# AMLT The token of compliance

White Paper

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### Abstract

Consisting of experienced professionals from compliance,  $AML^1$ , virtual currency<sup>2</sup>, blockchain and tech ecosystems, the Coinfirm team came together in 2015 under the vision to bring a new level of transparency and efficiency that serves the entire blockchain ecosystem, spreads its benefits into the traditional economy and enables the mass market to use it safely. Out of that vision the Global Standard that is the Coinfirm  $AML/CTF^3$  Platform (also referred to as the 'Platform') was built.

Now, Coinfirm is taking the next step in bringing effective AML/CTF compliance and allowing for the transparency and democratization of the financial system by actively involving market participants with AMLT.

AMLT used in the Coinfirm AML/CTF Platform is the missing puzzle to bring virtual currencies into the mainstream in a safe, secure and compliant way. It helps exchanges, payments processors, financial institutions and all players in the financial system to manage the regulatory risk related to blockchain value transfer. It allows network members to provide information, rate other market participants and democratically help determine the related risk to entities and counterparties using virtual currencies.

AML/CTF is connected with risk management, not just simply strict laws, rules and regulations to follow. There is also a degree of internal assessment needed by obliged companies to build a correct risk management model. AMLT helps with compliance in an innovative way while by engaging and providing beneficial participation to the users of virtual currencies.

Coinfirm works with world-class partners and clients ranging from major virtual

<sup>&</sup>lt;sup>1</sup>Anti-Money Laundering

<sup>&</sup>lt;sup>2</sup>Also called: cryptocurrency, digital currency, etc.

 $<sup>^{3}\</sup>mathrm{Counter-Terrorism}$  Financing

currency players such as Dash <sup>4</sup> and RSK <sup>5</sup>, to leading financial institutions such as SEI <sup>6</sup>. Being a key link in bringing virtual currencies and blockchain to the mass market and a wider range of organizations, Coinfirm and AMLT is helping ensure transparency and safety within the ecosystem, and allowing it to grow by solving one of the largest needs, effective compliance and AML procedures.

### Disclosures

- Nothing in this paper should be constructed as an investment opportunity.
- AMLT is not available in prohibited jurisdictions, please refer to Terms and Conditions relating to Token Sale.
- This paper is for informational purposes only and is not a statements of future event.
- The smart contract is owned by AMLT Limited, a company established in Gibraltar with company number: 116373.
- The AMLT token sale does not constitute an offer of securities or a promotion, invitation or solicitation for investment purposes.
- The terms of the contribution are therefore not intended to be a financial services offering document or a prospectus.
- The token offering involves and relates to the development and use of experimental software and technologies that may not come to fruition or achieve the objectives specified in the white paper.
- The purchase of tokens represents a high risk to any contributor.

 $<sup>{}^{4}</sup> https://www.dash.org/news/dash-adds-full-support-for-amlkyc-compliance-with-coinfirm/$ 

http://www.nasdaq.com/article/interview-dash-and-coinfirm-on-digital-currency-

compliance-partnership-cm 690524

<sup>&</sup>lt;sup>5</sup>http://www.rsk.co/

<sup>&</sup>lt;sup>6</sup>https://www.ftadviser.com/platforms/2017/09/20/sei-explores-blockchain-for-platform/

- Tokens do not represent equity, shares, units, royalties or rights to capital, profit or income in the network or software or in the entity that issues tokens or any other company or intellectual property associated with the network or any other public or private enterprise, corporation, foundation or other entity in any jurisdiction.
- The purchaser understands the Tokens are solely rights to access and purchase products on the Platform.
- The purchaser confirms that he or she engages or expects to engage in a meaningful number of cryptocurrency transactions, such as e-commerce businesses, token exchanges or traditional financial institutions, and will use the Tokens on the Platform.
- The Tokens do not have any attribute that provides the holder with equity, creditor or similar rights and should not be considered investments of any type.
- The purchasers should not expect profits of any type from acquiring Tokens.
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# AMLT

### 1 AMLT and blockchain Ecosystem

### Challenge

The over 100 Billion USD market of virtual currencies has a problem with access to the mass commercial market and traditional banking and struggles with regulatory compliance.

As studies <sup>7</sup> and industry leaders <sup>8</sup> have shown, effectively addressing Regulatory Compliance and especially Anti Money Laundering and Counter Terrorist Financing (AML/CTF) for blockchain and virtual currencies has been a massive roadblock and the missing link to the traditional commercial and financial sector and their overall mass adoption.

Countering Money Laundering and Terrorist Financing is not only a legal obligation but also a moral one. Without prevention and control mechanisms on transactions money flows directly to illegal business, drug dealers, human traffickers, terrorists or weapon traders and puts the entire market and its participants at risk. Hence the companies dealing with exchange of value via blockchain should ensure that they are not either knowingly or unknowingly exposed to, party to or facilitating such high risk transfers or counterparties. The lack of such basic risk management may pose a breach of rules for the companies involved.

Blockchain is a peer-to-peer system and with all of its benefits it also brings some risks such as counterparty risk that is currently mainly mitigated via intermediaries in the traditional economy such as banks or payment transmitters.

Even when you are accepting virtual currencies in your online book-store for example, the funds may come from unknown sources. Potentially sources that

<sup>&</sup>lt;sup>7</sup>https://www.theatlas.com/charts/ryUAwgSle

 $<sup>^{8}</sup>$  https://blog.coinbase.com/building-the-bridge-why-compliance-is-key-to-digital-currencys-success-7bfdd88a084c

you don't want to be exposed to and that could put you and your clients or partners at risk. Furthermore, you may know the party you're dealing with very well, but knowingly or not some of their blockchain assets could come from people who obtained them from illegal sources which in the end makes you associated too.

The proper application and execution of AML/CTF rules and regulations is a worldwide challenge that is yet to be solved. The current estimates indicate in the traditional system AML enforcement fails 99.9% of the time and less than 1% of global illicit financial flows are seized and forfeited <sup>9</sup>. The procedures are fairly arbitrary and rather general than specific, i.e. considering all transfers from some countries as high risk which helps contribute to the issue of financial exclusion.

The application and execution of AML/CTF procedures is even more important for virtual currency businesses. It is a growing burden that is limiting the speed and scale of market growth. Operating in this new dynamic space requires the application of the same standards as banks and other financial institutions. However, we believe that contrary to the banking system though, the process for virtual currencies can be largely driven by effective data and be fairly democratic as all participants of the ecosystem could deliver input and participate. Thanks to that it could be way more accurate, effective and less arbitrary than the traditional systems. Therefore, it could not only allow for more transparency and efficiency but also open up the financial market to more participants and promote real financial inclusion.

 $<sup>^{9}\</sup>rm http://thehill.com/blogs/congress-blog/judicial/292479-in-fight-against-money-laundering-and-terror-finance-the-emperor$ 

### Environment

Virtual currency acceptance is continuously increasing, while banks and financial regulators are still unprepared.

The market of virtual currencies has grown tremendously in recent years, not only in terms of value but also in terms of services offered and entities involved. Banks and financial institutions are not able to properly provide services to these businesses because they are not able to determine and manage the risk related to companies operating in this space. As banks do not have efficient and effective tools and processes to determine this risk they also can't provide banking services to clients that are accepting virtual currencies. For example, Japan has over 300,000 businesses <sup>10</sup>accepting cryptocurrencies. You can also officially pay some government fees in Switzerland, catch a cab in Amsterdam or shop with major retailers like Overstock.com using bitcoin, just to name a few cases. Even leading payment processors all over the world like Adyen are accepting virtual currencies<sup>11</sup>. Yet, the inability to properly determine the risk blocks the ability for traditional commercial players from being able to safely accept, adopt and benefit from virtual currencies and blockchain.

There are new entrants on the market that are interested in virtual currencies and bearing similar risks without proper tools:

- Virtual currency exchanges and payment processors
- Hedge funds
- Large companies that want to improve cash management
- International transfer entities (financial institutions)
- Internal Blockchains/Virtual Currencies for large groups

 $<sup>^{10}\</sup>rm https://www.cryptocoinsnews.com/bitcoin-accepted-300000-japanese-stores-2017/$   $^{11}\rm http://www.newsbtc.com/2016/10/27/adyen-brings-global-payments-1-7-million-etsy-sellers/$ 

### Market size

#### Costs of non-compliance and lost opportunity estimation.

For those that are following compliance and regulatory standards, the costs of AML/CTF compliance is high and will continue to increase as current solutions and processes are not only ineffective but inefficient and still manual in a lot of ways. Financial institutions already spend double digit percentages of their labor towards compliance while virtual currency companies are spending even more <sup>12</sup>.

The cost of the compliance for virtual currency businesses can increase over 50% of its total time and labor costs when taking systems, reports, training, manual processes etc. into consideration. Costs of 'non-compliance' are even higher <sup>13</sup>. Not only does it limit the ability to be commercially adoptable across the wider market but may also result in the closing of the business, paying fines or even potential legal ramifications for the business owners. Recent examples show that non-compliant businesses can be shut down regardless where they operate and the individuals behind them can be chased around the world.

The risk isn't only limited to payments on blockchain. Smart contracts or blockchains designed to exchange value can also be taken advantage of for money laundering or terrorist financing purposes and similarly require proper assessment. This risk will be increasing especially for Initial Coin Offerings, Token Crowd Sales, or new models that are yet to be defined.

Blockchain provides a unique opportunity to totally redefine and correctly conduct AML/CTF compliance. However, the solution must be a global platform that solves these problems for the entire ecosystem in a new, effective and efficient way. The solution must grow with and represent the democratized network

Currencies.pdf

it creates and become the 'back bone' for the ecosystem, running unnoticeably and smoothly in the background.<sup>14</sup> It also must democratize strict rules by being able to show other aspects of transactions and entities – not only hard, regulatory AML/CTF assessments but also more subjective information.

### Solution

#### The Coinfirm AML/CTF Platform - A Global Standard.

A solution is needed for virtual currency businesses and traditional businesses that accept virtual currencies or simply want to have exposure to it. At the end of the day, any entity touching virtual currencies or operating with them needs to apply AML/CTF compliance rules to protect themselves, their partners and their clients from potential risks and to allow for its commercial growth.

Any firm that has a commercial relationship with virtual currency companies also need to understand such risk. Businesses intelligence companies such as Thompson Reuters cannot ignore information about what they have in their portfolio.

Any market as large as the virtual currency market and entities operating within it need, analytics and an AML/CTF compliance solution for legal, commercial and moral reasons. The market is global and it is growing rapidly and is no longer ignored by big business, financial institutions, criminals, regulators and financial investigation units.

The solution is here. A global platform that solves these problems for the entire ecosystem in a new, effective and efficient way, that grows with the network it creates and becomes the 'back bone' for the ecosystem while running unnoticeably in the background. The entire ecosystem now has a simple and straight

 $<sup>^{14} \</sup>rm https://blog.coinfirm.io/post/when-a-regulator-knocks-managing-virtual-currency-and-financial-crime-risk-in-the-regulated-sector$ 

forward solution that helps with the compliance for the most sensitive aspect of its businesses.

Coinfirm's AML/CTF Platform<sup>15</sup> has been solving these issues in an innovative way, with actionable structured data that increases efficiency, reduces costs and streamlines compliance near to automation, bringing the ability for mass adoption and redefining AML compliance overall.

Coinfirm's goal is to make AML rules a reality and to build the global standard for AML/CTF for blockchain applications. The foundation for this standard has been set by the Coinfirm AML/CTF Platform ('Platform'). At the moment of creating this document the blockchain agnostic Platform serves three main blockchains: **Bitcoin**, **Dash and Ethereum**, and is currently in the process of integrating other popular blockchains both public and private. Due to the blockchain agnosticism of the Platform, the majority of public and private blockchains can be integrated into the Platform within 30 days. Now we're taking the next step in further advancing the virtual currency and blockchain ecosystem and Coinfirm's transparent and democratized global network with AMLT.

A missing element that will push the new global ecosystem's efficiency and transparency forward is a dedicated token that streamlines processes within and delivers benefits and rewards for its participants. The method for Coinfirm AML/CTF Platform is the token representing the global standard for AML/CTF compliant commercial blockchain transactions, that the blockchain asset for Coinfirm's collaborative network, AMLT (ACCESS RIGHTS) will be implemented into an already vibrant living network of players, providing a strong foundation with commercial adoption and use.

 $<sup>^{15} {\</sup>rm www.coinfirm.io}$ 

Metrics	Data		
Number of Queries	100 reports per second		
Size of Data Set	3  TB of SQL tables, 500  GB of graph		
	data, 250GB of raw blockchain		
Number of Scenarios of Assessment	186		
Average Time to Generate Report	10s		
Key Currencies Serviced	Bitcoin, Dash, Ethereum; ERC20		
	and ERC223 Tokens		

#### **Coinfirm - Select technical metrics and implementations**

### Team

Coinfirm's team consists of professionals and entrepreneurs with vast business and compliance experience, supported by great tech and blockchain specialists.

#### Founders

- Paweł Kuskowski: Co-Founder and CEO
- Paweł Aleksander: Co-Founder and CIO
- Grant Blaisdell: Co-Founder and CMO
- Jakub Fijołek: Co-Founder and CTO
- Maciej Ziółkowski: Co-Founder
- Ben Brophy: Delivery Director

#### Advisors

- Paweł Tomczuk: Chairman of the Advisory Board
- Ruth Wandhöfer: Blockchain Regulatory Advisor
- Julian Johnson: Strategic Advisor

### Acknowledgements

Coinfirm is the globally recognized brand in both the blockchain/virtual currency and Regtech industries with multiple honors and acknowledgments. In addition, Coinfirm has been featured in various articles and studies by known and major entities. Below there are some examples:

• Nasdaq Covering Coinfirm:

"RegTech for the FinTech may be the next big thing in the Bitcoin and Blockchain space."  $^{16}$ 

• Bitcoin Magazine covering Coinfirm and Dash Partnership:

"Dash and Coinfirm on digital currency compliance partnership." <sup>17</sup>

• The Fintech Times Cover Story:

"Major european bank PKO BP testing Coinfirms Blockchain Platform."<sup>18</sup>

• Royal United Services Institute for Defence and Security in Studies Virtual Currencies and Financial Crime Challenges and Opportunities by David Carlisle:

 $<sup>^{16} \</sup>rm http://www.nasdaq.com/article/regtech-for-fintech-may-be-the-next-big-thing-in-the-bitcoin-and-blockchain-space-cm781301$ 

<sup>&</sup>lt;sup>17</sup>https://bitcoinmagazine.com/articles/interview-dash-and-coinfirm-on-digital-currencycompliance-partnership-1475867943/

 $<sup>^{18} \</sup>rm http://the$ fintechtimes.com/major-european-bank-pko-bp-testing-coinfirms-blockchain-platform/

"Virtual currency and financial crime."<sup>19</sup>

• Financial Times: "Regulators move in on digital tokens after investor scams." <sup>20</sup>

### 2 Vision and Mission of Coinfirm

Coinfirm provides a network that builds a transparent, democratic, effective and compliant virtual currency and blockchain ecosystem. Coinfirm's goal is to deliver a streamlined and effective Global Standard for AML/CTF compliance in a decentralized and democratic way where participants can provide AML/CTF/Fraud/business/risk ratings whether negative or positive. Not only providing transparency and democratization of the financial system in an unprecedented way, AMLT attached to the Coinfirm AML/CTF Platform serves as a bridge to accommodating new business models and adopting blockchain and virtual currencies.

### 3 Value proposition

A token that provides access rights to the Coinfirm AML/CTF Platform, AMLT allows users to purchase reports with substantial discounts, gain exclusive access to knowledge, and allows members to evaluate market participants and obtain AMLT by providing data crucial to seamless and safe trade. AMLT is the key that in line with Coinfirm's Platform provides solutions to problems for all participants in the ecosystem and creates the foundation for a secure, tranparent, democratic and compliant economic system.

<sup>&</sup>lt;sup>19</sup>https://rusi.org/publication/occasional-papers/virtual-currencies-and-financial-crime-challenges-and-opportunities

<sup>&</sup>lt;sup>20</sup>https://www.ft.com/content/897963b4-8ec7-11e7-9084-d0c17942ba93

- Users of Virtual Currencies: a global standard, central reference and data access point enabling effective and efficient management of AML/CTF risk related to virtual currencies and blockchain assets, as well as anti fraud measures;
- Virtual Currency Exchanges, Businesses and Payment Processors, as they are recognized as obliged institutions, they must fulfill required standards and procedures. AMLT allows to effectively streamline and automate AML compliance, reduce costs, risk and be commercially acceptable to major partners and clients;
- Traditional Sectors like banks or business intelligence companies: having or accepting clients tied to virtual currencies pose risks that need to be understood and managed. Delivers a global standard, central reference and data access point enabling effective and efficient management of AML/CTF risk related to virtual currencies and blockchain assets, and allows for virtual currency and blockchain adoption.
- AMLT streamlines, democratizes and decentralizes AML/CTF risk assessment and processes;
- AMLT helps the exchange of information between market participants about the risk related to users of virtual currencies in a transparent way over and above objective rules arising from rules and regulations. Democratization of strict rules and risk based approach via AMLT means that one can, in their AML/CTF risk assessment, make a decision on the potential risk determined by both Coinfirm's platform as well as the voice of other market participants.

### 4 Introduction

"There is no FinTech without RegTech."

RegTech has a much wider scope of influence than FinTech as it is solving problems related not only to FinTech but also to a much broader range of sectors, industries and economic and human elements. Our aim is to enable a better, faster, more secure, transparent and effective way of transferring value and open up an entire new world of opportunities for the market and individuals.

The ecosystem impacted by the lack of effective and efficient AML/KYC risk management for blockchain transactions covers:

- Companies accepting virtual currencies
- Banks and Financial Institutions
- Business Intelligence Companies
- New ICO's
- Smart Contracts
- New Market Entrants
- Individuals Globally

### 5 An Inefficient and Troubled Market

### The challenge

Currently the AML/CTF compliance process is very inefficient and costly in both the blockchain ecosystem and the traditional financial sector.

#### • Size of a Money Laundering

It is said that the money laundering market is between 800 billion to 2 trillion USD annually and is around 3-5% of Global Domestic Product (GDP). This is capital that does not reach taxpayer and government services, homes, infrastructure and businesses, but is destined to reach drug traders, terrorist organizations, human traffickers and other nefarious enterprises building their empires.

UK Government – UK national risk assessment of money laundering and terrorist financing

"Money laundering can undermine the integrity and stability of financial markets and institutions. It is a global problem. The European Commission's 2013 impact assessment of the EU anti-money laundering/counter terrorist financing legislative framework points to global criminal proceeds potentially amounting to some 3.6% of GDP; around US\$ 2.1 trillion in 2009. Both money laundering itself, and the criminality which drives the need to launder money, present a significant risk to the UK. The laundering of proceeds of overseas corruption into or through the UK fuels political instability in key partner countries. The NCA judges that billions of pounds of suspected proceeds of corruption are laundered through the UK each year. Money laundering is also a key enabler of serious and organized crime, the social and economic costs of which are estimated to be £24 billion a year."<sup>21</sup>

United Nation Office on Drugs and Crime ('UNODC') – the foremost international authority and commonly cited entity

"Criminals, especially drug traffickers, may have laundered around US\$ 1.6 trillion, or 2.7 per cent of global GDP, in 2009, according to a new report by the United Nations Office on Drugs and Crime (UNODC). This figure is consis-

 $<sup>^{21}\</sup>rm https://www.virtualcurrency$ report.com/wp-content/uploads/sites/13/2016/08/UK-NRA-October-2015-Final-Web.pdf

tent with the 2 to 5 per cent range previously established by the International Monetary Fund to estimate the scale of money-laundering. Less than 1 per cent of global illicit financial flows is currently being seized and frozen, says the report."<sup>22</sup>

Global Financial Integrity – Illicit Financial Flows from Developing Countries

"Every year, roughly \$1 trillion flows illegally out of developing and emerging economies due to crime, corruption, and tax evasion - more than these countries receive in foreign direct investment and foreign aid combined(...).developing and emerging economies lost US\$7.8 trillion in illicit financial flows from 2004 through 2017, with illicit outflows increasing at an average rate of 6.5 % per year - nearly twice as fast as global GDP."<sup>23</sup>

#### • Money stopped

Unfortunately, the statistics are not looking well here. From the statistics indicated above, it means that only up to 2% of laundered funds have been stopped by all efforts applied by governments, regulators, banks and businesses. So, 98% of laundered funds never make it back into the system, but instead - reaches the previously mentioned nefarious enterprises.

#### • Cost of Compliance

Massive and expensive efforts have been made to improve these numbers and processes – banks, financial institutions but also virtual currency businesses are

<sup>&</sup>lt;sup>22</sup>UN Office on Drugs and Crime, "Money Laundering and Globalization", https://www.unodc.org/unodc/en/money-laundering/globalization.html

<sup>&</sup>lt;sup>23</sup>http://www.gfintegrity.org/report/illicit-financial-flows-from-developing-countries-2004-2013/

http://www.gfintegrity.org/press-release/new-study-illicit-financial-flows-in-developing-countries-large-and-persistent/

increasing their time and cost expenditures towards these issues. Global spending on anti-money laundering (AML) compliance is set to grow to more than \$8 billion by 2017. It is, therefore, a costly but necessary obligation for companies, particularly when confronting the rising threat of terrorism and the increasingly sophisticated way in which it is financed, which is of critical importance to the world and its governments. blockchain is playing an increasingly prevalent role in combating money laundering and this will further highlight the commercial advantages for companies that incorporate such RegTech and innovation into their AML/CTF procedures. It will also help examine the potential concerns from a client's perspective and a fact how these issues should be addressed before solutions such as blockchain gain universal industry approval.<sup>24</sup>

According to the international Financial Action Task Force  $(FATF)^{25}$ , an estimated \$7 billion annually is spent in the U.S. alone for implementing AML/CTF Regulation processes. The cost is disproportionately high in smaller countries such as Mauritius, which has 1.3 million people with 25 government officials working on AML/CTF implementation - more AML/CTF bureaucrats than the country has opticians - and that's not counting bank staff who carry out customer investigations and other elements of compliance.<sup>26</sup>

#### • Risk of exclusion

Due to high AML/CTF risk banks and financial institution do not service or enter countries with significant structural problems, political corruption or political instability. Because of this a large number of innocent people and legitimate businesses are excluded from the financial system. This is called the risk of exclusion. Virtual currencies are a great solution here however it needs to

 $<sup>^{24} \</sup>rm https://www.pwc.com/gx/en/services/advisory/forensics/economic-crime-survey/antimoney-laundering.html$ 

 $<sup>^{25} \</sup>rm http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf$ 

<sup>&</sup>lt;sup>26</sup>https://www.imf.org/external/pubs/ft/scr/2008/cr08319.pdf

be applied with care and in line with regulations otherwise we face repeating the same problem. AMLT is designed to help with these aspects through the use of the Coinfirm AML/CTF Platform, but also by building a mechanism where participants can collect and share data in a democratized way. This way one can indicate to the network that these counterparties operating in high risk countries are trusted and in fact low risk and others can, with a degree of additional analysis and assessment, use this data for their benefit. With such an effective and accurate system, entities can be judged individually as opposed to their entire nation or region being excluded as it is today.

Example: a company located in Somalia (high risk) is trading with an established entity in Europe and paying in virtual currencies. With a long record of legitimate trade and an assessment conducted where no political risk exposure was discovered, the entity in Europe can rate and add data into the network reflecting the legitimacy and stability of the Somali entity. This way the Somali entity receives a lower AML/CTF risk rating indicated via Coinfirm's C-Score and other European counterparties can rely on this information and trade with the Somali entity.

#### • Risk related to virtual currencies

Virtual currencies are characterized by non-face-to-face customer relationships, may allow anonymous funding and can be exchanged into fiat or other virtual currencies. Anyone can download the free, open-source software from a website to send, receive, and store Bitcoins and monitor Bitcoin transactions. They may also permit anonymous transfers if the sender and recipient are not adequately identified. The speed of transaction processing in virtual currencies presents a significant benefit to users, although it varies according to the virtual currency that is used. These systems can be used to make cross-border payments and funds transfers.

Virtual currencies commonly rely on complex infrastructures that involve sev-

eral entities, often spread across several countries, to transfer funds or realize payments. The difficulties created by virtual currencies stem as much from the elusiveness of the various stakeholders as from the international (and extraterritorial) nature of both transactions and participants. This is particularly the case when the servers and the individuals and legal entities that use them are located in non-cooperative countries and territories. Virtual currency systems may be located in jurisdictions that do not have suitable AML/CTF regulations. Centralized virtual currency systems could be complicit in money laundering and terrorist financing and intentionally seek out jurisdictions with low AML/CTF regimes.

• Scandals in banking sectors that show the lack of a solution<sup>27</sup>

Company	Sanction	Year	Country
BNP Paribas	US 8,9b	2014	France
HSBC	US\$ 1,9b	2012	Great Britain
Commerzbank	US\$ 1,5b	2015	Germany
ZTE	US\$ 1,2b	2017	China

• Regulatory aspect that cannot be ignored

UK Government – Action Plan for anti-money laundering and counter-terrorism financing

"This Government has done more than any other to tackle money laundering and terrorist financing. More assets have been recovered from criminals than ever before, with a record £199m recovered in 2014/15, and hundreds of millions more frozen and put beyond the reach of criminals (...)."

"The UK remains the largest centre for cross-border banking, accounting for 17% of the total global value of international bank lending and 41% of global

 $<sup>^{27} \</sup>rm https://www.reuters.com/article/us-bnp-paribas-settlement-sentencing/bnp-paribas-sentenced-in-8-9-billion-accord-over-sanctions-violations-idUSKBN0NM41K20150501$ 

foreign exchange trading. The size of the UK's financial and professional services sector, our open economy, and the attractiveness of the London property market to overseas investors makes the UK unusually exposed to international money laundering risks. Substantial sums from crimes committed overseas are laundered through the UK. There is no definitive measure of the scale of money laundering, but the best available international estimate of amounts laundered globally would be equivalent to some 2.7% of global GDP or US\$1.6 trillion in 2009  $(\dots)$ ."<sup>28</sup>

What's the solution?

It's blockchain.

It's Coinfirm AML/CTF Platform.

It is AMLT.

# 6 A New Deal – Global Standard for AML/CTF Compliance for blockchain based transactions

Due to its characteristics, blockchain, especially public blockchains, are perfect for RegTech and AML/CTF compliance solutions as they deliver the ultimate level of data trust and transparency.

It is evident that in an increasingly digital commercial landscape, the role that solutions such as blockchain will play in facilitating AML/CTF procedures is an inevitability rather than a possibility. The efficiency and transparency with which discrepancies concerning client data can be detected should be commended and supported as consistent scandals and highlights of inefficiency in

 $<sup>^{28}\</sup>mathrm{Action}$  Plan for anti-money laundering and counter-terrorist finance HM Tresury, April 2016

the current ecosystem shows. The recent alleged involvement of major UK banks such as HSBC, RBS and Barclays in a Russian scandal concerning the movement of approximately £65m highlights that any FinTech developments that can help to expose other crimes of a similar nature should be endorsed.<sup>29</sup>

However, convincing more cautious companies to engage with this technology, with the knowledge that their sensitive transactional information is distributed so openly, is a major challenge. Finally, whilst there are hundreds of different blockchain networks, protocols and virtual currencies available, the benefits of blockchain are partially undermined until standardization can be achieved as different networks will not be able to communicate with each other simultaneously. Though perhaps idealistic, achieving standardization and resolving privacy concerns will be a key to blockchain's long term success.

How can Coinfirm build this world differently for virtual currencies with exchange of value on a public blockchain where Coinfirm can access public ledgers and analyze them?

How would blockchain impact money laundering?

## 6.1 Blockchain - the solution for efficient and effective AML/CTF

A global standard – the decentralized nature of blockchain and virtual currencies implies that user and transaction records may be held in many different jurisdictions, some of which may not have adequate AML/CTF controls, making it difficult for regulators and law enforcement to access them. Furthermore, it is impractical to assign responsibility to one particular jurisdiction as blockchain transactions can pass through dozens of jurisdictions in seconds and cannot be blocked or overseen. Therefore, the only effective approach to AML/CTF for

 $<sup>^{29} \</sup>rm https://www.theguardian.com/world/2017/mar/20/british-banks-handled-vast-sums-of-laundered-russian-money$ 

blockchain and virtual currencies must be a global standard - central reference and data access point, operating across all jurisdictions and without significant entry barriers.

A self-sustaining system – in peer to peer value transfers, by design there is no central authority that could provide effective AML/CTF coverage and remove the risk from network members. Therefore, the effective approach to AML/CTF for blockchain and virtual currencies must interact with users of the ecosystem in real-time and engage them in collaborative data collection and transaction counterparty verification, in an easy and automated way, without putting additional effort on users.

**Easy to use data access point** – the effective AML/CTF system for blockchain applications must be able to provide structured, actionable data on blockchain, virtual currency transactions and transaction counterparties, with associated money laundering risk, fraud, noncompliance and financial performance. It must be an easy to integrate solution for both public and private blockchains, that turns compliance into an automated, efficient and reliable process.

Easy to deploy in traditional sectors – blockchain technology in conjunction with Coinfirm's solution, creates a near automated system, truly capable of separating illicit funds from circulation significantly more effectively and at the fragment of the cost. By utilizing decentralized oversight and creating a specific environment of interactions between users, it creates an effective infrastructure unachievable for traditional centralized financial systems. This enormous added value of an AML compliant blockchain solution must be easily deployable within traditional sectors like banks and financial institutions as well.<sup>30</sup>

**Commercial and mass adoption and social impact** – Coinfirm builds the standard for the mass adoption of blockchain and virtual currencies for the

 $<sup>^{30}\</sup>rm https://blog.coinfirm.io/post/sei-teams-up-with-coinfirm-to-create-new-standard-for-uk-asset-transfers$ 

benefit of all by allowing blockchain transaction systems to be safely adoptable. Coinfirm creates an ecosystem that promotes the engagement of individual users and entities in addressing a major roadblock on the way to the mass adoption – compliance. The solution should be powerful enough to create the movement towards financial inclusion of those who were unjustifiably excluded by faulty compliance solutions of the current financial system.

The Platform decrypts and analyzes data from blockchains in real time. The data collected from blockchains include:

- transaction hash and type (e.g. single/multiple input and output, single/multiple signature)
- transaction input and output blockchain addresses
- transaction value
- balance of funds on blockchain addresses
- transaction timestamp
- fee
- size and message
- address cluster
- information about the node that approved the transaction and more.

### 6.2 The AML/CTF market and implication of blockchain

• all transactions performed on a public or a permissioned (private) blockchains could be distributed among companies, users, banks and other financial institutions, and would create a secure, accessible ledger of all transactions;

- all transactions could then be processed instantly in unlimited amounts on a permissioned blockchain; this would increase the efficiency and effectiveness of processing transactions far more easily and in real-time than using SWIFT;
- all transactions would be registered on the blockchain with a timestamp
  information about the recipient, the sender, the costs and the amounts involved;
- the data registered on the blockchain is immutable, and can never be changed, making it fully auditable;
- privacy is protected, as access to blockchain information is limited and only available to those permissioned to access that particular record;
- Suspicious Activity Reports (SARs) and related sanctions monitoring could be automated, removing the overhead and obligation of the banks and other financial institutions to do this onerous activity;
- estimates believe that 60% or more of the costs of AML/CTF compliance could be removed through this process as a result.<sup>31</sup>

### 6.3 Coinfirm AML/CTF Platform and AMLT

The Coinfirm AML/CTF Platform serves as a foundation for the safe adoption and use of blockchain. The Platform uses over 200 proprietary algorithms and big data analysis to provide structured actionable data that increases efficiency, reduces costs and streamlines compliance to near automation. The blockchain agnostic platform benefits not only companies operating around blockchain but also major financial institutions, asset management and BI companies. Already being used by many players in both the blockchain and traditional economy,

 $<sup>^{31}\</sup>mathrm{Chris}$  Skinner's Blog: https://thefinanser.com/2017/01/laundering-service-bank-usp.html/

the Coinfirm AML/CTF Platform continues to not only solve problems for the blockchain industry but allows it to be adoptable within the traditional economy.

In the distributed economy, tokens are at the core of a project. Since presenting AMLT to Coinfirm's partners and potential users there have been many interesting conversations about creating tokens that harness the full power of the distributed business model. A well-designed token increases value along with the growth of its network and incentivizes the community and early adopters to use, participate, spread and evangelize the platform it represents.

AMLT represents added value and is distributed among the participants - Network Members who receive AMLT in exchange for data provided to the Coinfirm AML/CTF Platform. For Network Members, AMLT powers the interactions on the platform and allows them to provide information to the network for the benefit of themselves and transparency of other participants.

If Bitcoin is the petrol that makes the car run then AMLT is the motor oil that keeps blockchain assets running smoothly.

The data collected from the blockchains are complemented with data from the following actors of the Coinfirm ecosystem:

- Clients, Partners and Authorities data about blockchain transactions on external Platforms and services is provided either automatically (through API's) or in packages by our clients and partners such as virtual currency exchanges and business intelligence companies. Such a model allows for unparalleled transparency and for Coinfirm to have an ultraeffective service for Coinfirm's clients and semi-automated development of products and services along with the expansion of cooperating entities.
- **Platform Users** the Platform is developed with the aim of creating interaction in the ecosystem and providing users incentives to be a part of the ecosystem and provide information and evidence on blockchain trans-

actions and suspicious addresses.

• **Post AMLT launch** – Network Members, who are users of AMLT and the Platform that meet certain criteria defined by a Smart Contract, will create the entire new and effective global ecosystem for data collection and validation – see details in further parts of this White Paper.

The data collected from blockchains is further perfected with data collected from external resources. For this purpose, Coinfirm has developed a set of advanced tools, including crawlers, scrapers and an internal department of skilled data researchers and analysts. External data sources include:

- Clearnet (Internet) Coinfirm harvests data from websites, forums (reddit.com, bitcointalk.org, etc.), blockchain explorers (blockchain.info, walletexplorer.com, etc.) and more.
- **Deep Web** Coinfirm collects information about blockchain addresses and transactions used for illicit activities on Tor, Freenet, I2P, darknet markets and more.
- **Data leaks** Coinfirm monitors and harvests all relevant data leaks and indexes them for blockchain addresses and transactions.
- **Tracking own funds** set of proprietary analysis methods and tools for semi-automated identification of blockchain addresses.
- **Network Nodes** set of proprietary analysis methods and tools for acquiring information from network nodes.

The collected data is further processed thorough several categories of Big Data Analyses:

• Data merge and fuzzy matching – algorithms devoted to match the data from blockchains with the data collected from other sources, through

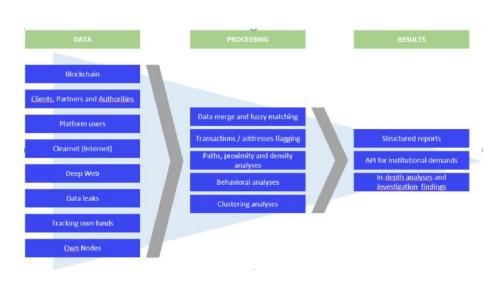
either one-to-one matching or with assumption of probability - fuzzy matching.

- Transactions/addresses Flagging Flags indicating risks or other attributes are assigned to addresses and transactions as a result of merging blockchain data with data from other resources as well as based on our transaction patterns analysis algorithms. For example, a Flag for drug trade relation is assigned to an address if the address was found to be used in a drug trade on a darknet market. The Flag may be automatically further propagated on subsequent transactions depending on certain circumstances and analysis.
- Paths, proximity and density analyses Coinfirm uses graph databases to recognize transaction patterns such as specific paths, and relation to Flagged addresses or graph structures. Addresses and transactions involved in specific patterns are appropriately Flagged.
- Behavioral analyses Coinfirm's algorithms look for transaction patterns and characteristics that represent a certain user profile, for example high risk users, such as long-term accumulation of funds or use of complex transactions in order to layer the track of funds.
- **Clustering analyses** set of algorithms aimed to recognize and group addresses and transactions belonging to one user.

The diagram below shows the Data collection and analysis within the Coinfirm AML/CFT Platform:

### AMLT THE TOKEN OF COMPLIANCE

White Paper



Once processed, the data is subsequently provided to Platform users in the form of structured reports or actionable data sets pulled through the Platform's API. In both scenarios data is structured in a way that enables streamlining of compliance and automation of the decision-making process for users. The exact content of the data can also be customized for select users. Select data is available for free in order to expand Coinfirm's ecosystem, allow access to such tools for all and facilitate the mass adoption of blockchain.

The following structured data is currently available in the Coinfirm AML/CTF Risk Reports:

- **C-Score** Coinfirm risk score that is numbered between 0 and 99 and reflects the level of money laundering, fraud or compliance risk. Coinfirm Risk Rating is the reflection of the above mentioned C-Score as either low, medium or high-risk rating.
- **Coinfirm recommendation** Coinfirm's transaction recommendation, e.g. transact freely, transact with caution, do not transact.
- Entity name identified virtual currency addresses connected to legal commercial entities e.g. Bitstamp.

- **Profile** information about the type of entity (e.g. exchange, payment processor, wallet, gambling service etc.) and Profile characteristics (e.g. extensive user, trader, miner, mixer etc.) based on behavioral and identification analysis. Over 50 Profiles are currently available.
- **Risk Indicators** over 150 scenarios that the address/user is assessed against, including: use of darknet markets, terrorist financing, crime and cybercrime, tax evasion, industry risk, layering track of funds, behavioral characteristics, country risk.
- Financial activity data sets of financial activity, status, and cash-flow indicators and charts, for example: list of identified addresses of the user, timestamps and value of first and last transaction, funds balance history, average transaction value, number of transactions, turnover and many more.
- Whitelist yes/no information on whether the user is listed by Coinfirm as a trusted party (e.g. an exchange with a good reputation). Multiple other data sets are available upon further client's needs discovery and development.

#### 6.4 Coinfirm Risk Score – C-Score

The C-Score is an internal Risk Rating indicator expressing the level of money laundering, fraud and compliance risk associated with counterparties of blockchain transactions. Each blockchain address or group of addresses identified as belonging to the same user is assigned with 0 to 99 C-Score, where the higher score reflects higher risk. Here Coinfirm presents only the highlights of how a C-Score is generated. The overall process is depicted in the diagram below:

### AMLT THE TOKEN OF COMPLIANCE



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Coinfirm uses a system of Flags assigned to blockchain addresses or holders (payment processors). Flags carry the value (usually binary – True or False, however other types of variables may be used) resulting from events related to blockchain addresses and users. For example, a binary Flag "terrorism financing" is assigned to blockchain address in case it was found as a donation address of a terrorist organization. Some flags are assigned manually and others result from automated processing or automated propagation of already existing Flags.

Flags are automatically transposed into the Risk Indicators, each representing a specified, defined risk associated with a blockchain address or its user (multiple Risk Indicators can be assigned to one address or user). Coinfirm's AML/CTF model currently utilizes hundreds of Risk Indicators grouped in a few categories: Criminal or Illicit Activity, Cybercrime, Industry, Service and Occupation, etc. Coinfirm's model consists of Risk Indicators typical for traditional AML/CTF systems used by financial institutions as well as blockchain specific ones. Below there are two examples distinguishing between the two mentioned types of Risk Indicators:

#### Example 1 (Risk Indicator typical for traditional AML/CTF systems):

#### Address related to terrorism financing:

"This Risk Indicator increases the risk assessment of the evaluated blockchain address when: - The evaluated blockchain address was found or reported together with evidence or credible indication that it may be involved in terrorism financing; or - The evaluated blockchain address is discovered through data analysis as being used in terrorism financing;

- Terrorism financing refers to activities that provides financing or financial support to individual terrorism or terrorist groups.

For example: The evaluated blockchain address was found on the website of a terrorist organization and was referred to as a donation address."

Example 2 (Risk Indicator specific for blockchain applications):

#### Address with incoming transactions passing significant fees to miners:

"This Risk Indicator increases the risk assessment of the evaluated blockchain address when:

- The evaluated blockchain address receives funds in one or more transactions, which are executed with a transaction fee causing the passing of significant funds to mining addresses (transaction fee amount or fee/kB of transaction size is significantly greater then network average at the time of transaction);

- Illicit funds are frequently distributed in the form of inflated transaction fees on blockchain addresses functioning as miner addresses but owned by an author of the transaction; due to the nature of blockchain protocol, funds passed in the form of transaction fee rather than regular blockchain transaction are more difficult to be traced;

- Mining addresses are blockchain addresses owned by miners, who are responsible for sustaining the process of adding transaction records to the blockchain ledger; miners receive remuneration on their mining addresses in the form of transaction fees and newly created coins or tokens for providing computing or storage resources required for confirmation of transactions in the blockchain network or storing the copy of the ledger. For example: the transactions outgoing from the evaluated blockchain address are executed with transaction fees set to the equivalent of several thousand USD, while the actual transaction value is of minor value."

Each Risk Indicator carries a risk severity score, which is the number from 0 to 99 reflecting the level of risk represented by this Risk Indicator.

The final C-Score translates into a risk evaluation that can take three forms: low risk (0;33), medium risk (34;66) and high risk (67;99), which translate respectively into the following Recommendations: "transact freely", "transact with caution:" and "do not transact".

The C-Score can be decreased in the case the address or user has been Whitelisted or will be rated well by network members using AMLT. In order to become Whitelisted, the applicant should contact Coinfirm in order to pass a KYC process and prove the ownership of the blockchain addresses. Currently the Whitelist assumes a maximum decrease of the C-Score by 15 points and applies in the case when the original evaluation is not high risk.

Select Flags are automatically transposed into Profiles, each representing specific characteristics or industries related to the blockchain address or user(multiple Profiles can be assigned to one address or user). Profiles do not carry the risk severity score and therefore do not impact the C-Score, as all adverse Profiles (e.g., mixer, gambling service, charity, inactive user) have corresponding Risk Indicators that carry the risk evaluation.

#### 6.5 Business Overview of Coinfirm

Coinfirm is a global RegTech enterprise focused on AML/CTF for blockchain that is functioning under the UK based legal entity, Coinfirm Ltd, and its subsidiaries. The management of the company consists of recognized leaders and professionals from AML, compliance, anti-fraud and blockchain industries. The Coinfirm AML/CTF Platform, along with its paying clients, partnering companies, corporates, banks, financial institutions, and users, creates an ecosystem aimed to build the transparent, new era of finance and a foundation for the mass adoption of blockchain and virtual currencies. Coinfirm brings highly efficient AML/CTF solutions into public and private blockchains and further implementation of AML/CTF compliant blockchain technology to the global financial industry.

Below are listed key partners and/or clients of Coinfirm and services provided to them:

Selected Clients and Partners	Scope of a cooperation
Dash	Integration of Dash Blockchain into
	the Coinfirm AML/CTF Platform
	for Dash commercial users;
	First ever partnership between top
	10 virtual currency and business en-
	terprise;
	Registration and authentication of
	documents, files and data with the
	use of the Dash Blockchain via Coin-
	firm's Trudatum solution for finan-
	cial institutions, corporates, govern-
	ments and SME's.
The Largest Central European	Supporting compliance and security
Bank	with the Coinfirm Trudatum solu-
	tion devoted to the registration of
	documents, files and data.
Big4 company	Fraud investigations and address
	analysis/tracking.
Government of an Asian Country	In-depth AML/CTF reports on se-
	lect blockchain entities.
Leading Central European Virtual	Preparation of AML/CTF Policies
Currency Exchange	and Procedures;
	Access to the Coinfirm AML/CTF
	Platform through API.

Selected Clients and Partners	Scope of a cooperation
Leading Balkan Virtual Currency	Preparation of the AML/CTF Poli-
Exchange	cies and Procedures;
	Access to the Coinfirm AML/CTF
	Platform through API.
Leading Blockchain Remittance	Access to the Coinfirm AML/CTF
Company	Platform through API
Leading Blockchain Gambling	Integration of Ethereum Blockchain
Lottery	with the Coinfirm AML/CTF Plat-
	form;
	Access to the Coinfirm AML/CTF
	Platform through API

# 7 AMLT – fuel for the Coinfirm AML/CTF Platform and the transparent ecosystem

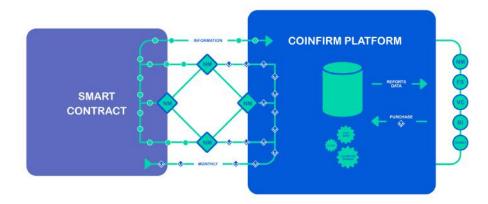
Although the Coinfirm AML/CTF Platform accepts payments in fiat and other cryptocurrencies, it is intended that activity in the Platform will eventually be performed primarily using AMLT and all purchases of AML Risk reports will be performed using AMLT. The principal purpose of a AMLT is therefore to operate as an 'in-app token' and an 'access token' that grants users access to the Coinfirm Platform and the services provided therein. AMLT will also offer discounts on fees charged within the Coinfirm AML/CTF Platform.

Another feature of AMLT is that it is the reward for Network Members who contribute their services to the ecosystem by providing identification and verification information (such as for information regarding public keys used in transactions with counterparties) and fulfilling certain other criteria that will give them the status of a 'Network Member'.

Users of AMLT will become an important and active part in building the transparent new era of finance and a foundation for the mass adoption of blockchain and virtual currencies. The interactions between AMLT users will move the economy towards transparency and financial inclusion of good actors and exclusion of bad ones with precision beyond the reach of the current financial system in which individuals unjustifiably suffer from financial exclusion.

AMLT was designed to activate and be used by not only blockchain related entities but also an entire scope of actors from traditional sectors, including for example: large commercial companies, banks and financial institutions, some of which are already Coinfirm's clients and partners.

This shows the flow of AMLT in the Coinfirm AML/CTF Platform.



## 7.1 Tokens Distribution during Crowd Sale

Tokens available to public at launch: 210,000,000

Data rewards pool for Network Members: 120,000,000 (distributed monthly by the smart contract)

Consultants/Advisors: 2%

Ambassadors/Referrals: 1%

Founding Team: 10% (with lockup period)

Dev team and bonuses: 4% (with lockup period)

Foundation/Charity: 0,5%

Total AMLT Tokens generated in smart contract: 400,000,000

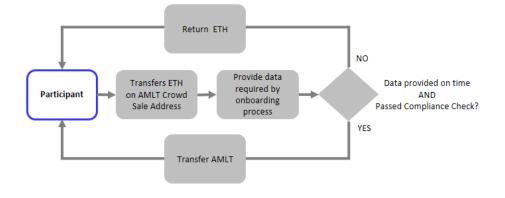
#### 7.2 Token Crowd Sale

A participant who wants to purchase AMLT during the Token Crowd Sale needs to pass through the onboarding procedure after transferring ETH to the AMLT Crowd Sale Address. The Participant needs to provide for the compliance evaluation Participant's Profile and Identity Data and Participant's Ethereum Address from which the payment for AMLT is supposed to be made.

In case the Participant does not provide all data required by onboarding process until AMLT Crowd Sale Timeout, providing this data would still be possible within 2 weeks after the Crowd Sale, the documents will be verified within a maximum 4 weeks after the Crowd Sale.

Only if the Participant provides all of the data required by the onboarding process on time and the Participant's compliance evaluation results are within the acceptable risk limit, the AMLT will be paid out to Participant's Ethereum Address. Otherwise ETH paid in will be returned. AMLT tokens will be released to Participants up to 4 weeks after the AMLT Crowd Sale.

In case the compliance evaluation will result in a high risk score, the Participant's Ethereum Address may be flagged as such on the Coinfirm AML/CTF Platform.



Purchase of AMLT during Token Crowd Sale

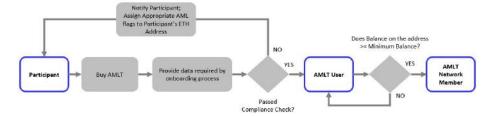
## 7.3 Becoming a Network Member

A Participant who wants to become an AMLT Network Member and become a compliant, active part of the ecosystem needs to pass the onboarding procedure described in point 7.2. above.

If the Participant's compliance evaluation results are within the acceptable risk limit, the Participant obtains the status of a AMLT User on Coinfirm AML/CTF Platform. The status of AMLT User entitles the Participant to use AMLT on Coinfirm's AML/CTF Platform.

If the Participant's compliance evaluation results are within the acceptable risk limit and the AMLT balance on the Participant's Ethereum Address meets the Minimum Balance, the Participant obtains the status of Network Member. Once a Network Member the Participant can be actively engaged in the network, receive full benefits and obtain AMLT for network contribution.

If the Participant's compliance evaluation exceeds the acceptable risk limit, any unsettled Participant funds are returned and the Participant's Ethereum Address may be appropriately flagged on Coinfirm AML Platform till receiving a proper explanation or evidence from the Participant. The following diagram depicts the process of acquiring the status of Network Member:



AMLT in circulation are constantly monitored in terms of AML/CTF risks by the Coinfirm AML/CTF Platform. Only AMLT that were not identified as AML high risk and those traded by exchanges with KYC processes may be used on the Coinfirm AML/CTF Platform.

## 7.4 AMLT for User Applications

AMLT was designed to activate and be used by not only blockchain related entities but also the entire scope of actors from the traditional sector, including for example: companies, banks and financial institutions, legal entities and governments, some of which are already Coinfirm's clients and partners.

Users who want to purchase AMLT and become a compliant, active part of the ecosystem, need to pass through the AML/CTF and KYC check. The User provides his/her Profile and Identity Data as well as the Token Address devoted to hold AMLT. The User's Token Address is verified on the Coinfirm AML/CTF Platform against suspicious transactions and the User's Identity Data passes through standard KYC checks, e.g. appearance on sanctions lists.<sup>32</sup>

If the evaluation result indicates low risk, the User obtains a status of a Qualified User and his Token Address is put on the Smart Contract Whitelist. The

<sup>&</sup>lt;sup>32</sup>There are many sanctions lists, the most important include UN, USA and FATF lists e.g. https://www.un.org/sc/suborg/en/sanctions/un-sc-consolidated-list

AMLT

Qualified User is entitled to purchase AMLT during the Token Crowd Sale and to use them for purchasing services on the Coinfirm AML/CTF Platform.

If the AMLT balance on the User's Token Address meets the Minimum Balance set by the Smart Contract, the User obtains the status of Network Member.

Network Members are the key pillars of the AMLT ecosystem and are entitled to multiple benefits, including:

- **SPEND** Services provided by Coinfirm's AML/CTF Platform can be purchased with substantial discounts with the use of AMLT and even more by Network Members when paid with AMLT. These services will include AML Risk Reports, available through our API, in pdf or web format and their prices will be nominated in USD or other major fiat currency.
- HOLD Network Members will gain access to the Knowledge Pool the wide database of materials on AML for blockchain and virtual currencies, this includes: Articles, Webinars, Guidance on AML/CTF, Exemplary AML Policies, Procedures and Risk Matrixes. This toolkit is an essential part for any entity that wants to effectively manage AML risk on blockchain transactions. It is market unique and can substantially decrease AML expenses for both small entities and large corporates.
- GET REWARDS Network Members will be entitled to obtain extra tokens coming from AMLT Monthly Distribution (periodic supply of newly created tokens, driven by token protocol), for providing specified data to the AMLT network. This data includes blockchain addresses with assigned data such as Profile data, Risk Indications, evidence, URLs. For example, the Network Member may report a donation address of a specific scam service with a supporting website address and pdf print screen. Once the provided data is validated by our team, the Token Addresses of Network Members who uploaded validated data are added to the payout list and AMLT Monthly Distribution amount is distributed between Network

Members that provided validated data. The provided and anonymized data would then be made public for the sake of transparency and fair treatment of Network Members.

Network Members will need to comply with the requirements of Terms of Participation, expressing the good will and terms of participation in the AMLT network, which would include:

- Providing transparent and quality information;
- Taking no defamatory action against other AMLT users;
- Being diligent with AML/KYC obligations.

## **Description of functionalities**

- Access to the Coinfirm AML/CTF Platform and its services (Basic Report, C-Score, Standard Report, and Enterprise Report);
- Access to an exclusive Knowledge Pool including exclusive trainings, webinars, articles, guidance on AML/CTF Compliance but also applicable example policies, procedures and risk matrix's;
- Possibility of being rewarded in AMLT for contributing data on virtual currency addresses to the Coinfirm AML/CTF Platform.

Certain benefits are exclusively available to Network Members. The following characteristics are required to become the Network Member:

- Hold 50,000 AMLT;
- Provides identification and verification information for AML/CTF/KYC requirements;

- Install Coinfirm's Wallet;
- Provide their IP.

Benefits ONLY available to the Network Members:

- Discount % for services on the Coinfirm AML/CTF Platform;
- Access to the exclusive Knowledge Pool of the Coinfirm AML/CTF Platform;
- Possibility of being rewarded in AMLT for contributing data on virtual currency addresses to the Coinfirm AML/CTF Platform.

#### 7.5 AMLT for data collection application

It is intended that certain benefits will only be available to Network Members, who will be required to hold a certain amount of AMLT, primarily in the form of (i) access to rewards in AMLT for their contribution to the Coinfirm Platform and (ii) access to AML/CTF training resources and/or services known as the 'Knowledge Pool'. Rewards may be earned and paid out in the form of AMLT for users of the Coinfirm Platform that qualify as Network Members. Qualification to be a Network Member include:

- hold at least 50,000 AMLT (fifty thousand AMLT)
- agree and perform in line with the Coinfirm Terms and Conditions of Network Members
- approved for the purpose of AML/KYC process

Rewards to the Network Members shall be provided on the basis of information provided to Coinfirm. Data Reward Pool for Network Members shall be distributed on the basis of percentage of quality data versus the total number of data provided by the network.

Example: if Network Member provided information about 10 address and the network provided information on 100 addresses in total than this Network Member receive 10% of Data Reward Pool available this month. The quality of data will be assessed by Coinfirm's team.

The monthly amount of AMLT within the Data Reward Pool for Network Members starts with 500,000 AMLT and shall be lowered every month with 5 percent.

Terms of Participation will be based on the good will and signing up for the rules of usage of the system.

General reference shall specify: "I commit to provide the most transparent and accurate information possible, take no defamatory action against other participants on the market via AMLT, disclose relevant information immediately, and be diligent in my AML/KYC obligations."

## 8 Roadmap

- Pre 1.0 AMLT: Coinfirm AML/CTF Platform already provides AML/CTF solutions for the virtual currency ecosystem with global clients and partners ranging from some of the largest virtual currencies to major business intelligence companies and financial institutions. The system can be accessed online or via API. The easily adoptable and user friendly Platform allows users to complete their AML/CTF compliance model with transaction monitoring. The Coinfirm AML/CTF is blockchain agnostic and currently provides services for Bitcoin, Dash, and Ethereum.
- 1.0 AMLT: AMLT becomes the fully transparent access token of the Coinfirm AML/CTF Platform and network where in order to fully use the

Platform, buy a report or access the API at discounted rates and access the Knowledge Pool with exclusive webinars, trainings, articles, draft policies, procedures, risk matrix's on AML/CTF, AMLT and the status of Qualified User or Network Member is required.

• 2.0 AMLT: AMLT Wallet integrated with the Coinfirm AML/CTF Platform. Network Members that went through the identification and verification process on the Coinfirm AML/CTF Platform, obtained approval for a white label address and hold the minimum of amount of AMLT required are able to provide information to the Platform about virtual currency addresses (their own and others) in exchange for participation in the Monthly Distribution of AMLT generated by the smart contract. The contributions will be valued, and transactions will be calculated based on the value of the reported information. This will allow for full user privacy as well as a decentralized audit trail for users to ensure they received the correct payments for their input into the AMLT network.

## 9 Business Landscape

Coinfirm welcomes competition. There is room for more than one. Big data is big business. Worldwide revenues for big data analytics are forecast to exceed \$150 billion in 2017, rising to more than \$210 billion by 2020.<sup>33</sup>

#### 9.1 Competition

**Elliptic**<sup>34</sup> is engaged in the identification of illicit activity on the Bitcoin blockchain and provide their services to the leading Bitcoin companies and law enforce-

 $<sup>^{33}\</sup>mathrm{Royal}$  United Services Institute for Defence and Security Studies; Occasional Paper; Big Data and Policing An Assessment of Law Enforcement Requirements, Expectations and Pri-

orities by Alexander Babuta

<sup>&</sup>lt;sup>34</sup>https://www.elliptic.co/

ment agencies. According to the publicly available resources Elliptic focuses on fraud examinations and provides services related to Bitcoin's blockchain only. Coinfirm has not identified any indication about Elliptic providing streamlined AML/CTF related services.

**Chainalysis**<sup>35</sup> advertises itself as leading provider of AML/CTF software for Bitcoin, working with global financial institutions and Europol. Chainalysis provides data analysis, visualization and actionable intelligence to protect the integrity of the financial system. According to publicly available resources Chainalysis focuses on the development of data analysis tools for Bitcoin's blockchain only. Coinfirm has not found that Chainalysis would provide automated, structured AML/CTF risk reports.

**Scorechain**<sup>36</sup> presents its Profile as a provider of a Bitcoin analytics Platform, allowing companies to implement regulatory compliance procedures for Bitcoin activities, forensic investigations and also enhance Bitcoin companies customer engagement. According to publicly available resources Scorechain provides streamlined reports on the risk of counterparties of Bitcoin transactions only. Coinfirm has not identified that Scorechain reports would be devoted specifically to address AML/CTF risks.

## 9.2 AMLT Advantage Matrix

Present ecosystem	Coinfirm	
AML Advantages for blockchain industry		

 $<sup>^{35}</sup>$  https://www.chainalysis.com/

 $<sup>^{36} \</sup>rm https://www.scorechain.com/$ 

[	
Lack of global standard for	Setting a global standard, refer-
AML/CTF coverage for blockchain.	ence and data access point en-
	abling effective and efficient man-
	agement of AML/CTF risk related
	to blockchain transactions.
No AML related solutions truly uti-	First mover advantage - the first
lizing the decentralized power of	AML related blockchain based token
blockchain and blockchain based to-	and ecosystem, designed to become
kens.	a global standard for AML and de-
	liver an open democracy and finan-
	cial inclusion to the global financial
	system.
No solution devoted specifically to	End to end AML risk manage-
address the blockchain market	ment, including streamlined, action-
needs on compliance with AML	able AML risk reports and AML re-
regulations.	lated bespoke services.
Only a very limited number of	Project backed by network of
experts in AML and compliance	globally recognized leaders in
are engaged in the development of	AML, compliance, anti-fraud and
solutions for blockchain.	blockchain technology.
Currently no effective solution	End to end AML risk manage-
devoted specifically to address the	ment, including streamlined, action-
blockchain market needs on	able AML risk reports and AML re-
compliance with AML regulations.	lated bespoke services.
Currently no solution to address	Blockchain agnostic with the aim to
the AML risks related to	support all major public and pri-
blockchains other than Bitcoin.	vate blockchains; currently support-
	ing Bitcoin, Dash and Ethereum
	blockchains.

No effective system allowing banks	Solution easily adoptable by banks
and financial institutions to accept	and financial institutions, provid-
clients using blockchain	ing them with constant oversight
transactions.	on blockchain transactions of their
	clients.

Advantages for Current Financial Ecosystem	
Extremely ineffective AML	Enables effectiveness beyond the
solutions – only up to $2\%$ of	reach of traditional financial system.
laundered funds is discovered.	
Extremely costly - \$8 billion	Enables saving billions due to au-
annually	tomation and standardization
AML centralized in hands of	Enables involvement of entire soci-
regulators and financial institutions	eties in the identification and report-
	ing of suspicious transactions, creat-
	ing a sort of democratic
Financial exclusion of poor and	Enables selective financial inclusion
sanctioned countries	of entities and individuals, regard-
	less of geographical location
Duplication of efforts	Encrypted client details and analy-
	ses can be distributed to all financial
	institutions in near real time
Difficult auditability	Full and automated auditability, in-
	contestable authenticity, ownership
	and timestamp of data and AML
	analyses results

# 10 The people behind it

Our project and team is constantly growing. Currently Coinfirm is a group of over 30 recognized leaders and professionals, projected to grow a few times in the next half year.

#### 10.1 Founders

**Paweł Kuskowski, CEO, Co-founder** – Entrepreneur, AML/CTF and recognized compliance advisor. A former head of global AML/CTF processes at major financial institutions such as RBS, Paweł is a specialist in compliance and anti-money-laundering with extensive experience in conducting global projects for international financial institutions and cooperating with supervisory authorities. He is also the chairman of the Compliance Association of Poland.

**Paweł Aleksander, CIO, Co-founder** – One of the more recognizable fraud prevention experts in Central Europe. Former Head of Fraud Investigations in ArcelorMittal, AML/CTF Project Manager in the Royal Bank of Scotland and fraud investigator and auditor in Ernst & Young. Paweł holds the titles of Certified Fraud Examiner and Certified Internal Auditor. He has conducted numerous fraud and in-depth AML/CTF investigations in blockchain industry.

Jakub Fijołek, CTO, Co-founder – An innovative IT and security specialist, Jakub has been analyzing and developing around blockchain, virtual currencies and their applications since 2010. Jakub is the former head of multi-algorithm virtual currency mining farms with vast experience in attacking, testing and creating the security systems around blockchain.

**Grant Blaisdell, CMO, Co-founder** – Creating models and ventures around tech and new media since his teens, Grant has been engrained as a visionary in both California and European startup ecosystems. Whether through his own projects or working with major companies, Grant has been pushing progress in the clash of tech and culture.

Maciej Ziółkowski, Co-founder – An international pioneering virtual currency adopter. Maciej has been involved in the Bitcoin and blockchain space since the early stages. He is a recognized author and speaker on the subject and co-founded the first Bitcoin establishment of its kind in Europe.

**Ben Brophy, Delivery Director** – One of the creators of blockchain movement around the financial area, Ben built and led the ENTIQ Blockchain LAB, is the CEO of BlockLab and the former Head of the Innovation Hub for Royal Bank of Scotland.

## 10.2 Advisors

**Pawel Tomczuk, Chairman of the Advisory Board** – CEO of JPGH & Associates, entrepreneur, founder of Ciszewski Financial Communications (successfully sold to Publicis Groupe '2011), investor & advisor to the board of numerous tech businesses across fintech, digital media and data. Mentor at Techstars, Startupbootcamp Fintech & Insurtech, Startup Grind and London Tech Advocate.

**Ruth Wandhöfer, Blockchain Regulatory Advisor** – Global Managing Director of Compliance & Market Strategy in Citibank, Regulatory and FinTech expert and one of the foremost authorities on banking regulatory matters, Ruth is a recognized global leader in the compliance space and chairs a number of influential industry bodies.

Julian Johnson, Strategic Advisor – CEO of MainSheet Ventures with 25years of experience in the technology market and global sales executive roles at Oracle, Siebel, SAP, Microsoft and Salesforce. Julian has implemented major systems around the world and built an extensive career spanning several industries, including financial services, public sector, telecommunications and media, utilities and energy.

#### 10.3 Key Team Members

Robert Ciurkot - COO at Coinfirm

Krzysztof Król - Product Owner

Marcin Rabenda - Product Owner

Beata Wiśnicka - Senior AML Analyst

Pylip Radionov - C++ Developer

Sebastian Gruza - Java Developer

Bartosz Zięba - Developer

Magdalena Poprzeczko - Executive Assistant

Maksymilian Jaworski - Data Base Administrator

Łukasz Kranc - Frontend Developer

Filip Wieczyński - Business Developer

# 11 AMLT - setting the high standard

#### 1. Clear and feasible idea

AMLT is attached to Coinfirm's automated AML/CTF compliance platform used to assess risk and fulfill regulatory obligations for blockchain transactions. AMLT delivers streamlined compliance at a discounted price for its holders and Network Members

#### 2. Team with track record

The Coinfirm team has built a recognized brand, AML/CTF Platform and a portfolio of clients and partners ranging from Big4's and financial institutions to the major virtual currencies. Team members include compliance and regulatory leaders for major financial institutions, virtual currency experts and blockchain technologists.

#### 3. Solid White Paper

Drafted by the Coinfirm team and reviewed by external experts, the White Paper is also externally audited.

#### 4. Audited Token

The smart contract and token will be audited and tested.

#### 5. Realistic milestones

Create a transparent and mutually beneficial compliant blockchain ecosystem while becoming the global AML/CTF standard.

# 6. Safety of funds and compliance with AML/CTF and KYC regulations

Escrow will be implemented for at least 70% of the funds. AML/CTF and Compliance will be transparently run through the Coinfirm Platform (each AMLT holder will be rated) with other elements outsourced to a trusted third party provider.

#### 7. Responsible antibug approach

Regular checks as well as a generous bug bounty policy.