

# **AEROBLOC WHITE PAPER**

BRINGING AI & DECENTRALISATION TO AVIATION

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# LETTER FROM THE CHAIRMAN

## The INTERNET OF AVIATION - A New Vista in Aviation Technology

The team at Aerobloc is building the **Internet of Aviation** based on a new proposed layer 1 Distributed Ledger Technology ("DLT") with a native token called the \$AERRO token. Platform will be live in Q4 2025.

As an aviation die-hard, I ran the global USD250 billion in annual value airline ticket settlement system with Accelya as its Global CTO and CIO. I founded Planitas, which built the first Online Booking Engine with zero-to-one 'Look to Book' ratio at our headquarters in Dublin, Ireland. Through my work at Accelya I supported 350 airlines on 25 products and our combined core team at Aerobloc have over 100 years of aviation application design and development experience, almost as old as aviation itself and considerably longer than "modern" mass air-travel originating in the 1960s.



Peter Boylan, our Chief Operations Officer, was a senior executive at Emirates Airline, EMC and IBM and our Product Director for PRA, AV Rao was integral to the design and build of the industry's leading solution 25+ years ago. We are honoured to have some very talented and successful aviation folks in our advisory team, including notably Jonathan Norman and Cormac Whelan, who sold the nextgen Siri to Apple. Other key advisors include Yani Malahov, the 'Godfather of Ethereum', Mark O'Byrne, a world leading gold and precious metals expert and Pearce Clune an early stage crypto expert invested in Animoca, Sandbox and Ledger. The project has also added blockchain experts and specialists Dermot O'Reilly and Franky Kastrati to the operations team, who bring impressive resumes and extensive experience to the Internet of Aviation. We know our subject matter like no others.

Although our mission is bold, the industry is at an inflection point in technology and the timing is perfect. Airlines and airports cannot afford the lost revenue and high costs of 60 year-old ageing legacy systems. The Internet of Aviation led by the Aerobloc platform and the Aerohub team will bridge the legacy aviation technology world and the future that is Web3. Replacing legacy systems including solutions such as Passenger Revenue Accounting, the Aerobloc will offer Real World Applications ("**RWApps**") powered by AI that will support digital wallets and Central Bank Digital Currencies ("**CBDCs**") globally. Unparalleled functionality for CFOs to drive down cost, increase revenues and maximise profits. Powered by the Aerobloc, a blockchain with unique peer-to-peer capability channelled to stakers of the \$AERRO token.

We have commenced our Private Rounds for token sales, having closed our Seed rounds oversubscribed, and our institutional Phases will offer various discounts to our eventual list price. The \$AERRO Token launch is the most meaningful play in Web3 this year and needs its own categorisation in crypto as there are not many projects attempting to provide true real-world applications for Web3. The Aerobloc platform is both a first mover and the beginning of a new digital commons to replace the ubiquitous aviation legacy systems. We are already in talks with several airlines for our RWApps, who not only know this team really well but trust them due to years of successful delivery, solving many of their real world problems. Reputation is everything to us and we are championing this ethos in Web 3. If you have any queries, or wish to learn more about the Internet of Aviation, please email us at [info@aerobloc.aero](mailto:info@aerobloc.aero). Get ready for lift off!

Warm regards,  
Brendan James McKittrick - Founder



## ABSTRACT

Welcome to the Aerobloc Project, a cooperation platform hosting the Web3 digital transformation that the aviation industry has been waiting for, we know, they told us! This is driven by a huge array of inefficient legacy processes, which have inadvertently contributed to the establishment of the industry's widespread lack of trust and inoperability, resulting in a "locked-in" syndrome with the industry's long-established suppliers. This has created a situation which leaves airlines in a most financially disadvantaged position. In a very good year, they post a meagre 3% profits on a huge turnover. In times of economic crises, governments reluctantly support the industry with your funds, dear reader. The travel industry is cyclical so you can be sure there will be another bailout of your national carrier unless we do something about it.

Whilst being the biggest stakeholders and main protagonists in the industry, most airlines are risk averse to make anything other than minor changes or enhancements to the status quo, as the risk is too big for any significant transformation. The only way it will, and in fact, can ever change, is by finding a way to move the minor changes/enhancements outside of the existing landscape to a neutral ecosystem where no powerful entities have the ability to influence process-change outcomes. Airlines and airports are of course run by people, who we know from our decades of experience in the industry.

The answer is a decentralised platform which provides the infrastructure for the wider aviation industry to design, build and govern its own future. The mission of the Aerobloc Project is to provide the launch-pad for exciting new ideas utilising blockchain and Artificial Intelligence ("AI") technology which will lead to a fundamental shift in how the aviation industry collaborates, operates and grows, enhancing the way we move people and cargo in the air. Aerobloc is providing the world's leading DLT Platform for open-access RWApps, allowing the aviation community stakeholders to collaborate in efficiency enhancing incentives, increasing their revenues and reducing their cost of doing every-day business whilst transforming the travellers' experience. This provides an immense opportunity for the airlines and the other stakeholders to pivot into a more productive and sustainable future.

*"The greatest obstacle to data sharing has been trust, nowhere more so than at organisational edge interfaces where business is done. I believe that the time has never been better to introduce the Blockchain paradigm of trust-less networks and in particular its zero-knowledge-proof method, which allow peers in the aviation industry to trust their critical data to a community Distributed Ledger Technology supporting smart contracts, thus introducing a new vista in frictionless collaboration and unprecedented efficiencies. The industry has struggled to curtail the costs of running the business, resulting in a situation where even a modest increase in fuel costs would wipe out the industry's profit. Airlines are giving their focus to both cost control and revenue uplift. To succeed they need to reduce the friction on data exchange to support more agile transactional interactions and an enhanced customer experience. Artificial Intelligence and Blockchain do that and The Internet of Aviation platform will bring it to aviation."*

**Brendan James McKittrick, Founder and CEO, Aerobloc**

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## DOCUMENT STRUCTURE

This white paper is structured as follows: The Overview section of the Internet Of Aviation acts as a standalone introduction to the aviation industry with three subsections. A Background, which describes the current situation and the problem which Aerobloc addresses, Vision & Objectives, which specifies the solution requirements and the Aerobloc Project that provides the detailed business opportunity.

Following this is the \$AERRO Token Protocol, which provides a detailed description of the Token Model, Governance and Technology. The intended reader here is our friend in the aviation industry. We will have a shorter litepaper catering to the crypto community focusing heavily on the \$AERRO token itself

# OVERVIEW

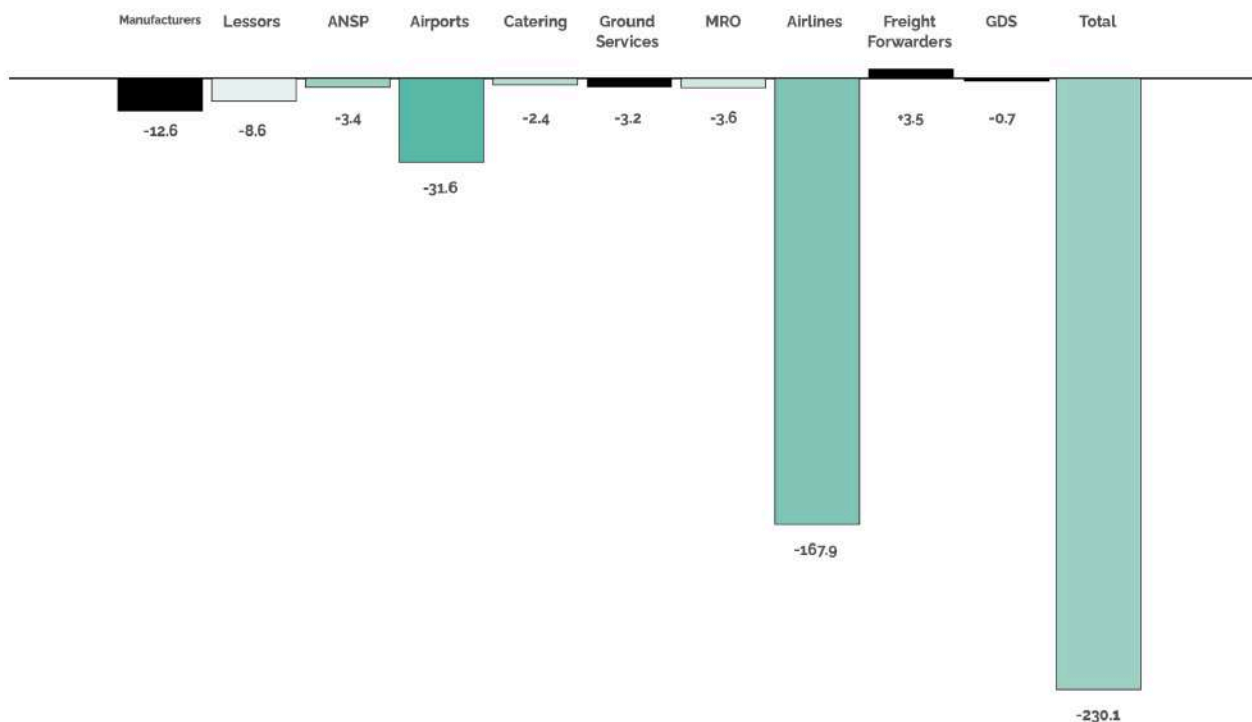
## Background

The global Airline industry is one of the most inefficient and lethargic industries today and for over 40 years has been in either recession or consolidation, forcing it to reactively shift focus from revenue maximisation during the short positive times, to drastically firefighting, primarily through attempted cost management in low periods to the detriment of innovation. These massive swings are arduous to manage at best, but ultimately provide no long-term improvement due to the inefficiencies that are solidly embedded in industry practices. Highlighted by MIT professor and former Deputy Assistant Secretary for the U.S. Department of Transportation, William Bonvillian, as one of the six major legacy sectors in 2011, he clearly articulated what was known to the insider for decades - "neither the private nor the governmental sectors may be able to fully realise the societal or *economic benefits of innovation*" [1].

Aviation is a complex industry with a wide ecosystem consisting of airlines, their passengers, airports, aviation authorities, freight companies, partner agreements, booking agents, industry associations such as the International Air Transport Authority ("**IATA**"), and International Civil Aviation Organisation ("**ICAO**"), all the regulatory public and government authorities, also extending somewhat to more distant industry players such as tourism, hotels and car rental companies. Alignment among the stakeholders in order to provide a robust customer experience is complicated by geographical challenges, lack of information sharing and inefficient operational procedures to sell the product, making the whole process a very complex undertaking. The airlines are dependent on many factors and rely heavily on numerous partners (such as Global Distribution Systems) to access markets and overcome issues they face as individual competing organisations, and that's if things are running smoothly. Add a volcanic ash cloud or a pandemic to this picture and the rate at which the industry heads downhill is mind-boggling.

With annual turnover of almost USD\$1 trillion dollars and valuation exceeding USD\$ 3.5 trillion, the air transport industry would easily place itself in the top 20 economies. Those very same economies rely heavily on air transport to link them together, enable commercial opportunities and facilitate trade. At the same time, the industry operates in practically every country, across most currency pairs and across dozens of legal and regulatory frameworks, creating massive operational challenges and a high point of entry. If that is not "Real World" activity, we do not know what is. Therefore, it is the airlines which struggle most to extract profit from their vast operations as they always bear the brunt of pan-national currency fluctuations and all other global issues affecting the industry. Conversely, most of the organisations which provide intermediary services to the airlines remain more insulated and less affected during downturns. During the COVID pandemic governments globally loaned over US\$123bn to airlines [20]. The figure below from McKinsey illustrates this best [14].

## Economic profit / loss by subsector, 2020, '\$billion



To improve the situation by cutting costs and making existing systems more efficient, airlines have already started to adopt AI, analytics, and robotics to downsize the workforce and bring more efficiency into operation. However, the core problems which include the need to share data and introduce seamless digital transactions have remained the same, and the fundamental issues are not being addressed. With AI and the digital revolution, airlines generate and manipulate more data that not only needs to be analysed, processed and securely saved, but also be mined, transferred and shared as needed for future operational digital interactions.

There is no better technology than blockchain to manage this transformation and growth. Blockchain without doubt has the potential to resolve the current issues of trust, security, control and transparency for the unique and complex ecosystem of the aviation industry. Many forerunners in the industry have already started investigating the potential benefits of this technology (e.g. IBM's and Walmart's use of Hyperledger for supply chains) by getting involved in pilot projects that leverage blockchain to address issues in areas like customer-related activities, cargo management, maintenance and repair, ground operations management and revenue proration to mention a few.

Few of these exploratory projects have effectively moved past the pilot phase due to one or more of the factors below:

1. The blockchain pilots have been built on technology that does not provide the scalability required to move it to an industry level expansion;
2. The projects were conducted as standalone efforts between two or three organisations and did not provide adequate returns sustainable in the long term (this goes back to the lack of trust between peers);
3. The projects were built on blockchain platforms provided by centralised owners and thus exposing the potential ramifications around ultimate future ownership and control (this is the issue airlines face with middlemen today).

We are now seeing the early shoots of nextgen travel technology in companies such as Chain4travel [21] and TravelX [22]. These pioneers are normalising the use of blockchain and NFTs in travel to create less friction in a space that traditionally siloes data.

Our first three products are:

1. AI Dashboard to allow airline CFOs to see whatever data they require on one screen with respect to the revenue and costs of their operations in real time. At time of writing this is actively being pitched to airlines. (AeroEYE)
2. Peer to peer Runway charges settlement on the blockchain. We started on something that is quite complex but relatively straightforward for Aerohub to develop. At time of writing this is being pitched to airlines (AeroCOST)
3. Revenue Accounting: This will be a flagship product for Aerohub, we have the team that back in the '90s created the current market leading product. They all worked with Brendan and we have been working on this product for over 2 years. (AeroPRO) This is a 12 month build from Token Generation Event ("**TGE**").

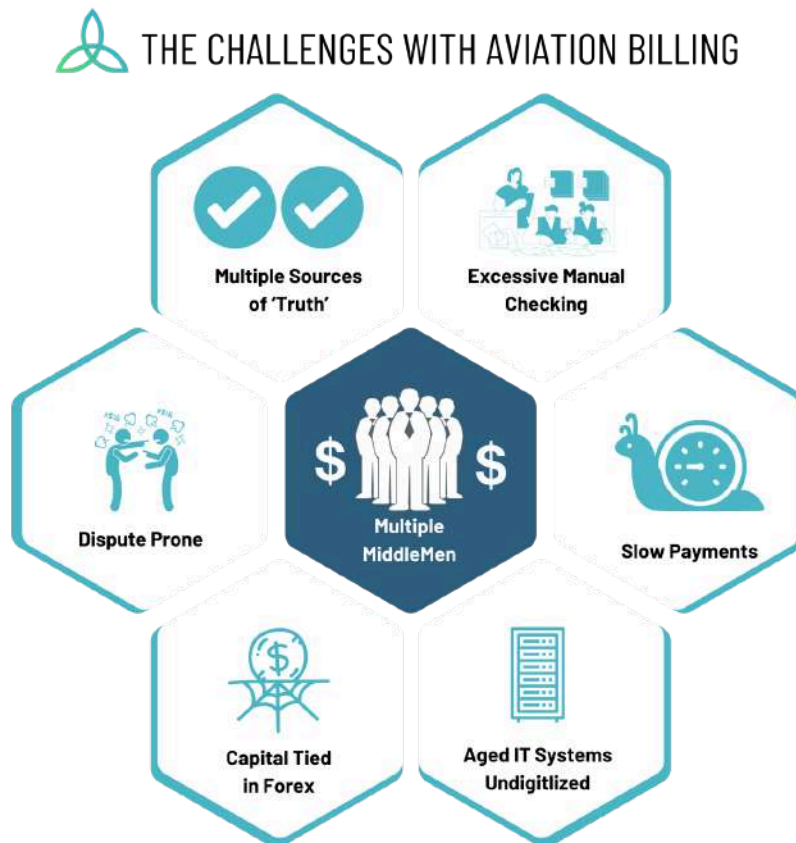
## The Challenge

Whilst this dynamic industry has seen significant growth over the past couple of decades thanks to the rapid evolution of technology including aircraft, digital communication and the internet, the profitability (or yield) for the players involved continues to shrink in order to keep end customer pricing respectable. The industry includes not only the passenger air travel, but cargo services, airport operations and a variety of ground support services that extends deeper into the travel, tourism and logistics marketplaces.

Customer centricity is rarely at the centre of the decision-making process, and these investments are generally seen as focused on marketing and revenue generation as opposed to operational efficiency and industry streamlining – to truly place the customer at the centre of all decisions made. You have travelled, you know the customer is not king. The airlines represent the largest capital investments into the industry. Although there is an increasing trend to lease aircraft rather than purchase, airlines' other outlays include maintaining a wide array of staffing skill sets, continuous training of type-certified pilots, high insurance costs, Maintenance, Repair and Overhaul ("**MRO**"), fuel costs, passenger facilities and the upkeep of over 150 IT applications. Despite the airlines' leading role in a near **USD\$ 1 trillion industry**, they consistently achieve less than 3% annual profitability,

equating to an average of just over USD\$ 6 per passenger boarded [2]. There are systemic reasons for this low profitability but at the forefront is the cost of the large number of 'middlemen' who charge per ticket.

The largest profitability margins are enjoyed by industry players that were originally designed to broker aggregation as middlemen and to connect the industry together. They have essentially become monopolistic in nature and heavily relied upon by the airlines to operate, to the detriment of the airlines' profitability and the associated increased cost of flights for passengers.



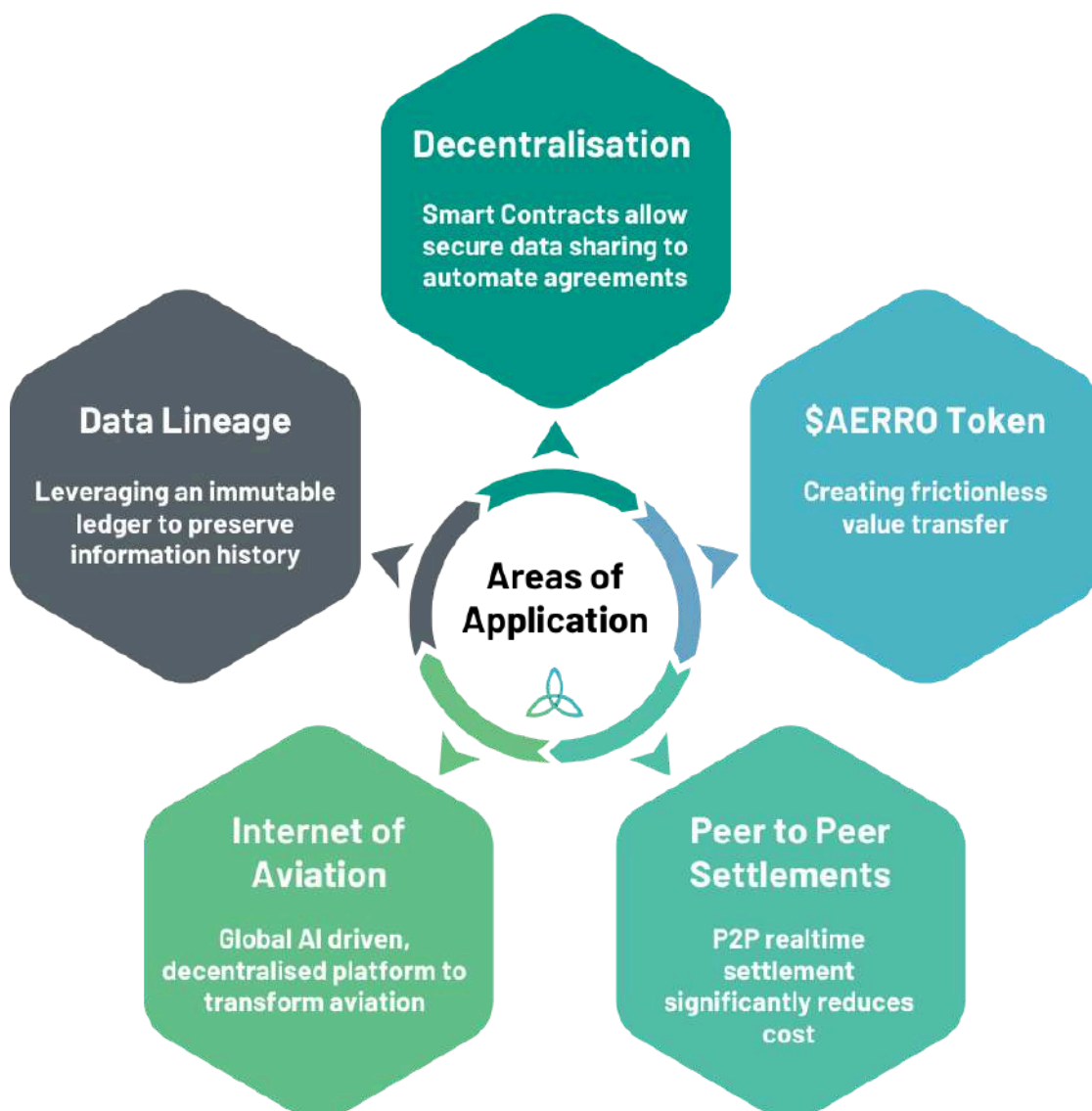
The aviation industry relies on numerous touchpoints and technology solutions for passengers and cargo to reach their destinations, with significant data needs shared across complex business processes. However, aviation data is often siloed, both within and between players, due to its strategic value. Many current IT systems are outdated, legacy-based, and poorly invested in, leading to costly and unmanageable back-office operations [3]. Digital transformation efforts have been largely reactionary and marketing-focused, neglecting core systems. This reliance on legacy systems results in higher costs, potential legal issues, and stifles competition and innovation [4].

Technical needs vary depending on the geography and business model – from legacy through hybrid to low-cost, however the key players (Amadeus, Sabre, Accelya etc.) that offer technology solutions to all the airlines and support organisations still remain the same, and their vision whilst talking about the next digital evolution (Web3, AI and AR), seldom do they invest heavily to do so. Don't fix what is not broken is a strategy, especially



when many of these systems are the heartbeat of the airline and impacting them in any way can lead to catastrophic events, revenue leakage and reduced yields. There have been a number of high profile airline-wide outages and airports being unable to function – these significant disruption events will only increase in frequency if the underlying issue – end of life tech – is not resolved. Indeed, the global outage of the weekend of the 20th of July 2024 (Crowdstrike failure) was the latest of such incidents that are escalating in their severity, and in this instance over 5% of all scheduled flights globally were impacted [19].

Governmental and industry regulators like IATA have launched various digitisation initiatives for intra-industry transactions, such as e-ticket, Simplified Invoicing and Settlement (“**SIS**”) New Distribution Capability (“**NDC**”), OneOrder, and OneRecord. These initiatives, driven by major industry players, often require significant time, effort, and cost, sometimes delivering only incremental value. IATA's initiatives at best ensure smooth operations and at worst are viewed as complex and costly [5]. Despite the noble intent of initiatives like NDC to enhance airline collaboration and product offerings, the adoption and increase in ticket sales through NDC have been slow [17].



Building an ecosystem where data and processes can more easily be created, adapted and shared for all the players to leverage and derive real value is the true digital transformation the industry needs.

Government regulations significantly impact airlines with varied customs, taxation, and data requirements, such as Advanced Passenger Information (“**API**”) post-9/11 and COVID-19 measures.

These data-intensive processes are costly for airlines, costs ultimately borne by passengers. The main challenge is advancing towards next-generation technologies while minimising risks, reducing costs, simplifying processes, and maintaining security and independence, fostering a collaborative, efficient industry that shares non-competitive ideas to reduce duplication and complexity.

With the introduction of blockchain technologies it is quickly becoming possible to exchange information and value in a peer-to-peer model, orchestrating the transactions without the use of a trusted third party. By doing so, it enables innovation outside of the remit of the centralised gatekeeper, as the individual trading partners now are encouraged to introduce new value added on top of the standardised information plane.

*“Blockchain is a revolution within a revolution. It's not about how much money people are making by mining bitcoin. Instead, the most powerful aspect of blockchain is how it's constructed and the many applications it has beyond cryptocurrencies. It's going to transform everything we do and how you and I interact with each other and things around us.”*

**Sir Tim Clark, President, Emirates Airline Group** [18].

Finally, technologies, including DLT, provide a means for the self-financing of the digital transformation of a legacy industry - with every stride towards the higher efficiency of operations being accompanied by accumulation of wealth and value around the newly formed venture. The Project proposes a three-pronged, approach - creating a decentralised **protocol** for a digital commons interoperable with the most popular Distributed Ledger Technologies (**Aerobloc**), with the shared, for-profit software development laboratories (**Aerohub**), and towards an ecosystem-driven token-based community, joined together by the - **\$AERRO Token**.

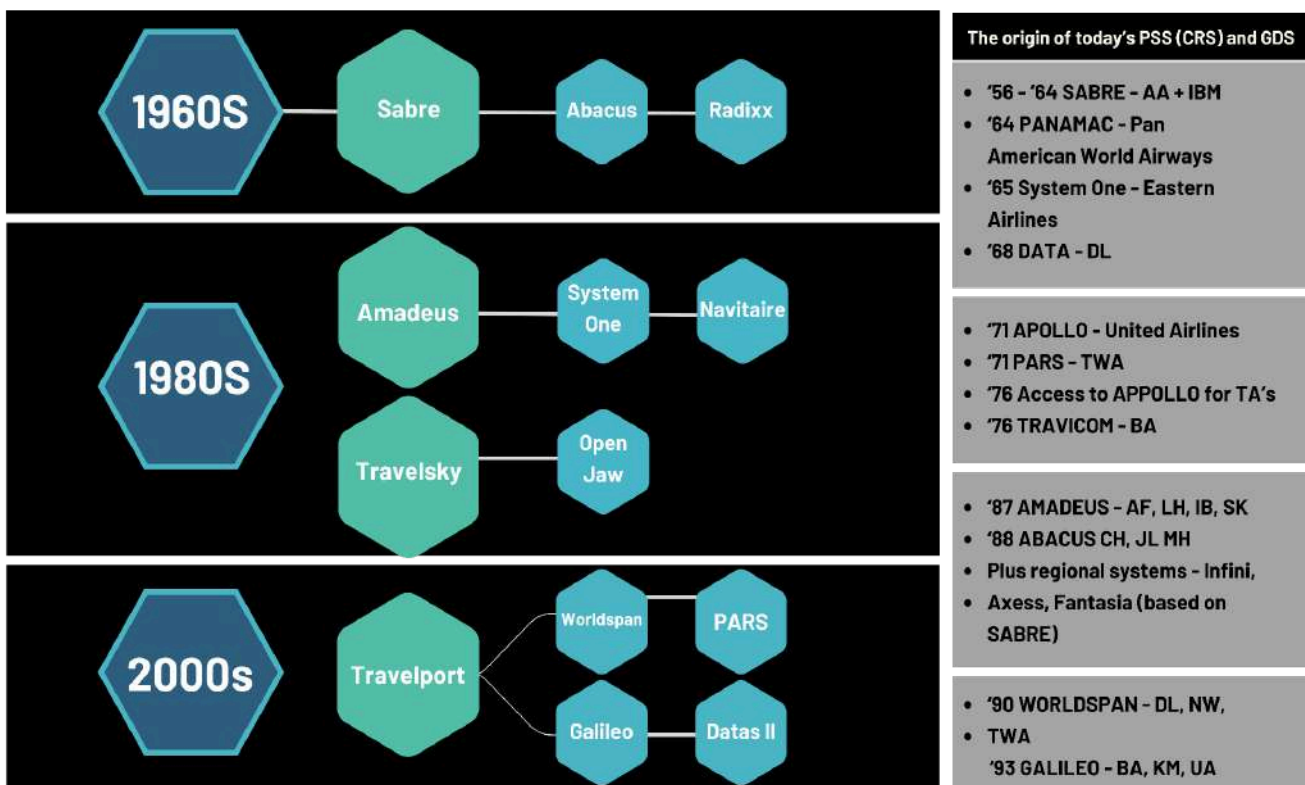
This whitepaper will highlight the key areas that Aerobloc can address to significantly reduce risks and costs of the digital transformation of the sector, allowing the players to work together in a decentralised ecosystem leveraging smart contract models, securely streamline and share data, drive peer-to-peer communication and settlements leading to increased profitability and truly placing the customer at the centre all future strategies.

## Why Decentralisation?

The foundational years of commercial aviation saw an emerging challenge - collaboration between competitors to offer the multi-leg travel itinerary on a single ticket. Airlines who may otherwise compete on other routes often had to collaborate to fulfil the passenger's journey legs in a single ticket.

This is a challenge that IBM undertook when they began the Semi-Automatic Business Research Environment ("**SABRE**") project for American Airlines in the **1960s** that has grown to support 57,000 travel agents daily [6]. Initially it allowed remote travel agents to have access to the airline's inventory and eventually it expanded beyond one airline to give access to multi-leg ticketing.

## THE EMERGENCE OF ONLINE BOOKING (PSS & GDS)



The business outcome was a big win for the consumer who could avail of interlining and code sharing to reach a destination in a single ticket, albeit with multiple coupons. This was the birth of the centralised Global Distribution System, or ("**GDS**"), that glues the inventory of the airlines together and incorporates an ever-increasing suite of booking rules.

Over the years the inability of the airline industry to self-organise and create multi-carrier itineraries to meet the travellers' needs has created an ever-growing

middle layer of inventory distribution - culminating in combined revenues for Sabre and Amadeus, the two biggest players in the GDS space, of over \$10 billion in 2019 prior to the appearance of COVID19 [7].

The big loser in the emergence of intermediary aggregators has been the airline. Airline profits had fallen to a low of around **3%** before COVID19 struck and the ability to sell beyond a commoditised seat in each class has become stifled. In DLT based systems unit costs are drastically reduced and transactions inherit a low overhead.

Loyalty programs can be replaced by token allocations in digital wallets which can be used in the seamless exchange of value across all the participating digital channels and gifted to friends and family.

According to Marco lansiti and Satya Nadella, writing in the Harvard Business Review [15], the core systems of the airline can best be digitally transformed through the participation of the entire workforce, since;

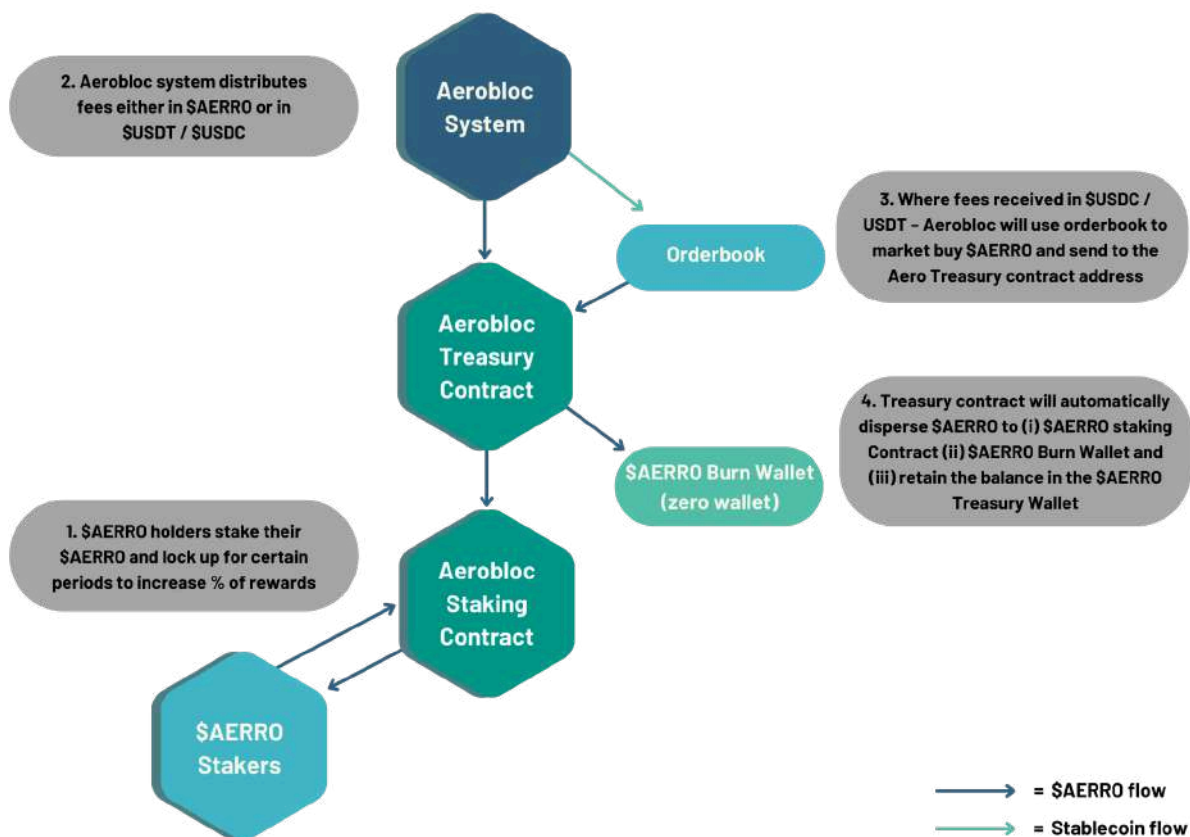
***“Digital transformation requires that executives, managers, and frontline employees work together to rethink how every aspect of the business should operate.”***

In conclusion decentralised systems erode the costs through disintermediation, higher the revenues through seamless collaboration and more relevant products, and ultimately transform the user experience through democratisation or indeed ultimately the tokenization and fractional ownership of the entire industry’s asset base.

# The \$AERRO Token

## The world's first RWApp Token

It is the world's first **RWApp Token** and shall be used to power real world applications on the Aerobloc once it is established. In the meantime, it shall be an ERC 20 token that shall accrue the value of the Aerobloc ecosystem. It will do this primarily via a staking mechanism as set out below.



### Circular Economy - how \$AERRO token holders are rewarded

For e.g. 1,000\$ fee payment made for service provided between an airline and an airport, 1\$ (which is Aerobloc's fees for facilitating the transaction) will be used to market buy \$AERRO tokens; 50c of the 1\$ will be used to reward \$AERRO stakers (paid in \$AERRO), 30c worth of \$AERRO will be sent to the burn wallet with the balance of 20c of \$AERRO retained by the Treasury.

This system permanently removes \$AERRO from the supply allowing it to be deflationary while also rewarding stakers. The true value of \$AERRO (for now - pending further products coming on stream such as passenger revenue accounting) is then proportional to the volume of dollars traded throughout time.

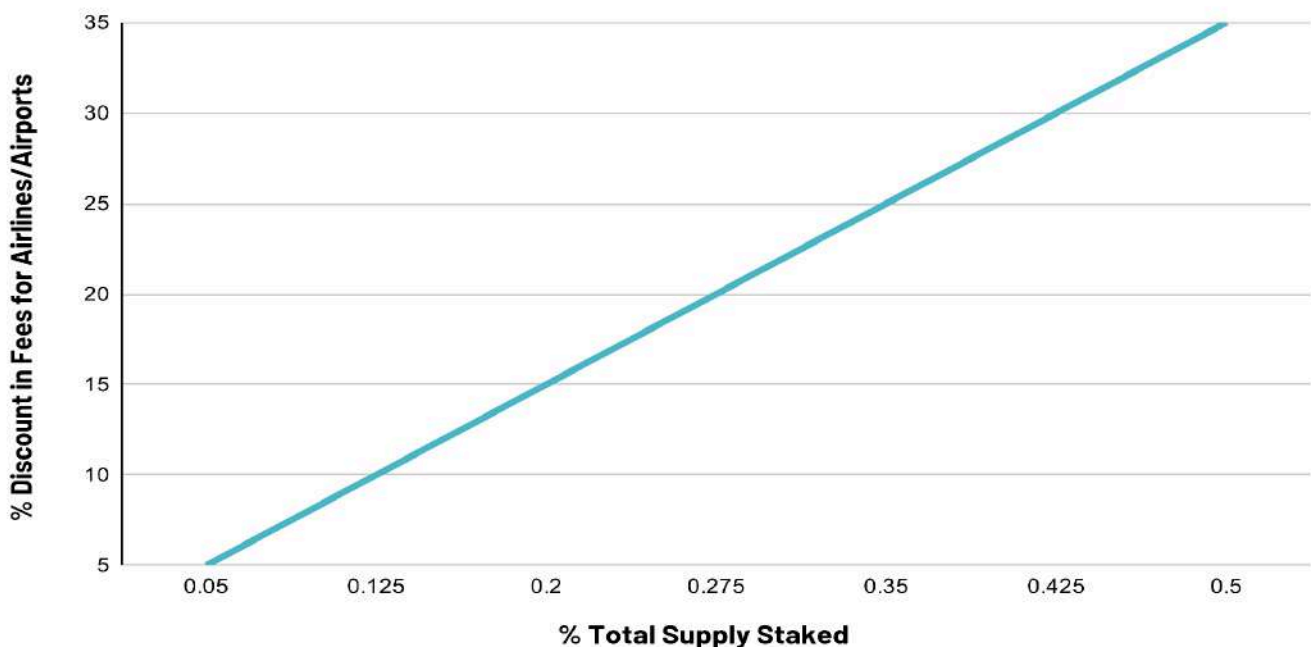
With respect to this reward / stake and burn formula, this can be amended by the Aerobloc Foundation / executive team and in time by the \$AERRO DAO.

## Additional Benefits of Staking

The rate of fees charged to the payer (airport / airline as the case may be) will be reduced depending on a sliding scale of staked \$AERRO for a particular length of time (like staked for 4 weeks for full fee discount). Here the airlines as stakers will also receive \$AERRO into their accounts as a fee rebate, further reducing the transaction costs for them. This will create **institutional buying pressure** on the token as the RWApps are utilised by the various airports and airlines around the world.

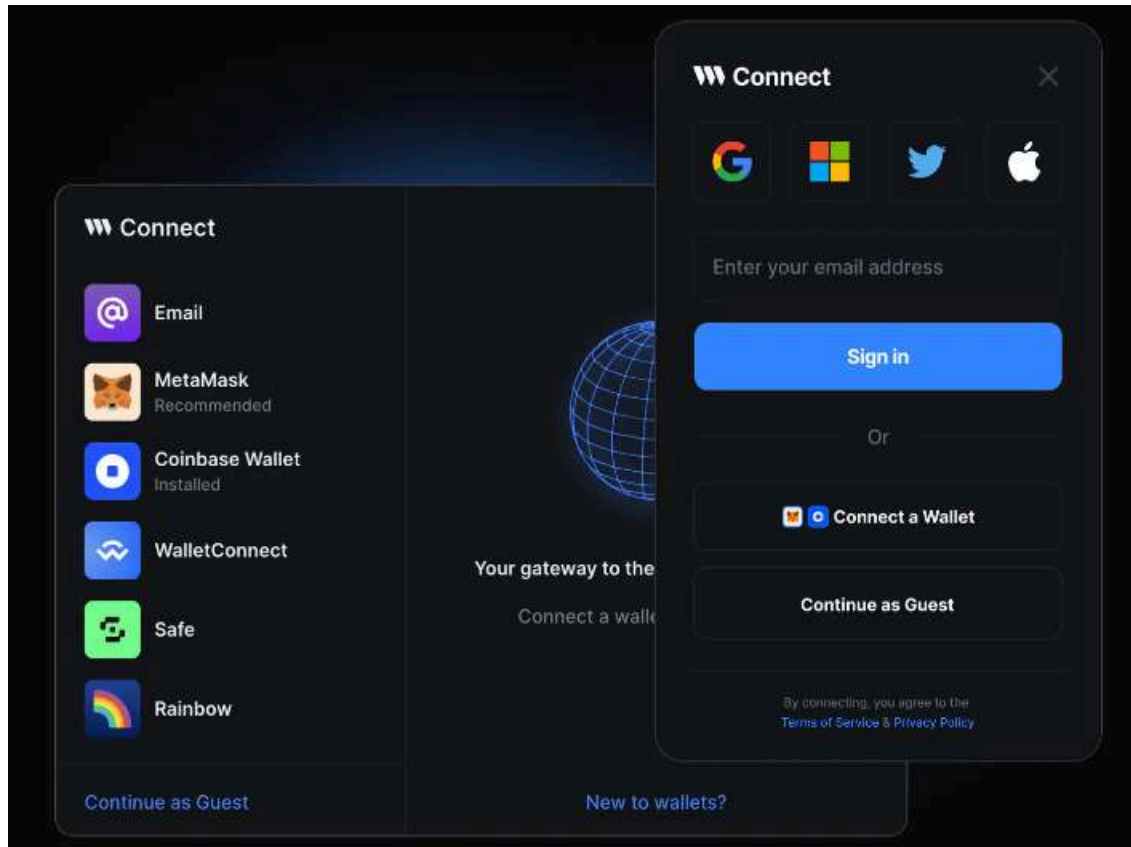
Maximum available discount on fees paid by Airlines and Airports will be 35% with a material amount (i.e. 0.5% of Total supply - not total Circulating supply) of \$AERRO staked, the objective here is to have the maximum 35% discount pretty much unobtainable (due to cost) unless the airline or airport was an early adopter and staker of \$AERRO. The rest of the discounts will be stepped down from 35%, 30%, 25%, 20%, 15%, 10% and 5% with most airlines or airports going for the 15 to 20% discount.

Visually represented below:



## B2B

For the Retail side, staking would be used as a multiplier of existing rewards schemes of the airlines, discounts for duty free etc. in addition to receiving a share of protocol revenue.



Time Staked X Volume Staked = ERC721 (NFT) Mint blue, silver, gold, Platinum.

### *Use of \$AERRO as a medium of exchange*

Aerohub will accept payment for services rendered to airports and airlines not outlined above (e.g. miscellaneous consulting work or providing RWApps as a service) in \$AERRO tokens. This \$AERRO obtained here will not be treated in the same way as that obtained for peer-to-peer value transfer. Imagine a scenario where an Airline customer owes 1,000\$ to Aerohub for use of a RWApp:

There will be a mechanism on the front end (e.g. Wallet Connect) that says; "pay with USDT = 1,000 USDT."

**or**

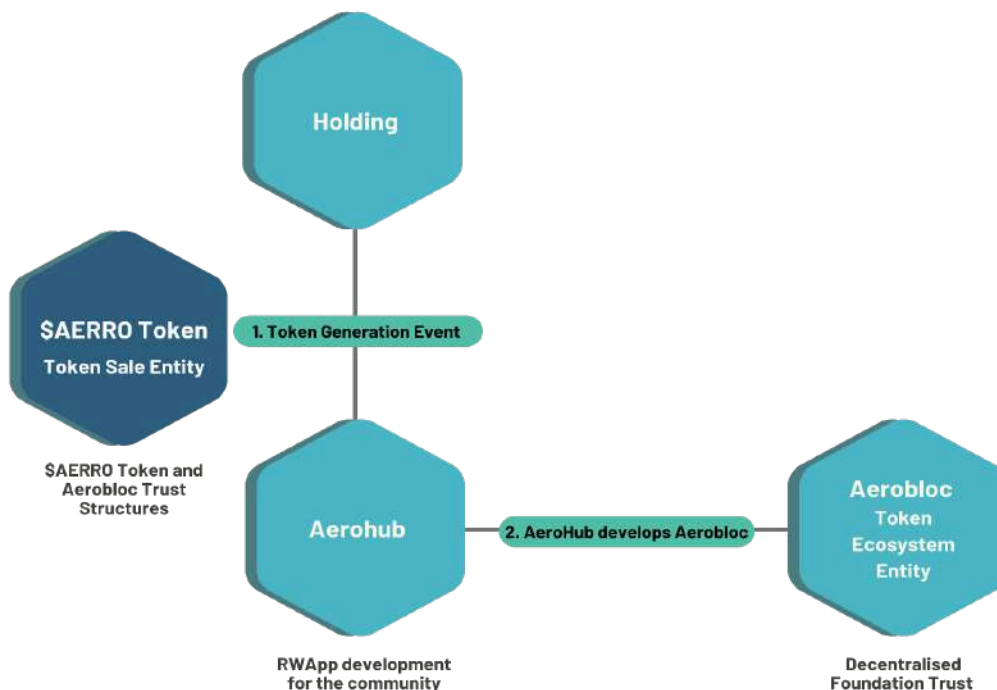
Pay with 2,000 \$AERRO (assuming a price of \$AERRO = \$0.5 at that point in time). To encourage adoption of use of the \$AERRO as a medium of exchange Aerohub will apply a **5% discount** on any fee paid with \$AERRO. Accordingly, the 2,000 \$AERRO will be reduced to 1,900 \$AERRO.

All fees paid in \$AERRO will be deposited to the treasury to manage operational costs, & growth of the Aerobloc ecosystem.

### Governance

1. \$AERRO is the governance token of the Aerobloc ecosystem, informing fee structure decisions, with the remit constrained to decisions that matter on-chain including amount of fees, distribution schedule and format of fees and pre-distribution fee strategy e.g. buy back and burn or distribute. This will become of increased importance when the Aerobloc DAO takes over the Aerobloc.
2. Blockchains function on a trilemma of decentralisation, security & scalability. As the ecosystem matures the transition towards decentralisation is paramount to Aerobloc. The success of Aerobloc requires input from airlines, airports & passengers and we recognise the importance of ownership in decision making which reflects on the industry. For this reason, the \$AERRO token will govern the most crucial decisions through a DAO.
3. The DAO's establishment will not be a decision made lightly and must ensure no compromises are made in relation to security & scalability.

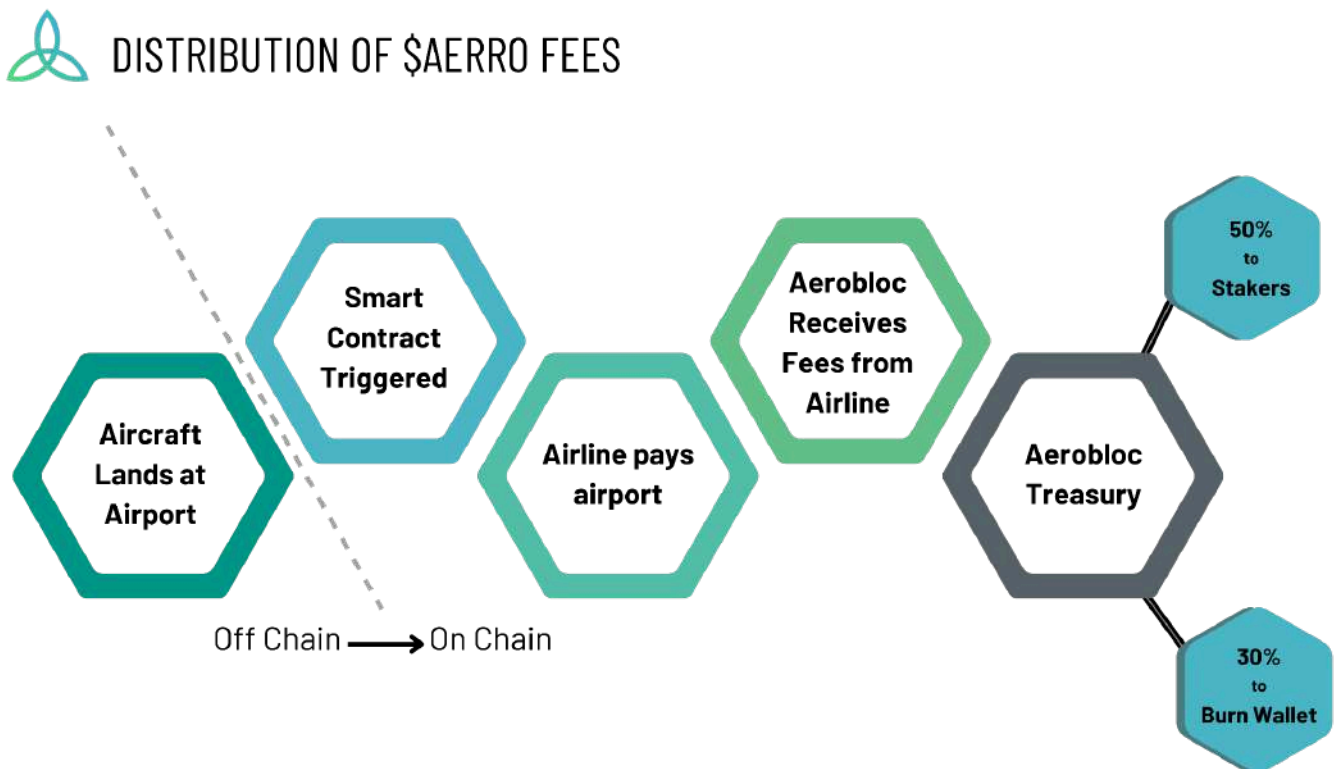
### The \$AERRO Ecosystem



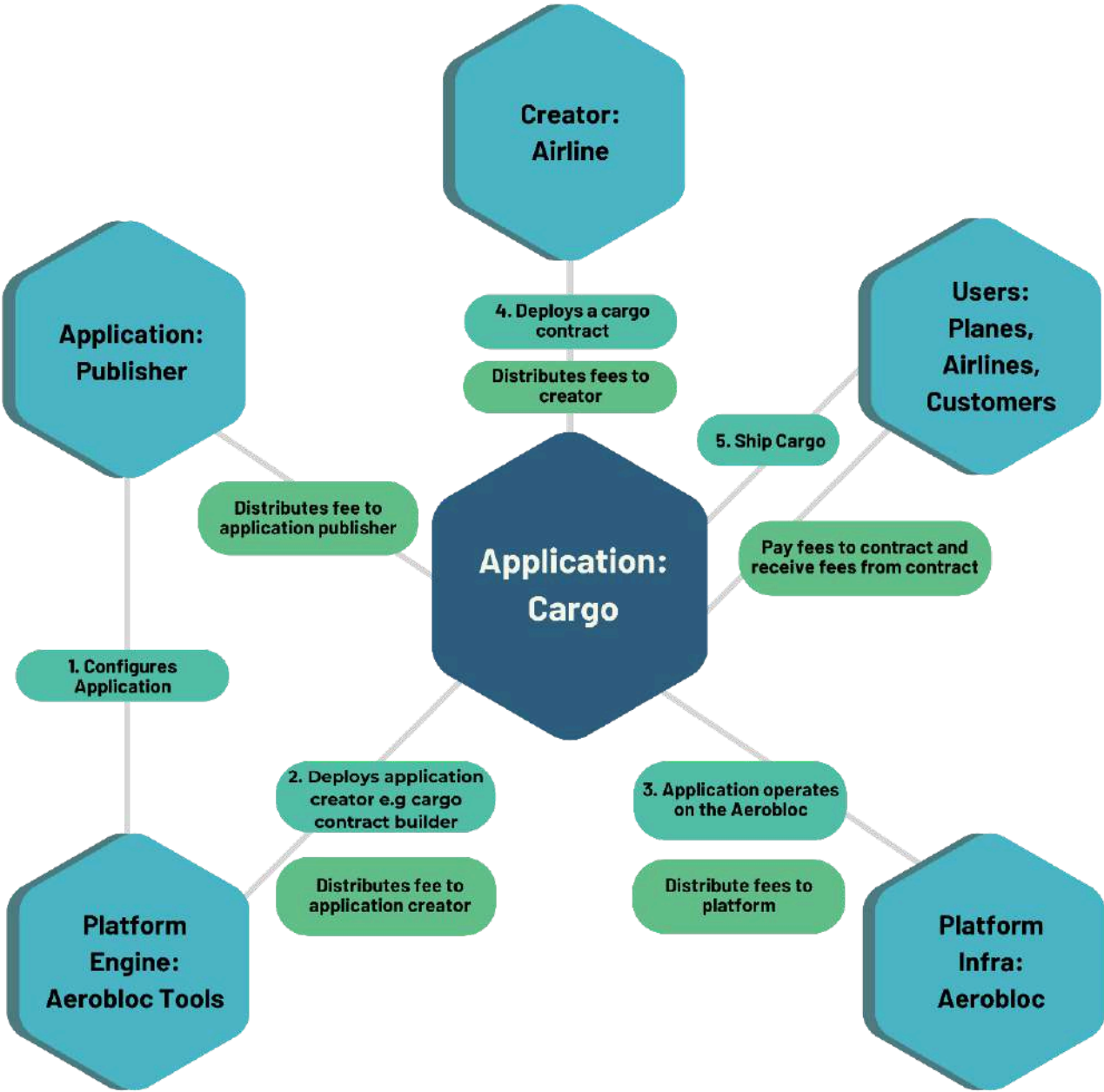


## The \$AERRO Economy

1. Fees earned on Aerobloc are generated by applications, interfaces, processes, validations created by publishers & developers: Fees are paid by airlines, cargo owners, passengers and distributed according to the rules of the particular contract to the platform, the protocol, the publisher, developers, ID3 collaborators and token holders.
2. Fees earned by the Aerohub and other RWApp creators, generated by support of applications on Aerobloc are held by the creator and not redistributed.



Example Application of an Economic System for Cargo



## Vision

Every sovereign state has a defined fiat currency within which their GDP value is embedded. This value is held within the ecosystem of the issuing country (or group thereof), and each time more currency is printed, it is added on to that ecosystem's value. Recent technological advancements have opened up the possibility for currencies to now be digitised, with many countries' central banks developing their own digital currencies - Central Bank Digital Currency ("CBDC").

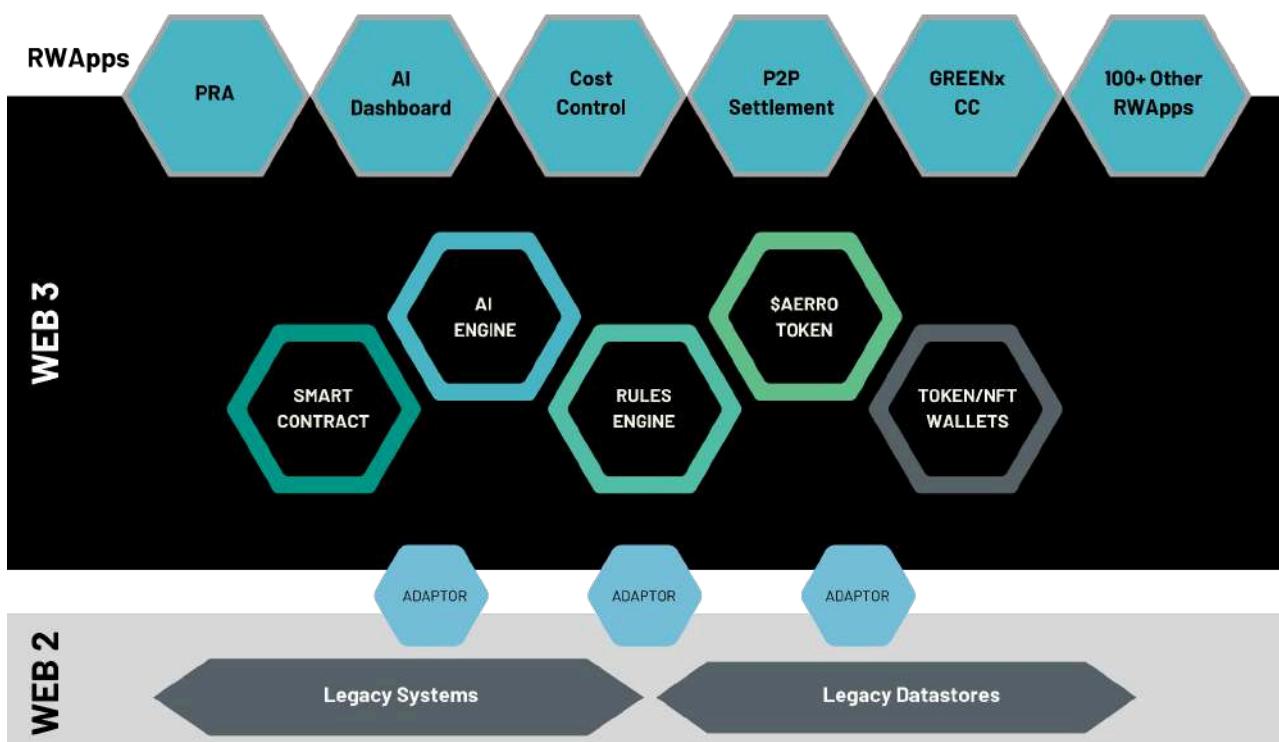
The future landscape of digital currencies will no longer be defined by geographic state lines, but by the formation of cross-border communities, pooling value into a digital currency that monetises the common interest that unites them.

With all these economies, however big or small, there is a heavy reliance on the airline industry to enable trade and commercial opportunities, making the true value of the aviation industry, incalculable.

When a community retains and protects its value within its own ecosystem, it substantially reduces the risk of extenuating circumstances devaluing it. The \$AERRO token will capture the value of part of this giant industry on launch, and it will only grow in size over time.

Peer to peer settlement across the Aerohub will be done using existing collateralised stablecoins such as \$USDT, \$USDC and \$DAI.

## INTERNET OF AVIATION



## Objectives

Aerobloc's objectives are to design and build the world's first RWApp platform for the industry's own users to build and/or integrate their own solutions upon, offering them the ability to share these developments back to the community with their own RWApps. The Aerohub will also start the process with core RWApps that the industry is in explicit need of, low hanging fruit that will engage them to share in the development but also the rewards of digitally transforming these old, process-intensive and expensive systems to next generation DLT models.

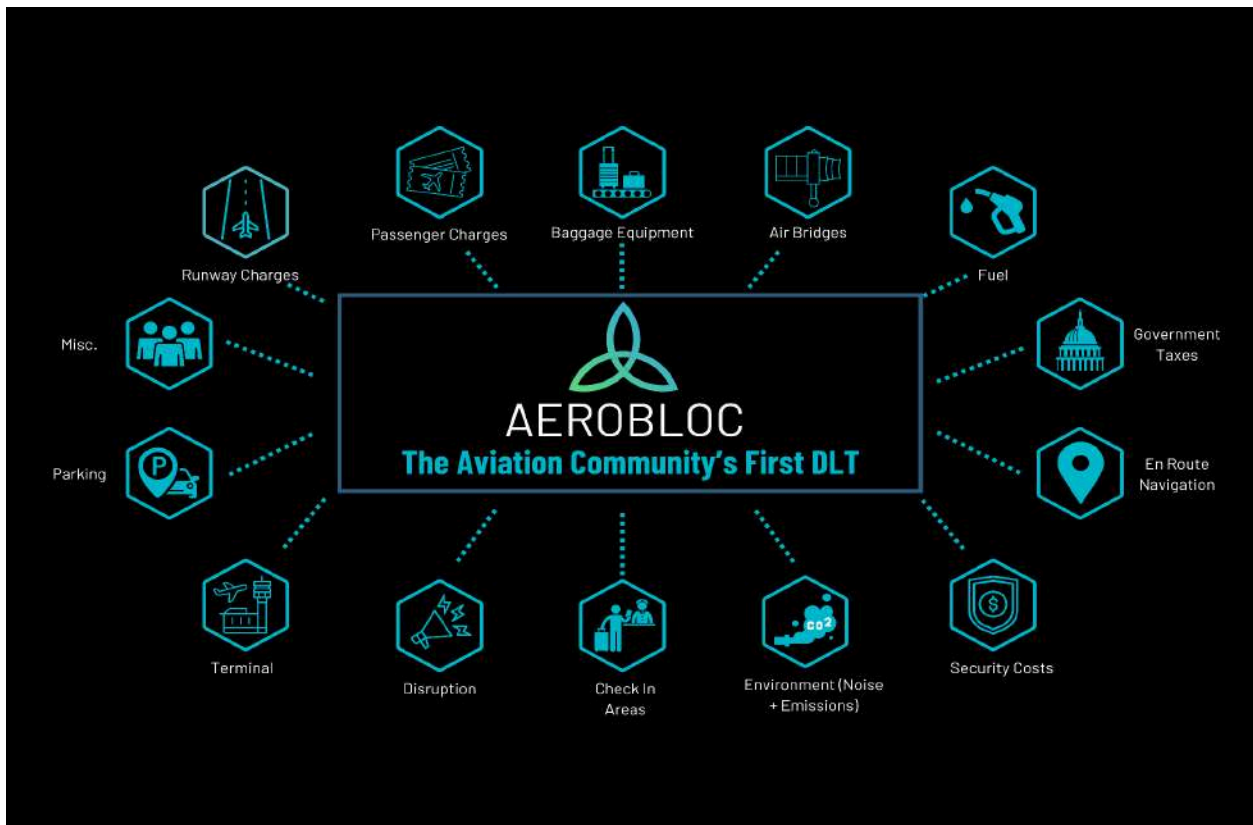
## THE AEROBLOC PROJECT

### The Team

The industry experience behind this endeavour is significant. The executive management team and advisory board have over 100 years of travel, tourism and logistics experience between them, with capabilities in all aspects of business, IT and operations at airline, airport, cargo, operations and other key industry knowledge. We have successfully installed over 40 different products in 400 airlines in the last 3 decades. Our Product team led by AV Rao are pioneers in the development of leading airline products over the last 2 decades including notably the world's leading Passenger Revenue Accounting software, which was first released in the late '90s. They are now building a replacement product in AeroPRO which leverages the best of AI and decentralisation to create a solution which will become the global standard in revenue accounting for Airline revenue directors and CFOs. The Aerobloc project has a three-pronged approach:

### AEROBLOC - The Decentralised Digital Commons for Aviation

The Aerobloc will be the decentralised protocol-based unifying ecosystem for aviation, securely sharing transaction data and implementing publicly verifiable logic. The RWApp model will be open to the industry and welcoming to new participants. The Aerobloc is ultimately owned and governed by the community stakeholders. Initially created and managed by the Aerobloc executive team to evolve into a fully decentralised model for the industry.



The Aerobloc will provide the Web3 based decentralised ledger where data from all stakeholders will be used in the creation of cost reducing and revenue uplifting processes. Any organisation which uploads data that is utilised in a process also gets incentivised for each utilisation. All industry stakeholders can get involved in designing, testing and launching distributed blockchain applications, outside application interfaces and new processes, which can then be utilised by any other users on the platform as the community expands. Other users would save capital by using existing applications or building their own applications by reusing proven best practices micro services as building blocks, and therefore merely pay a fractional transaction fee each time they use the service of the existing apps.

The ecosystem is decentralised and governed by the participants and Aerobloc will be able to allocate funds from the application participants in order to ensure its capability to invest, grow and evolve as necessary. This is achieved by charging a modest transaction fee to use the Aerobloc or RWApps built by AeroHub pending the creation of the Aerobloc.

The Aerobloc will operate on the **ID3 principle** (Industrial Design x3) which by design ensures every RWApp/project proposed by a party, is designed and tested in collaboration among up to three peers/contemporaries from the industry, ensuring that it is 'industry ready' at launch.

1. The distributed Aerobloc Platform will be the integration point where traditional systems meet blockchain via a connection layer, through which the conclusion of business processes can be resolved through blockchain technology, removing the costly administrative and reconciliatory function from manual process.

Aerobloc provides the impartial, equitable layer of 'Trust' that does not exist today;

2. The Aerobloc will allow airlines, airports and their supporting industry to form a community to ensure that their IT budgets are utilised more efficiently, by providing automation with accuracy assurance in the procure to pay process. It will also create an opportunity to recognise a Return of Investment ("ROI") on systems upgrades moving forward, thereby reducing operational costs, and adding a new revenue streams to the business;
3. The idea is not to rebuild all the existing industry systems, but rather to integrate them into connecting with the Aerobloc platform in the short term which is generally considered as emerging best practice with legacy industries [16];
4. In the longer term the plan is to re-strategise how these processes are being conducted and whether they can be built into more modern, increasingly efficient, blockchain-driven procedural solutions, optionally presented as monetised services.

## AEROHUB - Where Legacy Apps are Reimagined

### Introducing RWApps and Smart Contracts for Aviation

The Aerohub is a for-profit venture implementing some of the key opportunity areas for the industry. It will be built upon Aerobloc but will not enjoy preferential treatment regarding access to the Aerobloc as per the governance norms of equality of access to all stakeholders.



The Aerohub is where key RWApps and Smart Contracts are created, or enhanced to be ready to launch on the Aerobloc. Whether an existing industry system is being enabled to be able to integrate with the Aerobloc, or a brand-new system is being built, by the Aerohub or by third parties, the Aerohub will ensure that thorough compliance procedures are met for any system built to operate on the Aerobloc. The Aerohub will also offer a quality gate to the industry by providing high standard audits of applications.

The Aerohub will instigate, oversee and manage the relationship between stakeholders, as well as advise on technical requirements needed to bring a successful project to fruition on the Aerobloc. The Aerohub will design and build the first RWApps on the Aerobloc and is open to collaboration and co-creation. The major focus will be on the following key industry needs which will seed and accelerate the evolution of the Aerobloc community.

Smart Contracts are a powerful component in the Web3 arsenal which lend themselves easily to peer-to-peer complex payment scenarios, found extensively in the airline industry. Examples include the 130+ airport to airline charges, ticketing change conditions, refuelling payment automation, Proration and Interlining agreements, and many more.

## Roadmap for Aerohub RWApp development

The Aerohub will focus on solving several key pain points in the industry by building the following Best-in-class RWApps:

### 1. AI Dashboard (AeroEYE)

#### Converting raw data to powerful revenue generating insights

This is an AI interface that can plug into any airline's legacy systems and pool all of the data into a single screen to allow a CFO of an airline to see in real-time the profitability of the airline. The AI and Machine Learning of the product enables this product to be voice activated and directed and solve complex financial equations to present a visual representation of flights flown by the airline. In its most basic setting, the green will be deep green for very profitable, the red will be very bright red for loss making and the thickness of the red or green line will represent volume of flights on that route. For the unfamiliar readers, a CFO of an airline acquires his flown revenue from the Passenger Revenue Accounting ("PRA") system. **As leading PRA systems are antiquated AeroEYE gives the CFO a human interface into his present and historical data like never before.**

### 2. Cost Management (AeroCOST)

#### Streamlining Aviation Charges Settlement

Through 2016 to 2019 passenger numbers increased globally from 3.8 billion to 4.5 billion, yet airline profit margins eroded down to 3.1% from 8.5% on a USD\$800 billion industry, even before the impact of COVID-19 [8]. In 2020 core airline costs were spent on fuel (18%), manpower (11%), station expenses (8%) and numerous other operational costs [9], with airlines having to manage almost 140 different cost categories that cover everything from landing charges, ground handling and cargo fees, navigation and maintenance, as

well as the multitude of systems that inefficiently operate all these processes, likely in silos. The vast majority of charges are generally transacted between the airport and the airline, and are characteristically manually intensive, with often conflicting versions of the 'truth'. This leads to many charges being incorrect or wrong, and costs both airports and airlines significant effort to identify and correct these which importantly leads to massive revenue leakage.

Smart Contracts will easily solve this challenge that the industry faces with the capability to offer accurate billing of all charge types and a single pane of truth to all transacting parties; real-time execution that avoids payment delays and the removal of costly and lengthy disputes for all involved. This extends into digital value exchange that will minimise foreign exchange costs, and the use of digital wallets to offer frictionless low-cost, simplified, peer-to-peer transactions. Smart contracts align with the emerging paradigm of Total Airport Management ("**TAM**") systems [10]. For example, at the moment a passenger books a flight, they fly and at the end of the month the airline whilst reconciling its accounts (a 5-day laborious process!) realises that the ticketing agent had the wrong code share embedded in the price with a cost of say \$50 USD. This \$50 USD is now disputed and leads both parties to incur costs in excess of the disputed amount whilst following the dispute process. Smart contracts will eliminate or greatly reduce disputes. **We have a product which automates Airport Charges, such as with Landing Charges, through the use of Smart Contracts.**

### **3. Revenue Accounting (AeroPRO)**

#### **Simplifying Passenger and Cargo Revenue Accounting ("PRA" / "CRA")**

Unlike many other industry verticals, airline passenger and cargo Revenue Accounting (PRA/CRA) function is based on very complex and sophisticated accounting rules that have evolved considerably over the past 60 years. The demands of this fast-evolving global industry spans across third-party suppliers, sales channels, countries, currencies, payment methods and intermediaries that make the business of airline revenue accounting even more complex. The transaction lifecycles are highly sophisticated due to the bilateral partnerships involving 'Special Prorate Agreements' ("**SPAs**"), Interline, Codeshare and Joint Venture ("**JV**") agreements. Airline ticket prices also carry transportation taxes [11], airport facility fees, security charges, and foreign travel-related taxes that vary by jurisdiction but also by business model, all of which require significant manual audit efforts to minimise revenue leakage. There is tremendous pressure to record, monitor, analyse, and collect all types of earned revenues as soon as the flight service is provided. Within the overall ecosystem airlines rely a lot on their Revenue Accounting system to provide real-time and accurate information on the revenue earned on each and every single route.

This information is key and feeds the entire narrative for the airline as not only does it identify revenues but also provides a view of monies owed to other airlines as well as offer the ability to breakdown revenue data and costs across a variety of ancillaries and dues outside of the flight price, such as food on board, baggage, agent incentives and many tax types. The faster RA information can be calculated, the faster financial departments can validate and collect revenues, identify costs and view profitability – down to route and flight level – leading to faster decision making on airline operations, pricing and ultimately yields. The audit functions also help protect airlines from misuse and fraud, by ensuring correct ticketing processes are followed to limit revenue leakage.



RA systems are the source of truth for airlines when it comes to revenue recognition and therefore speed of access to the accounting is a priority for management. Over the past two decades the airlines have shifted from paper to e-tickets, leading to monthly, then weekly and now daily data feeds that allow these systems to calculate and report the data faster. And this is even more important for those airlines that also offer cargo services as this can double effort and system costs unnecessarily when you consider that large amounts of reference data are the same for both passenger and cargo.

As the aviation value chain involves many entities (e.g. Airlines, Travel agents, Ground handlers, Airports, Insurance companies, Car rentals, etc.) which all depend on each other for products and services to serve their customers, the use of blockchain technology creates numerous opportunities to simplify, secure and share RA information at significantly lower cost than today's inefficient systems, including the ability with Smart Contracts to manage peer to peer settlements between all stakeholders, offering real time proration calculations that identify revenues faster, and finally posting the revenue outcomes to a permanent ledger that avoids tampering and fraud. Additionally, Smart contracts within the revenue accounting app will reduce the dependence on GDS (which control indirect ticket sales because of unaffordable subscription fees for small travel agents) providing more flexibility for creative tour packaging by smaller travel agents, generating new revenue generation opportunities across the entire travel industry. The current leading products in the PRA and CRA field are decades old legacy systems which are nearing end of life technologically speaking. The team at Aerobloc were the original developers and product owners of the current market leading PRA/CRA solutions for several years. **This product will be released in Q3 2025 and will be the leading product in the market from a functionality and capability perspective.**

#### **4. Aerohub GREENx**

##### **Digital Carbon Credit ("DCC") Portal**

The aviation industry is at the centre of driving net-zero targets for the future of the planet. Airlines are working together with various organisations and partners on a four-pillar strategy that includes new less carbon-intensive technology, more efficient operations, and better infrastructure as well as the long-term CO<sub>2</sub> reductions under the Carbon Offsetting and Reduction Scheme for International Aviation ("**CORSIA**") global offsetting scheme as set out by the ICAO. Through these four pillars the industry aims to reach its long-term goal of reducing CO<sub>2</sub> emissions by 50% by 2050, compared to 2005 levels. CORSIA complements other measures that cannot be reduced through the use of technological improvements, operational improvements, and sustainable aviation fuels. Airlines and other aircraft operators will be subject to offsetting any CO<sub>2</sub> they emit regardless of the operating model including all aircraft operators, from large passenger airlines, cargo airlines, business aviation and even private aviation.

The DCC Portal will bring together advanced CORSIA capability allowing the industry to identify Carbon Credit ("**CC**") offsets down to the seat-per-mile and KG-per-mile of any flight. With this powerful data at hand, the purchase, offset and hedging of CCs via the digital marketplace is a click away. CORSIA Aligned and Certified CCs will be available to all users of GREENx as well as all the necessary validation of purchase and offset with certification and approvals from various bodies such as the registries, ICAO and governments that will ensure offsetting is compliant with all necessary international

regulations and targets. **This product is under development for the past 6 months and it is anticipated that it will be ready for the industry to use in Q2 2025.**

## **5. Cargo Management**

### **Nextgen Cargo Generation Transformation**

The entire first-last mile logistics space is an incredibly complex and multifaceted industry that includes a variety of players of which the aviation sector is one of the largest. Each player in the space from airlines to handlers, regulators to customs and all the touchpoints in between require enterprise management systems that, typical to the industry, are aged and incredibly siloed. Each player is protective of the customer and associated data, especially when it comes to pricing. In addition, the amount of data needed for these systems to operate is large, as are the datasets they create.

However, each of these players generally require the same data points at various times throughout the process, whether this be booking, flying, customs or delivery. In order to achieve a seamless offering, these systems accommodate complex handling rules and regulations that also change from business model (air, rail, ship etc.), the services offered to the customer (handling, packing, delivery), and the geographical constraints in the form of transport rules and customs, including special handling instructions for a variety of products that impacts how cargo can move. When you consider that transportation of goods by air is a backbone for managing 35% of world trade by value, or US\$6 trillion in real terms, and over 62 million metric tonnes of goods were transported by air in 2021 [12], not only is data capacity and seamless access key, so is the reliability and security of operations - a key point of failure of most operational systems today. Current air cargo enterprise systems do not manage data as securely or as efficiently as they should. Many require significant manual intervention at all levels of the shipment process, and true end to end automation is a faraway dream. All this leads to poor data quality and higher costs.

A blockchain approach with Smart Contracts will allow large amounts of data to be created and shared seamlessly, securely improving the operational processes and leading to greater automation. The re-use of the data across the touchpoints greatly reduces duplication and creates the single source of 'truth' the players truly need. Pricing and customer data is protected and therefore closed to fraud and price fixing or anti-competitive behaviour as seen in the past [4]. And not only can this extend beyond aviation into the end-to-end logistics space, but it can also add tremendous value in key aspects that the industry struggles with today. The internet of things (IoT) data that the industry needs such as temperature control, cargo tracking and supply chain management can all be integrated to reduce human error, costs and offer transparency into the authenticity and status of cargo - all to the benefit of the consumer. This industry needs next level intelligence, applied AI concepts and the ability to secure revenues faster, whilst providing next-generation customer experience. The Aerobloc has all the tools to deliver this much needed transformation.

## **6. Maintenance, Repair and Overhaul ("MRO")**

### **Managing the MRO certification process**

Maintenance, Repair and Overhaul is a critical part of the aviation industry as it ensures that the aircraft that fly billions of passengers globally are in optimal operating condition for obvious safety reasons. There are a huge number of different processes and functions within this segment of the industry, from A/B/C/D maintenance checks, to overhauling equipment based on strict regulatory rules, manufacturer rules and recommendations,

and the MRO strategy is one of the key decisions airlines make when choosing aircraft types. This becomes even more important when you consider that an aircraft can change ownership 5-6 times in its lifespan, so detailed and up to date records are paramount to the value of the aircraft. Some commercial airlines tend to forgo private-party MROs as they open the airline up to potential liabilities. Instead, they opt to have their own MRO infrastructure in place, which is a necessity for large commercial airlines as they have to adhere to strict maintenance timelines. Regardless of who owns the responsibility to carry out these activities, the approvals, workflows and data quality is of utmost importance.

Linking the entire MRO supply chain together for a single source of truth, integrating organisations, parts tracking, component life cycles, as well ensuring authenticity and in turn reducing the massive costs attributed to inventory mismanagement. Blockchain ensures that every listing includes images and quality documents for the exact part being reviewed, establishes the pedigree of each part, using encrypted data trails to create and share a digital ledger of previous transactions for each part. A log where all the relative physical certificates reside, leveraging biometric approvals and signatures of all the various maintenance tasks, captured via any approved device, and certified by responsible authority at task, job and entire process level as needed. The Aerobloc will provide a platform whereupon the App can be built to support the digitising of the whole MRO process and records in a blockchain-based communal and trusted repository, offering an immutable digital ledger for the entire MRO certification history related to any aircraft. This product will most likely be built in partnership with an established industry leader who is seeking to replace their legacy offering with a solution powered by nextgen technologies including AI and DLT.

## **7. Aircraft Leasing**

### **Facilitate and Automate Lease Agreements**

Many of the tasks and operations, which take place currently – including, maintenance, transfer of title, lease repayments, exchange of value – all happen in siloes. A lease agreement can contain a variety of financial commitments tied into numerous criteria for the lessee but also for the lessor and other investors. Whilst these models are all fairly standard, the detail and offers are very much tailored per customer, and therefore whilst many players would want access to aircraft details and history – the financial information needs to remain protected. Under these agreements, airlines are tied into the maintenance responsibilities (MRO) to ensure they also protect the asset value. Not only can a blockchain solution with Smart Contracts ensure that all the players including the airline meet the terms of the lease agreement, including the leveraging of MRO data, but it can also help automate billing and settlement of financial commitments to help the players avoid the massive fees associated with such operations.

Extending further into operational lease activities such as return or ownership change, the detailed data requirements and history needed is a cumbersome and manually intensive process. With all these key data points on an immutable ledger, the Aerobloc can provide the entire end-to-end management of a lease agreement for any customer, reducing costs and effort, but also simplifying the end of life and ownership change process. There are a number of initiatives, such as the Global Aircraft Trading System (“GATS”) which could potentially benefit from such a paradigm shift to a DLT based

solution, and the community of users would reap the benefits of a single immutable repository for all related data, providing a single pane of truth.

## **8. Peer to Peer Settlement**

### **P2P settlement of ticket revenues is a game changer**

Aerobloc is pioneering a revolutionary Peer-to-Peer (P2P) settlement solution using AI, Distributed Ledger Technology (DLT) and smart contracts to transform the aviation industry's financial transactions. By leveraging blockchain technology, Aerobloc enables airlines and stakeholders to execute and settle transactions directly and transparently, eliminating intermediaries and reducing settlement times from weeks to minutes. This approach enhances security through immutable records, reduces costs associated with third-party processing fees, minimises errors and disputes, and provides real-time visibility into transaction statuses. The use of smart contracts ensures automated compliance and enforcement of contractual terms, further streamlining operations and increasing efficiency in the aviation sector.

## **9. Loyalty**

### **Introducing digital wallets and an industry wide token**

Whilst loyalty strategies are designed to build brand loyalty and drive business to their own products and offerings, consumers are now looking at programmes that offer a wider range of benefits that are not always tied into airline points and prizes. It is very important to make sure that airline loyalty experts understand the value that blockchain technology can bring over legacy systems whilst still ensuring priority over their own products. Many airlines are already experimenting with options to redeem "miles" or loyalty points at various retail outlets and fashion brands, but have discovered limitations due to the terms and conditions which may need to vary for each partnership. Of course, a seamless ecosystem for the consumer leveraging a community of benefit providers is the ultimate objective but it needs to ensure individual players still reap rewards. Smart Contracts offer a significant advantage over legacy systems to quickly and securely ramp up partnership agreements, identify consumer behaviour patterns and react quickly to changing market conditions.

The \$AERRO token provides an opportunity for a paradigm shift in loyalty programs, as airlines can mint sub-tokens with a predefined set of rules and values, for capital raises or marketing initiatives, for example, tokens which provide a 25% discount on their ticket prices, but limited to a specific set of routes and/or on specific days of the week or particular periods, allowing them to fill seats where demand is lower, for travellers who don't have specific time frame requirements. This would tie in nicely with modern revenue management systems in targeting low load factor routes or distressed inventory. These tokens could eventually be traded on the Aerobloc's planned decentralised loyalty token exchange, providing extra revenue to the issuing Airline, yet still securing the spend of the original value, whilst providing substantially cheaper travel options to the consumer - an all-round win-win for airlines and their passengers.

Generally, the same types of partners are seen partaking in loyalty programmes around the aviation industry - hotels, car rentals etc. However, the Aerobloc ecosystem could extend further offerings into many different commercial sectors, large or small businesses that would offer real incremental value and benefits to consumers that

traditional loyalty programmes today cannot achieve. A Smart Contract quickly defines rules, autonomously trace transactions, reduce costs of programme and system management thanks to self-enforcing, autonomous and secure record keeping, allowing a faster and more secure solution for greater customer engagement and improved customer experience. Use of digital wallets by both industry stakeholders and consumers would extend frictionless P2P transactions past industry settlement to include B2C use cases.

#### A. Initial Roadmap of RWApps (pre and post TGE plus 12 months)

No	Name	Commenced	Target Delivery Date
1	Cost Management (Landing Charges)( <b>AeroCOST</b> )	2021	Available now
2	AI Dashboard ( <b>AeroEYE</b> )	2023	Available now
3	Passenger Revenue Accounting ( <b>AeroPRO</b> )	2023	Q3 2025
4	GREENx Digital Carbon Credit ("DCC") Portal	2024	Q2 2025
5	Peer to Peer Settlement	2024	Q3 2025
6	Maintenance Repair and Overhaul (MRO Certifications)	Pending	TBC
7	Aircraft Leasing (Facilitate and Automate Agreements)	Pending	TBC
8	Cargo Management	Pending	Q2 2026
9	Loyalty (using \$AERRO as rewards)	Pending	TBC

#### B. Future Roadmap of RWApps (post TGE plus 12 months and beyond)

No	Name
1	Customs and Government Operations
2	Airport Operations - Airside and Landside (ramps, baggage, transport, gates, etc.)
3	Passenger Airport Experience (Check-in, Duty Free, Lounges etc.)
4	Passenger and Cargo Revenue Management
5	Flight Operations
6	Catering Services
7	Airline Services - Turnaround Services (fuel, cleaning)

## \$AERRO CHARITY FOUNDATION

A portion of the total pool of \$AERRO tokens will be set aside for the \$AERRO Corporate Social Responsibility Foundation known as 'Wings & Prayers'. Some 5% of \$AERRO tokens will form the principal of this foundation. A small portion will be unlocked at TGE to fund the set-up costs of the charity, i.e. create legal structures and the balance of the \$AERRO tokens will be applied to the staking pool once they begin to be vested.

To be clear, the activities of the Wings and Prayers Foundation will be funded by the staked revenue received by it. So, the success or failure of this foundation is dependent on the performance of the Aerobloc ecosystem.

The charity will be independently set up under a governance structure and led by a board and chairperson who will oversee the use of the \$AERRO tokens as set out above to ensure this philanthropic mission is fulfilled.

Wings & Prayers will constantly be introducing new initiatives which can use the operations of the industry to add value to those who need it most. One of the first goals would be to support travel requirements to repatriate children all over the world who have been trafficked from their families and homes. Over 27% of trafficking victims are children, and of that 66% are young girls. This is a huge problem globally and Wings & Prayers is part of the solution [13].



Other examples could include initiatives like, but not limited to, utilising the empty slots in pilot training centres to offer underprivileged youngsters from impoverished regions the opportunity to gain a, previously unattainable, career in this industry.

To ensure the longevity of the charity, a significant portion of the tokens will be continuously staked against Aerobloc commercial projects, thus generating a continuous revenue, providing the funds required for these charitable causes in the most enduring fashion.

Examples of how the Foundation receives funds are visible in the images above. They simply receive fee splits in different categories of activity. Once the Aerobloc Dao is established, control over this charitable foundation will pass to it.

## \$AERRO TOKENOMICS

The phased distribution of the \$AERRO token is designed to foster the growth of the ecosystem and support decentralised aviation years into the future. This section covers all aspects of the token design and distribution, but not the economic system that powers it. The token will be, by design, sharia compliant as this brings several major benefits to the community such as shared financial success and the absence of compound interest on any debt.

### Summary

Summary	
Company	Aerobloc
Token	\$AERRO
Hard Cap (USD)	\$7,235,000
Total Token Supply	4,500,000,000
Tokens for Public Sale	2.81%
Initial Circulating Supply	318,983,153
Initial Circulating Supply %	7.09%
List price at TGE	0.0220
<b>Initial Market Cap (USD)</b>	<b>\$7,017,629</b>

Sale Summary	
Amount to be raised	\$7,235,000
Tokens to be sold	705,158,730
% Supply	15.67%
Initial Market Cap (USD)	\$7,017,629
Fully Diluted Market Cap (USD)	\$99,000,000

*Note that the number of tokens is equal to the estimated total number of projected passengers in 2020 before the pandemic.*

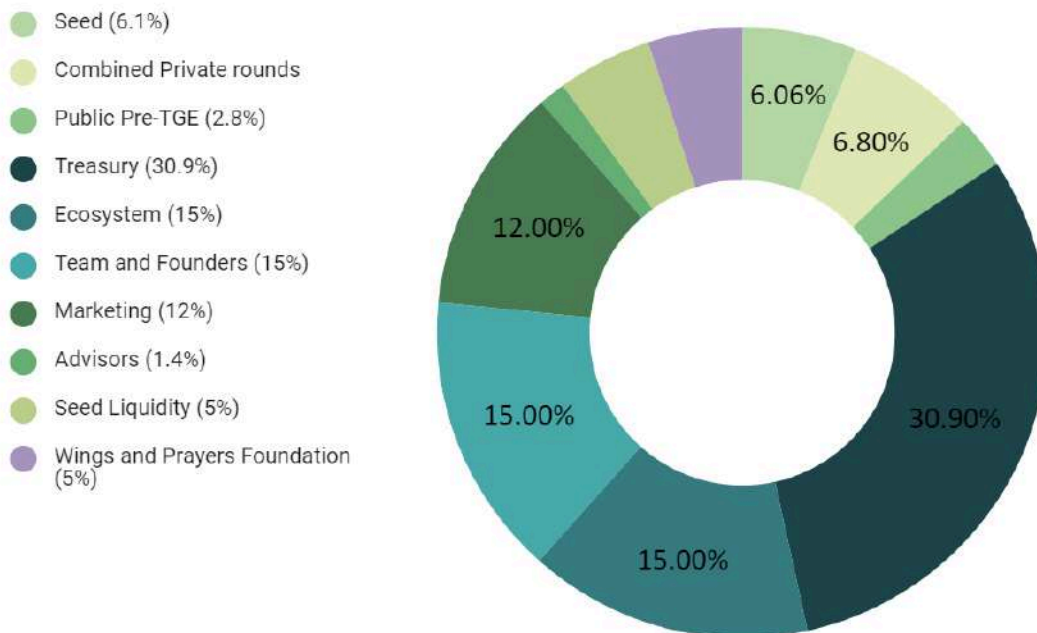
### Token Sale Allocation

**Token Sale Allocations**

Investor Type	% of the Total Raise	Total Raise by Value (\$)	Round Token price (\$)	Fully Diluted Valuation	Tokens issued in Round	% Total Supply issued in Round	Unlocked % @TGE	% of circulating supply @TGE	Cliff	Vested Over
Seed (6.1%)	8.29%	\$600,000	\$0.0022	\$9,900,000	272,727,273	6.06%	0.0%	0.00%	12 month	34 months
Private 1 (0.5%)	1.87%	\$135,000	\$0.0066	\$29,700,000	20,454,545	0.45%	0.0%	0.00%	12 month	23 months
Private 2 (2%)	13.82%	\$1,000,000	\$0.0110	\$49,500,000	90,909,091	2.02%	10.0%	0.20%	3 month	12 months
Private 3 (4.3%)	41.47%	\$3,000,000	\$0.0154	\$69,300,000	194,805,195	4.33%	10.0%	0.43%	3 month	12 months
Public Pre-TGE (2.8%)	34.55%	\$2,500,000	\$0.0198	\$89,100,000	126,262,626	2.81%	10.0%	0.28%	1 month	12 months
List price at TGE			\$0.0220	\$99,000,000						
<b>Total Sale</b>	<b>100.00%</b>	<b>\$7,235,000</b>	<b>\$0.0151</b>	<b>\$89,100,000</b>	<b>705,158,730</b>	<b>15.67%</b>	<b>0.92%</b>	<b>0.92%</b>		
<b>Private</b>	<b>65.45%</b>	<b>\$4,735,000</b>			<b>578,896,104</b>	<b>12.86%</b>	<b>0.63%</b>	<b>0.63%</b>		
<b>Public</b>	<b>34.55%</b>	<b>\$2,500,000</b>	<b>\$0.0198</b>	<b>\$89,100,000</b>	<b>126,262,626</b>	<b>2.81%</b>	<b>10.00%</b>	<b>0.28%</b>		

Token Allocation and Use of Funds

**Aerobloc (\$AERRO) Token Allocation**



Use of Funds:

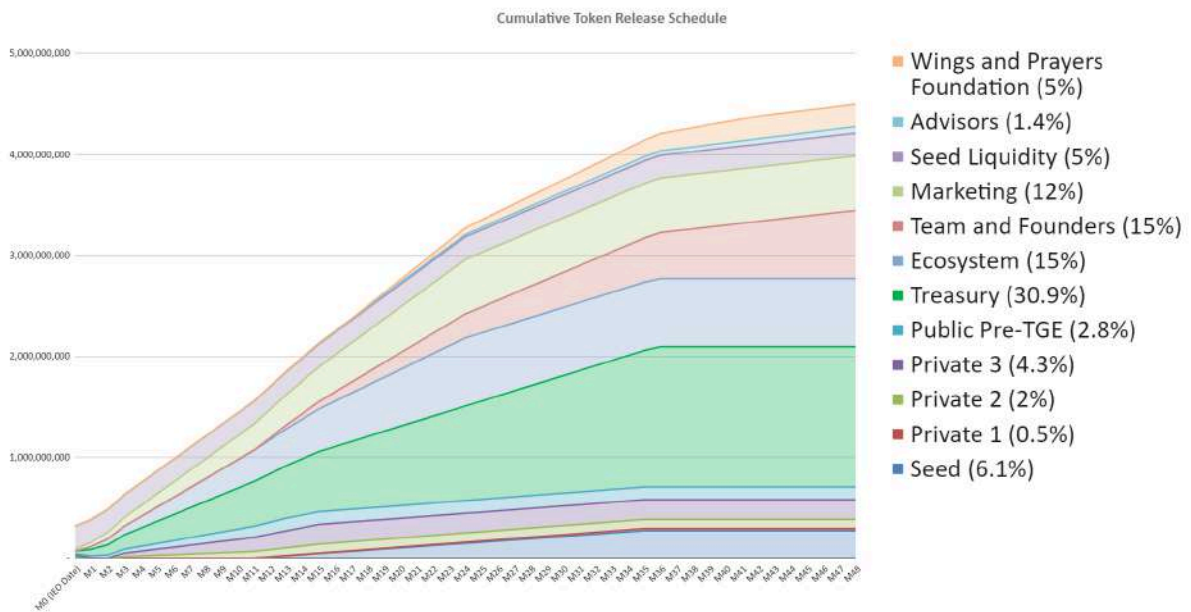
Use of Funds from Private and Public Sale (x3 years)		
Token Allocation	Total Tokens Sold (%)	USD Amount
Technology Build	51.0%	3,689,850
IP Acquisition	14.0%	1,012,900
Sales & Marketing	15.0%	1,085,250
Operations	15.0%	1,085,250
Others	5.0%	361,750
<b>All Tokens Sold</b>	<b>100%</b>	<b>7,235,000</b>



**Definition**

Treasury includes tokens held by Aerobloc and the Aerohub to fund operations of the protocol. Ecosystem includes tokens used by Aerobloc and the Aerohub to incentivise and reward use of protocol. Team includes tokens for the operating, build and go-to market team. Marketing tokens are to build awareness of the protocol and applications. Advisors includes tokens for project advisors.

Cumulative Token Release Schedule



**\$AERRO TOKEN PROTOCOL**

The \$AERRO economy is powered by:

Structures	Stakeholders
Aerobloc (marketplace of RWApps) Aerohub (build, advise on RWAapps) Aerobloc DAO (eventually)	Airlines Airports Passengers & Cargo Customers Developers Publishers

And

<b>Connected by</b>	<b>Which</b>
RWApps Interfaces Processes	Generate Data Generate Fees Incur Costs

# GOVERNANCE

## The Challenge for a Governance Model

Unlike any other community project out there, the Aerobloc and \$AERRO Token governance doesn't fit into any existing rules structures, as the intricacies that currently exist in the industry run very deep and are sometimes rather complicated.

Moving the industry into the decentralised world requires a lot of caution to avoid any surprise instances that could affect the industry or the \$AERRO token value in any substantial manner, while the Aerobloc will become a decentralised Web3 based ecosystem where many operational processes will reside in the future, both commercial and regulatory, some of which can never be allowed to be susceptible to any known risk in any form.

This is an industry exclusive project that involves a token which will provide transactional value between the passenger community and the world's airlines, who will then utilise it as B2B settlement method with their service providers, all benefitting from a reduction in current operational costs.

Moreover, this industry had collectively veered towards initiating a drastically needed digital transformation era, which, having stalled due to pandemic related revenue shortages, can now be funded from the (staked) token value pool.

While this 'staking for return' format would normally fall under an autonomous DAO 'majority rules' format, due to a complex mix of security and sustainability issues, there will always be a portion of overall industry procedures that can never be subject to collective public voting rights implications, including statutory rules or guidelines from expert working groups.

The simple truth is that, while we know that some decisions will need to remain 'industry expert' exclusive while others can be opened up to public opinion, no one can envisage where the final lines will be drawn when this industry has completed its digital transformation.

Hence, governance of the Aerobloc and \$AERRO token needs to be kept separate until the right balance has been identified. The Aerobloc executive team will be fulfilling the caretaker role for the setup and launch of both, once a minimum stable position has been reached, governance development will eventually be handed over to the industry.

From then on, we still foresee that the separation should remain for a while, to ensure that the security of both industry and the token value remain stable, while organically growing towards each other to incrementally merge the majority of governance at some point in the future.

## Governance Alternatives

We define protocol governance as solely what gets decided on-chain. This will start as protocol/platform fees only, with criteria to allow only certain wallets (i.e. airlines and airports involved in the Aerobloc ecosystem) to vote. If and when the governance mandate extends it is likely to only do so in this way, covering rules that are able to be executed on-chain and limited to those who are agents within the system and not all token holders will be eligible.

The aviation industry is incredibly complex. While over time we expect convergence in the ability of a blockchain economy to express more complexity and the ability of aviation to move towards digital transformation, the two worlds aren't there yet. Moving the industry into the decentralised world brings a whole new realm of potential catastrophes. This is an industry project that includes a token which will provide value between the consumers and industry stakeholders who will also use it as B2B settlement method and as a parent token for a variety of sub-token requirements.

The majority of protocol decisions, which could be in scope as governance, needs to be handled and decided by the industry stakeholders, to ensure that the security of the industry and the token value remain stable and not be at the whim of all token holders. These are things that have social, cultural and economic value and participation requires careful consideration. However, some things can be decided in a decentralised fashion from early on in the operations of the Aerobloc. These are things that can be decided and executed on-chain:

1. Fee amounts
2. Fee trigger
3. Fee distributions

Voting rules, nature of proposals and governance process will be decided closer to the Aerobloc platform launch in late 2025 / early 2026.

Long term, whilst some decisions will need to remain 'industry expert' exclusive while others can be opened up to public opinion, it is not possible to envisage where the final lines will be drawn when this industry has completed its digital transformation, nor should one attempt to limit this by design.

As a powerful team we could have chosen to build some widget on the legacy aviation infrastructure, made our millions and retired. We decided to do this and gift our work to the aviation industry via a DAO, not because it is easy but because it is hard and it turns the dial on the industry in a meaningful way for future travellers.

## TECHNOLOGY OVERVIEW & STACK

Aerobloc is a blockchain-agnostic layer which provides a rich ecosystem supporting the rapid development of aviation RWApps deployed on the most popular DLTs. It provides a suite of APIs providing access to the most common datastores (airport codes, airline tail numbers, sub-part inventory, etc.) and aviation related functions (aircraft locations, ticket proration as a service, taxation as a service, cargo AWB tracking, etc.) thus enabling the building blocks which accelerate the emergence of industrial standard Web3 solutions which solve real world problems.

### Back-End

Oracles e.g. aviation specific inputs from airlines, airports and other stakeholders
Templates e.g. revenue accounting (incl. TaaS, PRaaS), cargo tracking
Application agnostic core contracts e.g. vault, escrow that are highly secure
Blockchain (agnostic, EVM compatible and others)
AI/ML Engines - Smart AWB ingestion, Generative AI engine focussed on aviation industry, ML based route builders, AI driven loyalty calculator, etc.

### SDK

Easy contract interaction APIs
Cross-Application Script templates
Friendly script writer for Smart Contracts (Excel style)
JS-VM off-chain script simulator for insight prior to action
Template/pattern matching tools

### Front-End

UI Toolkit for group or airline 'marketplace builder' or RWApp builder
UI Toolkit developer / publisher application builder
Aerobloc platform for application interaction
Open-source script verification/inspection tool

### Industry Integration

Reference Data - Industry codes (IATA, ICAO ... ), Aircraft type/model, etc.
Dynamic Asset Data (Aircraft Locations/ADS-B, Cargo/AWB Tracking, etc.)

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**Closing Note:** All materials in this White Paper are the original work of the authors and graphic designer, with the exception of quotes which are fully referenced.