IASE Project – Concept Overview

The IASE Project (Intelligent Autonomous Space Entities) envisions a distributed network of intelligent nodes operating in space, interconnected through secure quantum and wireless communication links. The project aims to enable autonomous decision-making, decentralized data processing, and resilient communication for space missions, advanced Earth applications, and Web3-integrated environments.

Key Technologies

- Quantum-secured communication protocols

- Federated learning for distributed AI models

- Space-based energy harvesting and transmission

- Self-repairing autonomous satellite systems

- Smart contracts and decentralized infrastructure for mission governance

- Integration with tokenized ecosystems and functional NFTs

Development Roadmap

Within 10 years (by 2035): Early-stage quantum satellite networks and federated AI-enabled constellations, with initial token integration and decentralized communication nodes.

Within 20 years (by 2045): Large-scale autonomous AI infrastructure in orbit, including token-governed operations and NFT-linked mission modules.

Within 30 years (by 2055): Full AI-driven interplanetary communication, intelligence, and Web3-based resource and coordination frameworks.

Contact & Further Information

Project Website: https://iaseproject.com

Zenodo Publication: https://zenodo.org/records/14993586

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