







## EXECUTIVE SUMMARY

Edge Spark® delivers uninterrupted on the move connectivity for ambulance fleets across Timor-Leste ensuring continuous GPS, telemetry and live video from pick up to hospital, even in zero network zones

#### Why It Matters

Eliminates communication failures in severe monsoon rains, mountainous terrain and frequent road washouts and landslides

Supports faster triage, real-time specialist input and improved hospital load balancing
Proven uptime
99.5%+ using bonded Starlink + 5G/4G

#### **The Outcome**

A fully connected ambulance fleet that reduces delays, improves patient outcomes, strengthens command centre coordination and increases EMS operational reliability across all terrains Supports SNAEM dispatch, GPS visibility and hospital triage coordination

#### **Seamless Integration**

Installs in 60 minutes per vehicle
No changes to OEM wiring
Fully API-ready with no modification to dispatch
software
Scalable for district and country wide EMS
rollouts

#### **Internal Router**

EN61000 Electromagnetic Compatibility Certification





## STARLINK INTEGRATED FIELD TESTED MILITARY GRADE VEHICLE MOUNTED

### CONNECTIVITY FOR EVERY AMBULANCE

Field tested
Always-on
On-the-move connectivity





# AMBULANCE CHALLENGES IN TIMOR-LESTE

Edge Spark® connectivity can create a platform of solutions

Reduces loss of ambulance telemetry and dispatch data due to network gaps

Faster triage, faster dispatch and improved patient outcomes

Live video from ambulance to command centre

Continuous GPS + telemetry even in zero-network zones

Seamless switch between Starlink / 5G / 4G with no dropouts

"On-the-Move" connectivity for the full emergency run

Edge Spark® supports operational needs of SNAEM, municipal EMS teams and hospital emergency departments



WWW.FNCPROJECTS.COM



# FLEET INTEGRATION & DEPLOYMENT

Fleet integration and deployment enables rapid, coordinated rollout of Edge Spark® units across diverse vehicle fleets, ensuring consistent connectivity and operational readiness

Systems are preconfigured for plug-and-play installation, allowing seamless mounting on ambulances, 4WDs and mobile command units

Centralised monitoring supports real-time performance oversight, while modular hardware enables flexible redeployment across high-priority zones

Compatible with Hilux, Land Cruiser and other 4WD platforms commonly used across Timor-Leste



Scaling ambulance fleets
Expanding district or
state command centres

Powered from 12V/24V ambulance system

Minimal load







# TECHNICAL INTEGRATION WITH TIMOR-LESTE AMBULANCE SYSTEMS (SNAEM)

#### API-ready

No change needed to existing dispatch software

API-ready integration enables seamless data exchange with existing dispatch systems, requiring no software changes. It connects instantly, maintaining full compatibility while enhancing operational capability and workflow efficiency

EdgeSpark installs without modifying OEM wiring

#### Compatible with any on-board hardware

The system connects effortlessly to existing vehicle electronics, sensors and communications equipment without modification, ensuring seamless integration across all fleet types

#### Internal Router

EN61000 Electromagnetic Compatibility Certification

#### Setup takes under 60 minutes per vehicle

Enabling rapid deployment. The system mounts easily, configures automatically, and becomes operational immediately without disrupting existing fleet operations

EdgeSpark requires no body modification or OEM wiring changes



## CURRENT CHALLENGES

Black spots in rural, hilly and remote rural aldeia roads and mountain corridors

Network congestion or unavailability during heavy rain, power outages and emergencies

No connectivity during monsoons, flash floods

Difficulty transmitting patient data while vehicles are moving

Delays in dispatching specialist support due to connectivity gaps

## SOLUTIONS

LEO satellite + 5G/4G bonded signal avoids dropouts

Continuous comms from pickup to hospital Vehicle-mounted Connect Pod = real "Connected Ambulance"

Supports Starlink Professional (32-country smooth roaming)

Field and emergency services tested military grade routing, data protection, EMR integration ready





## Realtime Coordination with SNAEM Dispatch / National Ambulance Coordination

Supports mass-casualty command centre load balancing

Reduced ambulance turnaround time

Live patient vitals transmission

On-the-move telemedicine

Continuous stable communications in floods,

landslides, severe monsoon storms, flash

floods and road closure events

Reliability in "zero G" pockets common in Timor-Leste

In mass-casualty events mobile networks often fail

Edge Spark® Connect Pod™ ensures the ambulance network remains operational enabling coordinated live triage and hospital load balancing



# FIRST RESPONDERS TO MAJOR CLIMATE EVENTS

#### Edge Spark® connectivity comes into its own in high risk areas

Suggested Test Routes

Suai-Ainaro corridor (critical humanitarian corridor) Los

Los Palos-Tutuala

Dili – Gleno – Ermera corridor

Liquiçá – Bobonaro

Baucau - Viqueque

Maubisse – Ainaro

#### Scenario

A landslide cuts off 4G/5G connectivity for several hours. An ambulance responding to a trauma call is unable to transmit vitals or GPS location to the command centre. Dispatch could not coordinate with the nearest trauma unit. Opportunity with Connect Pod:

- Satellite + bonded 5G link provides uninterrupted telemetry
- Live video sent directly to medical command / Specialist advice delivered before patient arrival
- Ambulance turnaround time reduced / The trauma unit was pre-alerted and ready on arrival

#### **Outcome:**

Faster triage, faster mobilisation, and uninterrupted situational awareness despite total network collapse.





## SHARED VISION UNITED ACTION

Our partnership delivers a highly reliable, field-proven connectivity solution specifically for Timor-Leste EMS operations. Network Equity and Edge Spark® combine operational experience, technical capability and deployment support. This supports ambulance fleets maintaining uninterrupted communication in the most challenging terrain and network conditions

Edge Spark® provides field and emergency services tested military grade, on-the-move connectivity with bonded satellite/5G/4G links, ensuring uptime even in black spots, disaster zones and high-congestion areas

This enables command centres to retain full visibility of fleets, transmit live patient data and coordinate hospital load balancing without interruption

For ambulance operators, the value is clear. Reduced communication failures, faster triage decisions, improved dispatch accuracy and more predictable operational performance across the entire emergency run







## THE COMPLETE PACKAGE

### DATA SECURE EASE OF ACCESS MOBILE OPTIONS

### CONNECT™

Edge Spark® Connect™ makes LEO and 5G bonded connectivity fast and easy to deploy. Edge Spark® Connect™ integrates a Starlink terminal, 5G modem, enterprise grade router, and Wi-Fi access point inside a ruggedised, weatherproof enclosure.



Up to 250 devices can connect through one Edge Spark® Connect™ unit, but we recommend one unit per 100 people for equitable and fast internet access.

### CONNECT LITE™

Portable connectivity for small teams.

Edge Spark® Connect™ models share a common technology core. Each model is optimised for the size, weight, and power constraints of different operating models and environments.



Lightweight connectivity Network access to dispersed groups

WEATHERPROOF AND SUITABLE FOR COASTAL AND MOUNTAIN CONDITIONS COMMON TO TIMOR-LESTE





## THE COMPLETE PACKAGE

### CONNECT POD™

Enable on-the-move connectivity for any vehicle. Edge Spark®

Connect Pod transforms any vehicle into an on the move

communications node.

Powered directly from 12V or 24V vehicle source



#### SOLAR GENERATOR™

Edge Spark® Solar Generator creates a source of battery power in the harshest environments on earth. Deployable and fully scalable, powers Edge Spark® product off-grid with this modular, solar blanket powered generator



WEATHERPROOF AND SUITABLE FOR COASTAL AND MOUNTAIN CONDITIONS COMMON TO TIMOR-LESTE



## HOW WE WORK

Deployment support available with Timor-Leste-based implementation partners

We provide a streamlined procurement and deployment model tailored for ambulance fleets

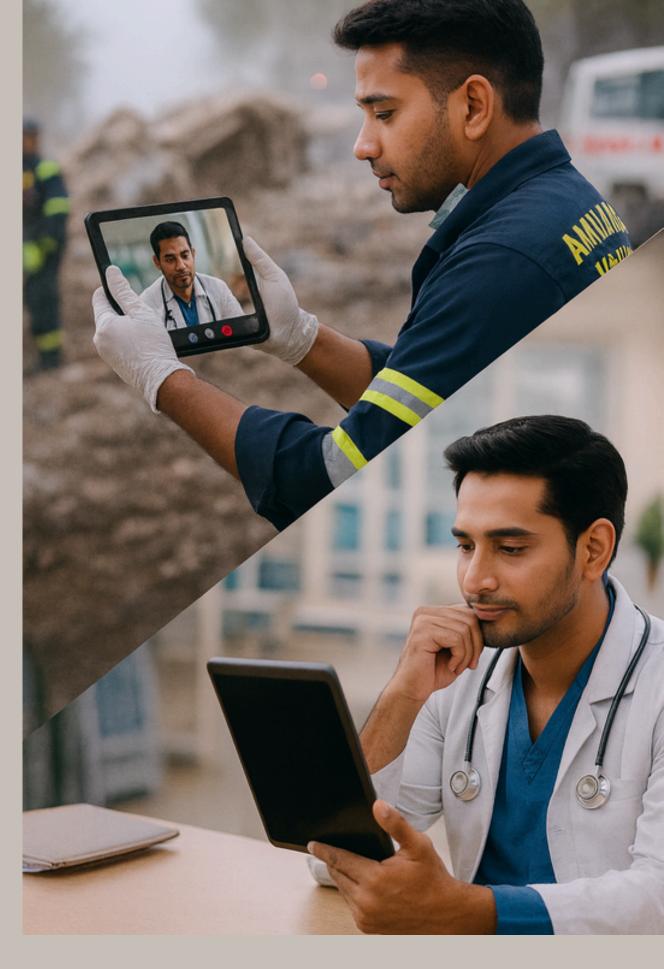
Edge Spark® installs in under 60 minutes per vehicle without affecting OEM warranties Bonded satellite cellular architecture delivers 99.5%+ uptime across all terrains

Service reliability is ensured through clear SLAs and optional AMCs with Timor-Leste based field support

Integration requires no software changes, enabling immediate operational benefits and a low-risk, scalable upgrade path for command-centre and fleet connectivity

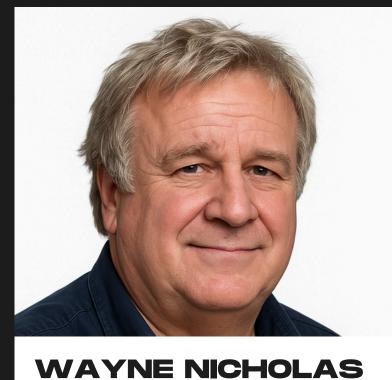
#### Internal Router

EN61000 Electromagnetic Compatibility Certification





## ABOUT NETWORK EQUITY



WAYNE NICHOLAS
Founder

Network Equity designs integrated programs that extend digital access to communities of all sizes, supported by high-reliability connectivity that enables participation and wellbeing in remote settings. Our work spans health, education, disaster resilience and livelihoods, combining practical technology deployment with community-led implementation.

All programs are modular, scalable and rapid to adopt, ensuring underserved communities gain lasting digital access, capability and inclusion

Wayne is a senior practitioner 35+ years in remote operations, digital inclusion and complex access support

Planning for Timor-Leste focuses on digital inclusion, emergency systems strengthening and connectivity for health education and remote communities

## KEEP CONNECTED WITH US

RFQ, pilot site selection and deployment planning

#### **Executive Engagements**

Wayne Nicholas
Founder
ceo@fncprojects.com

#### **Commercial Implementation**

Pat Brady
Commercial Officer
pbrady@fncprojects.com

www.fncprojects.com

Network Equity is a Social Enterprise of FNC Projects (Australia)



