ENZO WhitePaper

A global mapping network of smart cameras

V2.1.3

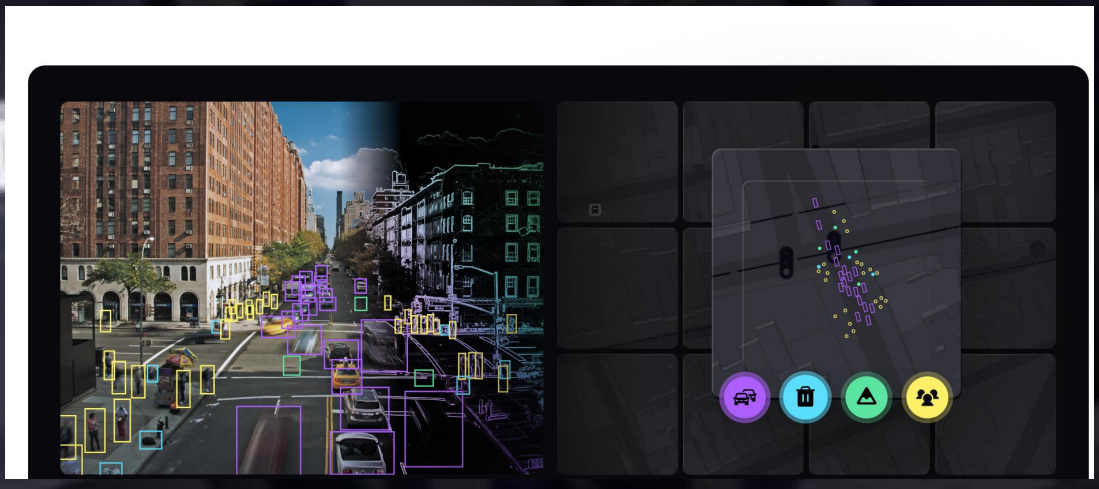
Catalog

Executive Summary

No matter the industry, market, or sector, real-time actionable geospatial data has become an essential part of our lives and an ingredient to ensure a successful enterprise. Yet today, much of that data is barricaded behind intellectual property rights, held hostage to big tech's pricey subscription fees, or simply inaccessible due to technical constraints.

This whitepaper outlines the ENZO Network's strategy to provide open and equitable geospatial intelligence to people and organizations. The paper focuses on how the platform collects data using existing cameras as "super sensors," protects privacy rights through ENZO's proprietary artificial intelligence and Edge computing technology, and creates a Dynamic Map of the real world for users to collect and consume real-time data. In addition, the paper details key participants, data collection incentives, and spotlights the innovative products and technologies that make it all happen.

Here we explore how a crowdsourced camera network can give businesses and communities real-time access to decision-making data gathered locally and without the burdens of typical camera network infrastructure costs. By adopting a crowd-sourced camera network and Blockchain technology, ENZO Network combines decentralization, financial incentives and intrinsic motivations to break up long-standing data monopolies. In concert, these digital tools and economic strategies, make the ENZO Network a ground-breaking entry into the multibillion-dollar geospatial data market.



Introduction

Today, mapping and geospatial data provide services beyond navigation. The technologies provide the insights to plan efficient transport routes, manage city zoning, for business planning, or for people to experience places where they’ re not physically present. With the recent advancements in artificial intelligence and sensor technology (e.g., cameras and LIDARs), maps can visualize a broader range of dynamic and real-time information such as road congestion, crowd size, and available parking spots. Such dynamic maps enable a new era of smart city and smart mobility applications ranging from crowd management to autonomous driving. This innovation is expected to grow the geospatial solutions market to $845 billion by 2029.

Problem

Big tech companies have invested millions into collecting map data and are creating “centralized data monopolies.” The monopolies have allowed these companies to limit who has access to essential geospatial data and how the data are used. These obstacles have created various issues preventing the map market from reaching its full potential. Some of these challenges include the following:

- **Data silos that prevent billions of dollars worth of new services** - Modern digital services depend on data, making data sharing essential for innovative services. The UK government estimated that open geospatial data sharing could generate between $7 billion and $14 billion in additional revenue from new products and services in the UK market.

- **High-cost burdens on cities and businesses** - Tech giants like Google are exploiting their stronghold on geospatial data, with Google Maps pricing increasing over 1000% in 2018. This price gouging has led the U.S. Justice Department to investigate the Alphabet Inc. enterprise for unfair business practices, like prohibiting the use of Google Maps with outside software and services, according to Reuters.

- **Unfair compensation for user data** - Morgan Stanley estimates Google Maps will earn more than $11 billion in revenue in 2023, profits generated mainly by Google Maps’ user data. On average, analysts calculate that people lose about $500 annually by voluntarily providing personal data to tech companies. This financial loss is expected to surge to $20,000 by 2034 as data increases in diversity and value.

The problems will get worse in the future as mapping technologies gain more sovereignty over

our lives. Today, maps serve us as oracles, helping us with strategy (e.g., the best route possible) and leaving us with the execution. With the emergence of autonomous cars and robots, maps become “agents” in charge of both strategy and execution. Finally, they will become “sovereign” when a centralized player like Google controls all our autonomous agents. It can navigate us through their desired routes, force us to see what they want, and make us believe this is all our free will.

To counter big tech’s data monopolies, people, businesses, and governments need a way to gather their own mapping data. Yet this is almost impossible. The high costs of data collection and technical privacy barriers prevent individuals and organizations from gathering and generating their own geospatial data.

The Challenge and Opportunity of Cameras: A 'Super Sensor' for Dynamic Maps

The camera is a commonly available sensor. There exist 1 billion closed-circuit television (CCTV) cameras or IP cameras, and an additional 44 billion cameras in the form of mobile phones, drones, cars, etc., worldwide. Combined with AI accelerated chips and computer vision AI, the cameras turn into “super sensors” capable of mining a wide range of real-time data. They can detect cars, humans, bicycles, or potholes and understand complex events such as overcrowdedness, traffic congestion, and more. Considering the drastically lower cost of cameras compared to other visual sensors (e.g., LIDAR), they are preferred by many industry leaders such as Tesla for environmental sensing.

Although attractive, using cameras to gather data from public spaces has challenges. The first challenge is personal data privacy. Citizens do not like being surveilled, and the data privacy laws — e.g., General Data Protection Regulation (EU GDPR), California Consumer Privacy Act (CCPA), and China’s Cybersecurity Law (CSL) — have become ever more stringent. The increasing stringency of data privacy regulations leads many companies to avoid launching computer vision (camera) projects because of the risks involved in non-compliance fines.

Camera infrastructure costs represent the second significant barrier to using fixed cameras as a source of data for dynamic maps. As we noted, the current tally of more than 1 billion active global CCTV cameras has cost more than $6 trillion to install, operate and maintain. Hardware or software maintenance often leads to downtime, which results in costly or detrimental data gaps.

The Solution: ENZO Network

A People-powered Map Enabled by ENZO “Internet of Cameras”

To solve the privacy issue, ENZO has developed a patent-pending AI technology that is the easiest way to make any camera smart and 100% privacy compliant. The technology was implemented successfully at international organizations such as E.ON, City of the Hague, and Deutsche Telekom.

ENZO Network aims to combine ENZO’s proprietary AI technology with the world’s 45 billion existing cameras (in smartphones, drones, cars, and IP cameras) to create the largest crowd-sourced camera network ever. Almost any camera, anywhere can run the AI software, collect metadata (with the highest grade of privacy compliance) and populate a Decentralized Dynamic Map (DDMap). The camera's owners earn crypto in return as the real-time data is monetized to support real-time applications. As a result, ENZO Network creates a new crowdsourced geospatial data economy powered by the “Internet of Cameras”.

It’s a solution that reduces infrastructure costs to almost $0 for Data Consumers (as the cameras are owned by private individuals) and is 100% privacy compliant.

Decentralized Dynamic Map (DDMap)

DDMap is the byproduct of ENZO Network and it serves citizens, businesses, and municipalities with a wide range of real-time data such as crowd size, available parking spots, pothole locations, and more.

DDMap consists of two main layers:

- **Permanent and transient static layers** - this includes the static road map, roadside infrastructure, and Landmarks.
- **Dynamic and highly dynamic layer** - This includes dynamic information such as road conditions, traffic conditions and parking spot availability.

The first layer does not need frequent updating and is mainly provided by mapping companies such as Google Street View and Mapbox. The second layer, however, requires frequent updates of the information and is the main focus of ENZO Network.

Market Entry Products

The Smartphone Strategy

With over 7 billion devices worldwide, over 1.5 billion of which come equipped with AI-accelerated chips, powerful processors, and a large array of sensors, smartphones are the perfect candidates for building decentralized physical infrastructure networks (DePIN).

DePINs, which can be described as the Uber and Airbnb of digital and physical infrastructure, harness the power of blockchain technology to crowdsource and tokenize digital (storage, computer, network) and physical infrastructure (sensors, telecommunication, robots, etc.), enabling a decentralized and democratized approach to infrastructure management. Therefore, scalability potential is most important for DePINs.

Smartphones offer unmatched scalability for decentralized applications. Onboarding a device to a network is as simple as installing an app. Unlike purpose-built hardware, this approach allows users to become part of the network immediately and without any upfront costs, effectively lowering the barrier to entry to nearly zero.

Smartphones are equipped with a wide range of sensors that enable real-time data capture and processing. Furthermore, the prevalence of AI-accelerated chips in smartphones allows for efficient on-device AI processing, providing valuable insights and the ability to develop a wide range of driver-assistant suites without relying on external infrastructure. To be more specific, any Apple iOS device equipped with an Apple Bionic chip (iPhone XS or newer) has such capability. Samsung, Huawei, Google, and other brands are also providing mobile AI chips in their devices.

ENZO Network opts for a smartphone-led approach over hardware-centric solutions for its initial go-to-market strategy. Hardware-dedicated solutions require an initial investment, and hardware solutions are bottlenecked by supply chain and logistic challenges.

By opting for smartphones over custom hardware, ENZO ensures its products are user-friendly, accessible, and, most importantly, scalable. Smartphone cameras are crucial for crowdsourcing real-time data, creating a digital twin of our world, and bringing the vision of decentralized technology into practical, everyday use.

ENZO Drive

Drive&, ENZO Network’s flagship product, is a revolutionary AI-based driver assistant application operating in a decentralized space. It empowers users by automatically rewarding them for capturing events in their surroundings while driving, making every journey safer, more engaging, and financially rewarding.

Smartphones' global and widespread availability and convenience make it effortless for users to join and start using Drive&. The application is free and there's no need for costly and specialized devices – your smartphone is all you need.

All-in-One Solution

Drive& aims to change our driving experience by combining driver assistance tools, Marketplace integration, and gamification features into a single, user-friendly application. As users contribute to the network by mounting their smartphones on the dashboard, the computer vision AI can turn every smartphone camera into a smart sensor that automatically scans the road ahead and detects events such as road obstacles, surface damage, traffic congestion, and more.

For their contribution, Drive& users are rewarded with in-app currencies which can be redeemed for a variety of rewards. With the introduction of the native ENZO token in 2024, users will have the opportunity to translate their driving experience into actual earnings, further incentivizing participation and driving the growth of the ENZO ecosystem.

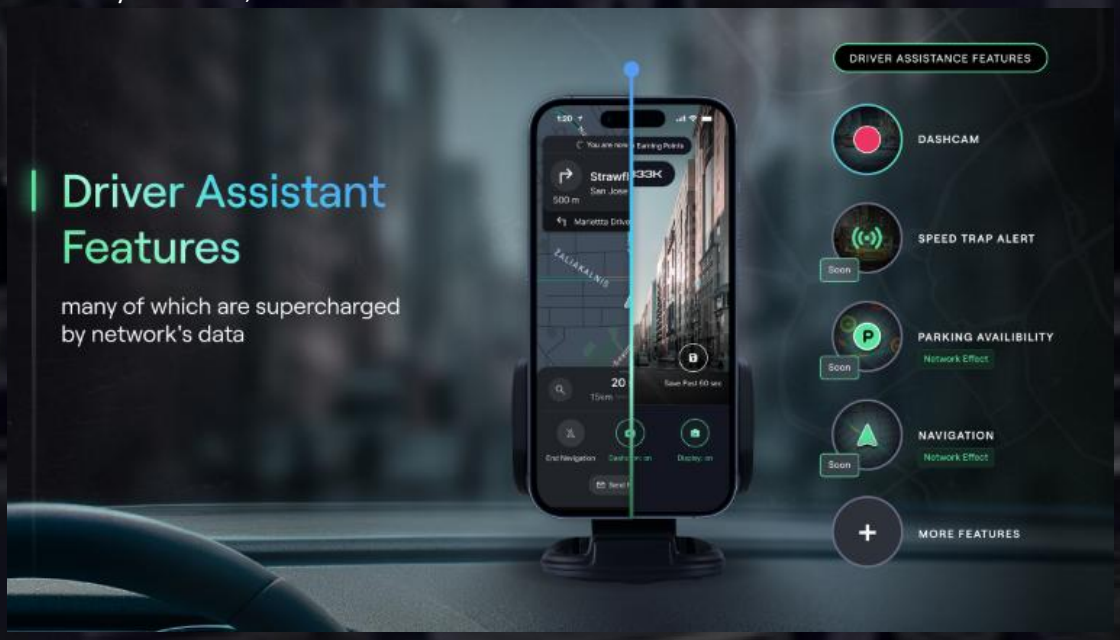
Privacy and Low Data Consumption

Drive& is committed to user privacy and data efficiency. By utilizing on-device (Edge) computing and artificial intelligence, Drive& guarantees a fully privacy-compliant method of scanning public spaces – by design, adhering to data protection and privacy laws worldwide.

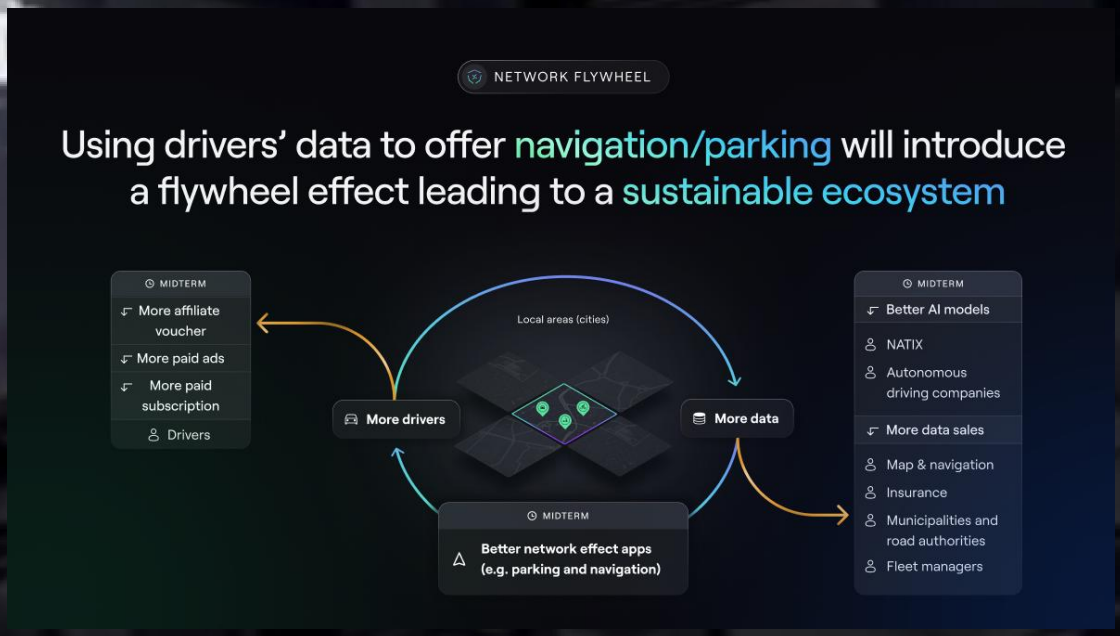
Hardware-based dashcam projects that transmit images have 50-200GB of data consumption for heavy users per month (driving 8 hours per day). With an average data consumption of only 1 GB per month for heavy users, ENZO’s bandwidth usage is 99% lower than any dashcam. Drive& reduce impact on users' data plans while delivering powerful computational capabilities.

Driver-Assistant Applications

With the data contributed by Drive& users, ENZO can offer a suite of driver-assistant features designed to enhance the driving experience. Drive& currently provides dashcam capabilities and plans to expand its features to include speed trap alerts, navigation assistance, parking availability indicators, and more.

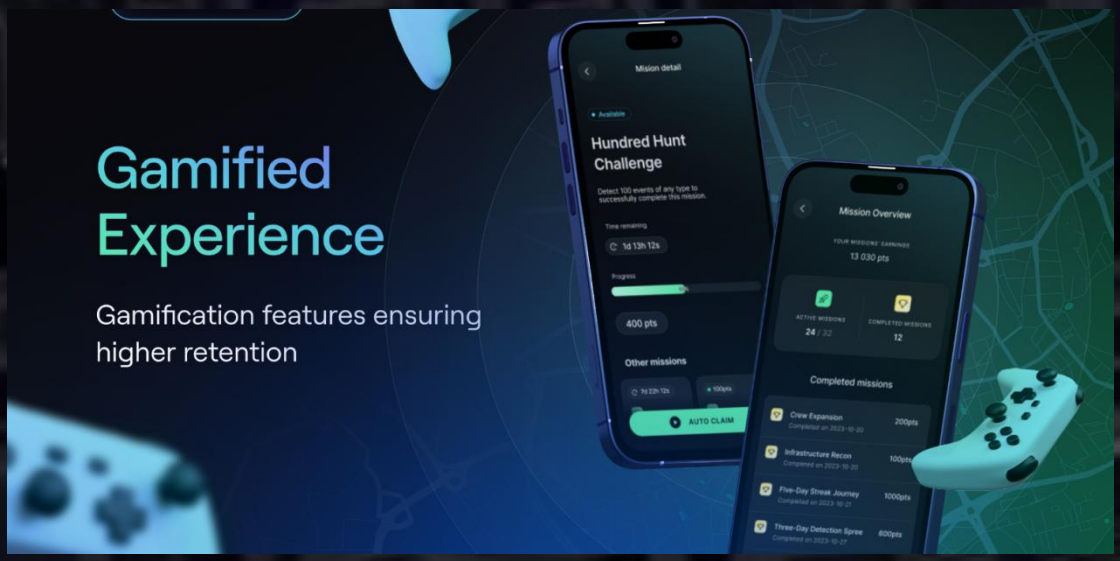


By providing practical driver-assistant tools and functionalities, Drive& becomes an indispensable companion for drivers creating a powerful flywheel effect. Drive& users become both the supply side for the data as well as the demand side of a network that operates in a decentralized space, pushing the boundaries of Web3 and DePIN innovation.



Gamified User Experience

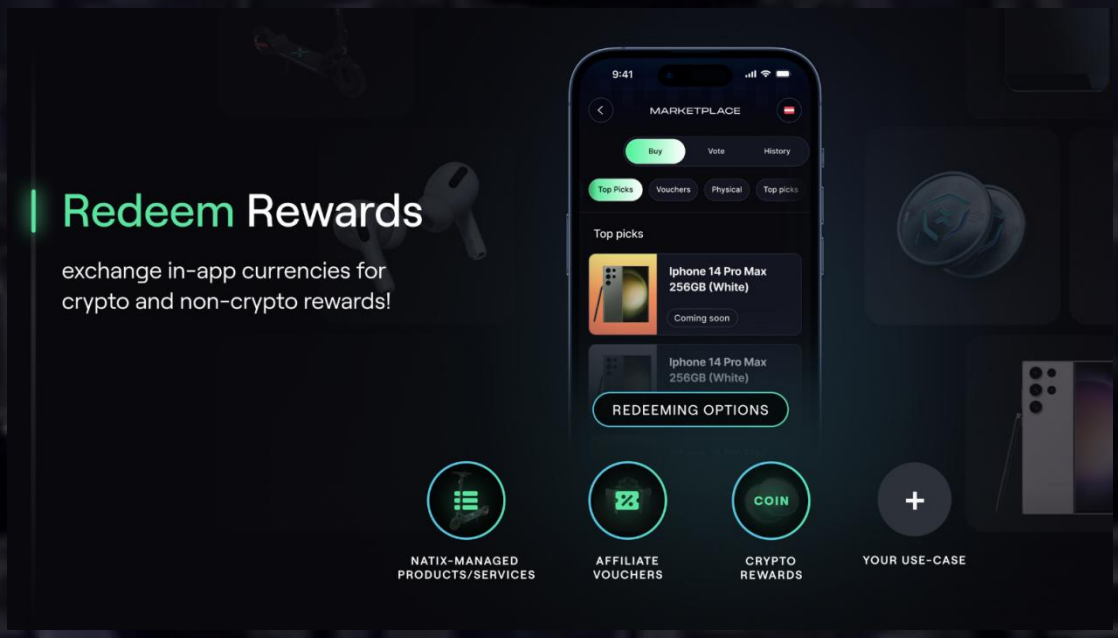
Drive& is a pioneer in integrating gamification into DePIN smartphone apps to enhance the user experience. By incorporating gamified elements such as regional leaderboards, completing missions, and participating in airdrop programs for extra rewards, Drive& transforms driving into an interactive and rewarding activity.



This gamified approach not only encourages user participation but also fosters a sense of community and competition among users. As one of the first DePINs to embrace gamification, Drive& sets a new standard for user engagement and retention in the decentralized infrastructure space.

Marketplace Integration with Crypto and Non-Crypto rewards

DePIN users are incentivized to contribute data to the network and are rewarded through blockchain technology and cryptocurrencies. Drive& caters to a wider audience with one of its key pillars, the integrated Marketplace. The Marketplace offers a diverse range of rewards beyond cryptocurrencies, offering tangible rewards and discounts through collaborations with leading vendors.



Through the Marketplace, ENZO taps into a vast user base that may not yet be familiar with cryptocurrencies, providing an accessible entry point into the world of decentralized networks. This approach not only fosters wider adoption but also enhances user engagement and retention.

ENZO-enabled Smart Cameras

ENZO-enabled smart cameras are hardware devices running ENZO software and provide “set-and-forget” functionality to the users. Our community can purchase and customize ready-to-use cameras (e.g., Smart IP cameras, dash cams, etc.) or prototype and build their own (via our references and onboarding guidelines).

ENZO-enabled smart cameras are supported by ENZO Device Manager — a web-based device management tool to register, authenticate, and manage devices on the ENZO Network.

ENZO Map Interface

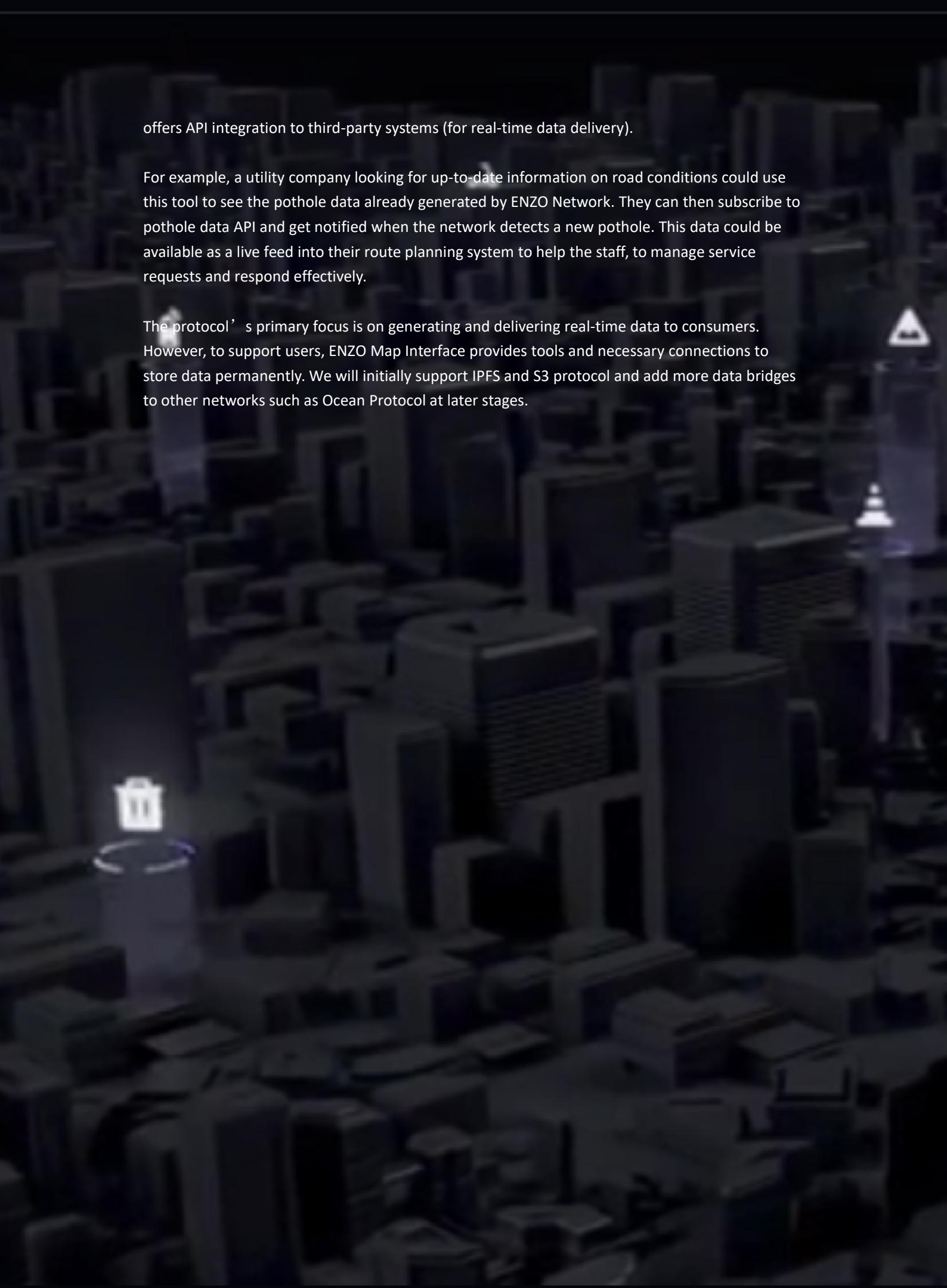
The data produced by this massive crowdsourced camera network needs to be collected and made available to buyers in an easy way. ENZO Map Interface is designed for enterprise Data Consumers, enabling them to subscribe and consume real-time data captured by ENZO’s internet of cameras.

Data Consumers can search, filter, and visualize already generated data across the network by the set of AI models (e.g., pothole detection AI). This functionality allows them to pre-screen the sample data before subscribing to the future data generated by the network. The interface also

offers API integration to third-party systems (for real-time data delivery).

For example, a utility company looking for up-to-date information on road conditions could use this tool to see the pothole data already generated by ENZO Network. They can then subscribe to pothole data API and get notified when the network detects a new pothole. This data could be available as a live feed into their route planning system to help the staff, to manage service requests and respond effectively.

The protocol’s primary focus is on generating and delivering real-time data to consumers. However, to support users, ENZO Map Interface provides tools and necessary connections to store data permanently. We will initially support IPFS and S3 protocol and add more data bridges to other networks such as Ocean Protocol at later stages.



ENZO Economy

The ENZO Network economy is based on three pillars:

- Token rewards will incentivize the people providing the infrastructure and data
- ENZO Network will incentivize people to hold on to the token
- A significant portion of the value would be distributed to active contributors and participants

ENZO Economy Summary

The native cryptographically secure fungible protocol token of the ENZO Network (ticker symbol **$ENZO**) is a transferable representation of attributed governance and utility functions specified in the protocol/code of the ENZO Network, and which is designed to be used solely as an interoperable utility token thereon.

$ENZO is a functional multi-utility token that will be used as the medium of exchange between participants on the ENZO Network in a decentralized manner. The goal of introducing $ENZO is to provide a convenient and secure mode of payment and settlement between participants who interact within the ecosystem on the ENZO Network, without any intermediaries such as a centralized third-party entity/institution/credit. It is not, and is not intended to be, a medium of exchange accepted by the public (or a section of the public) as payment for goods or services, or for the discharge of a debt; nor is it designed or intended to be used by any person as payment for any goods or services whatsoever that are not exclusively provided by the issuer.

$ENZO does not in any way represent any shareholding, ownership, participation, right, title, or interest in the Company, the Distributor, their respective affiliates, or any other company, enterprise, or undertaking, nor will $ENZO entitle token holders to any promise of fees, dividends, revenue, profits or investment returns, and are not intended to constitute securities in the British Virgin Islands, Singapore or any relevant jurisdiction. $ENZO may only be utilized on the ENZO Network, and ownership of the same carries no rights, express or implied, other than the right to use $ENZO as a means to enable usage of and interaction within the ENZO Network. The secondary market pricing of $ENZO is not dependent on the effort of the ENZO team, and there is no token functionality or scheme designed to control or manipulate such secondary pricing.

For the avoidance of doubt, neither the Company nor the Distributor deals in, or is in the business of buying or selling any virtual asset or digital payment token (including $ENZO). Any sale or distribution of tokens would be performed during a restricted initial period solely to obtain project development funds, and raise market/brand awareness, as well as community building and social engagement; this is not conducted with any element of repetitiveness or

regularity that would constitute a business.

Furthermore, $ENZO provides economic incentives that will be distributed to encourage users to exert efforts towards contribution and participation in the ecosystem on the ENZO Network, thereby creating a mutually beneficial system where every participant is fairly compensated for their efforts. $ENZO is an integral and indispensable part of the ENZO Network because, without $ENZO, there would be no incentive for users to expend resources to participate in activities or provide services for the benefit of the entire ecosystem on the ENZO Network.

Given that additional $ENZO will be awarded to a user based only on its actual usage, activity, and efforts made on the ENZO Network and/or proportionate to the frequency and volume of transactions, users of the ENZO Network and/or holders of $ENZO which did not actively participate will not receive any $ENZO incentives.

In-app $ENZO

In-app $ENZO is a point-based system that stands as the premium currency in Drive& app, to reward those who contribute the most toward collecting geospatial data. In-app $ENZO can be converted into ENZO tokens. In-app $ENZO has several in-app utilities:

As a membership access token, in-app ENZO holders would be able to access certain premium Drive& features (parking, safety alerts, special dashcam functionalities, etc.)

- In-app ENZO would also be utilized to settle purchases in the exclusive marketplace offers (premium goods and raffle tickets)

- In-app ENZO may be utilized to participate in additional Gamification features such as boosters (Nitro)

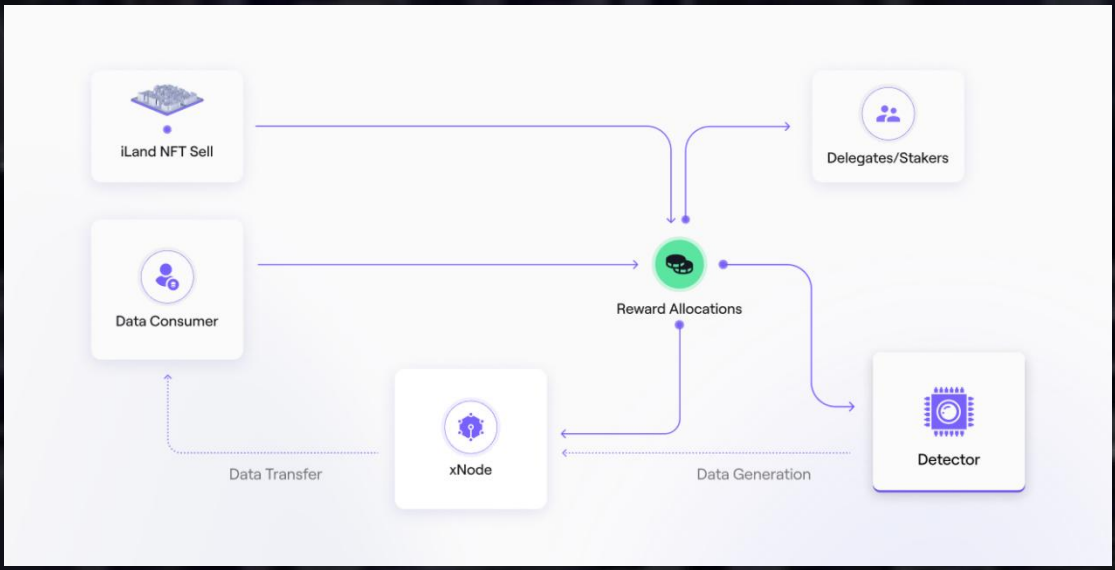
As a membership access token, in-app ENZO (HODL) offers advantages such as exclusive access to community airdrop, free monthly Marketplace raffle tickets, and premium offer discounts

On-Chain $ENZO Token

The $ENZO token is the ultimate reward for ecosystem actors, and offers the following functionalities:

- **xNodes** – ENZO Network is a blockchain protocol that relies on a network of nodes that curate data generation, validation, and exchange, so $ENZO would be utilized to reward these nodes. Furthermore, ENZO validator nodes (i.e. xNodes) require long-term $ENZO as a bonding mechanism to punish malicious activities. xNodes are based on the number of available slots and $ENZO staked, and earn $ENZO according to their uptime and number of validations tasks completed.

- **Staking and voting power for system governance** – Token holders can vote on larger decisions. To do so, the holder should stake their token.
- **In-app (Drive&) utilities** – $ENZO can also be converted to in-app $ENZO for users to benefit from the abovementioned Drive& app utilities.



ENZO Token Distribution

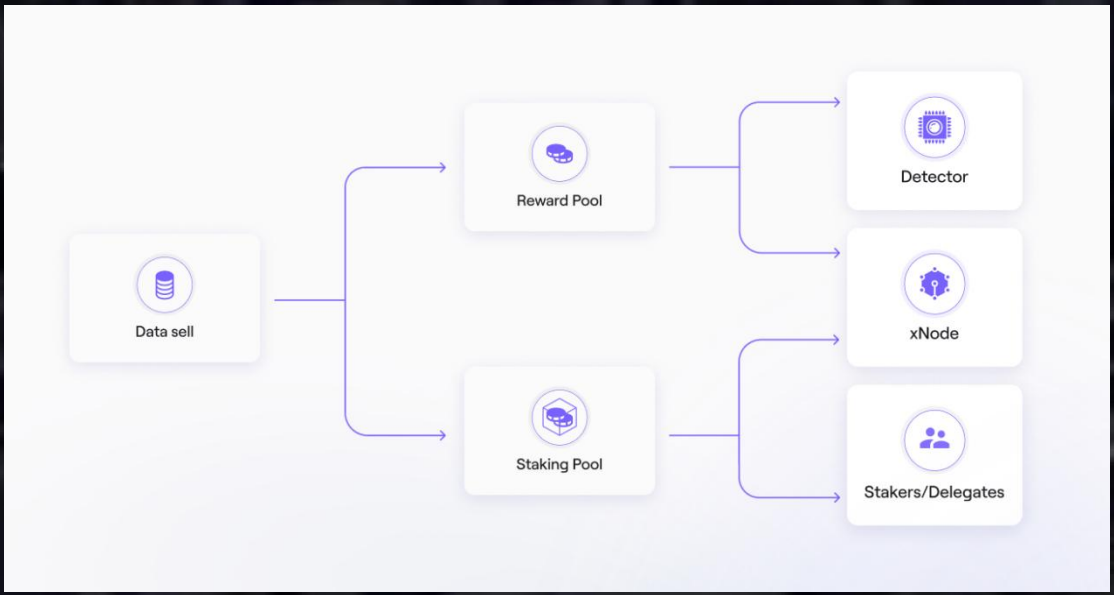
ENZO's token economics are meticulously crafted to ensure a vibrant ecosystem while maintaining a sustainable token supply. Here's a closer look at how $ENZO tokens function within our network:

Token supply: The total supply of the $ENZO Token is 100 billion.
Distribution: The exact token distribution and corresponding vests are listed below:

- IDO: 25%, all produced by market IDO, not locked, and all released before going online.
- Technology: 15%, locked for 5 years, and then released 1% each year until all released.
- Operation: 15%, reviewed by the foundation, issued irregularly, and the specific release ratio will be announced in the community.
- Foundation: 19%, locked for 2 years, and then released 1% every quarter. This part of the tokens is mainly used for public relations, community building, marketing promotion, and rewards for users and institutions who have made outstanding contributions to the platform.
- Airdrop: 10%, conditional airdrops for active users or users who meet specific conditions to encourage community participation and ecological construction.
- Mining: 16%, produced through user data mining, encourage users to actively participate in ecological activities and contribute value

Rewards for ENZO Network Participants

The $ENZO Token-based ecosystem is built on a solid foundation of balanced rewards for network participants. ENZO rewards users by paying them when they actively contribute to the network. This ensures that users are long-term aligned with ENZO in generating valuable data.



ENZO Economy Break Down

On-Chain $ENZO Token

$ENZO is the native utility token of the ENZO Network, powering its operations and fostering collaboration among its diverse ecosystem participants. The total supply of $ENZO Token is 100 billion.

In-App $ENZO

ENZO application users are rewarded with In-App $ENZO based on the value and amount of the data they collect.

Converting In-App $ENZO to $ENZO Token is only available after the Token Generation Event (TGE).

Converting In-App $ENZO to $ENZO Token is only available after the Token Launch Event. Converting In-App $ENZO to $ENZO Token past the token launch will require a cooldown period. Users who want to convert their In-App $ENZO to $ENZO Token immediately can do so but will be subjected to an instant conversion fee. The fee will first go towards the incentivization pool, and later be used for a permanent burn of $ENZO which ensures the long-term sustainability of the

economy.

Staking and network participation

Users who wish to gain access to system governance and/or participate in the validation program would be subject to a minimum $ENZO staking requirement to prevent malicious activities.

Staking options will have an “instant withdrawal” option, where users forfeit a percentage of their tokens to withdraw instantly.

Details of staking programs will be published at a later stage.

Governance

Only users with staked $ENZO Tokens will have governance power to ensure that only long-term token holders aligned with ENZO will be able to vote. To build an engaged community, the longer users have staked/locked the tokens, the more voting power such users would achieve. Users would receive staked $ENZO rewards for participating/engaging with governance.

ENZO Network Governance will be rolled out in three phases:

- Phase 1: Limited Governance – Proposals can be posted by the core contributors to the vote of the token holders on key issues such as protocol fees and major parameter changes
- Phase 2: Increased Governance – Proposals can be posted by token stakers with a minimum amount of tokens for the vote of the token holders. These proposals can change protocol fees and other major parameters.

  Phase 3: Full Decentralization – Proposals can be posted by token holders with a substantial amount of tokens and change any aspect of the protocol.

xNodes

ENZO Network uses a system of Validator Nodes called “xNodes.” Users who commit to the 90-day “deep” staking can become xNodes to verify the data integrity of the network. Any user can become an xNode based on the number of available slots and the amount of $ENZO staked. xNodes who stake the most $ENZO will earn a fixed amount of $ENZO per month. The number of xNodes will scale with the size of the network and the volume of data being produced.

Data Monetization and Value Accrual

The data generated by the ENZO Network is monetized in stable/fiat currencies to reduce barriers to purchasing the data for the data consumers. The (protocol) revenue will be distributed towards the Reward Pool for active users and network participants, as well as future R&D costs

for continued development. At later stages, ENZO plans to distribute the protocol revenue majorly towards buyback/burn as well as stakers.

The exact allocation or the structure can change during the project and is subject to governance.

iLand

iLand Tokens and NFTs are expected to be introduced later in 2024.

The iLand Tokens and NFTs will fulfill the following key functions:

- Signals of potential undiscovered value in a given area
- Ensures early adoption by cross-funding the reward allocations that fund the buildout of the ENZO Ecosystem
- Helps to define and guide the Network’s location-based governance

ENZO Network Ecosystem

ENZO Network is an open ecosystem designed to empower and align different stakeholders to create, manage, and maintain the DDMap through a crowd-sourced camera network. This data gathering and distribution work is driven by the platform's various participants, advanced AI computing, and supporting technologies and processes. Here we spotlight these essential elements.

Privacy-compliant Metadata Mining

ENZO Network uses proprietary computer vision AI to analyze video streams, turning visual data into privacy-compliant metadata. ENZO’ s unique privacy-by-design technology relies on two main pillars:

- Edge Computing Architecture (instead of centralized Cloud) - By enabling local computing (i.e., on-camera or on-device), the need for transferring raw images to data centers is eliminated. The AI will analyze the video locally to mine “metadata,” i.e., numeric data such as the number of detected cars and their location. The information shared with the network is the mined metadata. This architecture has both privacy protection and bandwidth benefits for the network.

- Anonymized Detection (free of personal data) - Faces, skin color, vehicle number plates, and other personal information are irreversibly discarded. Computer vision models will perform their detection over anonymized images free of personal data.

This framework turns any camera anywhere into a smart privacy-compliant data source that detects and transfers numeric-only information.

System Overview

The ENZO Network includes four primary participants, or “Actors,” that operate within the DDMap. They include Governance Participants, Developers, Detectors, xNodes, and Data Consumers who have the following roles:

Actors	Activity
Governance Participants	1.Hold $ENZO tokens to participate, and have long-term interest in the future of the network 2,.Govern and incentivize the network as a member of the community
Detectors	Mine real-time metadata by monitoring physical spaces via ENZO Mobile App and/or ENZO-enabled Smart Cameras.
xNodes	Verify and transmit the metadata generated by Detectors to the Data Consumers.
Data Consumers	Users and companies who subscribe to, pay for, and consume the real-time data generated by the network.

Real-time Geospatial Data

Real-time Geospatial Data refers to rich data objects that are time-stamped and location-tagged. They are mined by visual sensors and verified by multiple independent sources. The validity, speci ficity, and freshness of that data are what make the data valuable. It is a crucial duty of the protocol to perform data validation and ensure such qualities. To prevent the introduction of inaccurate data into the system, we rely on several computational proofs that need to be delivered alongside Real-time Geospatial Data.

Data Validation

Our current standpoint is to rely on two main validation principles: validation based on the challenge-response concept (where validation of every single action is unfeasible) and direct proof mechanisms (where validation of every single action is feasible). The following section introduces the validation mechanisms available.

Proof of Location

While every Detector can be uniquely identified, it is not sufficient to rely on location data provided by Detectors; this is due to the ease with which GPS information can be spoofed. ENZO Network’s key feature is the location specificity of the data. We rely on proof-of-location mechanisms to ensure that the data actually comes from a claimed location. We plan to leverage decentralized location attestation solutions such as XYO network to ensure even greater accuracy as well.

Proof of Live Stream

Proving a Detector’s node is analyzing a real-time video stream, not a pre-recorded video, is an important part of data validation. The primary mechanism used by the protocol relies on the challenge-response concept. Here, a randomly assigned xNode will challenge the Detector to execute a randomly generated set of actions on camera. The exact algorithm for the challenge-response mechanic will be released in the technical whitepaper, including the slashing conditions in case of equivocation.

Proof of Computation

The protocol ensures that the real-time geospatial data is correctly extracted by machine learning predictions (AI) provided in the mApplet and not generated heuristically.

Zero-knowledge proof schemes address this issue. Solutions like zkCNNs, vCNNs, and pvCNNs are zero-knowledge proof for convolutional neural networks. Some of these approaches ascertain model secrecy. Such schemes allow the owner of the AI model to provide proof without leaking any information about the model itself. They also provide proof that AI produced the output.

ENZO Vision SDK will incorporate verifiable AI compute mechanisms when training the AI models. This will ease the process for Developers to create mApplets that are capable of providing such proofs.

There are multiple other validations and proof mechanisms that ENZO is currently working on and are in the R&D phase. We will provide more information on these in later stages.

Network Infrastructure Setup

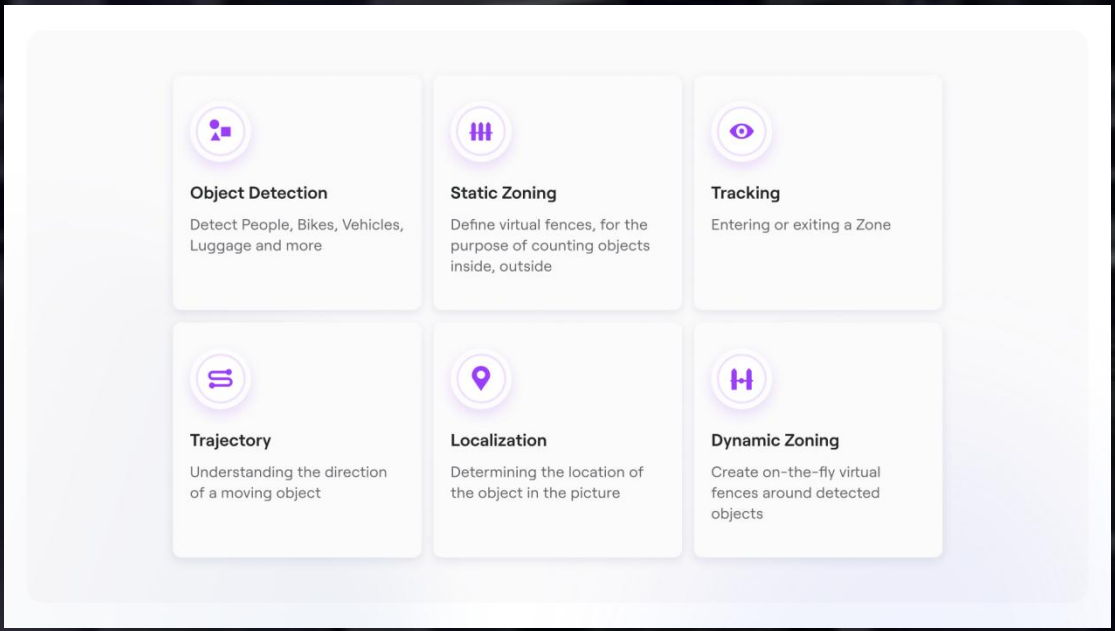
ENZO Network will launch a layer 3 (application layer) network on top of an existing L1/L2 Blockchain infrastructure. The main goal is to utilize Blockchain to govern the activities of the Actors within the ENZO network. To list a few:

- A network of ENZO’s nodes curates the ecosystem for data generation, validation and exchange. xNodes will reach a consensus to validate the data generated by cameras and transfer the data to Data Consumers.
- iLands NFTs are smart contracts that are minted on the blockchain, implement the land tax and handle the profit sharing.
- As the project grows, various topics are designed to be governed on-chain and by the community. A good example is the approval of mApplets and the region for their deployment.

ENZO Technology

ENZO Vision SDK (Privacy-Preserving)

Current computer vision approaches threaten people's privacy as they work with non-anonymized images during the data collection and processing stages. ENZO’ s patent addresses this and enables Developers to build privacy-compliant mApplets with only a few lines of code via ENZO Vision SDK. They can select and combine from the available set of features (e.g. object detection, zoning, object trajectory, etc.) and define the metadata structure.



Vision Deploy Middleware

Vision Deploy Middleware supports the deployment of mApplets on camera/edge infrastructure. For this purpose, it creates a small computing system at the edge of the network (smartphones, cameras, and other edge devices). The middleware orchestrates incoming anonymized images from the camera to deployed mApplets for metadata extraction. It also monitors and manages the computational resources (CPU, GPU, etc.) as well as the entire communication with the rest of the network.

Vision Deploy is optimized to run on Edge and mobile devices making their set-up and management easy. The Over the Air (OTA) device management functionality allows the system to maintain the highest level of security.

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in any decision to acquire any $ENZO, you have not relied and shall not rely on any statement set out in the Token Documentation or the Website;

you shall at your own expense ensure compliance with all laws, regulatory requirements and restrictions applicable to you (as the case may be);

you acknowledge, understand and agree that $ENZO may have no value, there is no guarantee or representation of value or liquidity for $ENZO, and $ENZO is not an investment product nor is it intended for any speculative investment whatsoever;

none of the Company, the Distributor, their respective affiliates, and/or the ENZO team shall be responsible for or liable for the value of $ENZO, the transferability and/or liquidity of $ENZO and/or the availability of any market for $ENZO through third parties or otherwise; and

you acknowledge, understand and agree that you are not eligible to participate in the distribution of $ENZO if you are a citizen, national, resident (tax or otherwise), domiciliary and/or green card or permanent visa holder of a geographic area or country (i) where it is likely that the distribution of $ENZO would be construed as the sale of a security (howsoever named), financial service or investment product and/or (ii) where participation in token distributions is prohibited by applicable law, decree, regulation, treaty, or administrative act (including without limitation the

United States of America, Canada, and the People's Republic of China); and to this effect you agree to provide all such identity verification document when requested in order for the relevant checks to be carried out.

The Company, the Distributor and the ENZO team do not and do not purport to make, and hereby disclaims, all representations, warranties or undertaking to any entity or person (including without limitation warranties as to the accuracy, completeness, timeliness, or reliability of the contents of the Token Documentation or the Website, or any other materials published by the Company or the Distributor). To the maximum extent permitted by law, the Company, the Distributor, their respective affiliates and service providers shall not be liable for any indirect, special, incidental, consequential or other losses of any kind, in tort, contract or otherwise (including, without limitation, any liability arising from default or negligence on the part of any of them, or any loss of revenue, income or profits, and loss of use or data) arising from the use of the Token Documentation or the Website, or any other materials published, or its contents (including without limitation any errors or omissions) or otherwise arising in connection with the same. Prospective acquirers of $ENZO should carefully consider and evaluate all risks and uncertainties (including financial and legal risks and uncertainties) associated with the distribution of $ENZO, the Company, the Distributor and the ENZO team.

$ENZO Token: $ENZO are designed to be utilized, and that is the goal of the $ENZO distribution. In particular, it is highlighted that $ENZO:

does not have any tangible or physical manifestation, and does not have any intrinsic value/pricing (nor does any person make any representation or give any commitment as to its value);

is non-refundable, not redeemable for any assets of any entity or organization, and cannot be exchanged for cash (or its equivalent value in any other digital asset) or any payment obligation by the Company, the Distributor or any of their respective affiliates;

does not represent or confer on the token holder any right of any form with respect to the Company, the Distributor (or any of their respective affiliates), or their revenues or assets, including without limitation any right to receive future dividends, revenue, shares, ownership right or stake, share or security, any voting, distribution, redemption, liquidation, proprietary (including all forms of intellectual property or license rights), right to receive accounts, financial statements or other financial data, the right to requisition or participate in shareholder meetings, the right to nominate a director, or other financial or legal rights or equivalent rights, or intellectual property rights or any other form of participation in or relating to the ENZO Network, the Company, the Distributor and/or their service providers;

is not intended to represent any rights under a contract for differences or under any other contract the purpose or intended purpose of which is to secure a profit or avoid a loss;

is not intended to be a representation of money (including electronic money), payment

instrument, security, commodity, bond, debt instrument, unit in a collective investment or managed investment scheme or any other kind of financial instrument or investment;

is not a loan to the Company, the Distributor or any of their respective affiliates, is not intended to represent a debt owed by the Company, the Distributor or any of their respective affiliates, and there is no expectation of profit nor interest payment; and

does not provide the token holder with any ownership or other interest in the Company, the Distributor or any of their respective affiliates.

Notwithstanding the $ENZO distribution, users have no economic or legal right over or beneficial interest in the assets of the Company, the Distributor, or any of their affiliates after the token distribution.

For the avoidance of doubt, neither the Company nor the Distributor deals in, or is in the business of buying or selling any virtual asset or digital payment token (including $ENZO). Any sale or distribution of tokens would be performed during a restricted initial period solely for the purpose of obtaining project development funds, raising market/brand awareness, as well as community building and social engagement; this is not conducted with any element of repetitiveness or regularity which would constitute a business.

To the extent a secondary market or exchange for trading $ENZO does develop, it would be run and operated wholly independently of the Company, the Distributor, the distribution of $ENZO and the ENZO Network. Neither the Company nor the Distributor will create such secondary markets nor will either entity act as an exchange for $ENZO.

Informational purposes only: The information set out herein is only conceptual, and describes the future development goals for the ENZO Network to be developed. In particular, the project roadmap in the Token Documentation is being shared in order to outline some of the plans of the ENZO team, and is provided solely for INFORMATIONAL PURPOSES and does not constitute any binding commitment. Please do not rely on this information in deciding whether to participate in the token distribution because ultimately, the development, release, and timing of any products, features or functionality remains at the sole discretion of the Company, the Distributor or their respective affiliates, and is subject to change. Further, the Token Documentation or the Website may be amended or replaced from time to time. There are no obligations to update the Token Documentation or the Website, or to provide recipients with access to any information beyond what is provided herein.

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