HYBSE exchange. The platform is highly secure and interacts with user applications using RESTful API.

## Intended Audience and Pertinent Sections

The target audience for this document are developers, project leads, project managers and potential clients.

This document describes the software features and makes use of technical information and terms related to software development and/or IT technology. This document does not use technical terms that would exceed a reasonable level of knowledge of the industry.

## Project Scope

The scope of the product (Apollo) is the back-end and API of the software; front-end interface for the trading platform and website and finally the front-end interface for Admin and Super Admin to access the data of the HYBSE. The API consists of both public and protected API. It also includes partner login and accepting transactions of NEM assets listed on the HYBSE from the partner interface. Partner transactions will be communicated through the API.

## Document Conventions

The conventions in this document pertain to the standardised SRS formatting. Category titles are in bold and a larger font size, regular texts are in an unformatted plain text. Special information is written in italic, sub-categories or features are written in bold, important information is written in bold and italic and critical information is written in bold, red italics.





# Description

## Product Perspective

HYBSE API V2 (code name Apollo) is the next major version of the existing HYBSE platform. It is a complete rewrite and not backward compatible. Although major business functionality requirements have been carried forward from version 1, the entire software functionality is different from its predecessor. The back-end of Apollo is developed using Symfony 3.x supporting the PSR-7 more and utilising the features and performance enhancement of php7. The front-end is decoupled from back-end to make the back-end more open, secure and extensible while making the front-end UI/UX more intuitive, robust, user-friendly and with minimum software footprints. AngularJS 4 and other node packages have been used as front-end JavaScript framework. Bootstrap has been used for HTML styling. The entire collection of data will be collected by front-end using AJAX request to HYBSE public and protected RESTful API.

## Features

A list of the main features is described below:

### Registration

To register as a participant or issuer on the HYBSE, the user must provide an email address and a password aligned with the password standards of the HYBSE. Upon registration, the user will receive an email with a link to activate the account. Once the account is activated, the participant account is ready for bronze level trading. Bronze level trading has a specific limit on funds that can be traded in that account.

The issuers will land on different pages where the user is asked to complete the registration process with complete details of the company - including management and financial details. Once this process is complete, the issuers must wait for administrative permission approving the company and issuing the pair. At this stage, a mosaic will be created in the NEM blockchain for the pair and it will be transferred to the issuer's wallet on the HYBSE, thereby notifying the issuers to create a sell order for the company.

### User Wallet

A NEM wallet will be created on the mainnet for every user that clicks the account activation link. User wallets will have two sections - the savings wallet and the trading wallet. The savings wallet is a NEM wallet which comes with a unique wallet address and is used to deposit, withdraw and trade assets.





User wallets have two major assets - primary assets (such as DIM EUR, DIM ZAR, DIM USD) and secondary assets. Secondary assets are cryptonized tokens that represent the stocks listed on HYBSE. Users deposit the funds from their NEM wallet (such as DEPOTWALLET) to their HYBSE wallet (also a NEM wallet) to enable trading.

## KYC

Only participants who successfully submit the KYC documentation, are eligible to level up their account to silver or gold level. Upgrading to higher levels allows users to withdraw and handle larger amounts in their account.

## IBO

The initial blockshare offering (IBO) section of the HYBSE will list assets which the user can buy in bulk with or without the discounted price. The IBO is created by the administrator. All IBOs come with a lock update and the IBO will enter the market for regular trading once the lock-up date has passed. The user cannot sell the IBO shares until the lock-up date has passed.

## Market Creation

The IBO will enter into the market once the lock-up date is over. The administrator can also open the IBO for trading. All assets listed on the HYBSE will have an IBIN number. The IBIN is a unique number that identifies the specific cryptonized asset on the blockchain.

## Trading

This feature allows users to buy and sell shares on the blockchain. Three modes of trade are possible.

1. Market orders – users are only able to buy/sell shares that have an existing opposite order. Users cannot define a willing price to buy/sell.
2. Limit orders – users give a specific price to buy/sell shares.
3. Stop-loss orders – users specify two prices for each buy/sell order - one the desired price to buy/sell, the other price option specifies another value which is above/below the current price to buy/sell.





## Demo Trading

The demo trading feature is available to all the registered users on the HYBSE. By utilising the demo trading function, users are able to simulate an experience of trading with test coins. A test net wallet will be generated on the NEM network and users are provided with test coins to understand and practice trading on the HYBSE.

## Order Matching

The HYBSE has an advanced trading engine that matches orders in a fast and secure way. When an order is submitted, opposite orders are matched. In the HYBSE, three different types of order can be placed. A market order is an initiated promise at a market price and once the submitted order aligns with a matching opposite, the trade takes place, thereby maintaining the ordered price dynamic. A limit order, (LO) is an order traders place with the price they want for the order to be executed. A stop-limit order (SLO) is a LO with a stop loss to enable traders to minimise losses with the order if the situation arises. All orders are matched to the best trade until the price order has been submitted. For submitted buy orders, the lowest sell orders are matched against the price of the buy order. For sell orders, the highest bid buy orders are matched against the price of sell order. This ensures traders get maximum profit out of an order. When an order is placed, the trading engine fetches an array of matchable orders following the matching rule and starts matching until the matchable orders are exhausted or the submitted order is matched to its required quantity. After each successfully matched order, the matching engine will fetch an array of orders that have a stop loss value within the range and start matching with available matchable orders, thereby minimising loss for the stop-limit orders.

## User Overview

Users that are expected to use the HYBSE trading platform.

- Existing/traditional market traders
- Existing crypto-market traders

Users must have basic knowledge of trading, cryptocurrencies, NEM assets and NEM mosaics.





## Operating Environment

- The HYBSE application can function on OS/Linux/Windows/Mac.
- Minimum hardware requirement of desktop and laptop– 512 RAM, Dual-core processor, minimum hard disk available in the current market, requires keyboard and mouse interface.
- Browser – Google Chrome, Safari, Firefox, Internet Explorer.
- All browsers on mobiles. (Android/Apple)

## Documentation

- API documentation – documentation of all public and private APIs is provided.
- The password-protected URL is shared.
- End-user documentation and manuals are posted on the HYBSE in corresponding sections.
- HYBSE will have operating procedures, commission percentage, legal terms and a complete stock list will be listed on the HYBSE website for user access.

## Assumptions/Dependencies

There is no possible change in system requirements or change in software design with the selected development platform and libraries. However, the software will have dependencies, such as *Doctrine*, *required Symfony modules* and *few node modules*.

It is assumed that the users on the HYBSE have sufficient basic knowledge of trading and stock markets. It is also assumed that the user is familiar with internet browsing and handling the keyboard and mouse. It is assumed that the user has the appropriate internet connectivity.





# System Features

## The HYBSE Platform API

DESCRIPTION AND PRIORITY

The HYBSE API is the core of the HYBSE system. The API is RESTful with an interface containing public and protected API end-points. Public API end-points are open and rely on HTTP GET method for input from the application. Protected API end-points are authenticated and rely on HTTP POST method for input from the application. The HYBSE platform has both open end and closed end sessions, depending on the end-point and user level. ACL is in action to determine the end-point access rights of the user and the session type. In many cases, the HYBSE platform relies on the input data as JSON and other cases form-data.

STIMULUS/RESPONSE SEQUENCES

Response from the HYBSE platform is RESTful, and the returned data is always JSON; thus, the application receives data in JSON regardless of the return type. In typical cases, the return data contains environment information, client information, data objects, and error objects. Where data objects are the expected data set and error objects are the error data set when expected data cannot be delivered by the HYBSE platform. In case of system level error, the aforementioned data format is not returned and a system error is returned in JSON instead.

FUNCTIONAL REQUIREMENTS

There are no functional requirements for public API end-points except fully qualified end-points. However, protected API requires the necessary keys which need to be provided in order to make a successful API call.





### The HYBSE Front-end

#### DESCRIPTION AND PRIORITY

The HYBSE front-end user application is developed to utilise the HYBSE platform and provide end users with the ability to use HYBSE. Front-end is meant for end users and is restricted to registered or guest users. HYBSE front-end relies on the HYBSE API and does not store or handle any user data. However, it utilises the cache engine and browser storage to store temporary data which will in return provide performance improvement and deal with latency of the network by reducing the API calls made to the HYBSE.

#### STIMULUS/RESPONSE SEQUENCES

The response received by the HYBSE front-end from the HYBSE platform is in JSON which is parsed and displayed on a successful request cycle. Although the request made to the HYBSE platform differs from guest users to registered users, the return data handled by HYBSE front-end is always effective.

#### FUNCTIONAL REQUIREMENTS

The HYBSE front-end can be used on any device, any operating system, and any modern web browser. However, the HYBSE front-end has not been optimised for browsers like IE9 or lesser, and any other browsers that were released prior to 2017. For such browsers, the HYBSE frontend may not function effectively or may not function at all.





### The HYBSE Administration

DESCRIPTION AND PRIORITY

The HYBSE administration comprises of user applications developed to utilise the HYBSE platform and provide end-users with the ability to use the HYBSE. Administration is meant for end-users and limited to the administration users only, hence this interface cannot be used by guests or registered users. The HYBSE administration relies on the HYBSE API and does not store or handle any user data. However, it utilises the cache engine and browser storage to store a minimum set of temporary data which will, in turn, improve performance and deal with latency of the network by reducing the API calls made to the HYBSE. This application is used for HYBSE administration only, and no front-end functionalities can be performed from here.

STIMULUS/RESPONSE SEQUENCES

The response received by HYBSE admin from the HYBSE platform is in JSON which is parsed and displayed on a successful request cycle. Since the administration is a highly secure application giving high-level access to the HYBSE platform, a series of user validation and key-based authentication is done from time to time to make successful requests and receive valid responses.

FUNCTIONAL REQUIREMENTS

The HYBSE front-end can be used on any device, any operating system, and any modern web browser. However, the HYBSE front-end has not been optimised for the browsers like, IE9 or lesser and any other browsers released prior to 2017. For such browsers, the HYBSE front-end may not function efficiently or may not function at all.





# Requirements

## User Interfaces

Any device with an updated operating system and any browser, IE10 or more, Firefox, Chrome, Safari, and Opera released on or after 2017.

## Hardware Interfaces

No particular hardware interface is required other than a computer, and its input devices (keyboard, mouse), mobile, tablet or any other device capable of running a web browser with HTML5 and CSS3.

## Software Interfaces

This section describes the product and other software interface characteristics, including component names and versions, databases, operating systems, libraries, tools, etc. It specifies any constraints, along with the nature of communications and what data is coming in and being disseminated.

The HYBSE uses two external applications, Google ReCaptcha and Google two factor authenticator (2FA).

## Communication Interfaces

The following email providers are used to communicate with the user:

- SMTP
- MAILGUN
- AWS

Types of communication with the user containing crucial account updates:

1. Email with activation link
2. Email with forgotten password link
3. Email with Email ID change request

Other generic emails include activation confirmation, password change confirmation, email change confirmation and issuers account completion requirements.





# Additional Non-functional Requirements

## Performance

The HYBSE system, consisting of the HYBSE platform, HYBSE front-end, and HYBSE administration, has been tested with various concurrent real users and performs without any noticeable issues. However, a series of test cases and load testing is underway, and this section will be updated with the result data in the future.

## Safety

The main server has to be backed up in a slave server for every database change. In case of main server failure, the database is backed up into the slave server where all transactions and user financial details can be retrieved. No data will be lost in case of any failure.

This web application does not require specific safety measures to be followed before using the application, nor will it cause any harm to users.

## Security

Security is of the utmost concern for the HYBSE platform. Beside hardware security, the HYBSE platform has implemented many security measures within itself. The HYBSE has an in-built custom firewall which monitors all incoming traffic, utilising a whitelist/blacklist table to prevent intrusion attempts. A series of algorithms are used to analyse traffic in real time to take necessary measures to prevent any breach to the system. The HYBSE platform also has different key-based authentication systems for different user levels to ensure access to the HYBSE system is legitimate. However, the HYBSE platform, as a deployed software, uses a number of underlying system services that cannot deal with DoS/DDoS or any similar break-in attempt which can only be prevented at OS or hardware level. To deal with DoS/DDoS or any similar break-in attempts, the system is surrounded by a custom Cloudflare setup.

## Software Quality

1. Seamless interactions with the NEM network to read the deposits and withdrawals.
2. Demo trading feature is given to all users to familiarise themselves with the HYBSE trading. This is crucial for new users, and ensures that no real money will be used for demo trading.
3. Since front-end and back-end are completely decoupled, developing another interface is easily achieved by APIs communication. Front-end and back-end are independent.





# Appendices

## Appendix A: Glossary of Terms

– Hybrid Stock Exchange - The HYBSE  
No project-specific acronyms are used in this document.

## Appendix B: Analysis Documentation

List file/document names/provided links to all diagrams, models, additional findings pertinent to technical specification development.

## Appendix C: Issues

Things to be done by BSI

- Messaging facility for user and admin
- Define access level control for different users
- Conditional trading
- Web socket for live updates for information on the HYBSE
- Cache tables for reducing the load on server. Information on front end will be shown from cache table
- Code optimisation
- Setting up master and slave server setup
- To increase speed of trade matching an application should be developed for distributing the order matching task across different nodes







MAST

ANNEXURE D

Ecosystem  
Development Roadmap



# Table of Contents

HYBSE	173
DGX Processors	176
Exchange Implementations	179
Other Projects	180
DIM X	182
Websites	183
Other Projects	184
New Blockchain (NBC Replacement for NEM)	185





# HYBSE

## Q1. 2019

### Release HYBSE v2

Action: Preparing and Testing the HYBSE Plattform for Release. Final “brush-ups” of the interface and detailed functionality test of the system.

Development: HYBSE v2

Estimated effort: 9 FTE\*

### Broker Function

Action: Trader accounts are linked to the Broker account, and the traders can use leveraged funds. The leveraged fund settles according to the configured period. Also, brokers may use their front-end to let traders trade from their terminal. Traders registered with the broker may be restricted to trader front-end. Brokers may configure brokerage fees that are calculated for trades, on top of regular HYBSE trading fee.

Development: New Broker Module

Estimated effort: 4 FTE\*

### Upgrade Backend Interface and Functions

Action: Upgrade the backend interface to represent operator functionality, structured rights management and a smooth and efficient to use interface.

Development: Create an easy to use functional complete backend user interface

Estimated effort: 4 FTE\*

## Q2. 2019

### Conditional Trading Logic

Action: Traders can apply complex trading logic (condition based) which is automatically executing trades when meeting the given conditions.

Development: Extending trade matching module

Estimated effort: 2 FTE\*

### Social Media - Friend System

Action: Users can make social media friends within HYBSE.

Development: New Social Media Module

Estimated effort: 2 FTE\*

\* Full Time Equivalent man months





### Social Media - Message Wall

Action:	Users may engage in social media communication within HYBSE. Everyday social media activities like the post of message or media, like on a post, comment on a post is possible
Development:	New Social Media Module
Estimated effort:	2 FTE*

### Mobile App

Action:	HYBSE mobile app for users which allows for trading or wallet functionality.
Development:	New Android and iOS app
Estimated effort:	4 FTE*

## Q3. 2019

### Social Trading

Action:	Traders will be able to follow a fellow trader. They can see the trading activity of the trader(s) they have selected to follow. The auto-trade following function is automatically executing the followed fellow traders trades if configured.
Development:	New Social Trading Module
Estimated effort:	4 FTE*

### API v3 with FIX Protocol 1 of 2

Action:	Next version of HYBSE with the same functionality as v2 but in FIX protocol instead REST.
Development:	Partial rebuild of HYBSE API
Estimated effort:	8 FTE*

## Q4. 2019

### API v3 with FIX Protocol 2 of 2

Action:	Next version of HYBSE with the same functionality as v2 but in FIX protocol instead REST.
Development:	Partial rebuild of HYBSE API
Estimated effort:	4 FTE*

### Trading Engine 1 of 3

Action:	Trading Engine decoupled from HYBSE API. Queue based multi-nodal trading engine for faster throughput and with high data integrity.
Development:	New project separate from HYBSE API but part of HYBSE platform
Estimated effort:	8 FTE*

\* Full Time Equivalent man months





## Q1. 2020 (Q5)

### Trading Engine 2 of 3

- Action: Trading Engine decoupled from HYBSE API. Queue based multi-nodal trading engine for faster throughput and with high data integrity.
- Development: Continued development of the new project separate from HYBSE API but part of HYBSE platform
- Estimated effort: 12 FTE\*

## Q2. 2020 (Q6)

### 1.6.1 Trading Engine 3 of 3

- Action: Trading Engine decoupled from HYBSE API. Queue based multi-nodal trading engine for faster throughput and with high data integrity.
- Development: Continued development of the new project separate from HYBSE API but part of HYBSE platform
- Estimated effort: 4 FTE\*

### All surveillance & Anti-fraudulent Engine 1 of 3

- Action: Analytic engine developed using Machine Learning, Deep Learning, and Artificial Intelligence to detect fraudulent, intrusion, phishing activity for user accounts including surveillance, user access, wallet activity and trading activity utilizing predictive behavioral analysis as well.
- Development: New project separate from HYBSE API but part of HYBSE platform
- Estimated effort: 12 FTE\*

## Q3. 2020 (Q7)

### Trade Feeds

- Action: Provide Trade feeds for chart providers and financial news providers in adjustable density
- Development: Develop a trade feed interface in adjustable density and provided in the standard structure for the financial industry
- Estimated effort: 4 FTE\*

### All Surveillance & Anti-fraudulent Engine 2 of 3

- Action: Analytic engine developed using Machine Learning, Deep Learning, and Artificial Intelligence to detect fraudulent, intrusion, phishing activity for user accounts including surveillance, user access, wallet activity and trading activity utilizing predictive behavioral analysis as well.
- Development: Continued development of new project separate from HYBSE API but part of HYBSE platform
- Estimated effort: 12 FTE\*

\* Full Time Equivalent man months





## Q4. 2020 (Q8)

### All surveillance & Anti-fraudulent Engine 3 of 3

Action:	Analytic engine developed using Machine Learning, Deep Learning, and Artificial Intelligence to detect fraudulent, intrusion, phishing activity for user accounts including surveillance, user access, wallet activity and trading activity utilizing predictive behavioral analysis as well.
Development:	Continued development of new project separate from HYBSE API but part of HYBSE platform
Estimated effort:	12 FTE*

## DGX processors

### Q1. 2019

#### DGX Local Instance Processor v1

Action:	Final functionality implementation and “brush-ups”. Intensive testing. Deployment of KMS.
Development:	DGX local Processor
Estimated effort:	8 FTE*

#### Multi-signature Account

Action:	Parent-Child account system where a transaction initiated by a child requires approval by configured siblings.
Development:	New multi-signature module
Estimated effort:	2 FTE*

#### DEAN SA System Compliance

Action:	System to comply with DEAN SA to exchange/payout of the student/scholarship tokens.
Development:	Extending the exchange module
Estimated effort:	1 FTE*

#### Admin Interface 1 of 2

Action:	Development of complete single country admin interface.
Development:	Fixing/Extending admin module
Estimated effort:	6 FTE*

\* Full Time Equivalent man months





## Q2. 2019

### Admin Interface 2 of 2

Action: Development of complete single country admin interface.  
Development: Continued development of fixing/extending admin module  
Estimated effort: 6 FTE\*

### POS Integration

Action: Point-of-Sale integration to enable a merchant to accept payment and enable a user to make payments at a shop using DIM currency  
Development: New POS Module  
Estimated effort: 2 FTE\*

### POS Integration – App 1 of 2

Action: App for POS system and mobile to accept and pay.  
Development: Extending current android app  
Estimated effort: 8 FTE\*

## Q3. 2019

### POS Integration – App 2 of 2

Action: App for POS system and mobile to accept and pay.  
Development: Continued development of POS integration for POS systems  
Estimated effort: 8 FTE\*

### iOS App

Action: Mobile app for iOS.  
Development: New project to develop iOS app  
Estimated effort: 4FTE\*

## Q4. 2019

### Master Admin 1 of 2

Action: Development of master admin (global) for all local admin.  
Development: New global admin module (Global Processor Backend)  
Estimated effort: 10 FTE\*

\* Full Time Equivalent man months





**Q1. 2020 (Q5)**

**Master Admin 2 of 2**

Action: Development of master admin (global) for all local admin.  
 Development: Continued development of the new global admin module  
 Estimated effort: 6 FTE\*

**Q2. 2020 (Q6)**

**All surveillance & Anti-fraudulent Engine 1 of 3**

Action: Analytic engine developed using Machine Learning, Deep Learning, and Artificial Intelligence to detect fraudulent, intrusion, phishing activity for user accounts including user access and all financial activities utilizing predictive behavioral analysis as well.  
 Development: New project but part of Micrypto  
 Estimated effort: 4 FTE\* (linked to HYBSE)

**Q3. 2020 (Q7)**

**All surveillance & Anti-fraudulent Engine 2 of 3**

Action: Analytic engine developed using Machine Learning, Deep Learning, and Artificial Intelligence to detect fraudulent, intrusion, phishing activity for user accounts including user access and all financial activities utilizing predictive behavioral analysis as well.  
 Development: Continued development of the new project but part of Micrypto  
 Estimated effort: 4 FTE\* (linked to HYBSE)

**Q4. 2020 (Q8)**

**All Surveillance & Anti-fraudulent Engine 3 of 3**

Action: Analytic engine developed using Machine Learning, Deep Learning, and Artificial Intelligence to detect fraudulent, intrusion, phishing activity for user accounts including user access and all financial activities utilizing predictive behavioral analysis as well.  
 Development: Continued development of the new project but part of Micrypto  
 Estimated effort: 4 FTE\* (linked to HYBSE)

\* Full Time Equivalent man months



# Exchange Implementations

## Q2. 2019

### Currency Exchange

Action: Crypto Currency trading exchange.  
Development: New project based on HYBSE code base  
Estimated effort: 5 FTE\*

## Q3. 2019

### Commodity Exchange

Action: Commodity trading exchange.  
Development: New project based on HYBSE code base  
Estimated effort: 6 FTE\*

## Q4. 2019

### Art Exchange

Action: Art exchange to trade tokenized arts.  
Development: New project based on HYBSE code base  
Estimated effort: 10 FTE\*

## Q1. 2020 (Q5)

### Mobile App for Currency Exchange

Action: Development of mobile app for cryptocurrency exchange.  
Development: New project to develop Android and iOS app  
Estimated effort: 6 FTE\*

### Mobile App for Commodity Exchange

Action: Development of mobile app for commodity exchange.  
Development: New project to develop Android and iOS app  
Estimated effort: 6 FTE\*

## Q2. 2020 (Q6)

### Mobile App for Art Exchange

Action: Development of mobile app for commodity exchange.  
Development: New project to develop Android and iOS app  
Estimated effort: 6 FTE\*

\* Full Time Equivalent man months





## Other Projects

### Q1. 2019

#### MAST Frontend Development and Backend oversight

Action: Development of MAST Website & connection to HYBSE.  
 Development: MAST  
 Estimated effort: 6 FTE\*

## Wallets (unconnected)

### Q1. 2019

#### DEPOTWALLET Voting

Action: Implement, and Bug Fix the DIM Voting function in DepotWallet. Implement Integration of Mosaic symbols for MAST and DIM Currencies  
 Development: DEPOTWALLET  
 Estimated effort: 1 FTE\*

### Q2. 2019

#### DEPOTWALLET Multi-Signature

Action: Integration of Multi-signature.  
 Development: DEPOTWALLET  
 Estimated effort: 1 FTE\*

#### DIMPAY APP Multi-Signature

Action: Integration of multi-signature.  
 Development: DIMPAY  
 Estimated effort: 1 FTE\*

### Q3. 2019

#### DIM Wallet APP IOS Version

Action: Develop an IOS APP mirroring all the functionalities of the Android App.  
 Development: DIMWALLET  
 Estimated effort: 4 FTE\*

\* Full Time Equivalent man months





## DIMPAY APP IOS Version

Action: Use the IOS APP of DIMWALLET and integrate the additional DIMPAY functions. (APP is mirroring all the functionalities of the Android App).

Development: DIMPAY

Estimated effort: 2 FTE\*

## Q4. 2019

### DIM Wallet APP Voting

Action: Implement and BugFix the DIM Voting function in DEPOTWALLET.  
Implement Integration of Mosaic symbols for MAST and DIM Currencies

Development: DIMWALLET

Estimated effort: 1 FTE\*

### DIM Wallet APP Merchant Search

Action: Develop an interface and a process to allow users to generate their language pack and make it available to other users (i.e., Keypass language files).

Development: DIMWALLET

Estimated effort: 2 FTE\*

### DIM Wallet APP Language Packs

Action: Develop an interface and a process to allow users to generate their language pack and make it available to other users (i.e., Keypass language files).

Development: DIMWALLET

Estimated effort: 2 FTE\*

### DIMPAY APP Language Packs

Action: Integrate the interface and the process to allow users to generate their language pack and make it available to other users (like DIMWALLET).

Development: DIMPAY

Estimated effort: 1 FTE\*

### DEPOTWALLET Language Packs

Action: Develop an Interface for User-generated language Packs (i.e., Keypass).

Development: DEPOTWALLET

Estimated effort: 2 FTE\*

\* Full Time Equivalent man months





## DIM X

### Q1. 2019

#### DIM X Responsive Mobile Front End

Action: Adjust the DIM X Website to support a positive consumer experience when accessing the site via a mobile phone.

Development: DIMX

Estimated effort: 1 FTE\*

### Q2. 2019

#### DIM X Operational Admin Backend

Action: Enhance the existing backend to allow for easy adjustment of Fees, spread, etc. Enhance the KYC and provide an easy management overview section in the backend. Implement rights management to allow for particular function based access.

Development: DIMX

Estimated effort: 2 FTE\*

#### Implement KMS-Technology

Action: Upgrade DIMX to company standard security and implement KMS. At the same time connect to the in-house exchange rate API for exchange rates.

Development: DIMX

Estimated effort: 2 FTE\*

### Q2. 2020 (Q6)

#### Connect the DIM X Backend to the DGX Global Processor

Action: Connect DIMX to the DGX global processor to allow for seamless monitoring and management of the Dim-currency changing implementations.

Development: DIMX

Estimated effort: 2 FTE\*

\* Full Time Equivalent man months





# Websites

## Q1. 2019

### IBIN Redesign

Action: Implement redesign according to design requirements  
Development: IBIN  
Estimated effort: 1 FTE\*

### IBIN API to Support Retrievals

Action: Provide an API to retrieve company information and IBIN numbers through structured requests  
Development: IBIN  
Estimated effort: 2 FTE\*

## Q3. 2019

### DIMPAY Website Geoinformation

Action: Update the DIMPAY Website and include support to add structured geographical location information like to include in Google maps or search. Make website "Google friendly" to enable consumers to find DIM accepting Merchants.  
Development: DIMPAY Website  
Estimated effort: 2 FTE\*

### DIMPAY Provide API to Create and Update Merchants

Action: Provide an API to create and update merchants including geographical information. Geo-tag Merchants to find a shop functional by the offer and by distance.  
Development: DIMPAY Website  
Estimated effort: 3 FTE\*

## Q4. 2019

### DIM Explorer Stability Enhancements

Action: Update the DIM Explorer to reach a 99,9% availability measured over 30 days.  
Development: DIMEXPLORER  
Estimated effort: 2 FTE\*

\* Full Time Equivalent man months





## Q1. 2020 (Q5)

### DIM Explorer Consumer User interface

Action: Design, Test and implement a consumer interface which enables the not technical consumer to make use of the functions. The consumer interface shall reflect the functionality today and provide connected functions like follow the transaction

Development: DIMEXPLORER

Estimated effort: 4 FTE\*

### DIM Explorer Connect to Exchange Rates API

Action: Connect DimExplorer to our Exchange Rate API to provide value of transaction information.

Development: DIMEXPLORER

Estimated effort: 1 FTE\*

### Information Websites (DIMCOIN, DIM Foundation, and others)

Action: Select a content editing system, transfer Websites to the selected system and preserve the design. The platform needs to support user self-content editing, approval and user rights management

Development: Content Websites

Estimated effort: 4 FTE\*

### Deploy Advanced Web Statistics on all Sites

Action: Deploy usage statistics on all Websites and provide a Dashboard for management to see users, time, repetitiveness and other relevant information.

Development: Content Websites

Estimated effort: 2 FTE\*

## Other Projects

### Q1. 2018

#### General DIM Service Availability Monitoring Solution

Action: Provide a Solution to monitor service availability with active automatic escalation procedures based on r severity of degradation and importance of service

Development: Service management

Estimated effort: 4 FTE\*

\* Full Time Equivalent man months



## New Blockchain (NBC replacement for NEM)

The project is not staffed as of now.

### Q3. 2019

#### NBC Analysis and Final Decision Preparation

Action: Provide detailed technical analysis of the pros/cons and risks for each potential choice for the NBC. An initial list of choices will be provided by management. Provide a report with a technical recommendation and justification.

Development: NBC

Estimated effort: 2 FTE\*

### Q4. 2019

#### NBC Preparation and Planning

Action: Provide detailed technical analysis of the pros/cons and risks for each potential choice for the NBC. Management will provide an initial list of choices. Provide a report with a technical recommendation and justification.

Development: NBC

Estimated effort: 2 FTE\*

### Q1. 2020 (Q5)

#### NBC Lab Testing

Action: Plan, prepare and install a complete Lab test environment for the selected NBC. Take into consideration the specific requirements for speed, fast confirmation, levy less operation and provide a solution for transferring wallet content as well.

Development: NBC

Estimated effort: 6 FTE\*

#### NBC Conceptualize, Describe and Develop the Transfer Plan

Action: Conceptualize, describe and develop a plan on the transfer from the technical standpoint. Prepare a detailed description and plan for the transfer

Development: NBC

Estimated effort: 1 FTE\*

\* Full Time Equivalent man months





## Q2. 2020 (Q6)

### NBC Build a Staging Network with Nodes

Action: Build a full staging Network with Nodes and all other required functions on TESTNET. Identify deficiencies and identify necessary changes to the software, nodes, etc. Test the transfer and operational processes on the staging network.

Development: NBC

Estimated effort: 10 FTE\*

## Q3. 2020 (Q7)

### NBC Test and Optimize performance with DIM NETWORK 1 of 2

Action: Build a full staging Network with Nodes and all other required functions on TESTNET. Identify deficiencies and identify necessary changes to the software, nodes, etc. Test the transfer and operational processes on the staging network. Make the identified software adjustments

Development: NBC

Estimated effort: 20 FTE\*

## Q4. 2020 (Q8)

### NBC Test and Optimize Performance with DIM Network 2 of 2

Action: Test and optimize NBC performance from the software/node perspective as well as from the network layer. Utilize performance booster possibilities on the software side as well as on the network side through i. e. traffic shaping.

Development: NBC

Estimated effort: 20 FTE\*

### NBC Finalise the Detailed Transfer Timeline for Real Net Operation

Action: Develop a detailed timeline for node rollout and implementation to support a full real NBC Network operation

Development: NBC

Estimated effort: 2 FTE\*

## Q1. 2021 (Q9)

### NBC Execute the Implementation Plan for the Live NBC

Action: Execute the rollout, provide node installation support unexpected fixing, etc.

Development: NBC

Estimated effort: 30 FTE\*

\* Full Time Equivalent man months





MAST

ANNEXURE E

Convertible Bonds

# Convertible Bonds

MAST WILL NOT OFFER A MEMORANDUM AND/OR PROSPECTUS. IT WILL BE PUBLISHED IN CONNECTION WITH THE OFFERING OF THIS MAST BOND.

Citizens, nationals, residents (tax or otherwise) and/or green card holders of each of the following countries are not accepted; citizens of the United States, Algeria, Austria, Bolivia, Vietnam, Indonesia, Kyrgyzstan, Lebanon, Morocco, Namibia, Nepal, Pakistan, Ecuador, Myanmar, Ivory Coast, Cuba, Iran, South Korea, Syria, Japan, Australia, Singapore, China, Bahamas, Botswana, Ethiopia, Ghana, Serbia, Sri Lanka, Trinidad, Tobago, Democratic People’s Republic of Korea (DPRK), Tunisia and Yemen or any other jurisdictions which prohibit the possession, dissemination or communication of similar information and/or prohibits participation in token sales or the purchase of tokens or any such similar activity or any other restricted persons, are not permitted to participate in the token sale. Under no circumstances shall the company or any current or former company representatives be liable for excluded liability matters. Furthermore, nations under the high risk and monitored jurisdictions are also excluded to participate in the token sale.

This document presents the summary of the terms and conditions of converting bonds (the “Bonds”) into DIGITAL Mosaics listed on the HYBSE Marketplace. The information herein reflects the current conditions of the Bonds at this time of communication. The Bonds will not be issued digitally only on the basis and final terms and conditions that are expected to release the convertible mosaics to participants before trade date on the HYBSE Marketplace. Before making any investment decisions and/or entering into any transactions relating to this Bond, participants must ensure that he/she understands the operation and has made an independent assessment to ensure that the process is suitable for his/her objectives. The participant must ensure that he/she has a thorough understanding of MAST BOND before making an investment.

### Term Sheet

Currency	US\$500Million in senior digital Bonds will be converted into digital Mosaics and listed on the HYBSE Marketplace in 2019.
Issuer	MAST Bond “the issuer”, a public company incorporated under the laws of Lesotho.
Securities Offered	MAST Bonds “the bonds” converted into both new and existing Mosaics and listed on the HYBSE Marketplace of the Issuer MINDEX IBIN: MU5233924270B, GMEX IBIN: MU8196879850B, HYBSE MARKETPLACE IBIN: MU2412075530B
Denomination	US\$50 “the principle amount”
Issue Size	US\$50Million

### Term Sheet

Status of Bonds	The Bond will constitute a direct and unconditional digitally secured obligation of the bond issuer.
Form	Registered
Rating	The Bonds will not be rated. The Issuer is not rated.
Launch Date	18 February 2019
Pricing Date	18 February 2019
Closing Date	31 April 2019
Final Maturity Date	18 June 2024 (5 years)
Issue Price	100% of the principal amount
Redemption Price	100% of the principal amount in cash
Coupon	3% per annum is payable bi-annually and in arrears in equal installments on the 30th of July and 30th January of each year, commencing on the 30th July 2019.
Conversion Costs	1,5% above the reference price
Reference Price	US\$50 "VWAP" (The volume weighted average price) of the mosaics between an opening of trading and the date of launch and pricing.
Initial conversion price	Each purchase of one bond offers the conversion per US\$50 per package reserved on the MAST public bond offering.
Conversion rights	Unless previously redeemed, or purchased and cancelled, each Bond will be converted at the discretion of the Bondholder during the conversion period where digital assets will be traded.
Tax	Tax on gross – subject to exceptions. Issuer tax call (with Bondholders' right to elect to retain bonds and receive net payments).

**Term Sheet**

Change of Control	<p>Shall occur, if utilising a Tender Offer or otherwise, if:</p> <ul style="list-style-type: none"> <li>i) Any person/persons acting together acquire control of the issuer</li> <li>ii) In aggregate more than 61% of the voting rights in respect of the issuer are acquired or controlled by an accepted person/persons (whether acting together or not) and any person/persons working jointly with an accepted person.</li> </ul> <p>“Control” means:</p> <ul style="list-style-type: none"> <li>a) The acquisition or control of more than 50% of the voting rights in respect of the issuer to</li> <li>b) The right to appoint and/or remove all, or the majority of the members of the Issuer’s board of directors or another governing body, whether obtained directly or indirectly, and whether obtained by ownership of share capital, the possession of voting rights in respect of the issuer or otherwise.</li> </ul>
Bondholder Put/Option	The Bonds may not be redeemed by Bondholders at the Principal amount. The short holding period is not permitted during administration.
Dividend Protection	There is no dividend entitlement before the delivery of Digital Asset upon exercise of conversion rights.
Event of Default	Yes, in response of the Issuer and Issuer’s Principal subsidiaries, as set out in detail in the terms and conditions.
Lock Up	During the MAST offering, there are different lock periods which can be viewed on the website, <a href="http://www.mast.eco">www.mast.eco</a> .
Governing Law	Lesotho
Listing	The Bonds are not admitted to a list due to short holding periods of the conversion of digital assets on the HYBSE Marketplace.
Use of Proceeds	General corporate purposes including extending the debt maturity profile, reducing the average cost of debt, enhancing liquidity and diversifying the Issuer’s source of funding.
Selling Restrictions	<p>Under the jurisdiction of Lesotho.</p> <p>No offers or sales into the United States, Canada, Australia, Japan, Spain or any other jurisdiction in which offers or sales would be prohibited by applicable law.</p> <p>Standard selling restrictions apply elsewhere.</p>

Term Sheet	
Settlement	HYBSE software clearing solutions.
Sole Global Coordinator	MAST Group
Security Codes	IBIN
Principal Paying, Transfer and Conversion agent	HYBSE software clearing solutions
Surveillance	GMEX

## Risk for the Investor

An investment in the bonds includes a significant degree of risk in making any decision to purchase the bonds, an investor will be deemed (a) to have such business and financial experience as is required to give it the capacity to protect its interests in connection with the purchase of the bonds, (b) not to have relied on (i) any investigation that the sole global coordinator and the joint (together, the “managers”) or any of their respective affiliates, or any person acting on behalf of the managers or any of their respective affiliates, may have conducted with respect to the issuer or the bonds, or (ii) any discussions, negotiations or other communications entered into with, or any other written or oral information made available by any of the managers or their respective officers, employees or agents (c) to have made its own investment decision regarding the bonds based on its own knowledge, investigation and assessment of the issuer, its subsidiaries, the terms of the bonds and the terms of the placement of the bonds.

This document is directed exclusively at the market of Lesotho and is for information purposes only and is not to be relied upon in substitution for the exercise of independent judgment. It is not intended as investment advice and under no circumstances is it to be used or considered as an offer to sell, or a solicitation of an offer to buy any security nor is it a recommendation to buy or sell any security. However, the issuer has taken all reasonable care to ensure that the facts stated in this document are true and accurate in all material respects and accepts responsibility for such statements.

Any decision to purchase any of the bonds should only be made by an independent review by a prospective investor of the issuer’s publicly available information. Neither the managers nor any of their respective affiliates accept any liability arising from the use of, or make any representation as to the accuracy or completeness of this term sheet or the issuer’s publicly available information. The information contained in this term sheet is subject to change in its entirety without notice.

This document is not for distribution, directly or indirectly in or into the United States. This document is not an offer to sell securities or the solicitation of any offer to buy securities, nor shall there be any offer

of securities in any jurisdiction in which such offer or sale would be unlawful. The securities mentioned in this document have not been and will not be registered in the United States under the US Securities Act of 1933, as amended (the “US Securities Act”), and may not be offered or sold in the United States, absent registration or exemption from registration under the US securities act. There will be no public offer of the securities in the United States or any other jurisdiction of the United States.

Each person receiving this document should consult his/her professional advisor to ascertain the suitability of the bonds as an investment. For the avoidance of doubt, neither the issuer nor the managers make any representation or warranty that they intend to accept or be bound by any of the terms herein nor shall the issuer or the managers be obliged to enter into any further discussions or negotiations pursuant hereto, but they shall be entitled in their absolute discretion to act in any way that they see fit in connection with the proposed transaction. Any discussions, negotiations or other communications that may be entered into, whether in connection with the terms set out herein or otherwise, shall be conducted subject to contract. no representation or warranty, express or implied, is or will be made as to, or in relation to, and no responsibility or liability is or will be accepted by the managers or by any of their respective officers, employees or agents as to or in relation to the accuracy or completeness of this document, or any other written or oral information made available to any interested party or its advisors and any liability therefor is hereby expressly disclaimed.

All copies of this document are not being, and must not be, mailed, or otherwise forwarded, distributed or sent in, into or from the United States or any other jurisdiction in which such mailing would be illegal, or to publications with a general circulation in those jurisdictions, and persons receiving this document (including custodians, nominees, and trustees) must not mail or otherwise forward, distribute or send it in, into or from the United States or any other jurisdiction in which such mailing would be illegal or to publications with a general circulation in those jurisdictions.

In connection with the offering of the bonds, the managers and any of their respective affiliates acting as an investor for its account may take up bonds and in that capacity may retain, purchase or sell for its own account the bonds and any securities of the issuer or related investments, and may offer or sell the bonds or other investments otherwise than in connection with the offering of the bonds.

Each prospective investor should proceed on the assumption that it must bear the economic risk of an investment in the bonds. Neither the issuer nor the managers make any representation as to (i) the suitability of the bonds for any particular investor, (ii) the appropriate accounting treatment and potential tax consequences of investing in the bonds or (iii) the future performance of the bonds either in absolute terms or relative to competing investments.

In connection with the offering, the managers or their respective affiliates may, for their account, enter into asset swaps, credit derivatives or other derivative transactions relating to the bonds and the shares at the same time as the offer and sale of the bonds or in secondary market transactions. The managers or any of their respective affiliates may from time to time hold long or short positions in or buy and sell such securities or derivatives or the underlying shares. No disclosure will be made of any such positions.



The managers are acting on behalf of the issuer and no one else in connection with the bonds and will not be responsible to any other person for providing the protections afforded to clients of the managers or for providing advice concerning the bonds.

The managers and their respective subsidiaries and affiliates may perform services for or solicit business from the issuer and members of the issuer's group, may make markets in the securities of such persons and have a position or effect transactions in such securities.

Any allocation of the bonds described in this document is made expressly subject to the condition that any offering of the bonds completes and that the bonds are issued. In particular, it should be noted that any such offering and formal documentation relating to it will be subject to conditions precedent and termination events, including those which are customary for such an offering. Any such offering will not be complete unless such conditions precedent complete, and any such termination events have not taken place or the failure to fulfill such a condition precedent, or the occurrence of a termination event has been waived, if applicable. The managers reserve the right to exercise or refrain from exercising their rights concerning the fulfillment or otherwise of any such condition precedent or the occurrence of any termination event in such manner as they may determine in their absolute discretion.

The issuer has taken no action, the managers or any of their respective affiliates that would permit an offering of the bonds or possession or distribution of this document or any offering or publicity material relating to the bonds in any jurisdiction where action for that purpose is required. The issuer requires persons into whose possession this document comes and the managers to inform themselves about and to observe any such restrictions.

If you are in any doubt about the contents of this document you should consult your stockbroker, bank manager, solicitor, accountant or other financial adviser. It should be remembered that the price of securities, and the income from them can go down as well as up.

The issuer and the managers and others will rely upon the truth and accuracy of the preceding representations, acknowledgements, and agreements. Notwithstanding the above, a person who is not a qualified investor and who has notified the managers of such fact in writing may, with the written consent of the managers, be permitted to purchase bonds.

In connection with the issue of the bonds the stabilising manager or any person acting on behalf of the stabilising manager may over-allot bonds or effect transactions supporting the market price of the bonds at a level higher than that which might otherwise prevail. However, there is no assurance that the stabilising manager (or any persons acting on behalf of the stabilising manager) will undertake stabilisation action. Any stabilisation action may begin on or after the date on which public disclosure of the final terms of the offer of the bonds made and, if begun, may end at any time, but it shall not end later than 30 days after the date of first issue and 60 days after the date of the allotment of the bonds.





MAST

ANNEXURE F

Glossary

## Glossary

**Anti-Money Laundering (AML)** - a set of procedures, laws and regulations designed to prevent the practice of generating income through illegal actions.

**Application Programming Interface (API)** - a set of functions, protocols, tools and procedures for creating software.

**Asset Token Offering (ATO)** - An initial offering of digital asset tokens to institutions.

**Blockchain** - distributed database of records or public ledger of all transactions or digital events that have been executed.

**Blockshares** - cryptonized shares of a hybridized business.

**Consensus mechanism** - a process of solving computational challenges for confirming transactions or creating blocks.

**Cryptography** - secure communication and protocols that prevent third parties from tampering with the information.

**Crypto-data** - securitised data.

**Cryptonization** - the process of dematerialisation products and services onto the blockchain.

**Connected wallet** - store DIM Currencies, local currencies, crypto currencies and country-specific user group mosaics.

**Decentralisation** - the process of removing the activities of an organisation, in particular planning and decision making, away from a central authoritative group or location.

**DEPOTWALLET** - a blockchain wallet that manages and holds cryptocurrencies and cryptonized-equities.

**DGX master processor** - is a technical solution to ensure stability and value backing of DIM Currencies distributed in the DGX Local Instance Processors.

**Data Interchange Module (DIM)** - an umbrella name for cryptocurrencies, products and services that bear the DIM namespace.

**DIM Ambassador** - a brand advocate that assists in building the growth of the DIM Ecosystem's global community, by connecting potential users and empowering existing participants.

**DIMCOIN** - speculative digital coin/ speculative cryptocurrency.

**DIM Currencies** - digital currencies used as a medium of exchange in the DIM Ecosystem and for e-commerce purchases.

**DIM Ecosystem (DIM-E)** - a community of services that utilises the DIM cryptocurrencies as a medium of exchange.

**DIM Foundation** - a non-profit organization that is responsible for the marketing, public relations, customer care and oversight of the DIM brands (DIMCOIN, DIM Currencies, DIM Cryptocurrencies and future DIM denominated coins).

**DIM-E Global Exchange (DGX)** - an online software provider which facilitates the exchange and management of currencies and reserves in the DIM-E.



**DIM Node Tokens (DNT)** - cryptocurrency built on a new blockchain or network called the DIM Node Network intended to underpin the DIM-E.

**DIMPAY** - a decentralised global payment system that is cost-effective, transparent and fully secured.

**DIMWALLET** - a mobile version of DEPOTWALLET, which permits users to manage various cryptocurrencies together with cryptonized-equities.

**DIMPAY Foundation** - manages and governs the brand and marketing related to DIM products and services including the DIM-E.

**DIM Government** - serves as the global head of the DIM Ecosystem and maintains businesses by regulating, enacting and changing policies within the ecosystem.

**DIM Crypto-Federal-Assembly** - an assembly which comprises of supreme representatives of the entire DIM-E and consists of two chambers who oversee all legislative projects.

**DIM Token** - a package representing a number of DIMCOIN during ICO rounds.

**DIM Node token** - servers on the network that are run by users, process the blockchain and caches some data in memory to improve online performance.

**DIM pay-out** - a decentralised autonomous organisation (DAO).

**DIM Promoters** - establish connections and relationships on an international scale by promoting the DIM Ecosystem and its products and services.

**DIM Ticket** - a utility within the DIM-Ecosystem that adds a multi-facet level of opportunities to participate with in the ecosystem.

**DIM X** - a platform for converting different cryptocurrencies into Data Interchange Module (DIM) Cryptocurrencies and DIM Currencies.

**Exchange traded commodities (ETC)** - a platform which grants traders and participants exposure to commodities in the form of shares.

**Fee stamp** - charges associated with the DEPOTWALLET.

**GMEX Fusion** - a Hybrid Centralised and Blockchain Ledger technology solution.

**GMEX Group** - a set of companies that offer sustainable and innovative solutions for a new era of global financial markets.

**GMEX Investments** - enables selective seed and early-stage strategic equity and token investments into post-trade market infrastructure and related FinTech companies such as MINDEX.

**GMEX market advancement programmes (MAP)** - works with the exchange to create a strategic vision for the marketplace.

**GMEX Technologies** - providers of multi-asset exchange trading and post-trade technology through a unique partnership.

**Hybridization** - the process of replicating and integrating real businesses onto the blockchain.

**Hybrid Stock Exchange (HYBSE)** - an online digital cryptonized-equity exchange.

**HYBSE Marketplace Limited** - a holding company of separate subsidiary companies, with related but distinct products, services, markets and opportunities.

**International blockshare identification number (IBIN)** - an identification number for equities that seek to be registered on blockchain based exchanges.

**Initial Blockshare Offering (IBO)** - the first sale of blockshares issued by a business participating on an online digital cryptonized-equity exchange.

**Initial Public Offering (IPO)** - The process where privately held businesses open up to the public by offering stocks, allowing them to purchase a share of the business and trade on stock exchanges.

**Initial Coin Offering (ICO)** - a crowdfunding initiative to raise funds for blockchain based products.

**JavaScript Object Notation (JSON)** - a lightweight data-interchange format that uses human-readable text to transmit data.

**Know Your Customer (KYC)** - a process of verifying the identity of consumers and assessing potential risks of illegal intentions for the ecosystem relations.

**Local processor solutions (LPS)** - country-specific solutions to support a particular implementation in connection with the DGX Local Instance Processor.

**Lock-blockshares (of IBO)** - cryptonized-equities which are untradeable for a certain time period until after a specified published launch date.

**Micro credit model** - a collaborative partnership aimed at providing sponsorships to assist students in financing their studies, operating on the token system by tokenizing students' performance.

**Mosaics** - assets that are created using blockchain technology found on the NEM blockchain.

**MINDEX Holdings Limited** - The holding company for the MINDEX ecosystem.

**MINDEX Clearing Limited** - operates as the Central Counterparty (CCP) clearinghouse regulated by the Mauritius Financial Services Commission (FSC) to clear all trades executed on MINDEX Limited.

**MINDEX Limited** - operates a multi-asset Derivatives Exchange that regulate HYBRID HOLDINGS PVT LTD by the Mauritius Financial Services Commission (FSC).

**MINDEX Spot Limited** - The marketplace for the electronic trading of standardised physical and digital spot commodity contracts for gold, precious metals and other commodities.

**MINDEX Vault Limited** - The proposed secured storage depositary solution for gold and precious metal.

**MINDEX Refinery Limited** - the proposed world-class smelting, refining and recovery of gold and other precious metals to the highest standards.

**Multi-signature/multisig account** - an account that can be accessed by more than one user requiring multiple signatures.

**Multi-Asset Stable Token (MAST)** - a new multi-utility cryptonized token asset.



**Multi-Asset Stable Token Pack** - a token pack which consists of various MAST token risk packages designed for institutional participants.

**NEM Blockchain** - Distributed ledger technology platform.

**Proof of Importance (PoI)** - a blockchain consensus algorithm used on the NEM blockchain.

**Proof of Stake (PoS)** - an algorithm used by cryptocurrency blockchain network which aims to achieve distributed consensus.

**Nodes** - servers on the network that are run by users.

**Price-per-DIM Currencies** - the individual price of each DIM Currency.

**Remittance** - Transfer of funds, usually from a buyer to a distant seller, an instrument of transfer (such as a check or draft), or funds so transferred.

**Stable coins**- non-speculative digital currencies.

**Security token** - A token that is subjected to security regulations and can derive its value from an external, tradeable asset.

**Stand-alone wallets** - stores DIMCOIN, DIMTOKEN, Mosaics of Stocks, NEM and DIM Currencies.

**Super Equity pack (SEQ)** - is a customisable investment package.

**Token pack** - a package of GMEX, MINDEX and HYBSE tokens, which are blockshares (tokenized shares) of these respective companies on the blockchain.

**Unconfirmed transaction cache (UTC)** - a collection of transactions still to be validated.

**XEM** - a native peer-to-peer (P2P) cryptocurrency for the NEM blockchain.





MAST

ANNEXURE G

References



## References

- Ammous, S. (2018). *The Bitcoin Standard*. 1st ed. John Wiley & Sons.
- Anand, A. (2018). NEM [XEM] on its way to unlock advanced blockchain applications, says VP. [online] AMBCrypto. Available at: <https://ambcrypto.com/nem-xem-on-its-way-to-unlock-advanced-blockchain-applications-says-vp/>.
- Antonopoulos, A. (2017). *Mastering bitcoin*. Sebastopol, CA: O'Reilly Media, Inc.
- Antonopoulos, A. (2018). *The Internet of Money: Volume 1*. 1st ed. Createspace Independent Pub.
- Bhattacharjee, S. and Kaur, H. (2015). An Overview of Alternative Currency: The Bitcoin. *Indian Journal of Finance*, 9(6), p.51.
- Bitfury.com. (2015). Proof of Stake versus Proof of Work. [online] Available at: <https://bitfury.com/content/downloads/pos-vs-pow-1.0.2.pdf>.
- Cocco, L., Pinna, A. and Marchesi, M. (2017). Banking on Blockchain: Costs Savings Thanks to the Blockchain Technology. *Future Internet*, 9(3), p.25.
- Crosby, M., Nachiappan, M., Pattanayak, P., Verma, S. and Kalyanaraman, V. (2016). Blockchain Technology: Beyond Bitcoin. *Applied Innovation Review*, [online] 1(2), p.8. Available at: <http://scet.berkeley.edu/wp-content/uploads/BlockchainPaper.pdf>.
- Economides, N. (2001). The impact of the internet on financial markets. *Journal of Financial Transformation*, [online] 1(8). Available at: [http://www.stern.nyu.edu/networks/Economides\\_The\\_Impact\\_of\\_the\\_Internet\\_on\\_financial\\_markets.pdf](http://www.stern.nyu.edu/networks/Economides_The_Impact_of_the_Internet_on_financial_markets.pdf).
- Fanning, K. and Centers, D. (2016). Blockchain and Its Coming Impact on Financial Services. *Journal of Corporate Accounting & Finance*, 27(5), pp.53-57.
- Financial Action Task Force (2014). *Virtual Currencies Key Definitions and Potential AML/CFT Risks*. [online] Paris: FATF. Available at: <https://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf>.
- Financial Services Commission (2018). *Recognition of Digital Assets as an asset-class for investment by Sophisticated and Expert Investors*. Ebene, Mauritius.
- Financial Services Commission (2018). *Regulatory Framework for the Custodian Services (Digital Asset) License: Consultation Paper*. [online] Ebene, Mauritius. Available at: [https://www.fscmauritius.org/media/67493/consultation-paper-custody-of-digital-assets\\_final.pdf](https://www.fscmauritius.org/media/67493/consultation-paper-custody-of-digital-assets_final.pdf).
- FXCM, N. (2018). *New York Stock Exchange (NYSE) - FXCM*. [online] FXCM. Available at: <https://www.fxcm.com/insights/new-york-stock-exchange-nyse/>.
- Harper, C. (2018). *Making Sense of Proof of Work vs. Proof of Stake*. [online] CoinCentral. Available at: <https://coincentral.com/making-sense-of-proof-of-work-vs-proof-of-stake/>.
- Hur, J. (2016). *History of The Stock Market*. [online] Businessed. Available at: <https://bebusinessed.com/history/history-of-the-stock-market/>.





- Iansiti, M. and Lakhani, K. (2017). The Truth About Blockchain. [online] Harvard Business Review. Available at: <https://hbr.org/2017/01/the-truth-about-blockchain>.
- Kenton, W. (2018). Stock Market. [online] Investopedia. Available at: <https://www.investopedia.com/terms/s/stockmarket.asp>.
- Khatwani, S. (2018). 6 Top Cryptocurrency Exchange Coins That Pay Dividends Or Offer Reduced Fees. [online] CoinSutra - Bitcoin Community. Available at: <https://coinsutra.com/crypto-exchange-coins-dividends-fees-reductions/>.
- Legal Information Institute. (2019). 17 CFR § 230.501 - Definitions and terms used in Regulation D.. [online] Available at: <https://www.law.cornell.edu/cfr/text/17/230.501> [Accessed 4 Feb. 2019].
- Morgan, T. (2013). Raising Capital - What You Don't Know Could Hurt You. The National Law Review. [online] Available at: <https://www.natlawreview.com/article/raising-capital-what-you-don-t-know-could-hurt-you>.
- Mullin, S. (2012). Regulatory Update: SEC Adopts Final Rules Defining "Accredited Investor" Consistent with Dodd-Frank. [Blog] Corporate & Securities Law. Available at: <https://www.corporatesecuritieslawblog.com/2012/01/regulatory-update-sec-adopts-final-rules-defining-accredited-investor-consistent-with-dodd-frank/>.
- NEM (2018). NEM Technical Reference Version 1.2.1. [online] NEM. Available at: [https://nem.io/wp-content/themes/nem/files/NEM\\_techRef.pdf](https://nem.io/wp-content/themes/nem/files/NEM_techRef.pdf).
- Swan, M. (2015). Blockchain: Blueprint for a New Economy. 1st ed. Shroff Publishers & Distributors Pvt Ltd.
- Tapscott, D. and Tapscott, A. (2016). Blockchain revolution: How the Technology Behind Bitcoin and Other Cryptocurrencies Is Changing the World. Penguin Books.
- U.S Securities and Exchange Commission (2012). SEC Tightens Rules on Advisory Performance Fee Charges. [online] Available at: <https://www.sec.gov/news/press-release/2012-2012-29htm>.
- Vigna, P. and Casey, M. (2015). The Age of Cryptocurrency. St. Martin's Press.
- Vigna, P. and Casey, M. (2018). The Truth Machine: The Blockchain and the Future of Everything. 1st ed. Harper Collins.
- Wamba, S., Robert, K., Bawack, R. and Keogh, J. (2018). Bitcoin, Blockchain, and FinTech: A Systematic Review and Case Studies in the Supply Chain. Production Planning and Control.





IMAGINE  
BELIEVE  
ACHIEVE

---

“CONSERVATION”

Give back life to endangered species

“FOOD & SEED”

Harvest nutrition to feed the world

“EDUCATION”

Create equal opportunities for young  
minds around this world

## “ART EXCHANGE”

Connecting the world with creations of beauty from global artist

## DIAMOND “STANDARD”

Access one's engagement to wealth

## “CHARITY”

Supporting those who can not support themselves

## CURRENCY “EXCHANGE”

Enable the flow of digital currencies when you need it





Author: Hybse Marketplace Ltd.  
MAST-Blueprint Version: V1.3, Last edited 2019-02-21  
[www.mast.eco](http://www.mast.eco)



MAST

[www.mast.eco](http://www.mast.eco)