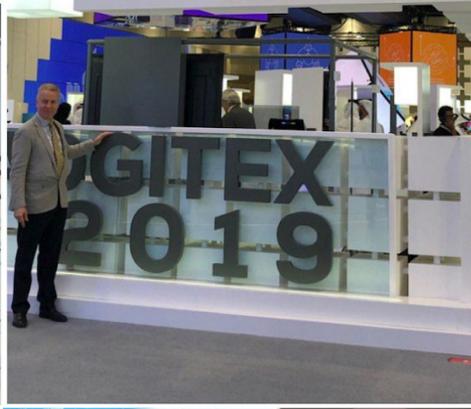


# Aergo Quarterly Project Update Q3 2019

November 4<sup>th</sup>, 2019





## Notice to Readers

The information contained in this Quarterly Project Update ("Report") is given as of November 4<sup>th</sup>, 2019, unless otherwise noted.

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Blocko Inc. ("Blocko"), a private blockchain services company based in Seoul, South Korea, was engaged by Aergo to act as an advisor to support strategic planning and defining of the organisation's transparency mandate. The Aergo Organisation prepared this Report with strategic guidance from Blocko, and per audit regulations, does not constitute a review or attestation to the financial data.

For readers not familiar with blockchain, an excellent on-line resource from Goldman Sachs can be viewed [here](#).

Ἔν οἶδα ὅτι οὐδέν οἶδα

**“I know that I know nothing”**

Socrates  
c. 470 – 399 BC

## Reflection from the CEO and CTO of Aergo

It has been a very interesting few months since the release of our last Quarterly Project Update (QPU) report.

With the volatility in the cryptocurrency market having somewhat slowed down recently, there are many so-called experts who are predicting that the *crypto winter* is now over. Some are even predicting that the (crypto) over exuberance of the past in is behind us; and that the market will continue to spiral downwards. Others are stating that decentralised blockchain solutions are a myth; that they are not viable and not value-adding in the long term. The same “experts” are saying that international governments will categorically quash any value transfer system that is anonymous (or even pseudonymous), and that the so-called cryptocurrency bubble will catastrophically burst very soon.

A similar dynamic played out 20 years ago around Open Source software. It was said that free software (that is developed in the open on the internet by skilled contributors from all over the world) would never get accepted by businesses. Come 2019: 90% of all publicly shared internet infrastructures in the world use Open Source solutions such as Linux, Apache and Kubernetes; and close to half of all private data centres across the globe use a software stack comprised of those three complementary technologies. At the time, many also dismissed as-a-service economic models, i.e. the idea of having customers pay a regular subscription fee to use software, rather than paying for a license and getting support from existing large software vendors. Today, Software-as-a-Service (SaaS), Infrastructure-as-a-Service (IaaS), and Platform-as-a-Service (PaaS) are the most successful enterprise software business models of all time. If you are not “renting” storage or computation resources - i.e. using cloud computing in one way, shape, or form - you are likely wasting your resources by paying for continued vendor lock-in (it is more costly to switch if you have already purchased the software).

Other experts speaking on a macro geopolitical level are quoting that we may be entering a new prolonged global economic recession. It is said this would be caused by a combination of the ensuing tariff-imposed trade war between the U.S. and China - spurring a balkanization and de-globalization of the world economy. Rising geopolitical tensions in the Middle East are also sparking discussion about a potential hike in oil prices that will hurt global economic development.

There are all kinds of predictions everywhere (often negative) with all sorts of hypotheses.

The one thing that is certain in these turbulent times, is that businesses and governments are all having to learn to better deal with technological revolution, climate change, and increasing degrees of international instability. CEOs around the world still face the same short-term pressures to hit their bottom-line targets. However, they now also need to respond to an expanding set of constituents and obligations relating to technology, the environment, ethics, and social responsibility.

AXA, a global multinational insurance firm, aptly captured the top 10 challenges businesses and governments face.



Source: AXA 2019 emerging risks survey

Many challenges do truly lie ahead. All types of organisations are currently facing significant hurdles in terms of Security, Privacy and Risk Management. Building more powerful new digital services and systems, that use cutting-edge technologies, will help solve these issues and enable a new paradigm to emerge. You can be sure of this.

We are increasingly seeing a dire need for companies and governments to allow the data, digital assets and identities of citizens and businesses, to be used and transacted, safely. New ecosystems must and will be created. These ecosystems will transcend both physical, digital, and socioeconomic boundaries. Once they form, the world will look very different to how it looks today, i.e. less centralisation (i.e. monopolies) and more decentralisation (i.e. fairer business ecosystems).

Blockchain is not *the answer* to achieve this. It is, however, part of the answer in more ways than one.

We at Aergo believe we may have now found the elusive *product-market-fit* for our hybrid blockchain platform strategy. It is a practical blockchain strategy. Not one buried in the promise of a future new “internet computer” or a blockchain that can perhaps operate at the speed of light! One only needs to check GitHub to see our technology is real. It is also ready.

We are excited. We are *very* excited.

Just like when some of us worked at the Linux pioneer Red Hat twenty years ago, we at Aergo don't just engage *experts*. We listen to - and learn from - customers, governments and partners. These are our important Aergo stakeholders.

Stakeholders, that are finally able to see past the *hype* and want to seriously build new value-adding solutions - that leverage the power and practical capabilities of blockchain - to help solve many of their challenges. More and more of these interested organisations are presenting themselves to us. We have adapted our business and roadmap execution strategy accordingly to catch these. This means slowing down (or stopping) some activities, whilst super-charging others.

For the entire Aergo team, the past few quarters have been extremely challenging and busy. Thankfully, we made certain decisions earlier in the year that are now bearing fruits for the project longer-term.

This report is written for all of Aergo's stakeholders. A summary version of many facts and figures relating to the Aergo token's supply model can be found [here](#). This report is focused on our ongoing “business execution” stage of development that continues to evolve as we ourselves adapt. This rhythm will continue well into the years ahead.

Aergo is one of the leading comprehensive clean-room hybrid blockchain platforms. It can be used by small firms, enterprises and governments alike. It supports a pragmatic design approach for businesses. It allows them to leverage their existing IT and cloud investments; coupling these with new blockchain based solutions. It helps unlock previously siloed data - to enable the creation of new, innovative solutions and ecosystems - for organisations in many industries.

In this, our third Quarterly Project Update Report (QPU), we detail some of the highlights of the past quarter. We also explain some of the key go forward decisions we made for the business. We then provide some commentary on our plans and focus areas for the remainder of the year.

The quarter that passed marks the transition towards a laser-focused “product-based use case” and “regional, sector-oriented” business strategy. We are making two large bets for the success of the project. Each bet is supported by a significant investment program in terms of people, technology, funding and partnerships. We expand on this in the report.

Our strategic technology partner Blocko is also ready to help with their new commercial product called Aergo Enterprise. This “industrialised” version of the Aergo blockchain protocol can be adopted, extended, and implemented in real-life production systems. In *any* industry. Blocko and Aergo have jointly been showcasing some of the exciting new

applications running on Aergo; at a number of leading industry events across three continents (for example at last months influential Samsung Developer Conference in the USA and GITEX, the leading technology event in The Middle East).

Aergo and Blocko's paths continue to remain deeply intertwined. We continue to deepen our technology and joint business development and strategic partnership. We even made a new board appointment to this effect.



Parallel to this, we are partnering with a bleeding edge research team that has the most advanced capabilities in areas such as quantum-resistant cryptography, data sovereignty, custody and delegation of digital services. More on this area of joint development as it gets nurtured with specific lighthouse early-adopter government clients.

Finally, Aergo continues to use its treasury resources diligently, so we can fund the project for the long-term; releasing more tokens from our reserves to accelerate a range of technical and business development activities.

The famous Greek philosopher, Socrates, was right about what he said 2,500 years ago: engage and listen to learn more...ignore crystal ball predictions...challenge and validate all assumptions.

In short, work it out by executing (doing). We remain steadfast to our cause and continue to execute against our long-term technology, business and ecosystem strategy.

This is the Aergo way.

Phil Zamani - CEO Aergo and Hunyoung Park - CTO Aergo

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## Section 1: Introduction

Aergo aims to become one of the leading enterprise hybrid blockchain platforms. Our conviction (that a hybrid blockchain and IT model) will prevail, is being vindicated through interactions, and real projects, with leading organisations across the world. We even won an innovation award at last week's prestigious Abu Dhabi Smart City conference in The United Arab Emirates.

A hybrid model – allowing for both control and decentralisation, two complete polar opposites – allows companies to leverage their considerable existing investments in terms of skills, software, cloud computing and data. It also allows existing business logic to be extended to create new ways of serving customers that previous (often vendor locked-in) centralised models were unable to deliver.

As we start preparing to scale-up as a project, we need to increasingly be conscious of where to spend our time and efforts. We also need to make it easier for customers and partners to benefit from our technology.

**Now that we have built and delivered the core technology framework for the Aergo platform, we will accelerate and intensify our efforts to:**

1. Work with Blocko clients, primarily in South Korea, to extend their existing deployments by leveraging Aergo.
2. Win new clients in other regions of the world; to create new solutions and new business ecosystems using our hybrid blockchain Aergo platform.
3. Start to productise and showcase our 1<sup>st</sup> Blockchain-as-a-Service solutions; that are easy to adopt and use for small-to-large organisation to benefit from Aergo.

In this, our third Quarterly Project Update, we explain how we are able to work on the above objectives, by de-focusing from other work, so we can prioritise certain hi-impact investment activities.

We also provide a review of the prior quarter's execution performance, together with an update on the latest key financial and token metrics for the project.

**This report covers the following:**

- The results achieved by the Aergo Organisation during the prior few months.
- Details of our key decision to focus on two major markets to accelerate our business traction.
- An update to our very deep partnership with Blocko in both technology and business development efforts.
- An explanation on how we are organising and assigning our resources (people and investments) to support these plans.
- A summary of our latest finances, use of funds, Aergo treasury; as well as updated token metrics.
- Answers to key questions raised by our community followers, token holders and other stakeholders.

We remain committed to delivering our long-term vision of making Aergo one of the leading decentralised trust-based digital platforms of the future.

The journey is long. The challenge is great. The opportunity is even greater.

As always, we invite and welcome feedback on this report from our stakeholders.

Our next QPU will be published in February 2020. In this we will review our full 2019 execution performance and results, as well as lay out our plans for the year ahead.

## **Executive Summary**

A short summary of the achievements in 3Q of 2019, as well as our go-forward plan for the final months of the 2019 year, are described below.

### **During the third quarter of 2019, we achieved all of our target objectives. These included:**

1. Releasing the commercial Aergo Enterprise product with Blocko to existing and new customers alike.
2. Further expanding the number of exchanges that Aergo tokens were available on, to attract a larger token holder base (i.e., Binance DEX, GDAC).
3. Conducting deep, focused business development and sales activities alongside Blocko to aggressively onboard lighthouse customers for Aergo-based products and to penetrate new markets internationally.
4. Migrating numerous existing Blocko customers to Aergo - securing over 10 additional Aergo-based projects.
5. Initiating a new global node provider program; to attract telecommunications firms as partners; to host Aergo sidechains on their own, highly reliable IT hosting resources.
6. Partnering with one influential state entity (i.e., the royal family of Dubai's private office, The Private Office of Sheikh Saeed bin Ahmed al Maktoum); to deploy large-scale blockchain solutions for governments and enterprises in a new region for Aergo (the Middle East).
7. Launching a new blockchain "FACTS campaign" to satisfy an increasing demand for non-hype based blockchain education from parties around the world.

### **Notable other news over the past few months include:**

- Blocko secured \$7.44M in additional growth funding from leading Shinhan Bank and Korea Exchange banks.
- Blocko launched a new stablecoin, aptly called "Aergo Gem", on the Aergo main network, as well as a complementary Rewards Infrastructure As A Service (RlaaSI) to support this.
- A large project has been confirmed with a notable international development bank to build an Aergo-based blockchain solution for over 400 million unbanked citizens in the region.

### **Our go-forward plan for the rest of the year will focus on five key areas:**

1. Delivering the next major update to the Aergo protocol [2.0] and associated planned (hardfork) update to Aergo mainnet.
2. Releasing a major component to the Aergo Enterprise product line, Aergo Orchestration™, as we move to aggressively take Aergo to mass enterprise market adoption.
3. Furthering our footprint in new markets such as the Middle East by securing AND delivering on a number of large transformation projects by early 2020.
4. Signing-up key firms (such as telecommunications providers) as node providers but also integrators (i.e. local delivery partners) – in order to assist with the delivery and completion of large projects internationally.
5. Closing more prospective lighthouse customers from our current pipeline, and delivering some of these as large-scale reference (aka lighthouse) projects.

These will all be supported by more focused marketing, brand positioning and community development activities.

This includes making the Aergo token available to more potential token holders. We will try to achieve this by releasing the planned final token lock-up to private sale participants (by end of next month); but also promoting the listing of Aergo on larger global exchanges.

Aergo is actively participating in many industry leading technology events across the globe. We aim to intensify our discussions with more and more stakeholders globally and well beyond South Korea. Just in the past month alone we attended five events. These included GITEX (the largest technology show in the UAE); World Blockchain Summit in Dubai; Gartner IT Symposium in Florida; the exclusive Samsung Developers Conference in the USA; and just last week the Smart City conference in Abu Dhabi.

This month we will exhibit at ADIPEC, the world's largest annual Oil and Gas exhibition in The UAE (with over 150,000 estimated visitors between Nov 11<sup>th</sup> - 14<sup>th</sup>).

We have a great story to tell so we are expanding our reach and voice. We aim to meet with existing connections and make new ones; to help solve future business problems and challenges with Aergo.

## **Aergo Strategy Update**

One year after we launched Aergo, we decided to conduct a detailed review of our strategy with existing and prospect clients and partners. To check we were on the right path (lack of validation being the death-nail for many startups).

As we talked to existing (Blocko) customers and new companies and IT integration firms over the past nine months (i.e. since we released our mainnet platform), a few very important themes emerged.

Our technology and ecosystem roadmap strategy were consistently endorsed. However, there is still a lot of confusion in respect of deciding whether to use a public or private chain with our target clients. As has been consistently stated by Aergo from the onset of the project, we have held an entirely different position to the many firms pursuing either of these singular approaches. We believe the future is hybrid; just like it proved to be with Open Source working with proprietary software and private data centres co-existing with public clouds.

We were also asked by many firms who took part in the review to focus on (and to prioritise) the delivery of certain aspects of our roadmap over others. These, so that companies could adopt our new hybrid blockchain architecture much faster and with more certainty.

### **The key feedback and demands included:**

- Requests to package-up certain core Aergo capabilities into simple to use products (in effect move to a standardised and self-serve blockchain-as-a-service [aka BaaS] type delivery model).
- Huge interest in understanding how our Aergo Enterprise to Aergo Public Chain transaction/data “anchoring” and digital “asset bridging” capabilities could be used to build completely new innovative business models and ecosystems.
- Numerous requests to provide a stable token capability within Aergo to allow innovative forms of token economics to emerge for new business ecosystems.
- Interest in providing a reward and crowd-funding system (to complement a stable coin capability) in order to attract, motivate and enable participants to engage and use new blockchain based services.

- Assurances that a selection of our future node providers and block producers would be more regionally based; so that they would be closer to the customer or government organisations intending to use Aergo; and so they could build systems that were faster, more secure and compliant with local/international regulations.
- A growing interest to investigate how blockchain based solutions could form part of the core fabric of future smart cities (including e-government Services, Digital Asset Management, Financial Services, e-Health Services, e-Tourism and intelligent Supply Chains).
- Our early IoT focused prototype (AergoLite) was showcased at select events and received great feedback. Some prospects want to now evaluate this SQLite-based capability in their own IoT plans.
- A demand for more education and help in better understanding how hybrid blockchain based systems can be designed, implemented and maintained. As stated, there appears to still be confusion and hype around the subject (i.e. the ongoing debate that “the future is purely decentralised public chains” vs “only private chains are viable for business”).
- A desire to see Aergo at more leading industry events to showcase our technologies, capabilities and proven use-cases. This, in order to educate key decision makers and to address a lot of the above hype.
- A desire to see the Aergo token on more exchanges and wallets to improve the availability to a broader range of future token holders.

We have listened and taken this invaluable feedback and series of stakeholder requests into account.

This involved a careful examination and review of our planned technology roadmap, our future focus areas and of how we organise the project (including our limited technical and sales resources around the world).

The board of Aergo therefore decided to prioritise and invest in select areas, whilst de-prioritising certain originally planned activities. A key part of this decision was our go forward regional business and partnering execution strategy.

This important decision is covered in the next section.

## **New Middle East Investment Plan**

We were honoured and very grateful in the summer to receive a formal invitation request from a leading organisation in the Middle East. This was a call for Aergo to present our capabilities to a number of high-profile regional government and business organisations.

It involved a number of briefing sessions to showcase Aergo; including our blockchain strategy, technology and roadmap. Many of the existing Blocko early use-cases were also scrutinised.

The end-result was that we were formally invited to form a local entity to target a number of important future projects (including smart cities) in the Middle East and more specifically the GCC region.

This new entity is called Blocko MENA. This is a joint three-way partnership between Aergo, Blocko and The Private Office of Sheikh Saeed bin Ahmed al Maktoum (called SEED Group). You can read more about this exciting partnership [here](#).



Aergo-Blocko Leadership with the CEO of SEED Group

This Private Office acts as both (i) an inward technology investment arm for The UAE and broader GCC region and (ii) as an investment partner - that will provide the financial, relationship and local resources - to allow us to talk and work with leading organisations in the region.

In effect, they open doors, provide executive and government level contacts and endorsements; as well as local know-how of how to attract, win and deliver significant projects in the region.

In short, they help to guide and to introduce us to some of the largest companies and influential government organisations in this digitally advanced region.

This is a huge endorsement of Aergo, Blocko and our joint teams. It is also a major opportunity to accelerate the adoption of the Aergo Platform with government and large businesses in the Middle East (who have already decided to use blockchain in their future systems).

It is perhaps worth explaining more about what is happening in the GCC region and why our hybrid blockchain strategy and technology are a perfect fit.

The GCC area (comprising of Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain, and Oman) is rapidly moving towards a more connected and digitally driven range of smart e-government and associated ecosystem of services.

Blockchain, AI and data rich IoT devices show promise that will enable all of this to happen. Almost anything of value will be converted and traded, as immutable digital assets, through automated smart contract services, on secure and trusted blockchains soon.

However, many challenges remain. These complex services will need a new paradigm to be created.

The data, digital assets and identities of their fellow citizens and businesses will need to be used (and traded) safely. At the same time, new ecosystems will emerge working across both physical and digital borders. Many types of organisations will face significant hurdles in terms of Security, Privacy and Risk Management.

### **Other challenges include:**

- (i)** blockchain and secure cloud architecture standardisation policies,
- (ii)** network governance,
- (iii)** smart contract design and auditing,
- (iv)** dispute resolution frameworks,
- (v)** data ownership, membership, incentives and funding within these ecosystems, and finally,
- (vi)** the need for more skilled personnel.

Many government organisations are in effect looking for what is being termed a “*Digital Civilisation Platform*”.

This will need to be a unique capability that combines a proven advanced (cloud deployed) hybrid blockchain platform, with bleeding-edge techniques in quantum-resistant cryptography, data sovereignty, custody and that allows an effective delegation of services.

We are in active discussions with perhaps the world’s leading research institute in their field, to jointly deliver these capabilities to select government and large-scale smart city organisations (we will reveal more and expand on this in our next QPU in early 2020).

The board of Aergo and board of Blocko decided in the quarter to take advantage of the tremendous growth for that presents itself in the Middle East to both organisations. We decided to form an entirely new venture. We would also equip it with a joint dedicated team to pursue these opportunities.

We have therefore redirected resources and created a specialised sales, marketing, business development and technical team to execute this plan. This team has already been recruited and is now based in our new office for Blocko MENA located in the Private Office of Sheikh Saeed bin Ahmed al Maktoum in Dubai.

There is a marvelous event next year that will prove to be a landmark showcase for Blocko MENA in The UAE.

Expo 2020 is one of the world’s largest expositions that happens every five years. In just under 12 months-time, Expo 2020 Dubai will be the first World Expo ever hosted in the Middle East, Africa and South Asia region. 25 million visits are expected over a six-month period.

Aergo intends to be present at Expo; by winning landmark deals in the region that will be showcased at this event. What an endorsement this will be for Aergo and our team.

This Middle East venture is such an amazing opportunity for our project, that Aergo CEO Phil Zamani has decided to personally lead these efforts. He is now based in Dubai with a SWAT team of Aergo and Blocko experts.

To the Middle Eastern market: As-salamu Alaykum from team Blocko GCC!

## Section 2: 3Q-2019 Results

In this section, we offer a summary of the team's accomplishments achieved towards advancing the state of the Aergo project and its supporting ecosystem. We first lay out the objectives we set ourselves in our previous QPU to show how we performed against these.

After launching the Aergo main network in its early incubation phase in 1Q-2019, we decided to put a strong focus in 2Q on establishing and growing a strong and sustainable core commercial business base around the Aergo technology. We also said we would partner more.

We can report that our efforts in this regard were a success. Not only did our commercial partners such as Blocko close a number of deals to deploy their blockchain solution using Aergo technology for large customers; we were invited into a new market in the Middle Eastern region alongside Blocko, to capitalize on the growing need for secure and stable blockchain solutions in the enterprise and smart-government sectors. This is a major endorsement for Aergo.

Additionally, we made significant progress towards furthering the development of the technology around Aergo as well as advancing the Aergo broader partner ecosystem. For example, we are nurturing a very technically advanced joint technology platform with a strategic research team in Europe. This is aimed at large scale smart city and smart government initiatives. It is what we are calling the "*Digital Civilisation Platform*".

**Last quarter, when we published our second-ever QPU for 2Q of 2019, we set out to achieve the following objectives:**

1. Continue to improve our mainnet and deliver our technology roadmap; while incubating the needed block producers to stabilize, secure and run the network.
2. Establish partnerships with important future members of the Aergo ecosystem; including building the associated F/OSS and dApp developer communities.
3. Sign up several early customers to prove the Aergo solution and show the mass market how our disruptive hybrid blockchain platform can solve real-world business problems (when this is applied pragmatically and practically with existing IT systems).

**In the four months following the release of last QPU for 2Q-2019, we accomplished the following:**

- Further developed the Aergo core blockchain kernel by making a total of nine new releases of the Aergo technology on GitHub. Our developers have been busy.
- Released our new enterprise-grade hi-performance RAFT consensus algorithm for enterprise hybrid blockchains built on Aergo.
- Added a number of administration and permission-setting features for enterprise blockchains deployed on Aergo - to further support enterprise requirements for Aergo-based blockchain use case implementations.
- Added support for Java database connectivity and improved Aergo's SQL support in smart contracts for enterprise blockchains. These help to make Aergo more integrateable with existing enterprise-IT architectures. They also establish important and easy to follow common software coding practices for our users.
- Expanded our innovative Merkle Bridge technology for verifying data across Aergo-based blockchains (Proof of Concept (PoC) stage to early-stage production cases).
- Worked in close collaboration with Blocko to complete the development and release of their Aergo Enterprise product and supporting Blockchain-as-a-Service solutions applications. These are being tested and refined via an early access program to key clients in Asia, Europe, and the Middle East. These pre-configured solutions will also very soon include Aergo Enterprise OpenKeyChain™, Aergo Enterprise DID™ (Decentralized Identity), and Aergo TSA™ (Time Stamping Authority). All of these activities are aimed at our "productisation" push to prepare and package the Aergo technology for easier mass market adoption by enterprise and government clients in South Korea and elsewhere in the world.
- Released AergoLite Version 1.0, a new lightweight embedded blockchain based on SQLite built for IoT use cases. Now in beta form, its being released to key early-access clients in Asia, Europe, and the Middle East.
- Launched a monthly initiative called "Blockchain Academy", a joint initiative between Aergo and Blocko. to educate the South Korean enterprise-IT community on how blockchain can impact businesses. The academy takes the form of two monthly briefing sessions,

Blockchain 101 and Blockchain Deep-Dive, targeting an audience of both developers and senior business executives in South Korea.

- Added Binance Chain to the list of non-Aergo public blockchains that support the Aergo token, in close collaboration with the Binance team. This was done in an effort to expand the liquidity and exposure that the Aergo token has and to open the gateway to a potential significant future influx of blockchain applications or service users who will utilize the Binance Chain (a public blockchain built and deployed by Binance, the world's largest cryptocurrency exchange).



- Established a partnership with Ankr Network, a new cloud-based blockchain solution for performing secure computations on idle devices to further explore more efficient ways of hosting enterprise blockchains on the Aergo platform for complex use cases requiring high-performance and secure cloud hosting.
- Announced the initial “incubation phase” block producers on the Aergo mainnet (D Street, Leadpoint System, MegaBlock21, Block Crafters Capital, Chain Partners, Cobak, CrossAngle, and Blocko).
- Saw the Aergo token listed on the Binance DEX (Decentralized Exchange), a decentralized exchange built on top of the Binance Chain, after a voting round from the Binance Chain community concluded that 100% of voters support the listing of Aergo on Binance DEX.
- Saw the Aergo token listed on GDAC, a well-known fiat-to-crypto exchange in South Korea; an event that will see Aergo expand its potential user base through a new gateway of liquidity and application users.
- Showcased a live demonstration of Aergo optimizing a smart city ecosystem by using IoT device sensors connected to a blockchain network at GITEX, the largest

annual technology show in the Middle East and Abu Dhabi Smart City 2019.



Aergo-Blocko Showcase Booth at Abu Dhabi, Smart City

Blocko, Aergo Organisation's strategic commercial and technology partner, also made huge progress and bold moves in 3Q-2019.

**Blocko's accomplishments towards increasing adoption of Aergo technology and platform during 3Q-2019 were as follows:**

- Blocko now exclusively supports the Aergo platform via its Aergo enterprise-based product offerings.
- It is now actively migrating its existing customers to Blocko's new Aergo-based enterprise product.
- It secured \$7.44M USD in additional growth capital from some of the largest banks in Asia including Shinhan Bank, Korea Exchange Bank, Dadam Investment, and more; to fund its new focus on migrating customers from its prior product offering Coinstack over to its new product Aergo Enterprise; to expand into new markets such as the Middle East and additional European countries; and to hire new personnel to help deliver large-scale digital transformation projects; as well as to establish its early reference clients who will adopt Aergo.
- Partnered with the royal family office of the Al Maktoum dynasty in Dubai, United Arab Emirates [perhaps the most influential family in the entire Middle Eastern region] in a three-way partnership alongside Aergo. This aims to deploy high-scale and high-security Aergo-based business solutions to large corporations and government entities in the Middle East. This will

further expand the influence of the Aergo software stack among developers and IT architects across key regions across the globe.

- Established a new sales, business development, and solutions delivery team (and office) in Dubai, United Arab Emirates - as part of the newly-established Blocko MENA organisation - to work directly with the royal family office of Dubai and the United Arab Emirates - in securing large blockchain-based digital transformation projects across the Middle East.
- Presented Blocko's disruptive blockchain solution (Aergo) to customers in the Middle East at GITEX, the largest technology show in the Middle East (Oct 6<sup>th</sup>-10<sup>th</sup>).

This created huge interest with Aergo talking with over 450 companies or individuals over the four-day event. The Private Office of Sheikh Saeed bin Ahmed al Maktoum supported us during the week and made senior level introductions for us with influential government and semi-government organisations.



SEED Group supporting Aergo at GITEX

- Have been selected by a leading multi-billion-dollar development bank reference customer in the Middle East, to build a large-scale token economy reward system, to address the growing issue of the billions of unbanked individuals around the region.
- Onboarded Korea Internet & Security Agency (part of the South Korean Ministry of Science) as a customer to deploy an Aergo technology-based smart contract IT solution. This will enhance internal and external operations for the government of South Korea.

- Secured the influential Busan Port Authority as a new client to build and deploy a blockchain-based inter-terminal transportation (ITT) network to connect siloed transportation terminals and speed up transportation times by enabling more real-time data sharing and status updates in South Korea.
- Partnered with the Ministry of Education in South Korea to design and run a blockchain 'business innovation' course for students to learn more about how blockchain can impact businesses of all sizes using technologies like Aergo.
- Worked with iQuest GmbH & Co KG, a large international IT solutions provider, to provide a blockchain-based document verification system for customers that use iQuest's ERP (Enterprise Resource Planning) system and supporting services.
- Worked in close cooperation with the Korea Land and Housing Corporation for Smart City, to explore the potential for the Aergo technology and product offering to unify devices and secure identities and supply chains in Sejong District 2-5, through a large-scale Smart City implementation.
- Initiated a new education campaign to help customers learn how blockchain can help them build new business models through monthly Blockchain briefing sessions; (a) a new, updated, use-case focused website; (b) a new technical blog on blocko.io for senior technical audiences; and (c) a new monthly long-form blockchain report, Block-Shot, for CEOs and CIOs to learn how blockchain can impact their organisations.
- Launched a monthly 'first Tuesday' and 'first Wednesday' blockchain briefing session for CTOs/CDOs/CIOs from government organisations and enterprises, in collaboration with royal family office of Dubai as well as a leading academic team from the United Kingdom.

- Launched the Aergo mainnet-based stablecoin "Aergo Gem", which achieves a stable value through a complex algorithmic supply model, to provide a stable way for enterprises to make payments on the Aergo blockchain as well as build complex use cases on Aergo more easily.
- Launched a new Rewards Infrastructure as a Service (RlaaS) based on the new Aergo Gem stablecoin, a

service that makes it easy for organisations and companies to build their digital reward infrastructure.

- Established a new and comprehensive partnership with a leading European academic research team building advanced blockchain and cryptography capabilities around quantum-resistant and lattice-based cryptography, green mining-based consensus algorithms, physical/digital identity binding, and more.
- Previously, Blocko also announced that it is building a blockchain platform to track the history of used cars for Hyundai AutoEver. Recently, Hyundai AutoEver announced that this platform would also now anchor to the Aergo mainnet for added decentralised trust, scaling, and for connecting to other digital ecosystems.

## Section 3: 4Q-2019 Strategy & Focus Areas

This section explains our updated go-forward plan for the remainder of 2019 and well into 2020, taking into account the realignments in our go-forward strategy.

### Our go-forward focus will be in three key areas:

1. Continued execution on our technology roadmap, with a greater emphasis on features that will make Aergo easier to adopt by enterprises and governments.
2. Establish partnerships with key partners that will advance the Aergo ecosystem; while also building out our own in-house applications and services on Aergo.
3. Pursue early customer prospects in two target key regions of the world: South Korea (Asia) and United Arab Emirates (Middle East) in a highly focused push to gain large reference projects before further global expansion.

### Continued Mainnet Buildout

As we explained in our previous QPU, the Aergo mainnet is an integral component of the Aergo platform.

We strive to make sure our mainnet excels in all areas and is technological sound; i.e. it has performance, reliability, availability, speed, and stability/maintainability built in. As such, we continuously develop new updates to the Aergo blockchain protocol and the software around it - until it all of it is ready for mass market use.

We launched the Aergo mainnet in April of this year in what we called the “incubation phase”, in an effort to safely bring the network to full capacity, before onboarding larger corporations as block producers, and establishing more comprehensive token economies for customers utilizing Aergo through our partner Blocko. As such, we continue to regularly send updates to the Aergo GitHub repositories that can be found [here](#).

Over the course of the past five months, we made a total of nine new releases to the Aergo blockchain kernel - from smaller updates including bug fixes for smart contract execution, API changes, improvements to P2P communications; to more sophisticated updates such as the release of a new RAFT consensus algorithm for Aergo blockchains, JDBC-compatible interfaces for

smart contracts, SQL support improvements, many new administration and customization features, plus more. Now, we are preparing to make our largest platform update yet; with the introduction of a new fee model which includes fee delegation to stakers (voters) on the Aergo mainnet; a new, lightning-fast, enhanced smart contract engine with the introduction of the latest Lua VM; and the introduction of the long-awaited new Decentralized Autonomous Organisation (DAO) system to the mainnet.

We refer to the new Aergo mainnet update as the Aergo Mainnet 2.0 Protocol.

Since this is such a comprehensive update, we will issue a request to hardfork the Aergo mainnet towards the updated Aergo Mainnet 2.0 Protocol to the network’s block producers, once the update is complete.

We plan to keep our community closely informed on these developments as they take place; with complete transparency and clear updates at each step.

In June this year, we made the Aergo native coin available to our community by launching a swap service ([swap.aergo.io](http://swap.aergo.io)), for users that would like to swap their Aergo ERC-20 tokens for Aergo native coins. While Aergo ERC-20 tokens offer exposure to liquidity within the Ethereum ecosystem, Aergo native coins would allow users to execute transactions and smart contracts on the Aergo mainnet.



This service was well received by our community, with many users and enterprise customers utilizing the swap service to acquire tokens and run smart contracts on the Aergo mainnet.

At its launch in June, and due to the complexity involved with this matter, we offered this swap service as a 1<sup>st</sup> phase one-way-token-swap token only (ERC-20 to native coin only).

Three months later and as part of the 2<sup>nd</sup> phase, we upgraded our in-house swap service (swap.aergo.io) from the previous 1-way swap service only to what is now a fully-fledged 2-way swap service. This now allows any user easy access in and out of the Aergo ecosystem; transferring between ERC-20 format and native coin format seamlessly. This completes the delivery of this much needed (and requested) capability.

This is currently an entirely centralized service, offered on behalf of the Aergo Organisation. Our intention, however, is to provide a smart contract-based 'bridge' for transferring Aergo tokens between Ethereum and Aergo in the near future. We aim to deliver on this commitment.

As explained in some of our past blog posts, we intend to fully deploy one of the most powerful blockchain interoperability protocols in existence - the Merkle Bridge - by the end of this year. The Merkle Bridge will enable a fully decentralized, smart contract-based bridge between Ethereum (where the Aergo ERC-20 token supply lives) and Aergo (where the Aergo native coin supply lives).

This will enable autonomous, self-sustained token transfers across blockchains, whereby users establish asset bridges using a smart contract interface for every individual transfer.

Whilst we have included this functionality in our software, the intention behind the Merkle Bridge is not, however, for transferring assets across distinct public blockchains. The main motivation behind designing the Merkle Bridge was to enable inter-chain transfers across different Aergo-based blockchains.

Over the past five years of actively working with enterprise companies on building and deploying blockchain solutions in the enterprise market, we saw an increasing need for complex token economies that exist across multiple blockchains (private and public ones).

Many of our team were involved with the development of some of the core Open Source technologies that

enabled cloud computing. Today, whilst there has been huge adoption of private and public clouds and SaaS based solutions, there still is in fact very interoperability between the few dominant cloud providers. Just try to make Amazon AWS, Google Cloud, IBM Bluemix, Alibaba Cloud, or Microsoft Azure based workloads talk to each other (and co-exist), to create even more powerful business uses-cases. Its almost impossible.

Proprietary vendor lock-in springs to mind again. Sometime lock-in is unavoidable; most times though it inhibits true hybrid enterprise solutions to be created. Merkle Bridge is a ground-breaking capability delivered by Aergo and through one of the world's most skilled and committed engineering teams: Blocko R&D. It is a true honour for our Aergo project to have such distinguished software development architects on our side. They never cease to amaze us on how they deliver on time and to the highest quality possible; whatever we scope and request of them.



Many blockchain projects spend much of their energy and resources on community hype; on how they are "building the next internet computer" or creating a blazingly fast blockchain platform.

Yet, their public GitHub repositories are often thin on both Open Source code or proof. What is needed is real customer adoption.

#### Team takes well deserved break

A diagram depicting our hybrid multi-industry framework and capabilities can be seen on the following page. It shows how Transaction Anchoring and Asset Bridging between Aergo Private and Public Blockchains work.

At Aergo we build, we share, and we iterate, We are not afraid (and in fact welcome) engineering inspection and critique via GitHub, our beta or early adopter programs.

This is the Aergo way. This is the true Open Source way.

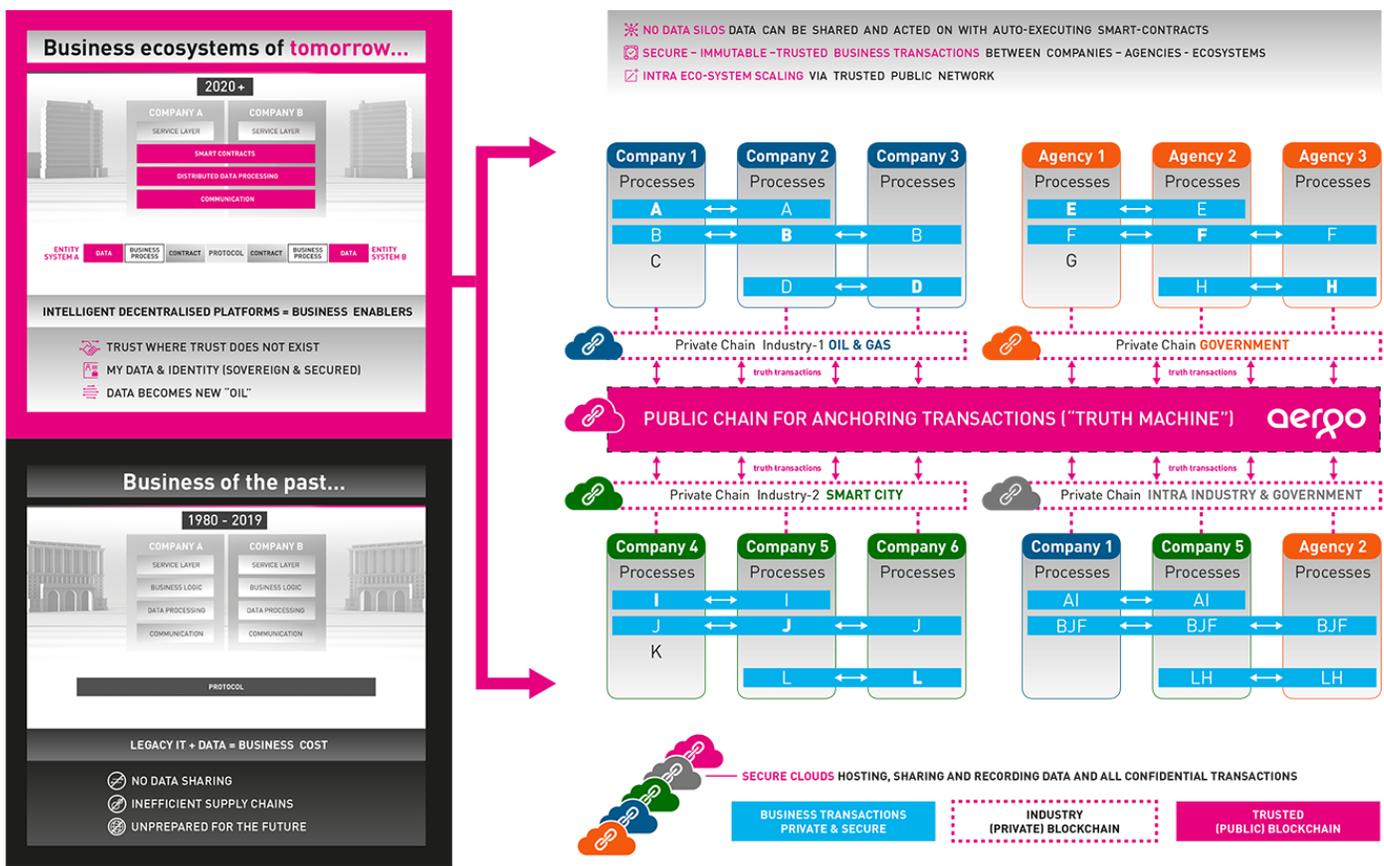
By way of a real example, we are currently working with an international development bank who is looking to create a rewards infrastructure to bank the unbanked using thousands of its existing schools, community centers, and branch locations.

Blocko and Aergo are both actively working with this bank to build a large-scale blockchain-based platform that runs across dozens of different blockchains representing each locality, underpinned by a massive stablecoin-based token economy. Tokens representing

real-world assets will be transferred across different consortium chains in real-time. This will all be done using the Merkle Bridge, and all of these individual private blockchains will run on top and connect to the Aergo mainnet.

For more information on the Merkle Bridge, you can read about it [here](#). This will be fully functional within the coming months.

**Aergo Hybrid Chain Reference Model:**



Transaction Anchoring and Asset Bridging between Aergo Private Blockchains and Aergo mainnet

## **Aergo Enterprise Development**

When planning out the Aergo project, we recognized that to be successful - it would not just take powerful software design and implementation - but it would also require an optimal, familiar user interface that enterprise companies are used to. This also necessitates IT integration with legacy systems. This complex requirement (in or target blockchain market) is greater than most blockchain companies currently realize.

It is perhaps the single most important impediment that is holding back many firms from adopting blockchain based solutions. Industry adoption will likely be sluggish unless this is addressed.

For this reason, in April this year, we began working with Blocko to develop a completely new enterprise blockchain product to rival other blockchain offerings such as IBM's Hyperledger, JPMorgan's Quorum, Enterprise Ethereum, and others.

This entirely new Open Source based product would include a wide array of functionalities and services. It would be a 'full stack' - offering the same cloud administration and management technologies that customers currently use (and expect).

The development of the Aergo Enterprise product has been a core focus for both the Aergo and Blocko teams for several months now. Blocko intends to migrate all of its existing customers onto their Aergo Enterprise product. They also intend to only use Aergo Enterprise for any future projects and contracts they win from hereon. This will super-charge and accelerate adoption.

With the most recent injection of new growth capital into Blocko from the largest banks in South Korea (Shinhan Bank, Korea Exchange Bank), Blocko accelerated the development of Aergo Enterprise. Version 1 of the product has already been fully developed and has been released to customers as part of our 'early access program', before it is made available to the mass market.

Moving forward, once the technology roadmap for the Aergo mainnet is further delivered, Aergo and Blocko both intend to direct focus towards adding additional functionalities to Aergo Enterprise; rapidly securing customers that will utilize Aergo Enterprise; and finally

securing partners that will both host and distribute Aergo Enterprise to more large global clients.



Future customer interest at one of Aergo's global events

An increasing number of SaaS type offerings will also be built on top of Aergo Enterprise to make the technology easier to test and adopt for large potential clients online.

The development and continued deployment of blockchains based on Aergo Enterprise is crucial. Aergo Enterprise will act as a gateway for customers wishing to enter the Aergo ecosystem. It will also be a powerful tool for future IT system integrators in our ecosystem.

We elaborate further on the features and applications provided with Aergo Enterprise, as well as provide more details on the product in Section 4 of this document.

## **Block Producers & Node Providers**

The Aergo main network has now been in operation for more than six months. It has, as expected, remained highly secure and highly reliable - maintaining a flawless availability rate of 100% uptime.

When we launched the Aergo mainnet in its incubation phase earlier this year, we noted that the network would operate with a total of 13 block producers, before later transitioning to a more distributed model with 23 block producers. We did this to safely incubate the dPOS algorithm and show current future enterprise-grade block producer candidate just how secure the software behind Aergo really is, before transitioning the network to its

final and self-sufficient state with many more block producers.

The incubation phase was designed to prove that the reliability, availability, and security of the Aergo mainnet to customers and larger block producer candidates would stand the test of time.

The incubation has so far been a success. We see a growing level of interest from our prospective larger block producer partners to run as official Aergo mainnet block producers. Our customers have been impressed at how well the Aergo mainnet has maintained itself.

Last June, we released the names of a number of organisations who we were working with us to incubate the Aergo mainnet. These organisations were D Street, Leadpoint, MegaBlock21, Block Crafters Capital, Chain Partners, Cobak, CrossAngle, our strategic partner Blocko, and a number of other companies that had chosen to remain unnamed. We plan to slowly transition the network out of incubation over the coming months.

For more information on our mainnet and block producer incubation program go [here](#).

Separately, an increasing area of interest for us has been onboarding node providers that will have the cloud-hosting resources and capabilities to host performance-intensive Aergo sidechains in the coming future. These sidechains will need to be hosted by multiple distinct node providers to ensure that there is no single point of failure within the network. They also need to be regionally dispersed. Our clients have requested this.

In the past, we have found that our customers often find the need to scale-up and scale-out their blockchain networks in real-time. The former means increasing the amount of compute load on operational nodes, and the latter means increasing the number of operational nodes hosting a network.

The software that allows for this is complex to implement for enterprise blockchain implementations - however, we were able to build functionalities like this as part of Blocko's new Aergo Enterprise solution. Complex cloud infrastructure services like this are not straightforward to offer. We found that services like this are best offered by

large telecommunications providers: they are hyper-local in their operations and that can provide higher speeds via their fiber optic networks.

These requirements are needed for complex high-frequency and low-latency environments found in many enterprise blockchain deployments.

In our last QPU, we explained our plan to run a program for large firms that would act as node providers for Aergo sidechain deployments. This program would aim to identify the most ideal candidates to host some of the most comprehensive blockchain systems that will act as lighthouse references for how blockchain penetrates the mainstream enterprise-IT market in the coming future.

We officially launched this program a few months ago. We are now engaging with large regional telecommunications providers and large system integrators in South Korea, as well as in the Middle East, to collaborate in these plans.

Being able to provide greater than 99.5% service availability uptime, secure networking, high-bandwidth and low latency - were some of the benchmark SLA (Service Level Agreement) requirements for this. We are now in deep discussions with a number of organisations that met (and in many cases beat) these baseline blockchain node provider requirements.

For example, we are currently speaking to the two largest telecommunications providers in the Middle East to partner in hosting a number of large-scale blockchain projects that are scheduled to deploy to Aergo mainnet.

We will continue to update our community in future QPUs on how these conversations and projects progress. For now, they remain confidential

### ***Partnership & Ecosystem Buildout***

Building a thriving, self-sustained ecosystem of partners, businesses, service providers, contractors, and users on Aergo was a paramount goal for the team since day one.

With our latest version of Aergo Enterprise having just launched recently, we are increasingly prepared to take our technology offering to specialist IT integrators to collaborate on complex and often difficult-to-deliver projects involving multiple stakeholders. We looked for

partners from Europe, South Korea, China, and other regions in Southeast Asia.

We made significant progress in finding the partners that have serious customer opportunities where adopting blockchain is an integral part of the desired solutions.

One such partner, approached us directly with a close collaboration offer. This partner also came to us from a region that we had not yet entered into, however it became more and more apparent that this region will be critical to both Aergo and Blocko.

We are seeing a serious demand for practical, on-time delivery of blockchain solutions in this region.

The partner that approached us was The Private Office of Sheikh Saeed bin Ahmed al Maktoum, a royal family-owned office that helps technology companies like Blocko and Aergo gain access to otherwise-unreachable customers in the Middle East. Working with The Private Office at their offices in Dubai, we partnered with them to make a joint business development and sales push targeting clients in the entire Middle Eastern region.

The Private Office of Sheikh Saeed bin Ahmed al Maktoum has a great deal of value to offer. They do not partner with just any company; they are selective, choosing only the best teams and business models to bring to their region. They have direct access to C-level executives and extensive government relationships across the GCC region. This includes some of the largest telecommunications, manufacturing, oil and gas, real estate and technology companies in the Middle East.

It has now been two months since we established our partnership with The Private Office to deploy high-scale and highly secure blockchain solutions in the Middle East.

With their help, we have already generated a number of promising leads and have identified key qualified target customer opportunities in the region.

We will share more about these opportunities as and well they develop. We do provide an early preview of one such company in the subsequent New Clients –

New Opportunities subsection of this document.

We are also seeing an increasing demand from business and technical executives within the Middle East for education on blockchain technology, and how it could truly impact their business. To satisfy this demand for blockchain education, we are working with The Private Office to set up monthly blockchain BUSINESS and TECHNICAL briefing sessions to help educate CDOs, CTOs, CIOs, and other developers on what blockchain really can do in the industry.

These will be closed, invitation-only briefing sessions, aiming at no more than a handful of the most qualified and interesting clients in each session. Our credibility and vast practical deployment experience in blockchain will allow us to attract the right audience. To make these even more valuable, we decided to also include one of our partners in these briefing sessions.

This partner is a leading blockchain research lab headed by a team of top computer science professors from a leading European university. Together, we intend to showcase some of the joint capabilities that we are working on with this partner around post-quantum ready lattice-based cryptography, delegation of services, digital custody, green mining, and more

## **dApp Ecosystem & Developers**

We made a number of advancements in developing our own in-house Aergo-based decentralized applications (dApps) and services alongside Blocko to show developers what is possible using Aergo.

We also launched a new Aergo mainnet-based stablecoin based on smart contracts to supply a need for a stable value exchange mechanism for users, dApp developers, and businesses utilizing the Aergo platform. This stable coin is called Aergo Gem.

The newly issued token is designed with an algorithmic mechanism to ensure a significantly stable value as it will be used for accessing various services within the Aergo ecosystem but also legacy customer systems.

Blockchain Company is cooperating with Blocko on Aergo Gem to build up its domestic and overseas affiliates network with the goal of expanding the Aergo Gem Rewards infrastructure. Many foreign companies (especially in Vietnam) are eager to get involved after we received many early inquiries about its implementation.

Additionally, Blocko is set to launch its Reward Infrastructure As A Service (RIaaS) built around Aergo Gem. This is a service that will allow organisations to build a rewards infrastructure with the Aergo network. It supports a packaged solution that facilitates the construction of blockchain-based open rewards infrastructures for local governments and public institutions that need to issue local points or a local currency. The Aergo Gem will offer a stable means of value exchange for businesses that use Blocko's RIaaS to build their own rewards system.

You can read more about the Aergo Gem [here](#).

A few months ago, we also gave our community an update on an in-house game that we are building on top of Aergo, called Captain Aergo. This is described as a roguelike turn-based adventure RPG where users play the role of a spaceship captain venturing through unknown territories. We released a new website, [captainaergo.com](http://captainaergo.com), with more information on the game.

Captain Aergo intends to showcase the performance and scalability of the Aergo platform as our mainnet will easily sustain the high resource requirements that the

smart contracts running on Captain Aergo will demand. This will also be an excellent showcase for future enterprise customers who would like to see proof of how powerful our technology really is.

Separately, both the Aergo and Blocko teams have made great progress in further developing the Gotchu application. Gotchu is described as a blockchain-based crowdfunding platform for creators and their fans. Gotchu provides a "Super Chat as a Service" connecting fans with creators. Youtubers, writers, and other content creators can extend their target audiences/ecosystems based on the value of their content and ideas.

Both Gotchu and Captain Aergo have passed their initial design and planning phases. They are now both entering advanced stages of development. Aergo Gem is also very relevant for both of these in-house applications. An integration between Aergo Gem and many of the applications we are developing in-house (such as Captain Aergo and Gotchu) is very likely.



AergoLite is another item that we are developing in-house. It is described as an embedded blockchain solution that provides interoperability with SQLite, a database engine with more than 1 trillion instances. This allows all sorts of smart city, mobility, and smart factory devices to instantly integrate with

our blockchain technology to form more secure IoT networks.

We showcased AergoLite at GITEX, a major technology show in the Middle East, just a few weeks ago. The AergoLite demonstration involved many common small devices such as those to be found in smart cities, smart homes, supply chains, and more - all connected securely to a live and functional Aergo blockchain network.

This gave customers at GITEX a hands-on view of how and embedded IoT based blockchain system could work. The working presentation was very well received. We

also showcased AergoLite and also Gotchu at the Samsung Developer Conference last week; both creating great excitement at our exhibition booth.

### **Blocko Client Migration**

As announced in our last QPU, Aergo Enterprise (an enterprise-focused, commercial version of Aergo) was launched as Blocko's new flagship product. It addresses the increasing need for hybrid blockchain solutions in the enterprise market.

Making a bold statement to its customers, Blocko migrated its business away from its prior private blockchain product called Coinstack. It therefore announced that it would migrate its existing customer base to its entirely new Aergo Enterprise product.

In addition to our Aergo Mainnet Launch Event that we conducted in April of this year, we also ran a series of focused workshops with customers over the past few months to plan out how they would like to utilize the Aergo platform for more sophisticated applications.

The nature of the enterprise blockchain opportunity lies in not only building completely new applications and services within businesses, but also integrating multiple applications and services together in one unified platform.

With our upcoming Merkle Bridge architecture, we will be able to build very advanced multi-blockchain systems for enterprise customers.

You can find Blocko showcase examples from a number of its existing customers on the newly released [blocko.io](http://blocko.io) website. We intend to continue to work with Blocko to migrate many of its existing customers and to secure new clients to Aergo Enterprise over the coming months.

### **New Opportunities – New Clients**

As stated earlier, we are working with a leading regional development bank to help it build a completely new digital banking and reward system for its many unbanked citizens. This system will use advanced techniques in security, identity access, digital assets, token economics and of course blockchain. The ultimate goal is financial inclusion for all of its citizens and customers.

### **Example other clients we are working with include:**

- On-boarding the Korea Internet and Security Agency (part of the South Korean Ministry of Science) as a customer to deploy an Aergo technology-based smart contract IT solution that will enhance internal and external operations for the government of South Korea.
- Securing Busan Port Authority as a new client to build and deploy a blockchain-based inter-terminal transportation (ITT) network to connect siloed transportation terminals and speed up transportation times by enabling more real-time data sharing and status updates in South Korea.
- Partnering with the Ministry of Education in South Korea to design and run a blockchain 'business innovation' course for students - to learn more about how blockchain can impact businesses of all sizes using technologies like Aergo.
- Worked with iQuest GmbH & Co KG, a large international IT solutions provider, to provide a blockchain-based document verification system for customers that use iQuest's ERP (Enterprise Resource Planning) system and associated support services.
- Worked in close cooperation with the Korea Land and Housing Corporation for Smart City, to explore the potential for the Aergo technology and product offering to unify devices, allow secure identities and associated supply chains in Sejong District 5-2 (through a large-scale Smart City implementation).

### **Showcasing Aergo and Upcoming Events**

With Blocko's recent funding round completed (providing further growth capital for its expansion) Blocko and Aergo agreed to jointly take a more aggressive push at industry focused events.

With the decline of interest in the cryptocurrency and blockchain market, it would make little sense to attend so-called crypto events in the near future. For this reason, we secured lucrative exhibition and speaking opportunities at leading events to showcase our technology and services to real customers and developers around the world.

Having a strong foothold in South Korea, we made the decision to focus on attending higher-quality events in other regions - including the Middle East and the USA.

**The events that we already have or will be attending in the coming weeks and months include:**

- **GITEX Technology Week** in Dubai (October 6-10). Blocko's local GCC personnel and Aergo jointly attended this event. This is largest technology show in the Middle East. We showcased a working AergoLite demonstration involving many common small devices such as those to be found in smart cities, smart homes, supply chains, and more - all connected securely to a live and functional Aergo blockchain network. This gave customers at GITEX a hands-on view of how and embedded IoT based blockchain system could work. The demonstration was very well received with many interesting leads resulting from conversations with prospective clients and system integrators from Saudi Arabia, The UAE, Bahrain and Kuwait. We were honoured to be supported by our business partner in the Middle East (The Private Office of Sheikh Saeed bin Ahmed al Maktoum) who made some key introductions.

In total we met and talked with over 450 individuals, companies and government organisations during the week. We are now actively qualifying these leads to convert them into a smaller list of qualified opportunities.



Aergo at GITEX Technology Week, Dubai

- **World Blockchain Summit 2019** in Dubai, UAE (October 23-24). Blocko's local GCC personnel and Aergo were asked by many potential customers to attend the World Blockchain Summit to present the Aergo blockchain solution to the Dubai market. The summit was attended by of over a thousand individuals interested in learning more about blockchain at a live

conference hall. Many so-called blockchain companies have made large promises in the region to customers but have failed to deliver working system - and due to Blocko's consistent history of on-time delivery of secure and scalable solutions to customers, many believe that Blocko and Aergo will be able to establish themselves as leaders in the Middle Eastern region - as such, Blocko and Aergo attended as both exhibitors and keynote speakers at the event. Aergo CEO's presentation created huge interest at this event.

A number of large organisations looking to implement blockchain spoke to us afterwards (resulting in a number of promising potential leads). The ruler of Sharjah, one of the 7 emirates in the UAE, attended the event. More details at [dubai.worldblockchainsummit.com](http://dubai.worldblockchainsummit.com).



Aergo CEO Phil keynoting at World Blockchain Summit

- **2019 Gartner's IT Symposium & Expo** in Orlando, Florida, USA (October 20 - 24). Blocko and Aergo jointly exhibited and spoke at the 2019 Gartner IT Symposium/Expo, the World's largest Enterprise IT conference to explain to customers and potential partners how blockchain has been adopted in the industry over the past five years through Blocko. Blocko debuted its Aergo Enterprise product at the Expo for the first time. We jointly demonstrated how enterprises can integrate Time-Stamping Authority (TSA) solutions, Decentralized Identification (DID) solutions, and other enterprise SaaS applications that we have launched with customers part of our early access program.

We also demonstrated the advantage of building on the Aergo platform, specifically for creating for the enterprise public and hybrid blockchain environments. More details at [www.gartner.com](http://www.gartner.com).



Blocko CEO Won talking at Gartner IT Symposium & Expo

• **Samsung Developers Conference** in San Jose, California, USA (October 29 - 30). Blocko and Aergo were honored to be invited to participate in the exclusive Samsung Developers Conference 2019 (SDC) 2019. We showcased some of our most bleeding-edge technology solutions to attendees at the conference as well as leaders within Samsung that are already familiar with Blocko (as they are one of Blocko's largest investors). SDC 2019 was a landmark event for Aergo as we were able to witness first-hand Samsung unveil its blockchain development ideas as well as its plans to build a new blockchain ecosystem.



All participating companies at the event had been carefully selected based on their ability to contribute to Samsung's blockchain ecosystem.

We showcased a live implementation of AergoLite, similar to the one Blocko MENA [showcased at GITEX 2019](#) in Dubai; as well as Gotchu, our new social media rewards platform based on a sophisticated token economy model. These were once again well received. More details at [www.samsungdeveloperconference.com](http://www.samsungdeveloperconference.com).

• **Abu Dhabi Smart City Summit 2019** in Abu Dhabi, UAE (October 29 - 30). Blocko's new local GCC team and Aergo exhibited at one of the most exclusive *smart city in government* events of the year. Here, we engaged directly with government customers that are interested in building a secure fabric and integrated platform that will power dozens e-government services. We also keynoted where we explained how Aergo can help the UAE's digital authorities, interior ministries, finance councils, and more to build their future smart cities.

Aergo's CEO unveiled our new *Digital Civilisation Platform* (concept) for smart government and smart city implementations. This is a truly innovative platform that we are developing with a bleeding edge technology partner. This (un-named) partner is a leading blockchain research lab headed by a team of top computer science professors from a leading European university.

Together, we intend to showcase some of the joint capabilities (that we are working on with this partner around post-quantum ready lattice-based cryptography, delegation of services, digital custody, green mining, and more) to select government organisations.

Aergo's CEO keynote was well received (and in fact resulted in Aergo being awarded the coveted Innovation Partner of the Year Award at the event).



Aergo Receives Innovation Award at Smart City Abu Dhabi

The top CIO/CTO/CDO (i.e. Chief Digital) Officers of the leading government and industrial clients in the GCC region are being invited to a series of exclusive invitation-only (private) briefing events to learn more about this *Digital Civilisation Platform* over the coming weeks. More information will be released on this partnership in due course.

You can learn about the Smart City event at: [www.smartabudhabisummit.com](http://www.smartabudhabisummit.com).

- **Abu Dhabi International Petroleum Exhibition & Conference** in Abu Dhabi, UAE (November 11 - 14). Blocko Mena and Aergo will be exhibiting at the largest annual conference in the Middle East - ADIPEC - to showcase how cutting-edge blockchain technologies such as Aergo can revolutionize complex oil and gas supply chains.

The event will see over 140,000 professionals from the oil and gas industry attend, looking for the best solutions to save costs in upstream, midstream, and downstream processes. More details at [www.adipec.com](http://www.adipec.com).

Our focus in the Middle East will culminate in Aergo and Blocko taking an active part in **Expo 2020**, to be held over six months in Dubai next year!



This will be the first World Expo in the Middle East, Africa and South Asia (MEASA) region, Expo 2020 will welcome more than 200 international participants, including a record 192 countries.

It will connect nations, multinational corporations, non-government organisations and millions of visitors from all over the world, providing an opportunity to see future technology innovations that will shape (and perhaps help save) our future and planet.

Through its theme, “Connecting Minds, Creating the Future”, and its three subthemes – Opportunity, Mobility and Sustainability – Expo 2020 aims to unlock the potential of technology and collaboration to make a difference towards the future development of humanity and our planet.

Aergo, Blocko and our strategic research partner aim to be there - with some of our leading government and smart city customers in The Middle East - with whom we are looking to implement and showcase our innovative *Digital Civilisation Platform*.

**Expo 2020** will be held in The United Arab Emirates, between 20 October 2020 and 10 April 2021.

More on **Expo 2020 Dubai** [here](#).

We now have a great story to tell. We do hope our stakeholders can see how we aim to expand our reach and voice by participating at such industry leading events.

The benefits and objectives here being to meet with existing connections and make new ones; to help solve future business problems and challenges with Aergo.

## Section 4: Deepening of Blocko Relationship

Just like Linux, a free to use Open Source operating system platform that is backed by a full-service ecosystem of enterprise offerings such as Red Hat Enterprise Linux, Aergo public chain is also a free to use Open Source blockchain platform. It is backed by a full suite of supported offerings from Blocko with its commercial product called Aergo Enterprise.

### **Aergo Enterprise Launch**

Clients will use Aergo Enterprise to design, configure and deploy blockchain based systems that are tailored to their specific needs. Perhaps the reasons are for improved data governance, control, or simply for a higher end-to-end throughput than was previously possible on fully distributed systems. These customers are also fully backed by professional support from Blocko, as it has over five years-worth of real-life in-production implementations. It also has many proven uses cases with both industrial and government clients.

All of this know-how has now been “codified” into the Aergo Platform over the past eighteen months.

Aergo Enterprise implementations can now be connected to Aergo Public chain to allow even further transparency and trust across businesses and organisations. Our unique combination of asset anchoring (i.e. immutable transaction recording) and asset bridging (i.e. exchanging and trading data and digital assets across totally different business ecosystems) enables completely new frameworks to be formed, for small, medium, enterprise or government level organisations.

This is the power of a truly hybrid architecture. It leverages the trust of a decentralised public blockchain with the performance and data governance that private blockchains coupled with secure cloud-based IT architectures provide.

This synergy between Aergo Enterprise and Aergo Public chain now requires absolute focus and coordination between the Aergo Foundation and Blocko. This, so we can enable a smooth adoption of this platform with customers and integration partners.

Our detailed review of our strategy with existing and prospect customers (as outlined earlier in Section 1) also confirmed our need to prioritise the delivery of certain aspects of our joint plans. We need to both continue to deliver on the roadmap features of Aergo Public chain (e.g. Ethereum bridge and enhanced Lua VM smart contract engine), whilst simultaneously accelerating entirely new products.

### **Blocko Co-Operation**

In parallel with this (and now that our core capabilities of Aergo and Blocko Aergo Enterprise are fully available) we need to push extra hard for client and industry adoption. Some of the target customers are naturally existing clients of Blocko in South Korea, but we must also work with even larger and more ambitious organisations in regions like the Middle East.

We are therefore putting even more emphasis and resources behind our partnership with Blocko. This is so we can release exciting new products and increase the awareness of Aergo across the world.

### **This encompasses:**

1. Delivering selective key roadmap features of Aergo that are of the most immediate use (and value) to clients
2. Building standardised (easy to use) self-serve blockchain-as-a-service aka BaaS type products including: (a) Aergo TSA [Document Time Stamping Authority] (b) Aergo DID [Distributed Identity Platform] (c) Aergo Gotchu [Crowdfunding Platform for content creators] (d) Aergo Gem [Stable Coin and Reward Mechanism], and (e) AergoLite [IoT/smart-city focused SQLite based embedded blockchain Platform].
3. Winning projects with existing and new Blocko clients in South Korea (our 1<sup>st</sup> target region)
4. Developing completely new projects and innovative implementations with customers in the Middle East (our 2<sup>nd</sup> target region)
5. Spreading the word by jointly attending and speaking at more leading industry events
6. Broadening the availability of the Aergo Token to new stakeholders across the world

## **Regional Focus**

It is clear that we need absolute focus and commitment to take advantage of both (i) the immediate business growth opportunity to target existing and new Blocko clients in South Korea and (ii) the tremendous long-term strategic opportunity in the Middle East (through our partnership with The Private Office of Sheikh Saeed bin Ahmed al Maktoum).

As part of the need for absolute focus on the above strategic imperative priorities, we have split and have assigned key responsibilities across the leadership team and board of directors for Aergo. We have also reserved separate budgets and people resources, to provide the requisite focus for these distinct strategic regional opportunities. At the same time, we are strengthening the Aergo leadership team.

The Middle East opportunity has unique characteristics (and challenges). It will need a local leader to represent both Aergo and Blocko at the most senior levels of government and industry interactions. As Aergo CEO and President, Phil will focus on leading and maximising the tremendous Middle East opportunity, as well as Aergo's international strategy and business plans (shaping our global long-term enterprise customer, government and IT integrator partner strategy).

At the same time, it is also clear that the immediate Aergo and Blocko Aergo Enterprise roadmaps are intertwined and need very close cooperation and a joint approach. This technical work will consume much of our go forward investments in terms of development resources and funding. It will also require senior leadership stewardship locally in Seoul to champion, drive and coordinate these activities.

Hunyoung Park (aka Hun), CTO of Aergo and Blocko is taking on full technical leadership role for Aergo to focus on all Aergo Technology and Ecosystem matters. As Aergo CTO and board member he will be responsible and focus on the evolution of Aergo's core platform and architecture, as well as lead Aergo's Blocko Korea R&D.

Hun will also oversee the implementation of new products and services and of Aergo's technical developer relationships and partnerships.

Hun is an exceptional technology and research and development leader. He is also a true people leader. Aergo's future technology and technical ecosystem plans (and their execution) are in very safe hands.

Despite the many challenges we face (i.e. over-hyped expectations from blockchain; misinformation from incumbent IT vendors who have much to lose in a more open and decentralized technology world; and slower adoption levels of blockchain at the enterprise and government levels) we remain bullish about the future of blockchain in business - and of the role Aergo will play.

Strategy (originally a Greek word for the leader of an army) is all about *winning* in business.

It is now abundantly obvious, that in order to maximise the chances of success of both Aergo and Blocko in the long run, both firms need to have the tightest possible relationship possible. The board of Aergo has therefore requested that we add a key member of Blocko's management to our senior leadership team.

We are very happy to share with all our stakeholders that Won-Beom Kim (aka Won), co-founder and CEO of Blocko has accepted to join our board of directors and senior leadership team. He is also an exceptional visionary technology and business leader, having created and lead one of the most successful (equity funded) blockchain businesses in Blocko. This is why firms like Samsung and the leading banks in Korea have ploughed significant funding into him, his team and the Blocko cause over the past five years. He is a winner.

Won will focus on the joint (i) business opportunity, (ii) strategy and (iii) implementation of new services and of Aergo's future ecosystem partnerships. He will also lead Aergo's significant Blocko Korea business and investor relationships. As part of these changes, Won will take on the role of Aergo Chief Strategy Officer (CSO) and Chairman - to make sure that both Aergo and Blocko maximise the synergies that can be gained by working even close together to win together. To win big.

We will be appointing other board members for Aergo very soon to further strengthen our leadership team and as we expand our business goals.

## Section 5: Financial Update

This section covers provides an update to Aergo Organisation's 2019 financial and operating plan.

The crypto market is still in a very precarious state.

We continue to assume there will not be any predictable sustainable growth in the near term. We remain very cautious about the market. We must therefore continue to fund the business through a diligent use of resources.

We continue to operate on a low cash burn rate. Despite the significant business development and technical development achievements over the past quarter. Liquidating Aergo Tokens to fund the business when the crypto market is where it is today is not a wise choice.

The early decisions we executed at the start of 2019 (that resulted in a re-balancing of our treasury assets) helped a lot. Our funding needs will continue to primarily be funded from our existing Treasury resources.

### We maintain our core principles of:

- (i) Investing in select areas where we believe there are significant benefits in the short, medium and long term;
- (ii) Leveraging the skills and resources available to Aergo from its strategic partner Blocko;
- (iii) Prudently using financial assets available to the Aergo Organisation (i.e., treasury funds, token reserves) to ensure a continuous and rolling 18-month runway.

As stated in our last quarterly project update, we are aggressively investing in our plans, accelerating some of the 2019 spending in the prior quarter. We still expect to come in just over our planned budget for the year.

Our partner Blocko also sees things the same way and is investing heavily. It successfully completed another round of equity funding (\$7.5M USD) to this effect. It is putting this money into Aergo based business focused deal-execution in its primary market of South Korea.

### Aergo's Treasury continues to focus on supporting:

- (i) A low direct cash burn rate;
- (ii) Ensuring that Aergo's immediate and long-term financing needs are met;

(iii) Protecting Aergo's valuable token reserves - only liquidating the absolute minimum needed to support our day to day operating plan.

### 2019 Financial Spend and Budget Update

The Aergo Organisation 2019 full year budget of USD \$7,801,331 will be increased slightly to circa \$9.2M USD to support our current execution and investment momentum. This represents a 100% year-on-year increase vs. 2018. We are investing because we see the opportunity and believe we can capture it with Blocko.

This is line with year two of our five-year plan to build out the technology, ecosystem, and business for Aergo.

The main source of financing for Aergo remains our leveraging of Blocko's substantial people and financial resources; as well as prudent use of the projects own Aergo treasury funds and token reserves.

The expected 2019 Financial Plan of USD \$8,500,000 will be financed through a combination of fiat (i.e., USD, KRW) payments, cryptocurrency (i.e., Bitcoin, Ether) payments, as well as [limited] Aergo token payments.

### It is estimated that:

- A total of USD \$3,550,000 of the overall costs (i.e., 42%) will be non-recurring.
- Approximately USD \$1,000,000 of these costs have been allocated to our international expansion in the Middle East with our partner Blocko
- Approximately \$1.5 million of the overall spend is being financed through the sale of circa 4 million Aergo tokens (i.e., 0.8% of total). Most of these tokens have already been sold and were taken from the Aergo Token Reserves (ATR).

As explained last quarter, our 2019 Financial Plan is now almost completely disconnected (i.e. protected) from any future fluctuations of the price of cryptocurrencies.

The use of funds to date is covered in the next section.

## Use of Funds in 2019

The Aergo Organisation's year-to-date operating expenditure (spend) in 2019 is summarized in the following table<sup>1</sup>.

\$US Dollars	Spent, YTD	%	2019 Budget (revised)	2019 budget (planned)
(1) Compensation	\$50,000	7.4%	\$675,500	\$582,500
(2) Marketing	\$818,790	68.2%	\$1,200,000	\$1,000,000
(3) Token Generation Event	\$367,946	73.6%	\$1,200,000	\$500,000
(4) General & Administrative	\$404,000	88.0%	\$459,000	\$125,000
(5) Professional Services	\$135,843	60.4%	\$225,000	\$150,000
(6) Ecosystem Development	\$1,090,504	87.2%	\$1,250,000	\$1,250,000
(7) Blocko Partnership	\$3,693,831	88.1%	\$4,193,831	\$4,193,831
<b>Total Expenditures</b>	<b>\$6,560,914</b>	<b>71.2%</b>	<b>\$9,203,331</b>	\$7,801,331

**(1) Compensation:** Total compensation costs to fund the various members and advisors to the Aergo organisation. All of these costs are currently scheduled to be paid by the end of December 2019.

**(2) Marketing:** These costs cover events, PR, advertising, digital marketing, exchange marketing, sponsorships, community awards, merchandising, and other community activities delivered during 2019. We increased the marketing spend over the recent months by attending a number of leading industry events and due to our expansion with Blocko into the Middle East.

**(3) Token Generation Event:** This covers all the costs in respect of listing and marketing, promotions and token holding competitions on various exchanges during 2019.

**(4) General & Administrative:** This covers costs for rent, insurance, utilities, equipment, software/information technology, and travel. These costs have risen due to Aergo jointly supporting the opening of the new Blocko MENA sales and business development offices in Dubai. These full year (G&A) costs will be higher than planned.

**(5) Professional Services:** This covers 3rd party costs for services to Aergo; including legal advice, compliance, AML/KYC, banking, tax, accounting and auditing. It also

covers some of the legal and compliance costs with setting up Blocko MENA to promote Aergo in the region.

**(6) Ecosystem & Development:** Ecosystem and Development represent costs such as product tooling, training, security and engineering integrations. These costs have risen due to the finalisation, testing and productisation of Aergo Enterprise to ensure it works well with our Aergo public chain (all costs however remain in-line with our stated 2019 budget).

**(7) Blocko Partnership:** Non-recurring, statement-of-work (SOW) based contract for Aergo core platform product development (e.g. payment for building and integrating Aergo Enterprise with Aergo public chain; the creation of an Aergo token swap/bridge capability; interfacing and integration work with Binance DEX, initial work into the creation of a stable Aergo token and continued support, enhancement and extension of our core Aergo mainnet capability).

We expect to finish 2019 with Total Expenditures of circa \$9.2M USD; slightly above our original planned budget.

<sup>1</sup>The actual 2019 year-to-date spend (in USD dollar and percentage terms) is compared against the updated revised full-year 2019 plan. For comparative purposes only, the actual full-year spend for the prior 2019 year is also listed.

## Use of Token Reserves

There are a total of 500,000,000 Aergo Tokens in existence (i.e., total supply). This total is locked as per the Aergo Organisation Articles of Association (AoA).

### As a recap:

The 500 million Aergo tokens are grouped into five major usage categories: (1) Private Token Sale (2) Community (3) Reserve Tokens (4) Advisor and Backer Tokens (5) Employee and Team Tokens. Aergo tokens are being released over a ten-year time frame. Some earlier than others (i.e. Private Token Sale holders, whose tokens are being released by the end of December 2018 - in line with our existing agreement with them). Other tokens will be released over one to three years (Aergo Team and Blocko R&D Tokens). Most Aergo Team and Blocko R&D Tokens will have been released by end of 2020.

We allocated a large portion of Aergo tokens to help create, test, deploy, secure, and maintain the core Aergo main network. We know it will take both time and a large network of partners for Aergo to reach its full potential. Of the total supply of 500 million tokens, approximately 45% (222,737,430) Aergo tokens were originally reserved for building, supporting and sustaining the Aergo Platform and supporting ecosystem. These are what we call the Aergo Platform Token Reserve (ATPR). Some of these will be used within the first five years. However, the vast majority of these will be released and utilised over a longer ten-year period (179,416,997 tokens; 36% of total supply). In fact, many of these Aergo Tokens (125,000,000 i.e. 25% of total supply) will never be released, as they will be used as long-term staking tokens.

### Overview of tokens allocated towards the long-term buildout of the Aergo platform:

#### (Class A) Community Incentives (Years 1 - 10)

<i>Ecosystem (block producers, dApps)</i>	30,000,000 (6.0% of supply)
<i>Developers &amp; Open Source ecosystem</i>	3,000,000 (0.6% of supply)
<i>Consensus reserve 1</i>	62,500,000 (12.5% of supply)
<i>Consensus reserve 2</i>	62,500,000 (12.5% of supply)
<i>Testing, deploying, operating Aergo</i>	21,416,997 (4.3% of supply)

#### (Class B) Foundation Reserve (Years 1 - 5)

<i>Business development</i>	10,000,000 (2.0% of supply)
<i>Marketing &amp; PR</i>	10,000,000 (2.0% of supply)
<i>Community incentives</i>	10,000,000 (2.0% of supply)
<i>New market entry, token generation event</i>	5,000,000 (1.0% of supply)
<i>Foundation contingency</i>	8,319,434 (1.7% of supply)

#### Total tokens allocated for long-term platform and ecosystem grow-out

Total Class A	179,416,997 (36.0% of supply)
Total Class B	43,320,433 (9.0% of supply)
<b>Total tokens (A + B)</b>	<b>222,737,430 (45.0% of supply)</b>

## Aergo Token Metrics

This section depicts where Aergo tokens were released. It includes an insight into the current and planned immediate circulation of Aergo tokens. It is in effect an update to the Aergo token metrics since the last QPU that was released in Q2 2019. Over the past two quarters a total number of 48,721,104 Aergo extra tokens were released. This was in line with our stated 2019 execution strategy. The current circulating supply (as of the date of this QPU) is 155,138,095. This represents 31.0% of total supply. To date a total of 34,957,694 of the Aergo Platform Token Reserve (ATPR) have been released (16% of total). This leaves a total of 187,769,706 tokens left for the running the Aergo Platform longer term (38% of total supply).

**Note:** Full metrics and vesting schedules for Aergo token holders can be reviewed [here](#). Occasionally, these metrics are rebalanced to suit both the immediate and long-term nature of the project. A summary of the Aergo token split<sup>2</sup> follows.

### A summary of the Aergo token split<sup>3</sup> is as follows:

	No. of tokens
<i>Tokens sold in private token sale, including discounts</i>	<b>135,392,289</b> (27.1% of supply)
<i>Ecosystem Incentives for developers, community, partners, businesses working on Aergo</i>	<b>161,207,844</b> (32.2% of supply)
<i>Reserve for future dApps, partners, business development, foundation &amp; marketing/PR</i>	<b>120,819,434</b> (24.2% of supply)
<i>Team Tokens for advisors, team building, Blocko, testing, deploying &amp; operating Aergo</i>	<b>82,580,433</b> (16.5% of supply)
<b>Total token supply</b>	<b>500,000,000 (100.0% of supply)</b>

### A summary of the latest Aergo token circulating supply<sup>3</sup> (as of 18/10/2019) is as follows:

	No. of tokens
<i>Tokens already released to Aergo private Token Sale participants</i>	<b>64,494,785</b> (12.9% of supply)
<i>Tokens already released as part of various Ecosystem development initiatives</i>	<b>16,488,700</b> (3.3% of supply)
<i>Tokens already released from the Aergo Reserve pool</i>	<b>48,713,641</b> (9.7% of supply)
<i>Tokens already released to Team: advisors, key backers, foundation, Blocko, marketing/PR</i>	<b>25,440,969</b> (5.1% of supply)
<b>Total circulating supply</b>	<b>155,138,095 (31.0% of supply)</b>

### A summary of the future estimated Aergo token circulating supply<sup>3</sup> (over the next five years) is as follows:

	No. of tokens
Estimated number of tokens to be in circulation by the end of 2019	<b>248,235,086</b> (49.6% of supply)
Estimated number of tokens to be in circulation by the end of 2020	<b>314,897,015</b> (62.9% of supply)
Estimated number of tokens to be in circulation by the end of 2021	<b>385,897,015</b> (77.1% of supply)
Estimated number of tokens to be in circulation by the end of 2022	<b>430,000,000</b> (86.0% of supply)
Estimated number of tokens to be in circulation by the end of 2023	<b>450,000,000</b> (90.0% of supply)

<sup>2</sup> Readers should not rely on forward-looking estimates for the purposes of buying, selling, or holding Aergo tokens or coins or for any other purpose. All future circulating supply estimates are based on the Aergo Organisation's current execution plan. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially.

## Section 6: Key Questions from our Stakeholders

The Aergo Organisation has once again been pleased to receive several questions over the past few months from its community. We continue to urge all of our stakeholders to raise any questions they may have. We will always attempt to answer all questions in an open, frank and transparent manner. We answer the top questions in this final section.

### **How many companies will be using the Aergo tokens since private enterprises are not required?**

The Aergo platform is being offered to customers and other organisations around the world as a pure hybrid blockchain platform. This means that any and all implementations we sell into sectors such as identity authentication, supply chain management, manufacturing, e-government, and others will utilize a combination of a private blockchain combined with a public blockchain. Increasingly in the future, some implementations may solely be conceived around a public blockchain for organisations that are interested in taking a leap forward to build a fully distributed business application. However, today and in the foreseeable future, we strongly believe that most organisations will implement a hybrid approach. This involves private blockchain system for their specific use cases coupled with a public blockchain in certain areas. Just like may use a hybrid cloud infrastructure for their IT needs.

The private blockchain will facilitate the bulk of computational and transactional load. It will be used to record important metadata and manage identities of employees or users of a system. The public blockchain will be used to record immutable, encrypted hashes of block headers or individual transactions or pieces of data. Each of these transactions will consume a gas fee in Aergo tokens. The concept of periodically recording information from private blockchains or even from regular database transactions is regarded as 'anchoring'. Almost all future Aergo implementations will anchor block headers or transactions on the Aergo mainnet. The concept has been well received by our early customers and is seen as a simple way for enterprises to introduce themselves to public blockchain technologies like Aergo.

Another area where private blockchain implementations will utilize the Aergo mainnet is tokenization and asset

bridging. With our newly developed Merkle Bridge architecture (which achieves cost-effective and high-performance inter-blockchain asset transfers for tokens and hashes representing off-chain data) enterprise companies are able to build multi-stakeholder, multi-blockchain use cases. Here, they will be able to settle interactions using the Aergo public network using our Merkle Bridge. Again, any interactions with the public network will consume gas fees in tokens.

### **When will we see more block producers on Aergo?**

As explained in the above sections of our QPU, we have taken the decision in recent months to shift our areas of focus into two key regions of interest: South Korea, our home market, where dozens of the (Blocko) customers reside; and the Middle East, the region that we were invited into by the Al Maktoum family's royal private family office to become one of primary blockchain solution providers in the region. We are working closely with many organisations to conclude the incubation phase of the Aergo mainnet. We continue to focus on the critical need to prove the reliability, availability, and security of the Aergo mainnet before bringing on-board a more prospective (larger) block producer candidates.

We have been in discussions with these candidates for some time now. They have shown great interest in not only hosting the Aergo mainnet to earn block rewards on a regular for-profit basis, but they have also shown interest in hosting custom blockchain networks and data sensitive customer data (file systems) deployed using Aergo Enterprise for customers in S. Korea and abroad.

Many of our customers in the Middle East are voicing a desire to have local datacenters host their blockchains, while at the same time they are not willing to take on the complex task of managing these local datacenters across different geographical locations in the region.

We plan to close partnerships with multiple cloud competent telecommunications firms in the Middle East to provide this capability to our customers and to maximize the impact on future projects.

This will increasingly be a major area of focus for Aergo in 2020.

**With Samsung recently adding Aergo to its blockchain wallet, does this insinuate a future collaboration?**

We are unable to comment on potential confidential, commercial transactions with any of our strategic partners. Samsung has been a valuable ally (and investor) of both Blocko and supporter of Aergo for quite some time now. We have and continue to work on many Samsung initiatives.

With the recent addition of Aergo to the Samsung Blockchain Keystore (in direct cooperation with Samsung) - Aergo has laid a strong foundation for dApps and services. Aergo will actively contribute to the open multi-party blockchain ecosystem that Samsung aims to build, promote and support.

Samsung has shown visionary leadership in many areas. Blockchain being one of their most recent. It is a true honour (and further validation of our technology and Blocko R&D team) to have such a close working relationship with global leading firms like Samsung.

You can see Aergo on Samsung's Blockchain Wallet in a [YouTube video showcase here](#).

**Why did you choose to enter the Middle East market?**

As explained in our QPU, we entered the Middle East through an exclusive, invitation-only partnership opportunity with the royal family office of Dubai. The Private Office of Sheikh Saeed bin Ahmed al Maktoum contacted us with the offer of helping us set up a local subsidiary in the Middle East. This, to address the complexities many organisations in the Emirates and other Gulf nations face, when trying to deploy blockchain solutions via traditional software providers like IBM.

We explain the strategy behind our new Middle East Investment Plan in Section 1 of this document.

**Will Hyundai really be anchoring their blockchain for tracking used cars to the Aergo mainnet?**

Yes. Hyundai AutoEver collaborated with Blocko to build a Blockchain-as-a-Service (BaaS) platform for plug-and-play integration with car tracking software - in order to automatically track metadata on used cars such as mileage and other important information.

All in an immutable and tamper-proof way.

In Hyundai's case, they have implemented a shared blockchain network within the massive Hyundai Motor Group. Very soon, they will be anchoring the blockchain's block headers to the Aergo mainnet.

**By adding support for Aergo to another blockchain, the Binance Chain, have you opened up the network to another attack vector?**

No. Binance Chain was well developed and tested prior to its launch; a factor we considered before we decided to join their ecosystem. We are using an AERGO (ERC20) and AERGO (BEP2) swap service. This swap service is composed of two secure main vault wallets on either side of these two systems.

When you swap AERGO ERC20 to AERGO BEP2, the circulating supply of AERGO token does not change.

In effect, the circulating supply of AERGO tokens equals:

*Circulating Aergo ERC-20 tokens + Circulating AERGO BEP2 tokens*

i.e., they are mutually inclusive.

**When will people start seeing more activity on the block explorers (and real companies utilizing network)?**

This is not a simple question and the answer is complex.

We are focusing on true enterprise use cases that will in many instances use a hybrid public network (such as the identified projects we are pursuing in the Middle East). It will take some time to achieve this goal. It is not simply about Aergo but also about the rate of adoption by clients. To accelerate this adoption, we are focused on developing real business use cases – not simply PoC's.

A number of other blockchain projects may currently be showing more transactions than Aergo mainnet. The vast majority of these transactions are for games gambling and experimental (e.g. PoC focused) smart contract execution. We don't do this. We focus on real enterprise customer projects (and transactions).

Just like public cloud when it was first launched by amazon AWS seventeen years ago, the early customers primarily used this for testing and non-mission-critical

workloads. It took a few years before they migrated real workloads on the cloud. We see similar dynamics today, with many of our early adopter clients preferring to stage and use their first hybrid (Aergo based) blockchains using our testnet. This is natural and to be expected.

We already have some good results but this will take more time before the client infrastructure will move onto our mainnet. Our next step priority is to further develop these opportunities to use our main network. A number of our partners are also busy developing solutions and services using our main network.

We should see the results of all the above soon.

**When will staking on the mainnet be released? What will the reward rate be for staking? What is the minimum staking amount?**

Our staking mechanism is already open and available on our main network. We will soon start our reward protocol for Staking (and voting).

The Aergo block rewards will be divided between both producers and stakers. The minimum staking amounts will be 10,000 tokens. We will share more about this in a more comprehensive note soon.

**Will the Mainnet 2.0 hardfork update cause a network split?**

Mainnet 2.0 will require a hardfork of the Aergo network.

We take great care with all such complex technical matters to protect our network and users of Aergo mainnet. We follow well-trodden Open Source and quality engineering release principles.

Our preparations are going very well (as we are actively working very closely with our current block producers). Like every major milestone delivered over the past eighteen months by Aergo, we expect this update to be smooth. We hope that our milestone delivery and quality release track record reassures all of our stakeholders.

**When can we use SQL features in the main network?**

Supporting SQL features in our public Aergo network is also a very complex issue. We are designing the associated gas system in Litetree (our purpose-built SQL

engine). This work is not yet fully complete as we are conducting a series of detailed experiments.

However, you can already use some SQL features in our SQL network. We will continue our experiments on the SQL network until we are ready to ship the complete feature list. You can access the latest features [here](#).

We are convinced that our users, programmers and developers will enjoy our innovative SQL features with new Aergo JDBC. Watch this space for more.

**Is Aergo worried about the current and planned circulating supply of Aergo tokens, or the current market value of Aergo on CoinmarketCap?**

No. We have a plan that we are sticking to. We have always gone into extreme detail to explain what this plan entails (as well as update all of our stakeholders) in each of our transparency reports in our published QPU's.

We cannot and will not focus on things we have no control of. In many cases, some things others think we should focus on, have little to no bearing, on the ultimate success of Aergo. We are focused on the enterprise business sector - not simple use cases that provide at best short-term gains.

We have, and will, always focus on the long-term success of the Aergo project. This will result from good old hard work and execution excellence - coupled with smart business decisions.

**Namely:**

- Delivering on our technology vision and roadmap.
- Winning new customers by solving real problems.
- Building out our ecosystem and partnerships.
- Global awareness of what Aergo provides.
- Keeping our joint Aergo and Blocko teams focused.

This is a serious project looking to solve complex business needs with blockchain. Anyone holding, or thinking of holding, Aergo tokens to help secure our network should bear this in mind. If you do not share our long-term vision, you should perhaps not participate in this project.

Patience is the name of the game here.



# Thank you for reading this report.

*We publish a thorough QPU every quarter detailing the performance of the Aergo Organisation and the progress it made in advancing the Aergo project.*

*Our goal is not only to keep our stakeholders well informed, but to also make sure we stay true to our most core values: trust, transparency, and openness. We are remaining accountable to ourselves as much as we are remaining accountable to you.*

*If you have any questions, please [email us](#). For regular updates, [follow us on Twitter](#).*

*Until next time,*

*Team Aergo*