MANGOSAT

MANAGED POWER & CONNECTIVITY HUBS FOR OFF-GRID LOCATIONS

Engineered and tested in the Netherlands. Trusted in the field.

BUILDING THE INFRASTRUCTURE THAT AFRICA CANNOT AFFORD TO LIVE WITHOUT

By: Onno Beemsterboer

Rev 1.0 – 28 july 2026 – request@mangosat.com

MANGOSAT

an infrastructure operating company

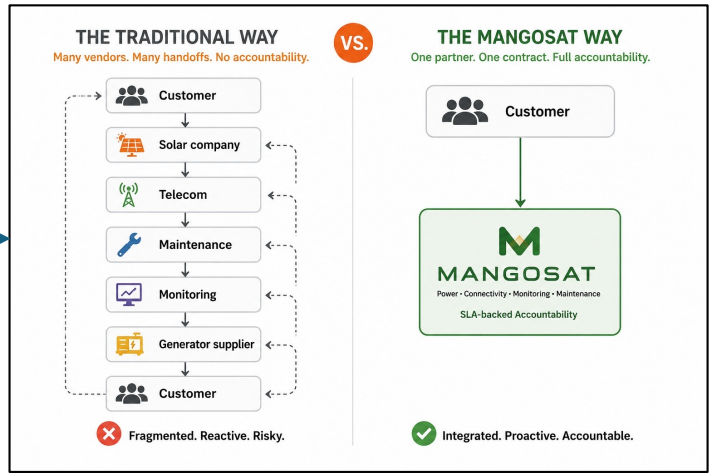
AN INVITATION TO EXPLORE THE OPPORTUNITY IN AFRICAN INFRASTRUCTURE

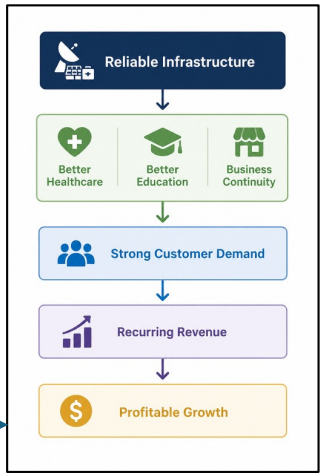
This presentation introduces the Mangosat vision, the market challenge, and why the timing is right. It explains our solution, our business model, and how we plan to scale.

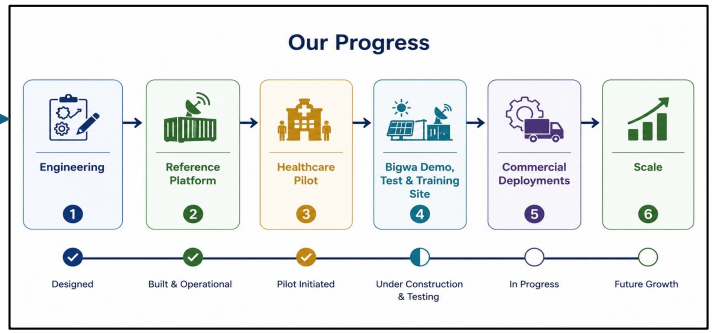
It is designed to start a conversation with potential investors, partners, and customers, not to answer every question.

Detailed business plans, financial models, technical specifications, and investment information are available to qualified investors and strategic partners upon request.

EXECUTIVE SUMMARY







THIS IS MANGOSAT

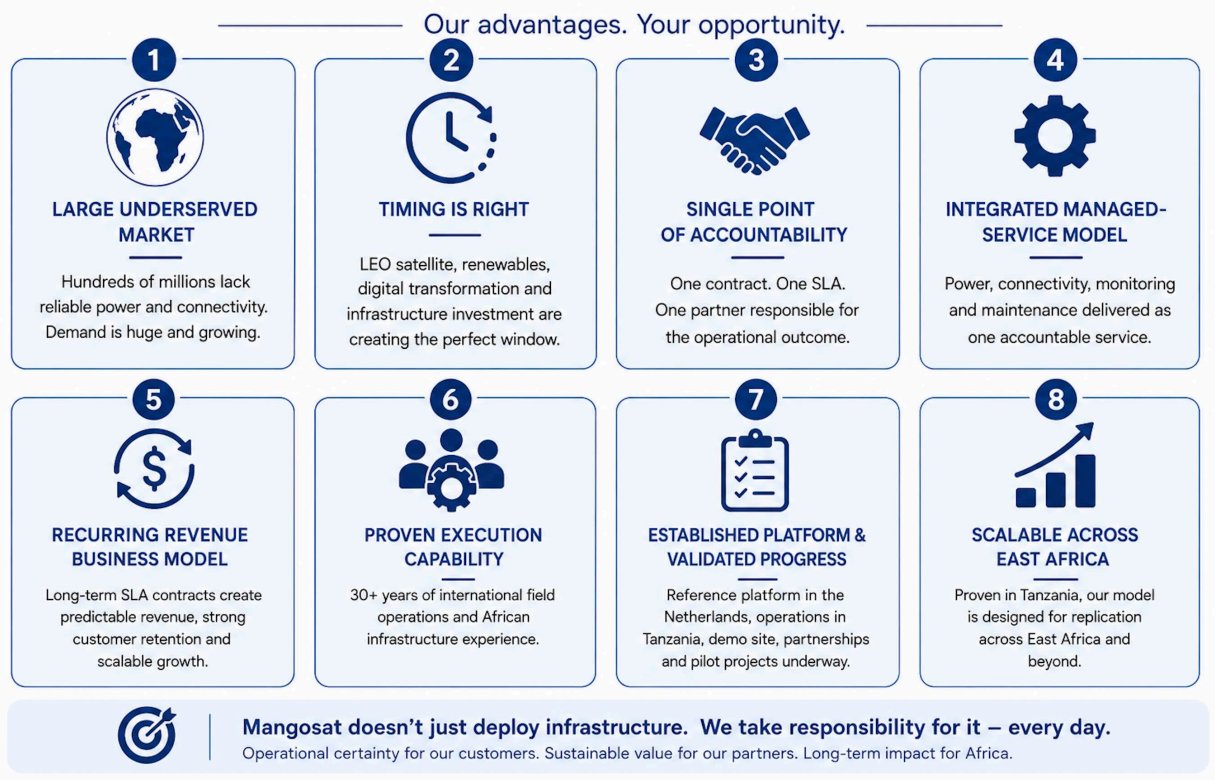
Building East Africa's most trusted managed power & connectivity infrastructure company, starting in Tanzania.

What defines Mangosat:

- ✓ **Operational certainty.**
- ✓ **Long-term responsibility.**

Which is also the foundation of healthcare, agriculture, education and economic development.

Mangosat exists to make it work.



THE REALITY IN AFRICA...

...is our opportunity.

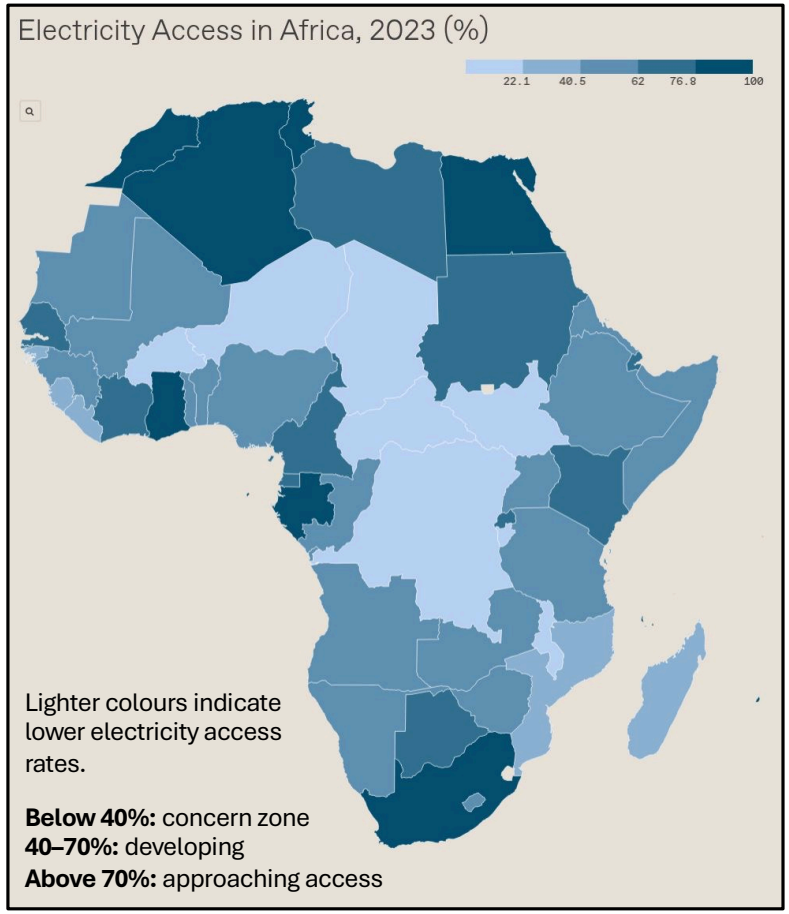
The situation: 560 million people in Sub-Saharan Africa lack electricity. In rural areas alone, 447 million have no access to power, and the pace of progress has slowed so dramatically that the region must *triple* its electrification rate to meet 2030 targets.

The problem isn't technology or funding: The World Bank documents a 30-40% failure rate for rural electrification projects within five years. The main issue is the lack of professional operations and maintenance.

Improvement requires long-term operational responsibility for outcomes that cannot be fully controlled without organisation. Equipment suppliers avoid it, telcos aren't structured to provide, and local contractors lack the standards.

Africa is a BIG market and its population is growing. **Closing the gap** is both a commercial opportunity and a development imperative.

Source: Tracking-SDG-7-The-Energy-Progress-Report-2026



WHY EXISTING SOLUTIONS FAIL

Technology is abundant.
Operational certainty is rare.

Most rural systems rely on:

- Inefficient diesel / petrol generators.
- DIY solar systems; poorly designed, badly installed, and unmonitored.
- Poor or no connectivity.
- Multiple disconnected suppliers.
- Lack of skills and limited (or no) maintenance.

This combination leads to a high failure rate as many projects become “**deploy and hope**”.

The cost of failure - wasted investment, lost services, community harm, and expensive replacement - far exceeds the original infrastructure cost.

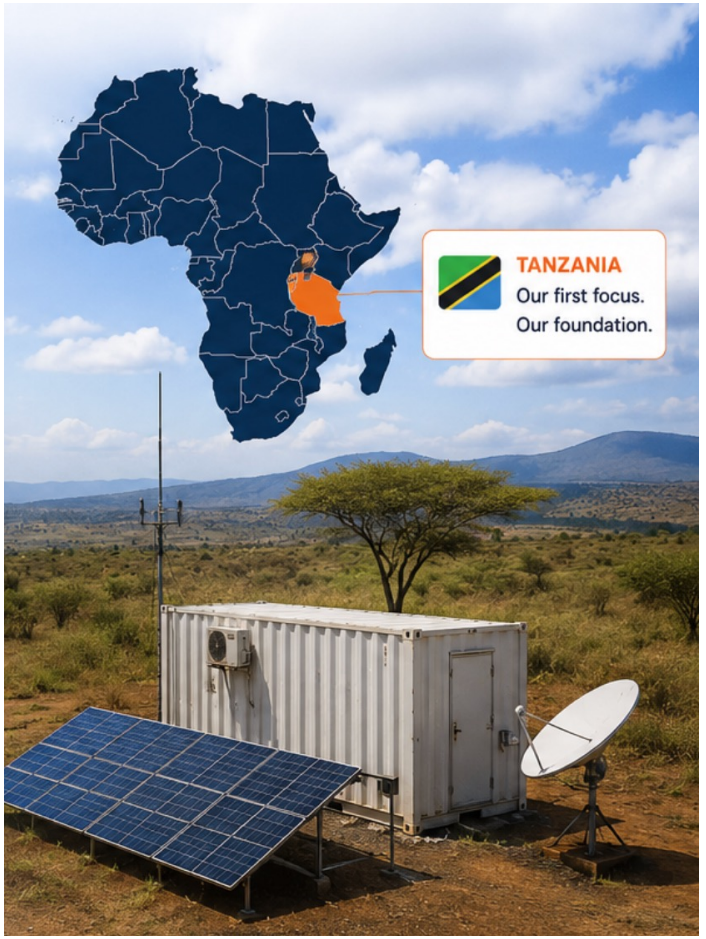
BUILDING INFRASTRUCTURE THAT WORKS

Mangosat is not just selling equipment, and we are not a systems integrator only. We are building networks that work.

What we do: We design, deploy, monitor, and maintain integrated power and connectivity solutions delivered as one accountable managed service.

- **Where:** Our first focus is Tanzania**.** We are there, established, and it is where we are needed most. Once proven successful East Africa is next.
- **Our promise is simple:** Customers shouldn't have to manage critical systems - they should be able to rely on it.

We're ambitious, but realistic. We believe disciplined execution, not technology, determines long-term success.



OUR SOLUTION: RIGHT-SIZED INFRASTRUCTURE

Purpose-built power & connectivity hubs.
Sized for the mission, not the catalogue.

Mangosat offers two complementary products:

1. Modular Hubs: Rapid deployment for clinics, schools, farms, and community centres. Deployed in weeks. Scalable as needs grow.

2. Containerised Hubs: Enterprise-scale power and connectivity for hospitals, government offices, NGO operations, and research stations. Built for mission-critical applications. Engineered to last.

One standard. Two scales. No compromise on reliability: Both products are delivered under the same service model, the same monitoring platform, and the same accountability framework.

Modular Hub
Flexible, fast, scalable

Containerised Hub
Robust, enterprise-ready, relocatable

OPERATIONAL CERTAINTY

Most providers sell equipment, minutes, or megabytes only.

Every Mangosat deployment will include:

- Dutch engineering standards: professional design, installation, and (preventive) maintenance.

And full accountability after commissioning:

- 24/7 remote system monitoring & control (M&C) and field service management from Dar es Salaam.
- Backup M&C and on-going technical support.

Mangosat = One Accountable Managed Service.

Because our predictive monitoring platform generates proprietary real-time performance data, problems are identified and resolved, often before users notice them.

Our customer never needs to ask: 'Who is responsible?' The answer is always Mangosat.

WHY NOW: THE MARKET IS REACHING A TIPPING POINT

What was difficult yesterday is commercially viable today.

For decades, delivering reliable infrastructure to remote communities was constrained by cost, technology, and complexity. Today, those barriers are rapidly disappearing:

- Affordable LEO satellite connectivity is transforming rural backhaul and makes cloud monitoring possible.
- Better solar and battery technology at lower costs.
- Mobile money enables digital service delivery.
- Governments are accelerating digital transformation.
- Public and donor investment is increasing rapidly.
- Demand for resilient infrastructure continues to grow.

The opportunity is no longer about technology. It's about execution.

Independent research confirms the opportunity.

The June 2026 Tracking SDG-7 Energy Progress Report, produced jointly by IRENA, the World Bank, the IEA, and the WHO concludes:

- Distributed renewable solutions are cost-effective.
- Africa must *triple* its electrification pace.
- Investments are increasing.
- Implementation capacity is limited.

Mangosat believes rural projects are evolving from one-time, donor-funded installations to professionally managed, commercially sustainable services.

This creates chances for companies that can deliver reliable platforms, not simply install equipment. Execution will determine who succeeds. Mangosat is built for that challenge.

MARKETS WE SERVE

Designed for Africa. Engineered for the field, not the lab.

Mangosat systems are purpose-built for remote and underserved locations where NOTHING can be taken for granted.

- Built for harsh environments; heat, dust, humidity, and typical security issues.
- Deployed and maintained by trained local teams.
- Relocatable and scalable as needs evolve.

Understanding Africa is as important as understanding the technology. We understand both.

Institutions that cannot afford downtime.

We are targeting eight sectors. One common requirement: platforms they can trust.

Phase 1 Focus:

1. **Healthcare:** clinics, hospitals, mobile health units.
2. **Agriculture:** cooperatives, farms, market hubs.

Phase 2 onwards:

3. **Education:** schools, universities, training centres.

- Community Services: churches, mosques.
- Government
- Research
- Tourism & Hospitality
- Emergency Response

THE COMMERCIAL OPPORTUNITY

Tanzania's Digital Tanzania Project and Mission 300 are accelerating investment in reliable power and digital infrastructure. Mangosat converts such investments into reliable, managed, operational services for institutional customers.

Tanzania alone represents tens of thousands of potential institutional sites requiring reliable power and connectivity. The sectors most closely aligned with Mangosat's managed infrastructure services focus include:

1. **Health facilities: 10,000 – 12,000.**
2. **Agricultural: thousands.**
3. Primary and secondary schools: 20,000 – 22,000.

- Public institutions (government offices, emergency services, places of worship and research facilities): 40,000+ sites.

Initial Serviceable Market across all sectors: 23,000+ sites with a long-term market estimated $210M in annual SLA revenue potential.

Statistics sources: World Bank, Ministry of Health Tanzania 2024, TAMISEMI, Mission 300, FAO, EU Joint Research Centre (PMC).

Mangosat does not need to dominate the market.

A small share is sufficient to build a profitable recurring-revenue business capable of achieving sustainable net margins of approximately 20% as scale is achieved.

Mangosat's conservative year 3 target:

- 1% market share = 230 active SLA contracts.
- Monthly Recurring Revenue from services: Typical planning assumption $750 - $1000/site
- Projected SLA revenue: $2.1M/year.

OUR BUSINESS MODEL: HOW WE GENERATE REVENUE

Managed infrastructure. Predictable revenue. Long-term value.

Mangosat combines engineering, monitoring, field service, local execution and long-term accountability into one integrated managed-service platform.

Four distinct recurring revenue streams Four different service levels: platina, gold, silver, and bronze	
Equipment.	One-time sales.
Deployment & Commissioning.	One-time implementation and integration.
1. Infrastructure availability.	Guaranteed uptime through SLA contracts.
2. Energy services.	Managed power generation and storage.
3. Connectivity services.	Satellite and terrestrial communications.
4. Operations and maintenance.	Monitoring, preventive maintenance and field support.

Why the model works:

- **Recurring monthly revenue** instead of relying on one-time projects.
- **High customer retention** because customers depend on continuous operation.
- **Multiple revenue streams** from the same infrastructure platform.
- **Scalable operations** with standardised deployments and remote monitoring.
- **Strong competitive advantage** created by operational expertise, SLA management and local execution.

Financial projections, pricing models and margin assumptions are available in the detailed business plan for qualified investors.

IMPACT CREATES DEMAND

Social outcomes drive commercial demand. Commercial sustainability enables impact at scale.

Mangosat is a commercially sustainable business whose financial success is directly linked to improving the essential services we provide.

1. **Social outcomes:** reliable healthcare, better education, connected communities
2. **Commercial outcomes**: business continuity, long-term contracts, recurring revenue.

The network that creates these outcomes is the same solution that generates Mangosat's revenue.

- The better Mangosat performs operationally, the greater the social impact, and the stronger the commercial returns.
- Therefore, impact and profitability are not competing goals. They are the same goal.

Why this creates value:

For investors:

- Recurring revenue.
- Scalable business model.
- Sustainable net margins (~20%).
- Year 3 revenue target.
- Blended finance opportunities.

For partners:

- Long-term contracts, not one-time transactions.
- Growing market: electrification targets create sustained demand.
- Reference deployments: credibility in a growing sector.
- Opportunities to deliver complementary services through the same customer platform

COMPETITIVE LANDSCAPE

A fragmented market with no single accountable provider.

Who's playing in this space:		
Type	**Strength**	**Gap**
DIY solar	Low cost	No managed service
Telecom	Connectivity	No integrated power
Utilities	Scale	Too expensive for rural
Local contractors	Installation	No long-term operation
Mini-grid companies	Energy	Limited integrated communications

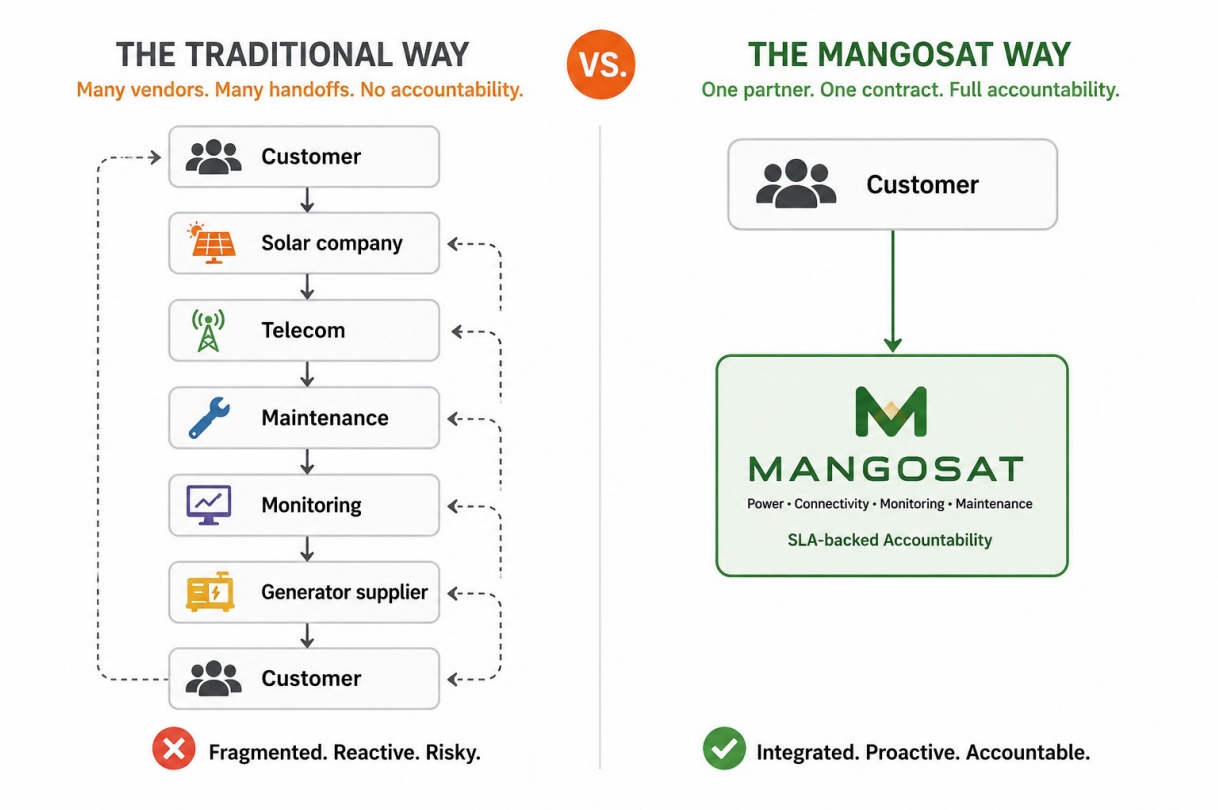
Mangosat addresses this fragmentation through a managed infrastructure operating model.

Based on our market analysis, we have not identified a provider that combines power, connectivity, monitoring and SLA-backed accountability into one managed service.

The competitors we've identified are spread across multiple player types, each solving part of the problem but none solving it completely:

- Most install equipment targeting project revenue only.
- Most provide reactive support rather than proactive operational management.

WHY MANGOSAT IS DIFFERENT.



Mangosat has advantages that competitors can't replicate quickly:

Mangosat's success is more likely due to its extensive field experience, established operational companies, international capabilities, and long-standing partner network.

- **Mangosat operates where competitors stop, at commissioning:** we offer a single predictive SLA contract that solves power, connectivity, and related issues.
- **Mangosat is the right size for reality:** too complex for local players, too small for big players.
- **Mangosat combines professional global standard engineering with local execution**, creating a unique position in the market.

EXECUTION CAPABILITY - WHY WE WILL SUCCEED

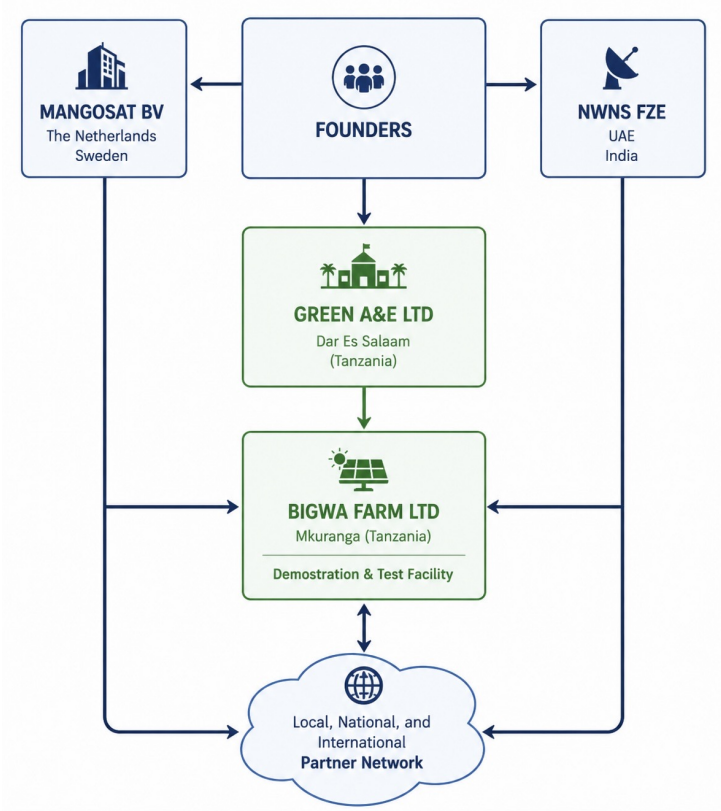
Technology can be bought off the shelf.
Decades of African execution experience cannot.

1. **Sanjeev Jatania**, 45+ years developing businesses and partnerships in remote and emerging markets, co-founded NWNS and other companies.
2. **Onno Beemsterboer**, 40+ years delivering complex field service and satellite infrastructure projects in challenging environments, co-founded NWNS and other companies.

Together in Africa, satellite communications, energy, infrastructure, field operations, and global partnerships since 2002.

Key supporting organisations:

- **Green A&E Ltd and Bigwa Farm Ltd:** established Tanzanian operating companies providing local execution capability.
- **NWNS** (UAE & India): active international network of field partners developed over nearly three decades.



THE ROAD AHEAD - TANZANIA FIRST

Validate. Standardise. Scaling with confidence.
We are proving a business model.

We're not trying to expand across Africa overnight. Each phase must meet predefined commercial and operational milestones before progressing to the next.

	Target	Objectives
Phase 1	By 2027	Core team in place. Prove the model works. ▪ Flagship hub operational. ▪ Five commercial pilot deployments. ▪ Anchor customer secured. ▪ SLA performance validated.
Phase 2	By 2028	Optimise and standardise. Expand Tanzania-wide.
Phase 3	By 2029	Mangosat will have proven the model in Tanzania, established a reference portfolio of **at least 230 operational sites**, and positioned itself for regional expansion across East Africa.
By year 5		Mangosat aims to become the trusted infrastructure partner for institutions where uptime matters most.

Concept illustration of Mangosat's first operational hub. Construction has begun in Mkuranga, Tanzania.

WHERE WE STAND – WHAT WE'VE ALREADY DONE

Every milestone completed reduces execution risk and brings us closer to commercial deployment.

Demonstration site underway:

- Bigwa demonstration and training facility under construction.
- Designed to validate the complete operational model under real field conditions.

Operational platform established:

- Reference system operational in the Netherlands.
- Engineering completed.
- Remote monitoring platform under final validation.

Core technology validated:

- Satellite / 4G / VHF connectivity operational.
- Reference platform engineered for repeatable deployment.

First commercial pilot:

- Community healthcare pilot under preparation with Mkuranga District Hospital.

Industry Recognition:

- Eutelsat is sponsoring satellite connectivity at the Bigwa demonstration site.

KEY EXECUTION CHALLENGES

Every early-stage managed infrastructure business faces execution risks. We believe these are manageable because they are operational rather than technological.

These six execution challenges are interconnected. Managing them successfully reduces overall execution risk and accelerates the path to a scalable business:

1. **Execution speed vs. cash burn:** Achieving sufficient deployment volume before recurring revenue covers operating costs.
2. **Proving the SLA model at scale:** Our integrated managed-service model must be validated through commercial in-country deployments.
3. **Partnership dependency and its risks:** Our partner ecosystem is a core strength, making careful partner selection, governance and performance management essential.
4. **Customer acquisition and willingness to pay:** Institutional procurement cycles can be lengthy. The challenge is converting a documented market need into signed, paying customers within a timeframe that supports sustainable business growth.
5. **Building the right team at the right time:** Team expansion is a priority as we scale. Growing the right local organisation while upholding our quality standards requires deliberate focus, particularly while we continue building our market track record
6. **Regulatory and compliance complexity:** Telecommunications, energy, import and construction regulations involve multiple authorities and approval processes that may affect deployment timelines.

None of these challenges are unique to Mangosat. They are execution challenges inherent to building a managed infrastructure business and form the basis of our phased deployment strategy.

BUILDING THIS TAKES PARTNERS

We're building something bigger than any one organization can build alone.

Africa's technical challenges cannot be solved by one organization alone.

Mangosat is building an ecosystem of long-term partners who share our commitment to service, reliability, and measurable outcomes:

- **Field partners** to secure local support
- **System integrators** seeking scalable deployment opportunities.
- **Technology & equipment suppliers** who value long-term operational performance.
- **Investors** seeking commercially sustainable opportunities.
- **Strategic alliance partners** who share our vision for reliable networks at scale.
- **Pilot customers**: 5-10 early adoptors who are willing to participate during the phase 1 pilot period.

What we bring to the partnership:

- 30+ years African telecom and power deployment experience.
- International engineering standards with local execution capability.
- Identified customer pipeline across three market sectors in Tanzania.
- Globally operating organisation: physical presence in ME, Europe, and Africa.
- One accountable service framework, same standard across every deployment.
- Phase 1 investment structure defined, blended finance model ready.

Furthermore, we are raising $1.2M - $1.5M in seed capital to build the teams, prove traction, fund go-to-market, and close what's still missing.

We don't just bring vision. We bring a working system, a commercial model, funding, and a deployment plan.

MANGOSAT

RELIABLE INFRASTRUCTURE TRANSFORMS LIVES, COMMUNITIES AND ECONOMIES.
JOIN US IN BUILDING IT.

Execution—not technology—will determine who succeeds.

We can do this, we have the plan, we understand the risks, and we've already started.
Technology can be purchased. Experience and execution cannot.

Where do you fit?

Onno Beemsterboer | onno@mangosat.com | +31 6 24209111
Sanjeev Jatania | sanjeev@nwns.org | +971 50 854 8247

We welcome visits to our reference site in the Netherlands, the team in Dubai, and our operations in Dar es Salaam, where you can see our approach in practice.