

**ARTup Stable Coin (D1A)  
White Paper (English) v.1.3.1.**

# **ARTup Stable Coin (D1A)**

Fiat currencies in a decentralized art ecosystem



**ARTup**

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# **ARTup Stable Coin (D1A)**

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### **1. ABSTRACT**

Historically, artistic practices have always played a significant role in the global socio-economic environment. Since the dawn of time, art has remained one of the best narrative practices of history itself. The word "art" has always had an inexplicable fascination with magical qualities; being in the presence of a work of art is like witnessing a sort of miracle, a phenomenon of inexpressible immaterial quality that surpasses the material of which the object in itself; it is what contemporaries call the "aura" of a work of art, its emanation beyond itself. The value of contemporary art therefore tends to place itself openly in a relational and rather immaterial dimension, precisely in the sense of a uncommodifiable phenomenon. In fact, the commodification of the value of art never corresponds directly to the value of the material of which the work is made, but rather to the value of its substance. It is said that "art is a mental thing" meaning that art is pure formativeness, i.e. the potential ability to appreciate a form. The value of the artistic work would thus correspond to the measure of its artistry and this value is conventionally expressed by means of the artistic coefficient. The value of the artistic work would thus correspond to the measure of its artistry and this value is conventionally expressed by means of the artistic coefficient. The artistic action therefore constitutes the real substrate of asset "art". This is also why the well-preserved artefacts around the world are mostly semiophores that are unique, precious, beautiful and capable of taking the narrative beyond time itself. Art has been considered a store of value for thousands of years and remains widely popular today, with an average of around €64 billion (known) transactions occurring each year in auctions and direct sales through physical and digital channels. Art endures as a privileged refuge even in wars and crises, is widely recommended as part of a diversified investment portfolio and continues to represent a status symbol as one of the favoured and most prestigious assets to own, keep, move or display.

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## 2. ARTup Stable Coin (D1A)



ARTup introduces “ARTup Stable Coin (D1A)”, a stable digital cryptocurrency pegged to the Euro and backed by FIAT currency, providing people, robots, artificial intelligences and art market organisations with a robust and decentralised method of exchanging value using an always convertible unit of account 100:1 in Euro. Backed by FIAT currency, the D1A helps authors of works of art and producers of Non-Fungible-Tokens and all other participants in the contemporary art value chain in the environment “phygital” (physical-digital hybrid) to take advantage of the technology blockchain TRINCI®, through latest generation consent systems present within the protocol, in order to easily allow peer to peer (P2P) transactions in less volatile currencies. This method uses the algorithm Proof of Reserves on the blockchain TRINCI® and other methods of control on behalf of third party companies to demonstrate that the tokens issued are fully backed by cash reserves. A part of the commissions obtained from the use of the D1A constitute in turn a cash reserve for the exclusive benefit of ARTup Community, which uses those reserves to reduce or completely

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reduce the costs of the digital transition or the blockchain entries necessary for users who create an ARTup Wallet for the management of their own assets - both physical and digital art.

### 3. The pictogram: ARTup Stable Coin - D1A™

ARTupStable Coin-D1A is a digital product created to enable user interaction in the artistic phygital and decentralized ecosystem promoted by ARTup s.r.l. All logotypes, trademarks, pictograms, derivative icons, the graphic design of the digital products and services offered by ARTup s.r.l. are original designs owned by ARTup s.r.l. already registered or currently being registered. They are subject to copyright and therefore all reproduction and marketing rights are reserved.



The ARTup pictogramStable Coin-D1A™ is used as a symbol to recognize and use D1A on proprietary and third-party platforms as well as in a decentralized environment.

### 4. TECHNOLOGY

ARTup s.r.l. technological systems are integrated with blockchain TRINCI® created by technology provider Affidaty spa; such technology is based on encrypted evidence rather than trust, allowing two consenting parties to negotiate directly with each other without the need for a third party. Within this blockchain a payment circuit called Synkrony Exchange® was integrated on which the ARTup cryptocurrency circulates Stable Coin-D1A, which has all the typical characteristics of one stable coin exclusively by means of which it is possible to purchase both physical and digital works of art represented in the ecosystem phygital by ARTup. All D1As will be minted on the blockchain TRINCI® through the specific cryptographic protocol of the coin itself (Advance Asset smart contract D1A). Each D1A

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put into circulation is guaranteed, in a hundred to one ratio (e.g. 100 D1A = 1 euro), by the corresponding quantity of FIAT currency held in deposit by Affidaty SpA with a registered office in Viale G. Milton n.53, Florence (FI) – Fully paid-up share capital of € 750,000, tax code and registration number in the Florence Company Registered no. 06641600488 on behalf of customers and ARTup s.r.l. The D1A are redeemable/convertible in FIAT currency under the terms and conditions of use of the service offered by ARTup s.r.l. (<https://ARTup.company>) or, if the D1A holder prefers, they can redeem and/or convert them with the equivalent value in bitcoin or other cryptocurrency directly via the “ARTup Wallet” or even on the Synkrony Exchange (<https://synkrony.io>). Once a D1A has been issued, it can be transferred, accumulated, spent, etc., just like any other cryptocurrency. The reserve FIAT currency has acquired the characteristic of a cryptocurrency and its price is permanently linked to the price of the euro FIAT currency. The smart contracts D1A requires a commission on transactions executed in D1A, will be destined for ARTup Community and will be used to cover the costs of the entries made by BART-SC on blockchain TRINCI® e.g. for the creation of digital avatars “Gioconda-NFT” of registered users and for the registering on blockchain of the artistic coefficient.

Our implementation has the following advantages over other FIAT-pegged cryptocurrencies:

- D1As exist on the blockchain TRINCI@open source repository <https://github.com/affidaty-blockchain> and not within closed source software performed on a private and centralised database.
- D1As can be used pseudo-anonymous, in a decentralised cryptographically secure P2P environment.
- D1As can be integrated with merchants, exchange and other digital wallets as easily as any other cryptocurrency.
- D1As inherit the properties of the ARTup Wallets integrated into the protocol <https://4rya.io> which include: a decentralised exchange, with encryption in the browser, open source and digital wallet encryption; transparency, trustworthiness, multilateral security features, digital token market reporting and analysis features with a sort of meta-mask named “ARTup Wallet”, created specifically for the management of both physical and digital art assets.
- The technology used ensures a simple but effective approach to using a reserve system or Proof of Reserves.
- The issue or redemption of D1A will not be subject to any price or volatility constraints. Users can buy or sell as many D1As as they want, quickly and with very low commissions, thus helping to strengthen the ARTup Community.
- D1As will not face any market risks such as unforeseen events, liquidity crises, etc., as reserves are kept on a one-to-one basis and do not rely on market forces.
- D1A's one-to-one relationship setup is easier for less technical users to understand than collateralisation techniques or derivatives strategies. At all times, the balance of FIAT currency held in reserves will be corresponding to (or greater than) the number of D1As in circulation. This simple setup more easily supports a reliable reserve testing process (Proof of Reserves): a fundamental process to maintain price parity between the D1As in circulation and the FIAT currency held in reserves. ARTup users can conveniently purchase

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D1A directly from their "ARTup Wallets" or even from exchange Synkrony or other exchanges that support D1A as deposit and discharge methods (FIAT currency conversion). The implementation of the ARTup Stable Coin-D1A is not perfectly decentralised as Affidaty S.p.a. acts as a centralised custodian of reserves (although outstanding D1As exist as a decentralised digital currency) while ARTup s.r.l. acts as the Certification Authority for greater customer protection. These innovative features allow ARTup s.r.l. to operate easily even with FIAT currencies in the decentralised artistic phygital ecosystem, offering users best practices of the digital transition, facilitating exchanges of assets, both physical and digital, i.e. payments in FIAT currency and also in cryptocurrency.

The innovations made compared to others Stable Coin are:

- Ease of adoption for users of new digital technologies.
- Facilitating payments between users and other parties, including merchants, even beyond SEPA, on a global scale.
- Near-instant FIAT currency transfer between decentralised parties
- Introduction to the use of smart contracts and multi-signature capabilities to further enhance the overall security process.
- Commissions on services for the benefit of ARTup Community.
- Guarantee of transparency and efficiency of ecosystem services thanks to the specific smart contracts developed by ARTup s.r.l., which bind the sale of works of phygital art exclusively to the cryptocurrency ARTup Stable Coin -D1A.

### **Technology stack and processes**

Each D1A issued into circulation will be guaranteed on a one-to-one basis with the equivalent amount of corresponding FIAT currency. As custodian of support resources, Affidaty Spa acts as a trusted third party responsible for those resources. This risk is mitigated by a simple implementation that collectively reduces the complexity of conducting audits, both FIAT and cryptographic, while increasing the security, probability and transparency of exchanges peer to peer and of the audits.

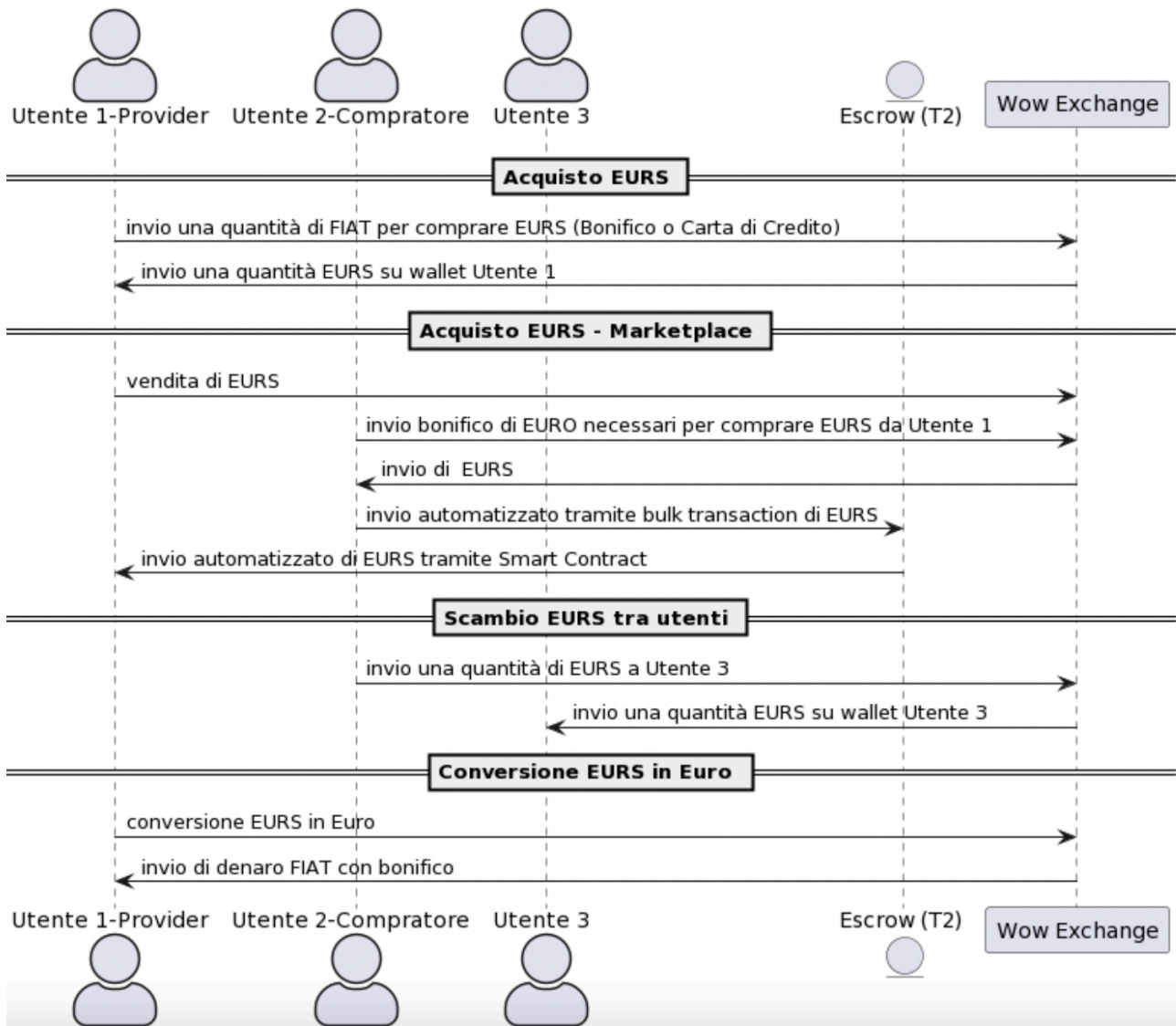
### **D1A Purchase Flow**

The stacks technology of the Synkrony® circuit on which the ARTups are issued Stable Coin-D1A has 3 levels and numerous features, as represented in diagram 1.

Here is a description of each level:

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## Modello per acquisto, vendita e scambio di EURS su WowExchange



1) The first level is the core: the blockchain TRINCI®. The Synkrony® transaction log is incorporated into the blockchain TRINCI®, in the form of metadata, via the built-in consent system.

2) The second level is the ARTup Company that thanks to the ARTup Wallet integrated with Arya protocol and Synkrony Exchange offers a fundamental technology capable of:

- a) Grant (create) and revoke (burn) digital tokens in the form of metadata embedded in the blockchain of TRINCI®; in this case, digital tokens pegged to the FIAT currency (€).
- b) Track and report the circulation of tokens through ARTup Wallets which complements ARYA Walletchest.info and the APIs ARYA wallet core, offering innovative tools for the analysis of performance of the digital assets and above all NFT securities in the artistic field.
- c) Allow users to transact and store D1A and other assets/tokens in a cryptographically secure pseudo-anonymous environment (p2p,) or in an encrypted web open source wallet,

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based on browsers: ARYA <https://4rya.io>

3) The third level is Affidaty Spa, the corporate entity responsible for:

- a) Acceptance of fiat deposits;
- b) Sending fiat withdrawals and revoking related D1As;
- c) Custody of the fiat reserves that support all assets in circulation ;
- d) Report publicly Proof of Reserves and other results of audits;
- e) Launch and manage integrations with other TRINCI® wallets/blockchain existing, exchanges, and merchants
- f) Synkrony Exchange allows you to send, receive, store and convert cryptocurrencies, FIAT money, tokens and NFTs peer to peer.

## D1A conversion flow into FIAT

The life cycle of a D1A consists of five phases:

Phase 1: The user creates his own ARTup Wallets inside the blockchain TRINCI® through the account form by ARTup (<https://account.artup.company>) integrated with the 4RYA.io protocol, generating its own asymmetric key pair offline.

Phase 2: Via ARTup Wallets or directly on Synkrony Exchange, the authenticated user deposits the FIAT currency in the bank account dedicated by Affidaty SpA and connected with the ARTup Wallets and its asymmetric key pair.

Phase 2.1: the smart contract (D1A-SC) automatically credits in D1A the user's wallet for the deposit made in €. The amount credited to the user in D1A will correspond to the value of the € at the time of purchase, see "Proof of Reserves" (e.g. €10 deposited = 1000 D1A)

Phase 3: At this point the user can transact using D1A: he can transfer, exchange and accumulate D1A through the integrated platforms on TRINCI®.

which vary between 2% and 8% in relation to the banking circuit of destination of the fiat currency.

Phase 5: Affidaty S.p.a. then proceeds with the transfer to the customer and burns the D1A object of exchange.

Once a D1A enters circulation it can be freely traded between any company or individual. The main concept that must be conveyed by the flow of funds is that the user can put new D1As into circulation (create them) and can remove them from circulation (burn them) only by using the smart contract D1A created by ARTup s.r.l. on blockchain TRINCI. This is the main process by which the solvency of the system is maintained.

## 5. MAIN APPLICATIONS

In this section, we will summarise and discuss the main applications of D1As in the ARTup phygital ecosystem integrated on blockchain TRINCI®. We divide the beneficiaries into three user segments: Producers, Promoters and Collectors. The main advantages aimed at all three segments are:



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- Property of TRINCI® transferred to other classes of assets
- Less volatile and familiar unit of account
- Any assets migrates on blockchain of TRINCI®

### **For Currency Exchanges**

In general, the main problems of providing a service through a platform exchange of the assets tokenised include:

- Identify the right payment providers for your exchange;
- Platform integration with banks that don't have APIs;
- Work with these banks to coordinate compliance, security and build trust; •Cost prohibitive for small value transfers;
- From 3 to 7 days for international wire transfers to be credited
- Very bad and unfavorable currency conversion fees.

Offering D1A, an exchange can eliminate the above complications and gain additional benefits, such as:

- Accepting cryptocurrencies as a deposit/withdrawal/storage method rather than using a bank or payment provider;
- Allow users to use FIAT currency inside and outside the exchange more freely, quickly and economically;
- Irreversible transactions, fraud protection, lower commissions, etc.;
- Outsource the FIAT custody risk in EURO, which guarantees the exchange of cryptocurrencies;
- Easily add other pegged fiat currencies as trading pairs within platforms
- Protect customer assets only through accepted cryptographic processes;
- Multi-signature security, hot/cold wallet, HD-wallet, etc.
- Conduct audits easier and more securely in a purely cryptographic environment;
- For all exchanges that can be done on TRINCI®, D1As can be used.

Given the growing number of default events we believe the use of D1As exposes traders to a lower counterparty risk compared to that associated with the constant holding of FIAT currencies on other platform exchanges. Additionally, there are other benefits of holding D1As, explained in the next section.

### **For individuals**

To date, there are many types of users with the still mostly latent need to use the blockchain. From authors and producers of works of art who should protect their work in a physical and digital environment and guarantee the normalized payment of copyrights, to promoters who promote artistic services/products in an asymmetrical and poorly protected market, to

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traders looking to earn profits every day, to collectors and long-term investors looking to keep their crypto assets securely, right down to the most tech-savvy users simply looking to avoid credit card fees or keep their own privacy; For each of these individuals, we believe the D1As are the ideal tool in several respects, such as:

- To carry out transactions in FIAT currency;
- To store FIAT currency while protecting your private keys;
- To avoid the risk of filing FIAT on the exchange and easily move cryptocurrencies and FIATs in and out of the exchange;
- To avoid having to open a bank account in FIAT to store the value;
- To easily improve applications that work with bitcoin or other cryptocurrencies that support the D1A protocol;
- Everything that can be done with the main cryptocurrencies can also be done with D1A.
- Per proteggere i propri dati e mantenere la propria *privacy*, effettuando transazioni fra pari in modalità pseudo-anonima.

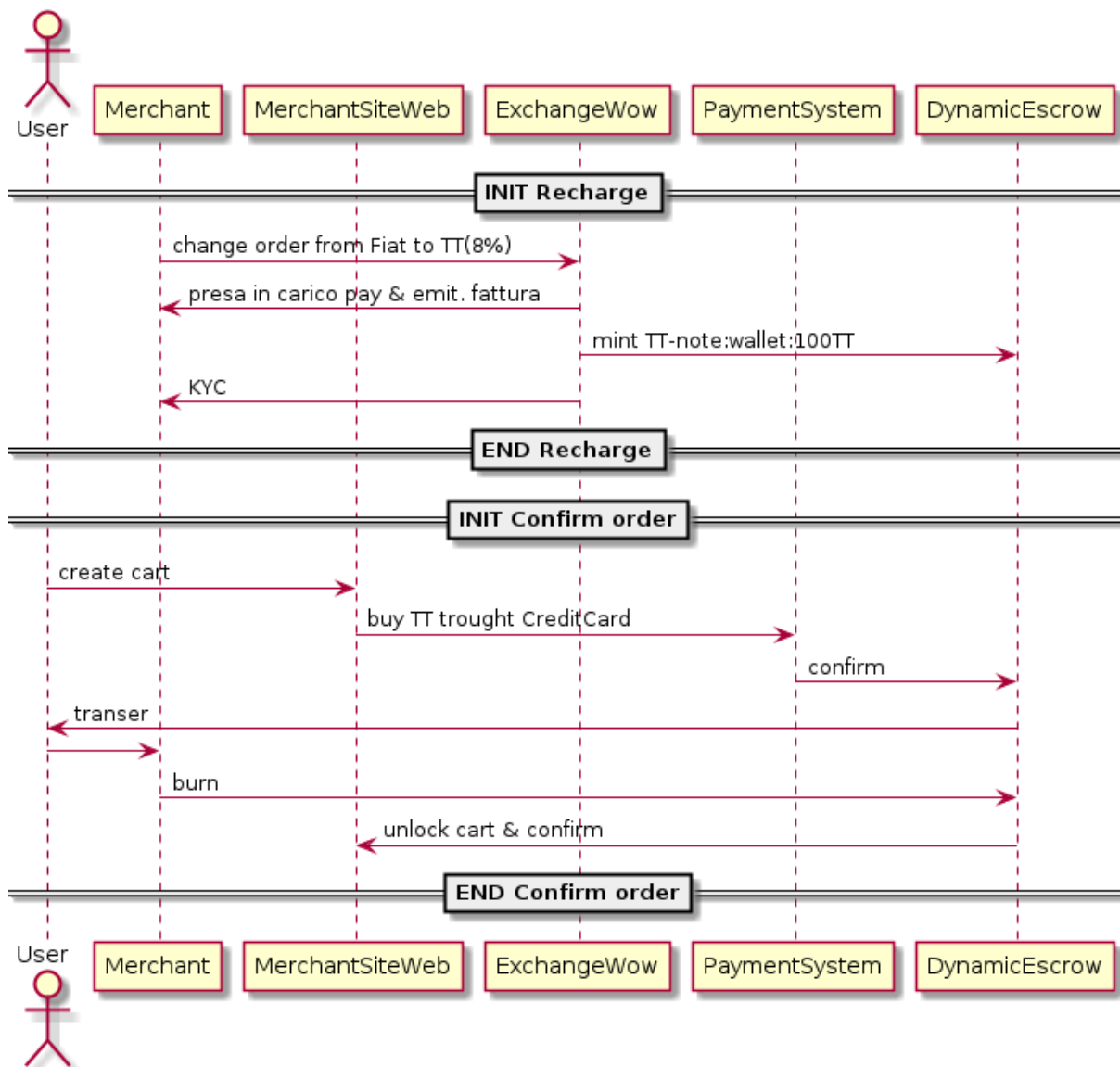
## For merchants

Gallerists and art intermediaries want to concentrate on their business, on what they do best: selling. For many, the digital transition represents only an obstacle to exercise or in any case a boring problem to be solved in order to reach an increasingly complex and global market.

Here are some of the ways ARTup srl can help them:

- Price of the artworks expressed in D1A, which, being permanently anchored to the FIAT currency, rather than to any other cryptocurrency, has the advantage of not having any fluctuations in prices or conversion rates which remain constant over time.
- Avoid conversion from other cryptocurrency to FIAT currency and associated fees and processes;
- Prevent chargebacks, reduce fees and gain greater privacy protection privacy
- Providing new services thanks to FIAT/crypto functionalities:
- Microtipping, gift cards, more;
- Anything that you can do with major cryptocurrencies as a trader can also be done with D1A.

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## Conclusion

ARTup Stable Coin- (D1A) is the first stable cryptocurrency on the art market based on TRINCI® and existing on the Synkrony® circuit. D1As are fully reserved on a one-to one basis, completely independent of market forces, prices or liquidity constraints and are backed by the implementation of the protocolProof of Reserves simple and reliable and regular professional audits by a supervisory body called the Board of Statutory Auditors. The banking reports produced weekly by the control bodies, the compliance of the procedures and the legal structure of the ARTup srl ecosystem provide absolute security in the management of assets - physical and digital art. Our team is made up of contemporary art experts, computer engineering experts, financial and legal consultants who are experts in

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business administration and scalability, as well as excellent strategic partner Affidaty SPA, a highly respected technology provider within the blockchain community and internationally.

### **Legal and compliance**

ARTup s.r.l. is a limited liability company established in accordance with Italian law with a fully paid-up share capital of € 65,000.00, with registered office in Rome at via di Pietralata 147/A, post code 00158.

Affidaty Spa is carrying out the due diligence of customers, record keeping and reporting procedures consistent with Italian and European Union law and with related Anti-Money Laundering and Terrorist Financing laws (through relevant financial institutions). These banks are satisfied with our processes and also with the fact that our business operates in compliance with banking regulations as all banks had been asked to check this with their own legal, compliance and venue before opening accounts (including on our request). It was our goal from the beginning to have a compliant operation and to deliver the highest level of comfort to our banking partners. Furthermore, these banks have and are working with other TRINCI®-based businesses.

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## **Glossary of terms**

**Phygital Ecosystem:** an ecosystem of decentralised P2P services that integrate the physical dimension with the most innovative digital technologies.

**ARTup Community:** the users or users of the services offered by ARTup, or rather the protagonists of the digital transition of the contemporary art market.

**ARTup Company:** the Board of Directors of the company ARTup s.r.l.

**ARTup Suite:** the set of decentralised Applications (dApps) of decentralised digital services for contemporary art offered by ARTup srl

**Digital Currency:** As defined by  
[http://en.wikipedia.org/wiki/Digital\\_currency](http://en.wikipedia.org/wiki/Digital_currency) Cryptocurrency

**Decentralised Digital Currency:** Any type of cryptocurrency open source, cryptographically secure using a distributed registry.

See: <http://en.wikipedia.org/wiki/Criptoaluta>

**Real world currency, fiat currency, or national/sovereign currency:** All types of currency that are non cryptocurrencies as defined above.

**Cryptocurrency System:** A collection of software and processes primarily created to enable a cryptocurrency to exist.

**Financial system legacy:** any financial system that is not a cryptocurrency system.

**Digital tokens supported by utilities, aka dApps:** a decentralized digital token whose value derives from utility of its application rather than just being a value transfer system.

**Cryptocurrency with asset backed/pegged:** Any cryptocurrency whose price is pegged to a real-world asset, i.e. it is not a "utility-backed" cryptocurrency.

**Synkrony(s):** refers to the payment and exchange circuit based on TRINCI® technology on which the ARTup Stable Coin D1A is based.

**D1A:** a single unit of ARTup Stable Coin D1A issued by ARTup s.r.l.