# **FAQ – UNIT ECOSYSTEM 101**

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#### **Definitions**

**UNIT** – new global currency of the UNIT ecosystem

UNT – proposed ISO 4217 currency code for UNIT with currency symbol ₩

**UNIT ecosystem** – fractal monetary ecosystem developed by IRIAS and operated on a decentralized basis according to the UNIT rule-book

**IRIAS** – International Research Institute for Advanced Systems, an international intergovernmental organization founded in 1976 to carry out comprehensive research and development in the field of management theory and practice

**UNIT rule-book** – set of governance rules and practices developed by IRIAS facilitating buildup and evolution of the UNIT ecosystem

**UNIT node** – integral part of the UNIT ecosystem authorized to mint and transact UNIT tokens as stipulated by the UNIT rule-book

**UNIT token** – indivisible fungible monetary transactional element of the UNIT ecosystem with intrinsic value reflecting proportionally total value of the UNIT reserve basket of underlying assets

**UNIT reserve basket** – total value of assets kept at UNIT nodes containing 40% gold and 60% fiat currencies freely convertible into gold, by value measured in gold

**UNIT proprietary payment system (UPPS)** – proprietary payment system designed in order to transact with UNIT tokens and open for access in line with the UNIT rule-book

**UNIT platform** – technological platform of the UNIT ecosystem built on distributed ledger infrastructure using open-source architecture solutions

**UNIT DAO** - organizational form of the UNIT ecosystem

#### What is the UNIT?

The UNIT (token) is a unit of account of the UNIT ecosystem, representing a proportional share of the underlying UNIT basket, which contains 40% gold and local currencies, freely exchangeable into gold. Each UNIT token is a fully fungible currency unit.

The intrinsic value of the UNIT is derived from the current value of the basket of underlying assets, measured in gold. The economic value of the UNIT token is determined by the supply and demand. The supply and demand are determined by its use as medium of exchange or as a storage of value.

The UNIT ecosystem operation is guided by the UNIT rule-book.

#### Which problems does the UNIT ecosystem address?

It is an open platform which may accommodate various economic agents: sovereign, private, public or state-owned.

The UNIT is designed primarily for free economic agents rather than governmental institutions, especially where one or both parties have constrained access to CLS-currencies. Thus, the UNIT ecosystem effectively addresses problems of traders engaged in cross-border trade.

The UNIT also alleviates the problems of related governments as local authorities may choose to actively use the UNIT ecosystem in various ways: acknowledge UNIT as an eligible currency for cross-border trade, set up sovereign UNIT node(s), accept tax and custom payments in UNIT tokens, promote the UNIT ecosystem in general.

We do not anticipate UNIT becoming the legal tender. The UNIT is complementary to and alternative of local currencies and convenient for transactions; but the local currencies remain sovereign source of credit.

### What is the main goal of the UNIT ecosystem?

The main goal of the UNIT is to be a new apolitical alternative global currency for all economic agents.

The UNIT ecosystem makes global trade and capital flows more resilient to external non-economic interferences. It offers a convenient and stable global alternative within existing financial infrastructure. It allows unimpeded use of its apolitical money for trade and capital transactions via any open payment and clearing system.

Our approach is unique, but it synthesizes many concepts developed earlier. We hope that our efforts will contribute to making the World a better place to co-exist and co-develop and will serve the generations to come.

### What is the key issue that the UNIT ecosystem is designed to address?

The UNIT ecosystem is designed to solve the main current problem in global finance - the lack of trust.

There is strong distrust of fiat currencies of developing countries, further deteriorated by geopolitical instability, direct interference into global trade via sanctions by G-7 and heavy-handed policies imposed by the IMF and other international institutions on economic agents from the Global South.

These problems are addressed by conceptual fractal design of the UNIT ecosystem and by anchoring the UNIT token to the underlying UNIT basket, which contains 40% gold and is valued in gold terms.

### What is the key benefit of the UNIT ecosystem?

The UNIT offers benefit for cross-border trade where one or both parties have constrained access to G-7 or CLS currencies.

According to our estimates, full economic costs associated with cross-border payments in local currencies of the Global South are approaching 10%, including commissions, exchange rate differences and the cost of working capital.

Minting UNIT tokens the ecosystem effectively gives x2.5 leverage over the gold collateral by accepting 60% of local non-CLS currencies and given in exchange UNIT tokens for cross-border settlements.

Transacting in UNIT provides obvious economic benefits for importers by reducing or fully eliminating their transactional costs. Exporters transacting in UNIT benefit from the stability of commodity and financial flows.

The UNIT ecosystem minimizes complexity, reduces reliance on political or regulatory solutions, offers market participants plug-and-play solution that could operate with minimal adjustments to the existing financial infrastructure and legal framework.

We expect that the use of the UNIT ecosystem will grow even more attractive over time, as circulation increases and economies of scale accrue to all ecosystem participants.

### What is the main long-term impact of the UNIT ecosystem on global economy?

The use of UNIT as apolitical money for trade and capital transactions will reduce risks for all parties and become the key element for long-term global economic growth and prosperity.

As the world is evolving towards multiple trading blocks, the UNIT ecosystem offers a sustainable platform for trade and investment between these blocks.

Integration of diverse participants into UNIT will facilitate development and growth of the autochthon capital base among them and reduce their dependence on external sources of capital and investment. This will level the playing field between the two blocks and create an alternative capital base for long-term investment and development of the Global South.

Presently, the Global South is wary of using domestic currencies of the Non-South countries for investment, mainly for political reasons. Neither gold, nor local currencies, nor cryptocurrencies offer adequate remedy for this problem. The UNIT ecosystem is designed to close the gap of distrust towards money.

# How can the UNIT ecosystem facilitate global trade and investments?

The main task is to balance the interests of the Global South with the interests of the Non-South, while not destroying the existing economic links between and within them.

In simple terms we can summarize the current (largely symbiotic) relationship between the two blocks as follows: the South produces, and the Non-South consumes.

The Global South wants to sell its raw materials, labor, and consumer goods to the Non-South, and the Non-South wants to invest its capital in the South, viewing it as the only place with sufficient growth potential for decades to come. Over time, the terms of trade will become more level, as consumption will grow in the Global South.

Introduction of UNIT for cross-border trade will have positive impact on balance-of-payments for the Global South because of its apolitical nature, conceptual simplicity and advanced technological solutions.

### What are the benefits of the fractal design of the UNIT ecosystem?

Open fractal structure of the UNIT ecosystem offers its participants the flexibility to evolve the structure itself with the changing priorities of the moment. The ecosystem relies on self-optimization and homeostasis due to intrinsic flexibility and the ability to evolve.

The number of nodes opened and tokens minted will constantly change, while self-optimizing in the process of the ecosystem development. Fractal design has a solid foundation of core principles (see our White Paper at <a href="https://www.unitfoundation.org">www.unitfoundation.org</a> for details), but no rigid fixed relationships between components.

External shocks, organic development, changing geopolitical realities, and other factors will impact the fractal financial system, but instead of destroying it, will help it evolve and become more resilient and flexible. Fractal design is "anti-fragile", borrowing the term from Nassim Taleb.

The number of UNIT tokens in the fractal financial system will grow following the demand. The fractal financial system allows an unlimited number of participants to join and use the benefits of a freely convertible decentralized currency, gaining access to stable long-term investment capital.

The fractal design of the UNIT ecosystem allows it to scale its capacity and usability seamlessly and cost-effectively through the opening of UNIT nodes in new geographies.

### How do you see the evolution of the UNIT ecosystem?

We expect a rapid evolution and a growing number of participants. The UNIT ecosystem facilitates international trade without imposing additional costs on the local monetary system of each of the countries. Access to the UNIT ecosystem strengthens sovereignty of each country, since it eliminates dependence on the monetary policy of other states and protects international trade from restrictions and pressures resulting from using a domestic currency of another country for trade and investment.

Early adopters and then an increasing number of other players will be encouraged to keep a part of their revenue in UNITs and possibly (over time and with enough support by local governments) also pay taxes in UNITs. This will supply tradable currency to local governments, which we hope might form a part of gold and foreign exchange reserves of these countries at later stages. Such reserves will not be exposed to the risk of external political pressure and currency controls.

Growing circulation of UNITs will create sufficient liquidity for lending and investment activities (sovereign debt issuance in UNIT tokens, corporate bond issuance denominated in the UNIT, etc.). For exporting companies with revenue in UNITs in particular, the issuance of bonds denominated in the UNIT will be safer and more efficient than the alternatives.

As the UNIT gains sufficiently wide circulation, part of the demand for it will come from individuals and companies that do not directly participate in international trade but are looking for a way to maintain liquidity in a freely circulating currency.

In many countries population avoids using local currencies because of a well-founded distrust. At this stage of the ecosystem development, sufficient liquidity of the exchange market between the UNIT and other currencies should be available along with financial instruments denominated in UNITs.

#### How can the UNIT ecosystem be embedded into the existing regulatory frameworks?

From the point of view of any regulatory body, the UNIT ecosystem is transparent and compliant, both at the global IRIAS (see Definitions) level and at the level of local organizational, legal and technological implementations.

In the world that is splitting along trade and political lines, sovereign countries can obtain extra degrees of freedom by focusing their monetary policy on their national interest. We believe that

our proposed solution will make it easier for smaller countries of the Global South to resist external pressures and to focus on their national interests.

The conceptual fractal design of the UNIT ecosystem should make it economically attractive and important for sovereign states so that they would not interfere, support its growth, and in some cases even adjust the regulatory regime in order to facilitate its development.

In-built characteristics of the UNIT ecosystem:

- reliability and transparency of all operations,
- local authorities' control of its implementation on sovereign territory,
- enhancement of financial sovereignty for participating countries.

The mere possibility of participating in the UNIT ecosystem may strengthen the negotiating position of some countries in their often-difficult negotiations with international financial institutions.

Direct sovereign participation in the UNIT ecosystem is not a requirement for the success but an option open to any sovereign actor, should they choose to participate. Everyone is welcome and everyone can benefit from access to apolitical money. The platform itself is open, the standards are clear, and operations are fully transparent and resilient.

The UNIT ecosystem should, with time, receive tacit or open support of many local governments, central banks, and other state actors. Engaging with the UNIT ecosystem allows to receive significant benefits, while keeping their options open with parties outside the UNIT ecosystem.

# How should local monetary authorities perceive the UNIT ecosystem?

The UNIT is designed for international trade and investment and will not interfere with domestic monetary policy objectives. The UNIT ecosystem is symbiotic with and complementary to the monetary and fiscal objectives of local authorities.

The initial plan is to reserve local currencies within UNIT nodes with subsequent transfer to special accounts either at the issuing Central Banks or at credit institutions authorized by them. The currencies included in the reserve basket are expected to see additional demand from external investors.

The direct use of the UNIT as a means of payment within a country is not planned. Instead, one of the possibilities of a practical implementation is to convert remitted UNITs into specially issued CBDC with controlled amount and functionality (for example: cross-border settlements, payment of dividends, domestic financial transactions, payment of taxes and customs duties). This will not interfere with the deployment of local CBDC, and will even facilitate these initiatives, under the full supervision of local Central Banks, as a practical solution of integration of the UNIT into domestic financial systems.

For the Ministry of Finance, the Customs and for the Tax Authorities, engagement with the UNIT ecosystem will help increase cross-border trade, improve its transparency, and strengthen customs and tax collection as a result. Further, we expect that symbiotic integration of the UNIT into domestic financial systems will facilitate the inflow of foreign direct investment.

Once the Eurasian Stock and Commodity Exchange is created as currently expected, it will provide the platform for pricing key commodities in the UNIT directly, without reference to other countries' currencies. This will be a key milestone on the road to enhancing financial sovereignty of all UNIT ecosystem participants and will reduce their vulnerability to other countries' monetary policy or exchange rate volatility.

### Why would sovereign states be interested in setting up and operating UNIT nodes?

Possible opening of nodes by sovereign states is the decision of these sovereign states. To join the open UNIT ecosystem is a possibility but not a requirement for sovereign agents.

We expect that benefits of joining will soon become apparent:

- easier accessibility of the domestic market for international trade,
- better control and liquidity to support external trade,
- speedier reserve accumulation.

Any country can mint UNIT tokens on its own sovereign territory using transparent infrastructure and without the need to transfer gold abroad. The use of UNIT tokens for cross-border settlements is very attractive, especially for countries with a transitional economic model and those with a chronic negative current account.

Technically, creation of new UNIT tokens transforms existing monetary units into more convenient, stable and liquid ones. In the process of creating new UNIT tokens, the components remain inside the fractal financial system. At the same time, the total amount of money supply does not increase, since UNIT tokens replace rather than complement their components.

In other words, the creation of UNIT tokens, for example from gold, rupee and yuan, is a neutral phenomenon from a monetary point of view. The components are withdrawn from circulation, and the process will not increase the amount of rupee or yuan in circulation, or cause inflation.

We expect that when the investment opportunities in UNITs exceed the investment opportunities in component currencies, the demand for the creation of new UNIT tokens will exceed the growth rate of trade turnover in this currency. Once the investment opportunities denominated in the UNIT appear, additional UNITs will be minted to meet these opportunities.

### Private vs. sovereign: which part of the fractal financial system is likely to develop faster?

Different countries will move along different trajectories due to political factors. It is possible that the monetary authorities of many countries will choose not to participate openly in the UNIT ecosystem. This may be politically expedient and could maximize the attractiveness and opportunities for some countries. Sovereign actors will make decisions that will reflect their evolving national interests.

Such uncertainty will not be a problem. In fact, decentralization is the core part of the conceptual design of the UNIT ecosystem. Setup of UNIT nodes by quasi-sovereign players like sovereign development or welfare funds could be a good hybrid solution.

# What is the impact of UNIT tokens use on the balance of payments?

The use of UNIT tokens may with time improve the terms of trade. It will be possible to obtain imported goods at more favorable prices, since exporting partners will be more interested in obtaining liquid UNIT tokens than the domestic currency of the importing country.

In certain cases, the presence of a UNIT node in the importing country could allow to mint new UNIT tokens for payments for imported goods using:

- up to 30% of the local currency,
- 40% of gold,
- up to 30% of the fiat currencies of other countries.

A potential issuer may have a trade surplus. This process must comply with the principles codified in the UNIT rule-book (requirement of free conversion of the used fiat currency into gold). As a result, up to 30% of hard currency imports can be paid for with domestic currency in some cases, without increasing the amount of domestic currency in circulation at home or abroad.

# What is the impact of joining the UNIT ecosystem on sovereign monetary policy?

Government will not need to adjust their monetary policy, no matter how restrictive it may be, to join the UNIT ecosystem.

Local Central Banks can maintain capital controls and fix official exchange rates of the local currency as before. The UNIT does not induce authorities to liberalize capital account. Quite the opposite, the presence of the UNIT gives local authorities more control over cross-border flows.

If a local currency is used to pay for imports, it is already emitted and is at least partially convertible. Any restrictions and conditions on it will be reflected in its market price expressed in gold equivalent. This market value may differ significantly from the official exchange rates set by local authorities, especially if there are strict currency controls or other restrictions on capital flows.

Such partial convertibility of local currency is compatible with the control of capital account, since the exported local currency usually cannot freely flow into the domestic money supply. The UNIT ecosystem does not undermine this control by the local authorities.

After new UNIT tokens are minted, the tokens' underlying components are withdrawn from circulation. They remain in custody at emitting UNIT nodes, and the creation of new UNIT tokens transforms existing monetary units (components of the underlying reserve basket) into more convenient, stable and liquid ones (the UNITs). At the same time, the total amount of money supply does not increase, since UNIT tokens replace their components, which remain "locked away" within the UNIT ecosystem.

As already stated, creating UNIT tokens from gold, rupee and yuan, for example, is a neutral phenomenon from a monetary point of view, and will not cause inflation in respective countries.

Countries can start borrowing in UNITs instead of other countries' domestic currencies. For countries whose currencies are included in the basic UNIT basket, the need for exchange rate management will decrease over time and currency risks will have less impact on the credit rating of government debt and/or the creditworthiness of the country.

The rating frameworks of most credit agencies, the amount of available reserves and the risk of losing access to international markets are some of the key factors that impact credit rating of a country. Participating in the fractal financial system will reduce both risks, other things being equal.

### What are the advantages for frontier countries to join the UNIT ecosystem?

The size of a country or of its economy is irrelevant. If Papua New Guinea, for example, exports oil to China and receives payments in UNITs, whose underlying basket at that time consists of gold, rupees and yuan, then whether there is a node on the territory of Papua New Guinea or not makes no practical difference. There is no requirement to have own UNIT node to benefit from the UNIT ecosystem.

We can illustrate potential economic usefulness of having a UNIT node on a sovereign territory on the example of Türkiye. Türkiye imports raw materials and exports value-added products and services. Türkiye needs to receive payments in currencies that can be used to purchase raw materials and other imports. If the main suppliers of oil, gas, ore and grain to Türkiye cannot receive payment in dollars, but prefer UNITs, it is likely that Türkiye will be motivated to receive UNITs for at least some of its exports. However, it is likely that in this case, the most efficient way to obtain necessary amounts of UNITs will be by minting additional ones.

The Non-South, at the block level in relation to the Global South, also has a negative balance of payments, which is now funded mostly with G-7 currency emission, i.e., Non-South as a block imports more that it exports, in exchange for its fiat currencies. This can continue as long as the Global South accepts payments in G-7 currencies for the raw materials supply to the Non-South.

These dynamic will change, if the suppliers demand payments in UNITs.

#### Is there a risk of sanctions on the UNIT ecosystem?

The UNIT ecosystem is being created and developed as an international decentralized network under the guidance of IRIAS. The legal status of IRIAS is an international intergovernmental organization endowed with international legal personality at the UN level, which is regulated by the current intergovernmental agreement and the Budapest Convention of 1980. This provides the UNIT ecosystem with a robust legal framework for its operation and with a unique organizational and legal status (and corresponding international immunity).

We expect that this framework will allow the UNIT ecosystem to avoid direct political pressure, make it attractive to non-aligned countries and create an economically viable alternative to the existing international financial infrastructure.

We also believe that attempts at direct sanctions on the UNIT ecosystem will fail due to the following factors:

- unlawfully imposed sanctions, being an instrument of pressure, will further discredit the current financial architecture at the same time highlighting advantages of the UNIT ecosystem as a reliable, fair and efficient alternative to all participants;
- an attempt to sanction the UNIT ecosystem will further validate its importance and disruptive potential;
- there is plenty of built-in resilience in the design of the fractal financial system and several mechanisms to deal with direct political pressure and subsequent disruptions.

# Is UNIT token a cryptocurrency?

The UNIT token is not a cryptocurrency because its intrinsic value is determined by a basket of underlying assets, which includes 40% of gold and local currencies backed by certain reserves and freely exchangeable into gold.

The UNIT ecosystem relies on distributed ledger technology (blockchain).

Once the UNIT tokens are minted and the nodes of the network are synchronized, they are completely fungible and can be used as any fiat currency: a simple account-to-account transfer using existing banking infrastructure should suffice.

#### Is UNIT token a stablecoin?

The UNIT token is not a stablecoin, since its intrinsic value is not directly linked to any asset, but depends on the composition and total value of the basket of underlying assets, which will fluctuate. This fluctuation is driven, among other factors, by the number of UNIT tokens issued and the dynamics of changes in the value of each of the underlying assets.

In principle, market value of the UNIT shall be determined by supply and demand only. Beyond the initial period, the market value will oscillate about the value of the underlying basket of assets, driven by supply and demand.

The main difference between UNIT token and a stablecoin is that the UNIT does not have the reverse conversion mechanism (and a key attribute of a stablecoin is the no-arbitrage mechanism for reverse conversion of a stablecoin into the underlying resource that was used to create one).

# Is UNIT token better than a stablecoin in fulfilling key functions of money?

The purpose of a stablecoin is to be an intermediate stable stage in the chain of transactions, where it is never the final stage. To achieve this goal, it is pegged to a resource that was used to create the stablecoin.

The UNIT token is the final stage. The UNIT is designed to perform the function of money, and to do it better than any of its underlying components. It serves the function of money as a liquid measure of account for goods and services, a currency for trade and investment, and a monetary unit which is suitable for fair contracts without putting any of the parties at an obvious disadvantage. However, we do not anticipate UNIT becoming the legal tender widely and highlight that it is complementary to a local currency.

Since there is no mechanism for reverse conversion of UNIT tokens into its constituent resources, the price of the UNIT token is not tied to any of the resources that was used to create it. Therefore, the exchange rate(s) of the UNIT token to its components or relative prices between the components are not fixed.

This approach eliminates the risk of unpegging of the UNIT token from any exchange rate, since it is not pegged to any exchange rate or resource. Each UNIT token is a part of the fractal monetary network, which allows the UNIT to have various positive attributes, while maintaining its decentralized design and resilience.

In the broadest terms, the UNIT is a decentralized supra-national currency designed to fulfil key functions of money in purely apolitical manner. This currency shall exist in digital form and be eligible for use in conventional financial infrastructure like any other currency.

### Why underlying UNIT basket contains 40% of gold?

Gold in UNIT ecosystem serves primarily the function of the natural constraint on the emission of UNIT tokens and the anchor of intrinsic value.

Our research indicates that 40% of gold is the optimal proportion to anchor the value of underlying UNIT basket and make UNIT eligible for mass adoption at the initial stage. Increasing the share of gold above 40% would likely lead to the UNIT price being dominated by the price of gold – a scenario that would make the UNIT less useful in fulfilling key functions of money.

40% gold-backing positions UNIT clearly below pure gold, but also below US dollar – presently the widely adopted currency for cross-border trade and investments. According to the Gresham's law, gradually, the more valuable form of money will cease to act as medium of exchange, erode its usefulness as measurement unit and become solely a store of value.

Although the pace of decoupling of the UNIT value from the underlying UNIT basket is impossible to predict, we expect it to happen relatively quickly, so that the price of the UNIT token will depend more on its commercial value rather than pricing of its components.

### How is the price and value of the UNIT token determined?

The value of the UNIT is measured in gold, because each component of the underlying UNIT basket is valued in gold.

Pricing of UNIT token components is the result of supply and demand for each of the components, measured in gold equivalent. After the UNIT tokens have been minted, no additional re-balancing of the basket is performed, the pricing of UNIT tokens is not fixed and is not manipulated.

The information about the number of UNIT tokens issued and the exact structure of the underlying UNIT basket is publicly available through the nodes of the UNIT network. The price of the UNIT token will be determined by the market and reflected on the relevant trading platforms.

The differences in liquidity between the individual components of the underlying UNIT basket may cause arbitrage between prices of the UNIT and its components. If the market value of the UNIT is below the intrinsic value of its components, arbitrage activity of buying the UNIT against selling its underlying basket can attract pure financial players to the ecosystem and improve price discovery and liquidity for all participants.

If the UNIT is priced above the value of the underlying basket, an opposite form of arbitrage will be useful to all participants: selling the UNIT vs buying weighted shares of the underlying basket.

# How will inclusion into underlying UNIT reserve basket impact local currencies?

If two parties are transacting across borders in a local currency, and if imported goods are exchanged for this "off-shore currency" (OFC, domestic currency used to pay for imports), there exists an effective value of the OFC that makes such trade economically attractive for both parties.

While the benefits for importers in this case are obvious, exporters are only compensated fairly if they can further use the OFC in trading with third parties at a market-clearing value of the OFC that is not directly related to the original transaction.

Creating a mechanism for transparent and free price discovery of OFC value in gold terms is a way of finding a consistently reliable market clearing value of OFC. The clearing levels measured in spot gold correspond to the value that makes it economically attractive for an exporter to receive OFC for its exports and then trade with third parties using the obtained foreign OFC.

Conceptually, the UNIT framework does exactly this by allowing into the underlying UNIT basket local currencies, that are freely exchangeable into gold. We expect that use of UNIT ecosystem instead of third-country currencies will alleviate trade imbalances and stimulate investment flows.

### Can the price of UNIT token decline?

Yes, due to changes in the supply and demand and in prices of each of the components of the underlying UNIT basket, both the market price and the intrinsic value of the UNIT, may decrease in gold terms and in terms of other currencies or financial assets.

With the evolution of the UNIT ecosystem (which will include the creation of its own commodity and stock trading platforms for cross-border trade), purchasing power of the UNIT will become more stable.

At the initial stage, as an increasing number of key natural resources (beginning with energy, metals, and agricultural commodities) becomes priced in the UNIT, the volatility of the UNIT will become and remain lower than volatility of the key commodities that are priced in this currency.

The systemic effect of these changes should lead to an increasing number of high-value-added products and services to become priced in the UNIT.

### What can be bought with UNIT tokens?

First, energy, metals, and agricultural commodities; then high-value-added products and services; finally, debt instruments.

Evolution of UNIT ecosystem will progress through several stages. These stages are not necessarily sequential, most likely they will occur in parallel as the market of goods and services available for purchase with UNIT tokens will grow in a non-linear fashion.

During the initial stage, essential infrastructure will be formed, which will require motivating "early adopters" to conclude agreements and make payments in UNITs.

Large exporters of natural resources, especially companies with a dominant market share, will prefer payments in a currency that is more liquid, stable and predictable than any available local soft currencies. For such exporters, it should be possible to convince their foreign partners to redirect part of financial activities to the UNIT ecosystem.

Sellers and buyers can prefer UNITs for cross-border transactions, since UNITs circulate freely and uncontrolled by any government or company. The UNIT tokens can be used in new transactions with any new partners without restrictions, without conversion into another currency.

UNIT adoption will be driven by the systemic effect: reaching a critical mass among market participants who use UNITs will encourage other participants to join the UNIT ecosystem.

Beyond the initial stage, as an increasing number of key commodities becomes priced in the UNIT, we expect that a growing number of high-value-added products and services will become priced in the UNIT as well.

Sufficient liquidity will make lending in the UNIT possible, as participants accumulate balances that can be lent onward by financial intermediaries (holding these balances on deposit).

Issuance of debt instruments denominated in the UNIT will be the next stage of the ecosystem development. It will make the ecosystem more attractive to new participants: the UNIT will evolve from a transactional instrument into a currency for savings and investments.

#### How frequently and by whom can UNIT tokens be minted?

New UNIT tokens can be issued as needed at any time after the delivery of the basic components to the fractal network node. The structure of the basket and the price of each component of the basket, measured in gold, is transparent and publicly available.

Practical implementation will require a minimum period of time before the registration of new tokens will be reflected in all elements of the UNIT ecosystem.

New UNIT tokens can be issued at the node level without the need for authorization from a central issuing authority or any coordination between the issuers of underlying currencies.

The issuance of new units is made by exchanging a scaled copy of the basket for new fractal units and sharing the updated number of issued tokens with the rest of the network.

Anyone can mint new UNITs, if the required components are delivered at the node. This includes private entities, quasi-sovereign and sovereign entities.

#### Is there a maximum limit on the number of UNIT tokens in circulation?

Practical limitations on emission are the amount of physical gold required to issue new UNIT tokens and the number of local currencies in circulation that can be freely exchanged for gold. There are no arbitrary limits on the number of UNIT tokens in circulation.

The growth of the ecosystem is likely to be non-linear and unpredictable, and any attempts to ration UNIT emission or ecosystem growth are likely to fail. Fortunately, this is good news ("a feature, not a bug"), as it reflects the decentralized nature of the fractal financial system and makes it resilient. We highlight some additional considerations below.

First, there is no practical need to control the emission. The requirement of 40% in gold for the issue of new UNIT tokens, and of 60% in the constituent currency components, protects the UNIT network and the fractal financial system from repeating the tragic experience of the Weimar Republic or Zimbabwe.

Gold in the fractal financial system performs the function of a fundamental stabilizer of value. The amount of gold is limited (though quite large), and its value is self-evident, without necessarily measuring the price of gold in terms of something else. The remaining components of UNIT tokens are fiat currencies and, accordingly, are subject to the risk of "competitive devaluation".

However, even in such a scenario, there is no need to limit the issue of UNIT tokens, since each UNIT token reflects the evolution of the value of its components, while not directly influencing negative trends, should they take place at the level of component currencies.

In addition, money in fiat currencies that is delivered for minting of UNITs will be "locked away" and no longer circulate.

A decrease in the value of any component currency, expressed in gold, will increase the amount of the cheaper currency required to issue new UNIT tokens. This built-in stabilization mechanism makes UNIT tokens a fundamentally more stable monetary unit than any of its components individually.

Second, the future number of UNIT tokens depends on factors that are impossible to credibly quantify or simulate in advance. There are many parameters in the ecosystem, which will affect the velocity of the emission of new UNITs. For example, the increase rate of turnover in the UNIT ecosystem - the velocity of circulation of the money supply in trade (when revenue in UNIT tokens is spent on buying goods from new partners, who in turn continue to use revenue in UNIT tokens for their needs or investments), the availability of credit funding in UNIT tokens, the growth in the number of participants, etc.

Third, the fractal financial system is self-balancing, due to its distributed and decentralized design. So, any restrictions on emission of additional currency that may be required by the market place will damage the integrity of the fractal financial system and can be easily circumvented.

A core feature of the fractal financial system is that UNIT tokens can be minted by any participant of the ecosystem at any node, if the minting conditions are satisfied.

Should the demand for new UNIT tokens exceed supply, the price divergence between the UNIT and the value of its underlying basket will motivate minting new UNITs to satisfy demand, as it will become an attractive way to obtain the currency. As a result, the growth of the number of UNITs in circulation is likely to have a variable velocity, as the ecosystem transitions into new stages of maturity.

### What rules exist regarding minting of UNIT tokens?

Each UNIT token represents a share of the basket of assets that is created and maintained according to simple rules:

- All items in the basket must be freely convertible into gold equivalent with the possibility of spot delivery in one of the nodes/hubs of the network. If the condition of free price determination is not met, the currency is not suitable for inclusion in the basket;
- To issue new tokens, the gold content in the basket structure, as a share of the total value of all basket assets measured in gold, should be equal to 40%;
- When issuing new tokens, the value of any non-gold component of the basket should not exceed 30% of the total value of all basket assets, measured in gold;
- The exact structure of the basket at any time is publicly available information broadcast by the nodes of the UNIT network.

Additional details on the architecture of the fractal financial system are contained in our White Paper: www.unitfoundation.org

### Who oversees implementation and compliance of the UNIT governance rule-book?

The fractal network UNIT was developed in cooperation with the Center for International Financial Development of IRIAS, founded in 1976 with the aim of conducting comprehensive research and development in the field of management theory and practice. The legal status of

the IRIAS as an international intergovernmental organization (IIO) endowed with international legal personality is regulated by the current intergovernmental agreement and the Budapest Convention of 1980.

IRIAS acts as an independent auditor, according to the principles of international law and is not controlled by any national regulator or a similar structure. IRIAS is planning regular audits of the nodes where the physical gold used within the structure will be stored.

Any necessary changes to the rules and regulations prepared by IRIAS, as well as the evolution of the underlying basket, can be introduced and implemented in the future transparently, through a consensus-building mechanism described in the White Paper: www.unitfoundation.org

# Who can create new nodes in the UNIT ecosystem?

The UNIT is apolitical money and a convenient alternative to domestic currency of other countries, so it requires giving the ability to all institutions, including private, to join the ecosystem and create nodes, if they prefer.

As long as the rules codified by the IRIAS within the UNIT rule-book are followed (the key requirements are: adequate infrastructure, security, logistics, and governance) and the network consent is reached, everyone is welcome.

In other words, sovereign participation is not a requirement for the fractal financial system to function correctly. In fact, sovereign nodes, should they join the ecosystem, will not be substantially different from any other nodes on the network.

# Where the information about the UNIT ecosystem can be obtained?

The number of UNIT tokens issued and the exact structure of the underlying UNIT basket at any time is publicly available information broadcast by the nodes of the UNIT ecosystem.

Sharing this information within and outside the ecosystem is beneficial for all participants. Full transparency is the key to long-term resilience and trust.

### Where can UNIT tokens be purchased?

UNIT tokens can be purchased either at a UNIT ecosystem node or at one of digital exchanges. We expect that a liquid exchange market between the UNIT, gold, local currencies, as well as G-7 currencies, will develop quickly.

#### How to convert funds from UNIT into fiat money?

We expect that UNIT tokens will be traded on all open digital platforms. The value of the UNIT token in gold equivalent will be publicly broadcast by the UNIT ecosystem through the IRIAS website and all UNIT nodes. Pricing of UNIT tokens in any fiat or crypto currency will be determined on each digital platform based on public information, local demand, and supply.

The only mechanisms to obtain fiat money for UNITs are trade and exchange. By design, there is no mechanism for reverse conversion of the UNIT into its underlying components - with one exception, a "node buyout"; please see the White Paper for details: <a href="https://www.unitfoundation.org">www.unitfoundation.org</a>

### Is it possible to exchange a UNIT token for its components?

Any market participant can exchange their UNITs for anything of value through free exchange and trading, including the underlying components of the UNIT basket.

By design, there is no mechanism for reverse conversion of the UNIT into its underlying components - with one exception, a "node buyout"; please see the White Paper for details: www.unitfoundation.org

### Is it possible to buy out or forcefully close a UNIT node?

The concept provides a mechanism for the redemption of the UNIT node, which eliminates an important limitation that potentially prevents sovereign entities from joining the network.

A UNIT node may voluntarily or under pressure from local authorities withdraw from the ecosystem with subsequent distribution of assets in its custody, if an equivalent amount in UNIT tokens is returned to the ecosystem as a whole.

These UNIT tokens will be simultaneously canceled, in order to preserve the integrity of the UNIT ecosystem. Please see the White Paper for details: www.unitfoundation.org

### What are the possible consequences of forcing a node to leave the UNIT ecosystem?

At the initial stage, extra precautions must be taken to preserve the integrity of the system, until it reaches the necessary scale and resilience. Initial UNIT nodes are likely to be created by exporters and importers, primarily in order to facilitate trade and avoid disruptions. These participants will likely be motivated to preserve the integrity of the system. Also, the design of the fractal financial system makes it self-organizing and removes incentives for disruption.

Even in extreme scenarios of vandalism and node hijacking, the financial consequences will be detrimental mostly for the disrupting party. In the fractal financial system, if the owner "steals a node" (i.e. forcibly disconnects it from the system and pillages the assets without returning an equivalent of UNITs minted at this node to the system as a whole), this party will suffer a net loss, resulting in the net gain for the fractal financial ecosystem as a whole.

Nevertheless, geopolitical risks will be among the critical factors affecting the authorization of the creation of new UNIT nodes, especially in the early stages. Additional measures to increase the security and safety of assets will be taken if such risks increase further.

### How do you finance further development and maintenance of the UNIT ecosystem?

The traditional stablecoin approach is one possibility, when interest income from collateral in fiat currencies goes to the development of the ecosystem.

Storage of gold, audit, and other expenses can be covered from this interest income. All income that remains after covering the cost of operation, maintenance, and development accrues to the system as a whole.

For the users of the proprietary UNIT payment system, a staking model can be used in parallel: a fee charged for confirming a transaction then accrues to ecosystem participants who confirmed transactions with their stakes.