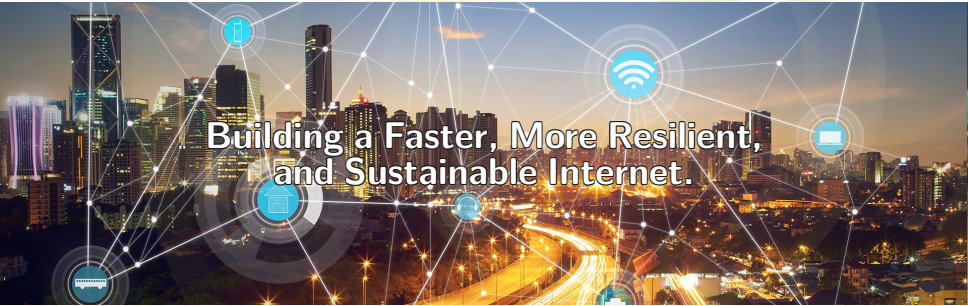




Internet of Edges (IoE)

By Green Communications

Internet of Edges



Building a Faster, More Resilient,
and Sustainable Internet.



**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

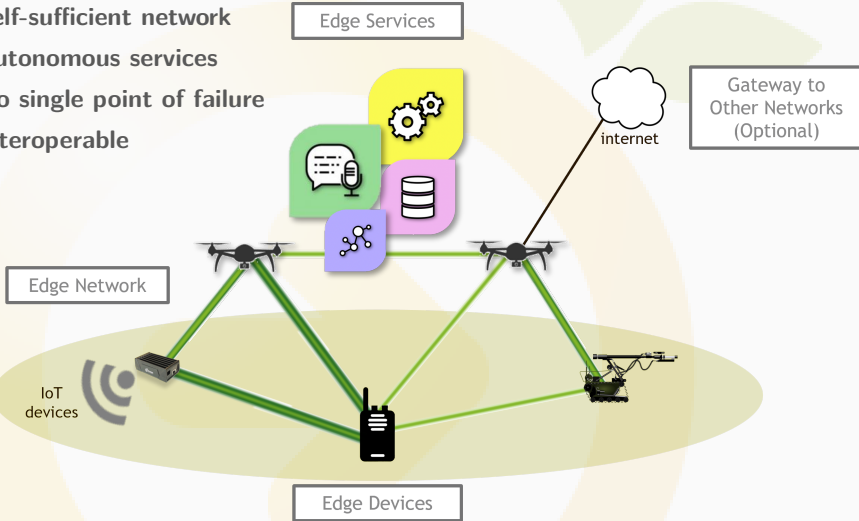
The Internet of Edges functions on very low-power, resource-constrained edge devices. It can be implemented either as software directly integrated into the systems of drones, robots, radios, and similar devices, or as an additional device positioned one hop away from end-user devices.

SCALE & INTEROPERABILITY

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

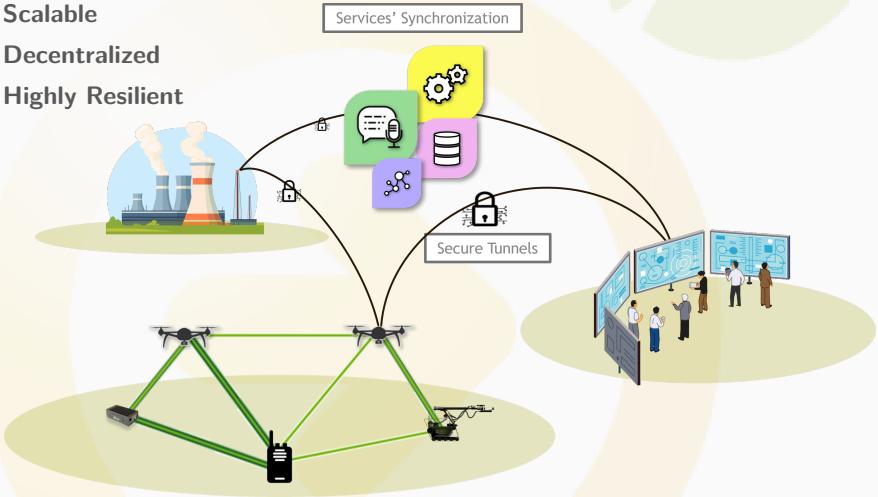
Edge Deployment

- ✓ 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.



 <p>Wi-Fi 6e Green</p> <p>≈ 4,5 W 315 g Quad Core</p> <p>nYOI</p>	 <p>Wi-Fi 6e 5G Green</p> <p>≈ 8 W 480 g Quad Core</p> <p>nYOI with 5G modem</p>
---	--

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 $\sim 15W$).
- **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



CYBER RESILIENCE

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

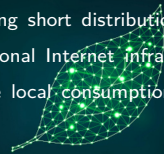
INDUSTRIAL AUTOMATION

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

GREEN COMMUNICATIONS

PARIS, France

contact@green-communications.fr

<https://green-communications.fr>

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.