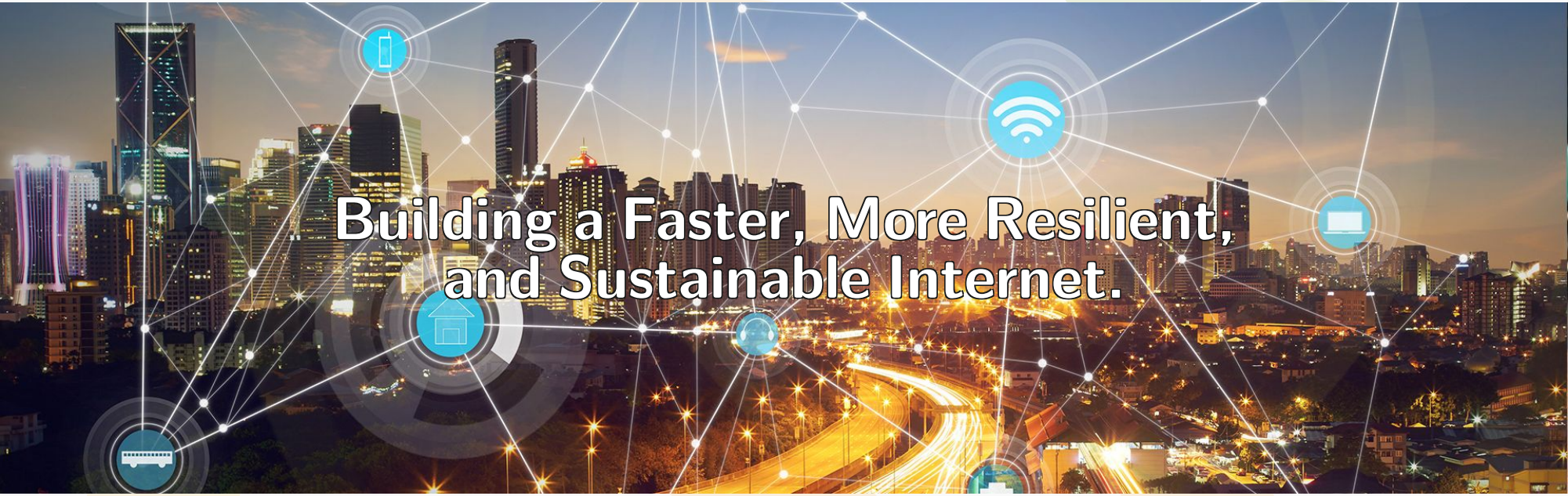
Internet of Edges (IoE)

Building a Faster, More Resilient, and Sustainable Internet.

By Green Communications

Internet of Edges



Enhanced
Performance

Innate
Resilience

Intrinsic
Security

Core
Sustainability

Technology



AUTONOMOUS EDGE NETWORK

A self-sufficient network composed of a constellation of interconnected edge devices, enabling autonomous, high-bandwidth, real-time local communication without relying on any existing network infrastructure.

EMBEDDED EDGE SERVICES

Servers and services are embedded and distributed across edge devices, optimizing response times, eliminating the need for remote resources, and creating systems with no single point of failure.

LOW POWER EDGE DEVICES

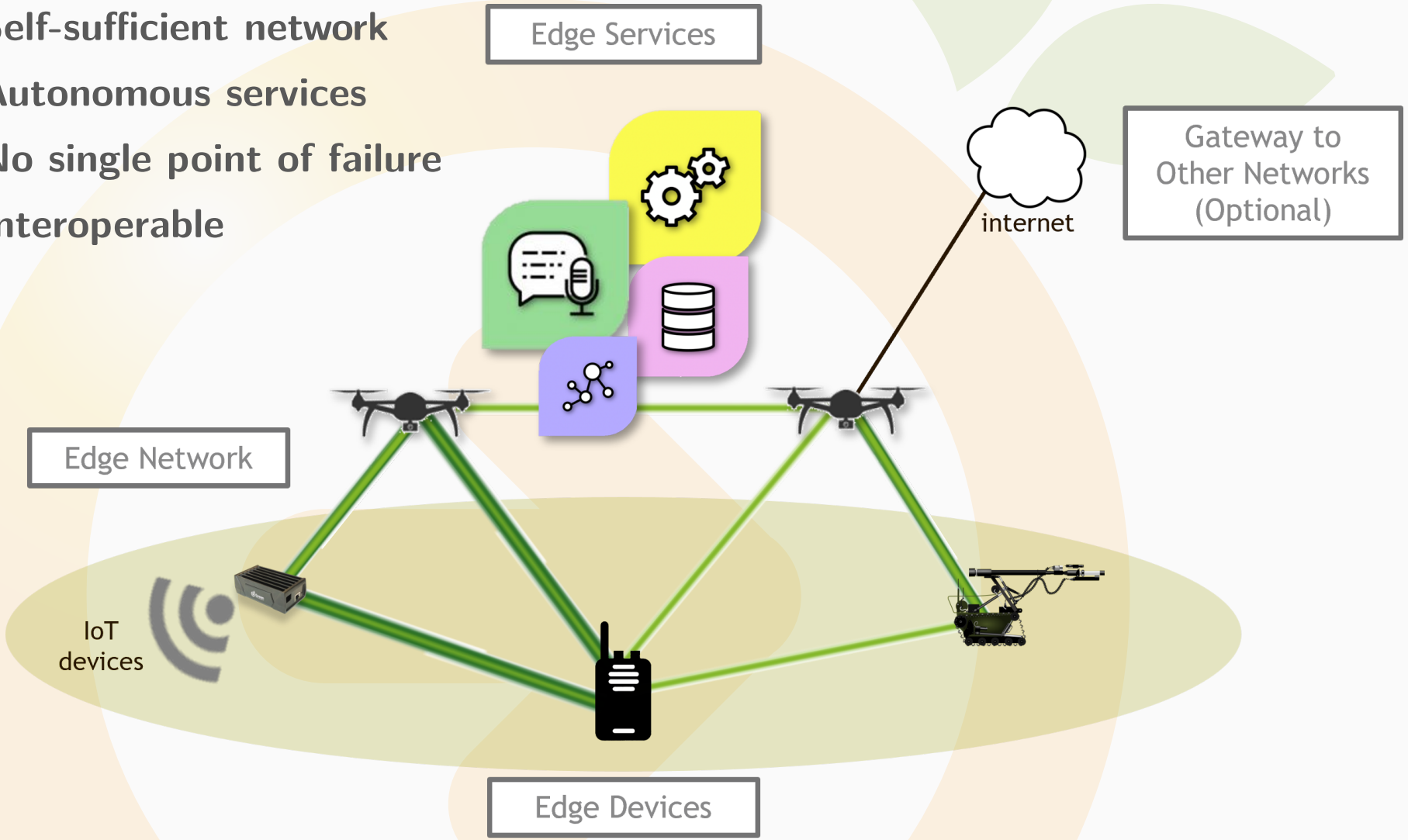
The Internet of Edges functions on very low-power, resource-constrained edge devices. It can be implemented either as software directly integrated into the systems of drones, robots, radios, and similar devices, or as an additional device positioned one hop away from end-user devices.

SCALE & INTEROPERABILITY

Autonomous yet interoperable, the Internet of Edges (IoE) federates edge devices both locally and across multiple locations.

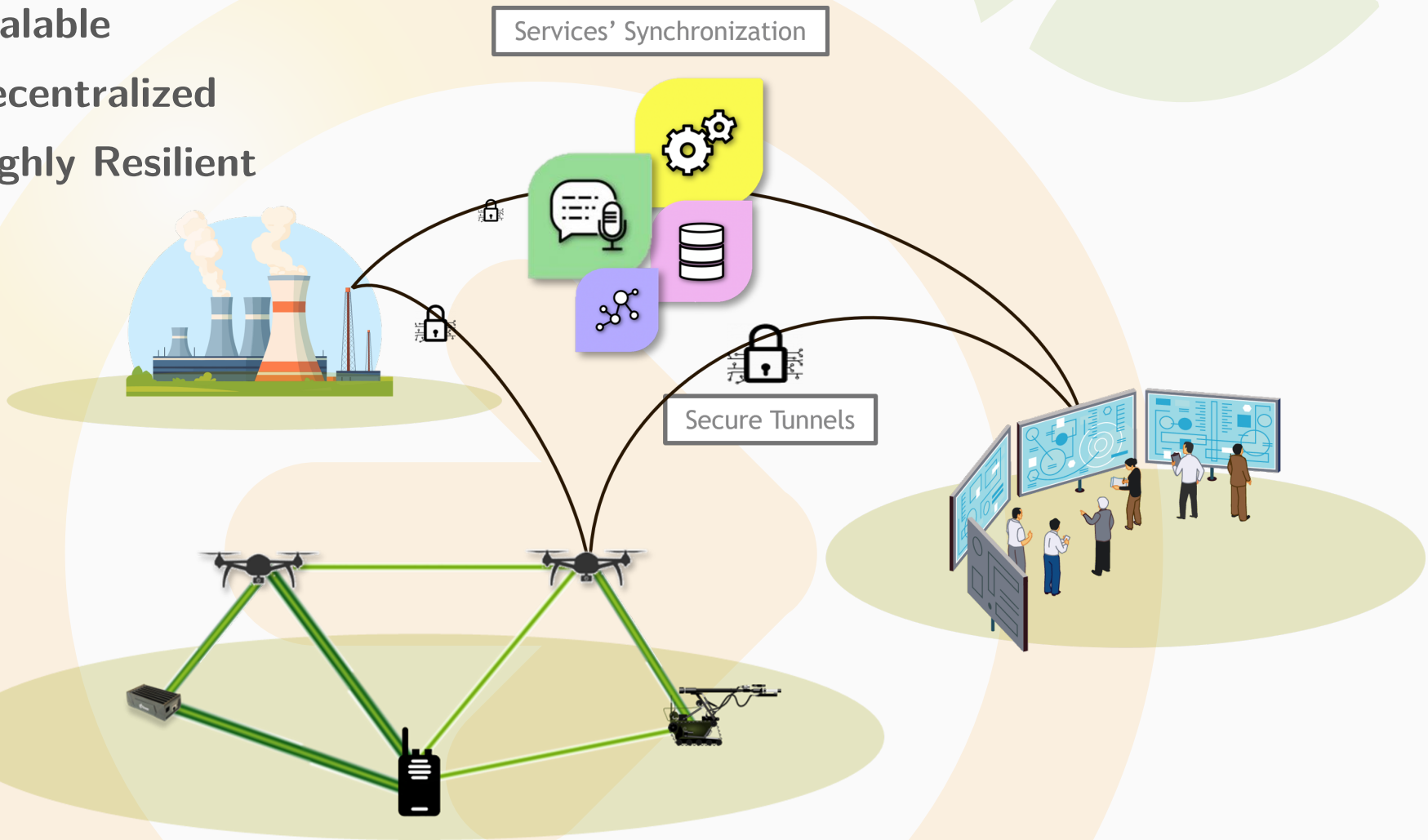
Edge Deployment

- ✓ Self-sufficient network
- ✓ Autonomous services
- ✓ No single point of failure
- ✓ Interoperable



Multi-Edge Deployment

- ✓ Secure
- ✓ Scalable
- ✓ Decentralized
- ✓ Highly Resilient



Products

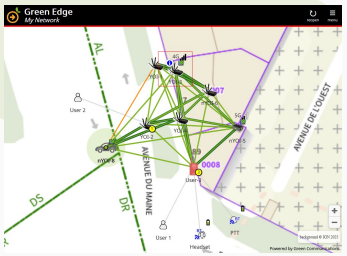
GreenSoft is being used by French Armed Forces

GREENSOFT

Software suite to create an Internet of Edges on customer hardware.

GreenSoft enables your hardware to connect directly and wirelessly with nearby edge devices, share resources, and access edge-based digital services without relying on existing infrastructure or a central server.

Edge-based services included: voice and text communication, file sharing, network visualization, user geo-location, blockchain, multicast, and more.





EDGE DEVICES

Ready-to-Use Edge Devices Equipped with GreenSoft Technology.



≈ 4.5 W
315 g
Quad Core

nYOI



≈ 8 W
480 g
Quad Core

nYOI with 5G modem

Wi Fi 6e 5G
Wi Fi 6 4G
Wi Fi 4

Interfaces

GPS
Bluetooth
Battery
Accessories

Optional Features

Performances

PATENTS

The Internet of Edges (IoE) is the result of 20 years of research and a technology transfer from top French universities (Sorbonne University and Paris-Saclay University) and the CNRS. The IoE technology is protected by **patents in Europe, USA and Japan**. IoE products have been commercialized for 15 years in multiple market applications.

PERFORMANCES

IoE delivers exceptional performance in:

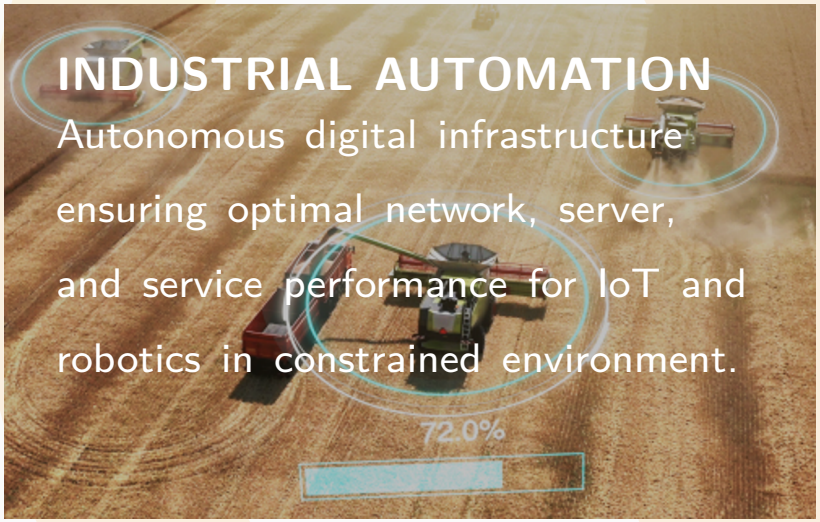
- **Network robustness**, enabling real-time video transfer across up to 30 wireless hops (compared to the state-of-the-art limit of fewer than 5 hops).
- **Energy efficiency**, with edge devices consuming 5W of power (versus the state-of-the-art ∼15W).
- **Carbon footprint reduction**, cutting greenhouse gas (GHG) emissions per GB transmitted by up to 16 times compared to cloud-based solutions*.

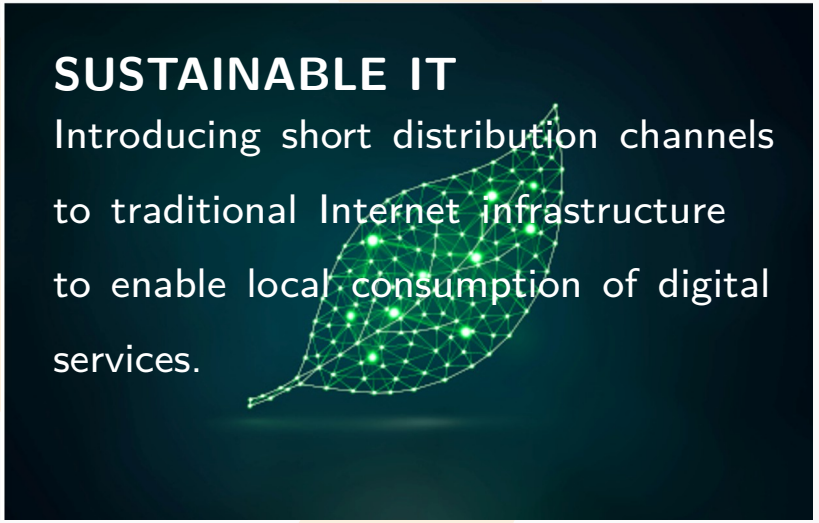
* https://doi.org/10.1007/s12243-024-01061-1

Markets


TACTICAL COMMUNICATIONS
IoE is digitizing and automating battlefield and rescue operations.
AS USED BY FRENCH ARMED FORCES


CYBER RESILIENCE
Alternative digital infrastructure designed to restore critical services immediately after a cyber-attack.


INDUSTRIAL AUTOMATION
Autonomous digital infrastructure ensuring optimal network, server, and service performance for IoT and robotics in constrained environment.
72.0%


SUSTAINABLE IT
Introducing short distribution channels to traditional Internet infrastructure to enable local consumption of digital services.

They Trust Us



Contact

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ABOUT US: Green Communications is a French deeptech company specializing in the resilience, sovereignty, and sustainability of digital infrastructures. The company develops innovative solutions based on edge computing, mesh networks, and distributed systems, enabling autonomous communication in complex environments while minimizing resource consumption. Green Communications' products are used by armed forces, major civil security stakeholders, operators of critical and sensitive infrastructures, the mobility sector, and healthcare organizations, among others. The company was founded in 2010, building on technology transfers from leading French institutions, including Sorbonne University, Paris-Saclay University, and the CNRS.