

PacNOG 37



THE PACIFIC CONTEXT

BALANCING GROWTH WITH GEOGRAPHIC REALITY

FIJI - APU (AVERAGE PER USER) HEAT MAP

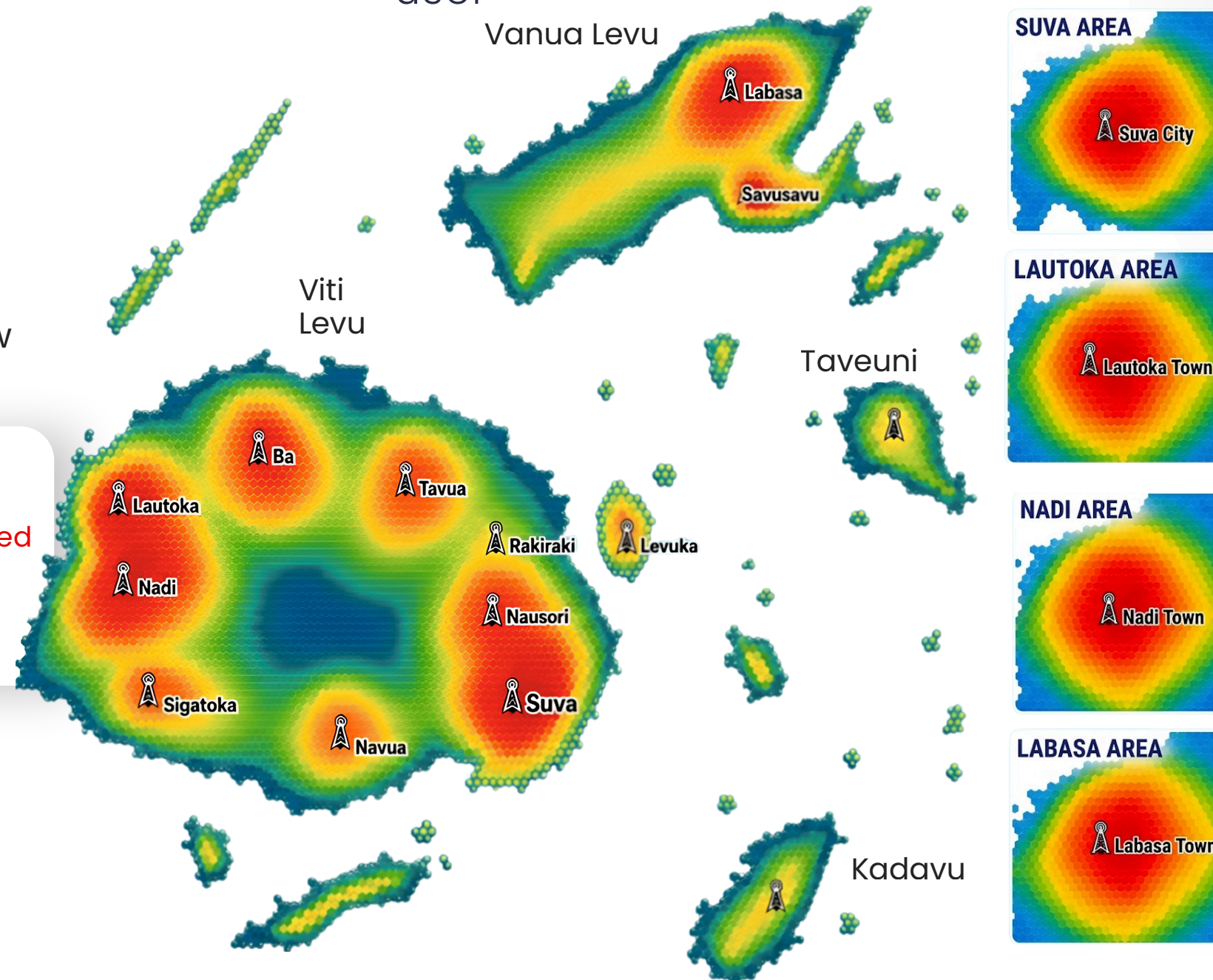
Average mobile data usage per user

KEYS

- APU High
- APU High
- APU Medium
- APU Low
- APU Very Low

i NOTE

The heat map is based on sample data for illustration purposes only. Actual values may vary.



IN A NUTSHELL...

- Smaller islands are seeing massive data demand spikes shifting from simple mobile connectivity to heavy data-reliant services.
- High cost of deployment over dispersed geographies, connecting remote communities requires disproportionate Capex relative to population density.

INFRASTRUCTURE RESILIENCE

THE HARD REALITY OF THE LAST MILE BALANCING



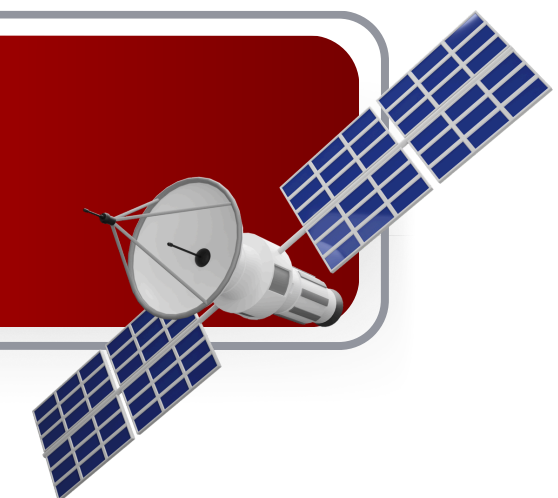
Category 5
cyclone design
requirements



Diesel to hybrid
solar/battery migration



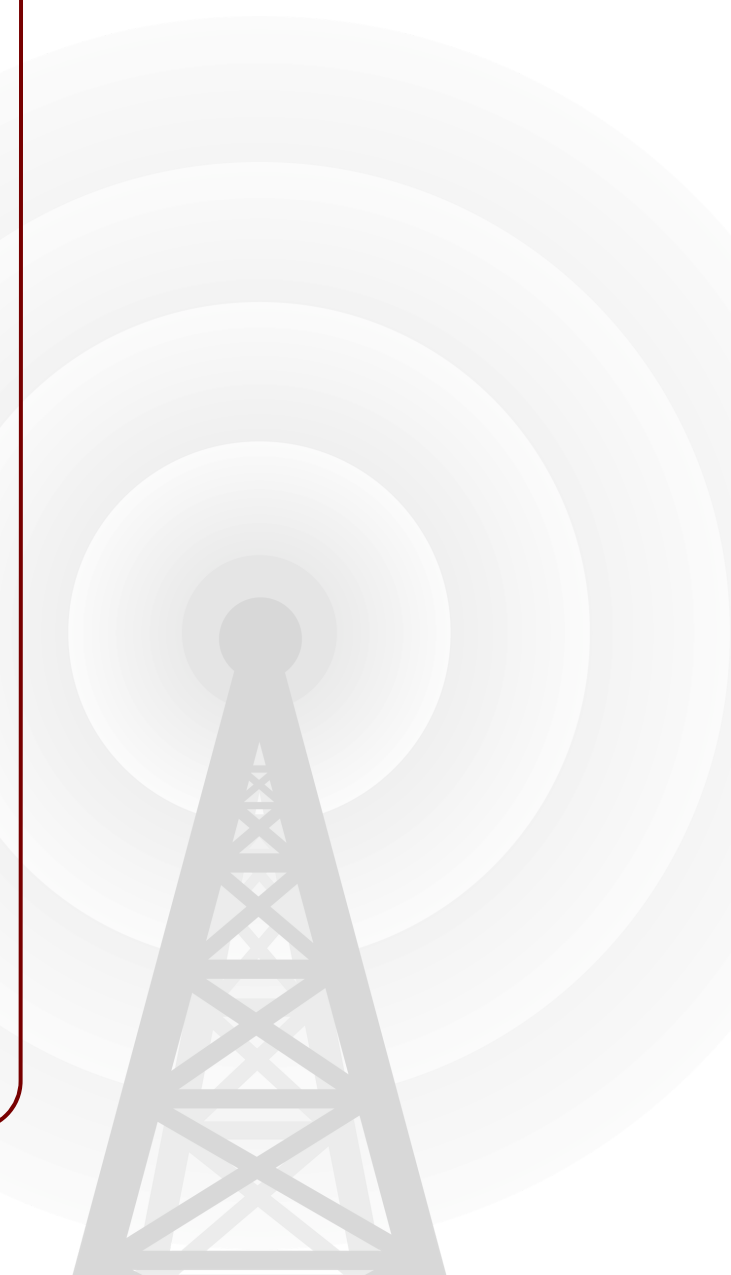
Fiber where possible,
microwave/satellite
where necessary



OPERATIONAL BOTTLENECKS & THE CAPACITY CRUNCH



- Maximizing existing allocations, managing interference and limited cell radius over dense or forested terrain
- Managing the co-existence of 3G/4G infrastructure while deploying 5G frameworks
- Rise in cyber threats, DDoS vulnerabilities and urgent need to deploy robust network monitoring.



THE CAPEX VS ARPU PARADOX

HIGH INVESTMENT, LOW RETURNS – THE CHALLENGE OF RURAL CONNECTIVITY

High CapEx

A single robust greenfield tower site in a remote/rural area can exceed

excessively high cost to build, clear and power



High Investment
Tower, power, backhaul,
logistics, maintenance



**LONG
ROI
CYCLE**



Small Customer Base
Low ARPU, slow revenue
growth

Low ARPU

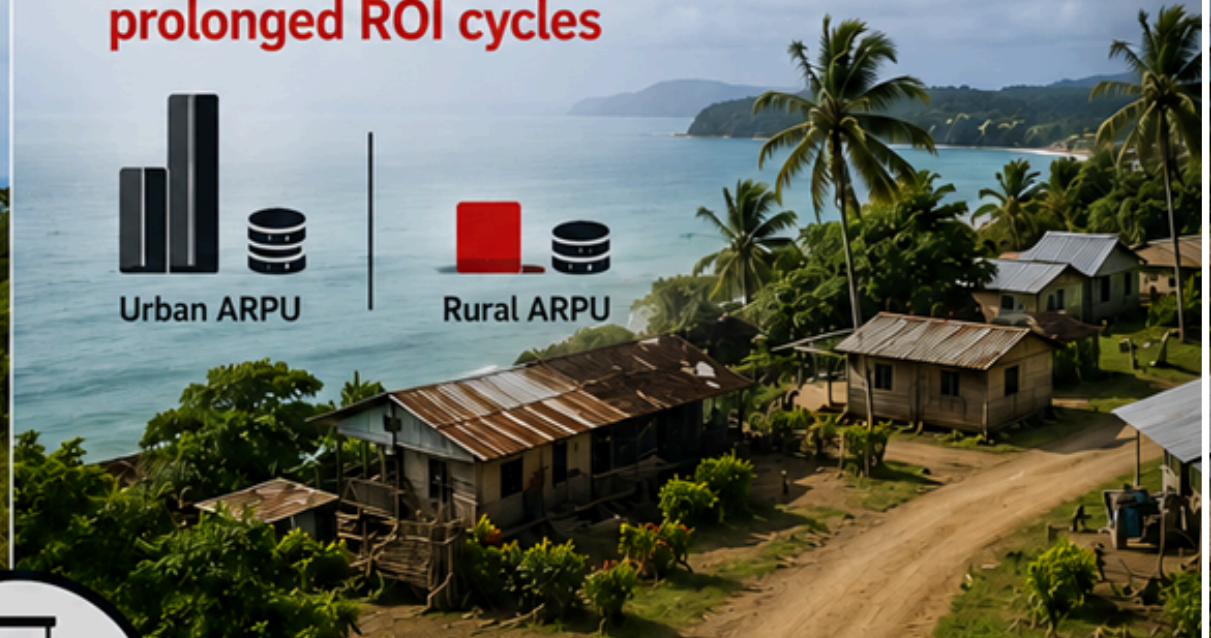
Remote rural markets yield a fraction of urban ARPU, creating incredibly **prolonged ROI cycles**



Urban ARPU



Rural ARPU



- A single robust greenfield tower site in a remote or rural area can easily exceed USD 150,000 to build, clear, and power.
- Remote rural markets yield a fraction of urban ARPU, creating incredibly prolonged ROI cycles
- If we as operators cannot find cost efficiencies, rural communities risk falling into a technology gap while urban areas enjoy high speed fiber and 5G services.

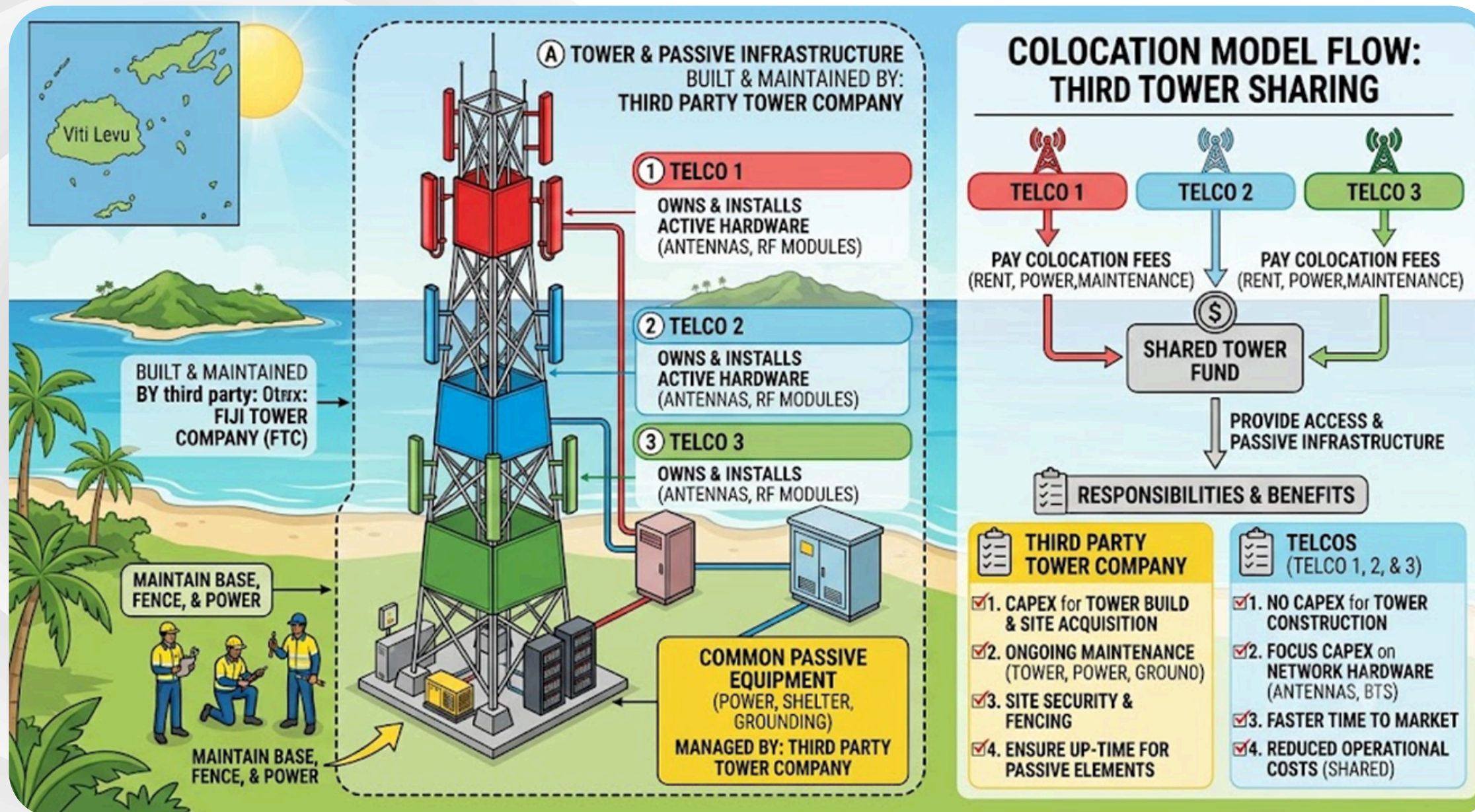


Without cost efficiencies, rural communities risk falling into a technology gap while urban areas enjoy high speed fiber and 5G services.



5G

THE PATH FORWARD – COLLECTIVE NEEDS AND SHARED MODELS



- Moving beyond simple passive collocation, we need to engage the relevant ministries and stakeholders to establish a coordinated framework for tower construction and ongoing maintenance. This allows telcos to focus investment on active hardware and collocation costs, while national partners support the civil and structural components.
- Establish closer regional peer-to-peer security networks to share real-time telemetry on cyberattacks.
- Leveraging platforms like PITA and APINIC to continuously upskill local engineers, keeping pace with technology advancements