SRv6 Enables MTN Best Network in South Africa

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Accelerating the PACE of Ambition 2025 Execution

Ambition 2025 Enablers

- Leading customer experience
- Best talent, culture & future skills
- Value based capital allocation
- ESG at the core
- Technology platforms second to none

PACE Technology Initiatives

- ***P**latforms, Ecosystems & Services*
- ***C**onnectivity & Monetisation of infrastructure* (MUNA Core Network Cloudification)
- ***E**xperience: Second to None* (5G, 4G+)

CASSI Transport Strategic Goals

Next Gen Transport Based on CASSI Strategy

CONVERGED & CONGESTION FREE	ALWAYS ON	SCALABLE	SIMPLIFIED	INTELLIGENT
Efficiently enable traffic and Revenue growth with high capacity TX solutions	**Enable revenue assurance** by increasing reliability	**TCO Efficiency & Accelerate growth** with easy to scale in and scale out solutions	**Drive TCO Efficiency** with flat network architecture and O&M simplification	**Reduce TTM for products and MTTR** by enable E2E transport automation

MTN SA: Network Digital Map + SRv6 Improves Network Utilization

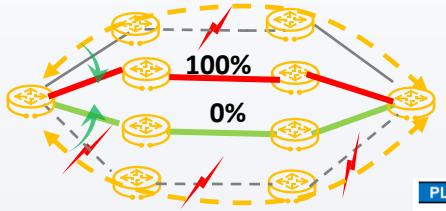
Challenges

- Poor grid availability
- Fiber breaks

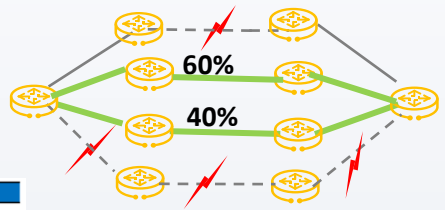
- Network congestion
- Packet loss rate ↑

Real-time Dynamic Traffic Optimization Powered by E2E SRv6 and Network Digital Map

Without SRv6 + optimization
Load-shedding cause network congestion, PLR increase

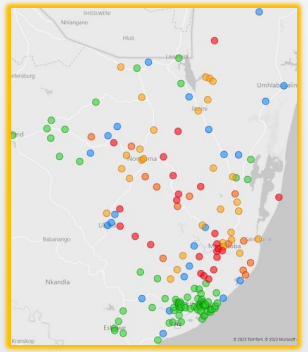


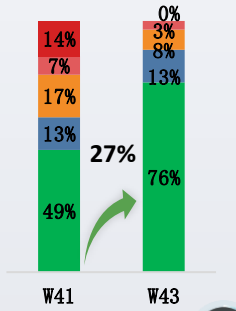
With SRv6 + optimization
Congestion release, PLR decrease



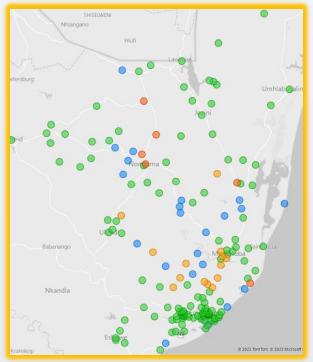
PLR Level	Color
≥10%	Red
≥1%	Light Red
≥0.1%	Yellow
≥0.01%	Blue
<0.01%	Green

Before SRv6





After SRv6



SLA real-time awareness

Automatic path optimization

Benefits

12000 times

2000 NEs

Network Optimization per Quarter

Fully Automatic

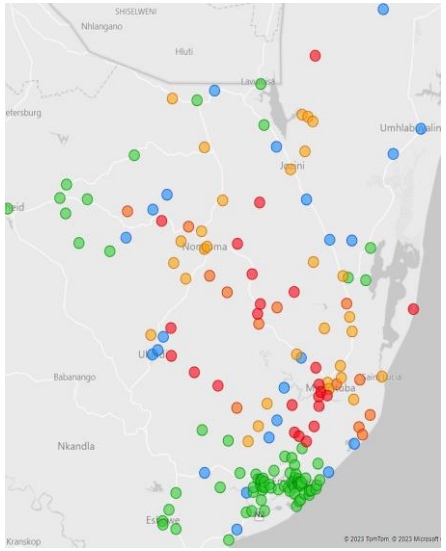
Traffic 15.4% ↑

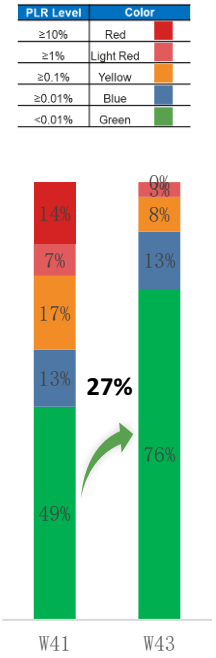
Average DoU 25% ↑

SRv6 Greatly Improve Packet Loss Rate and Latency for Radio Sites

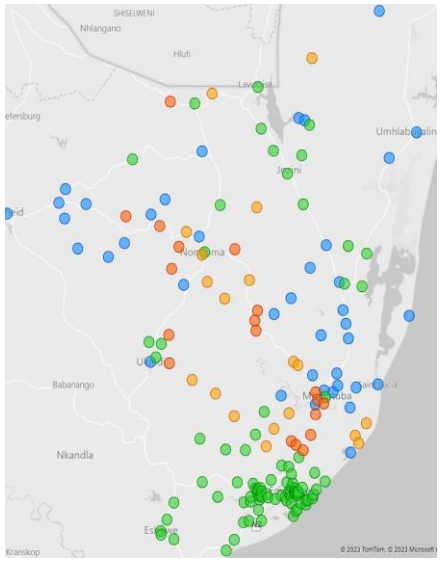
Packet Loss Rate (PLR) Comparison

Before SRv6



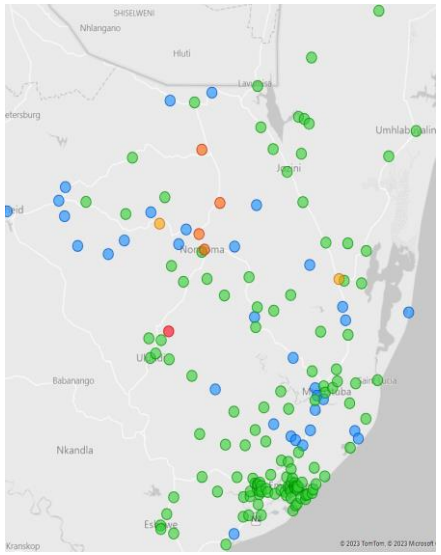


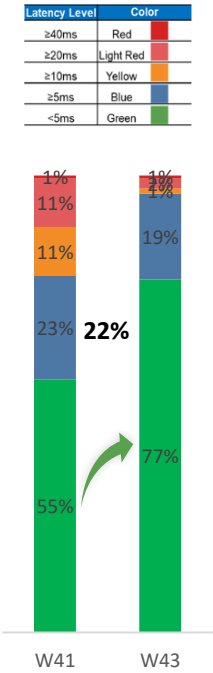
After SRv6



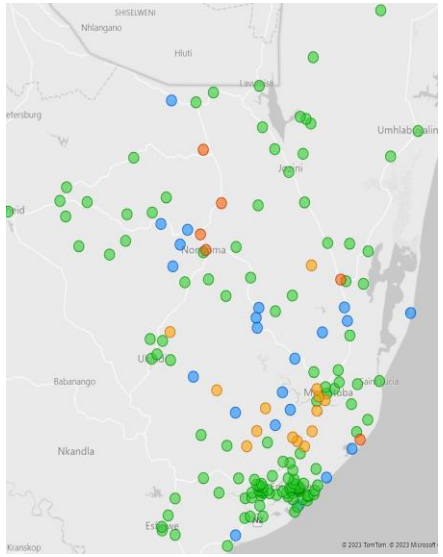
Latency Comparison

Before SRv6





After SRv6



Principle

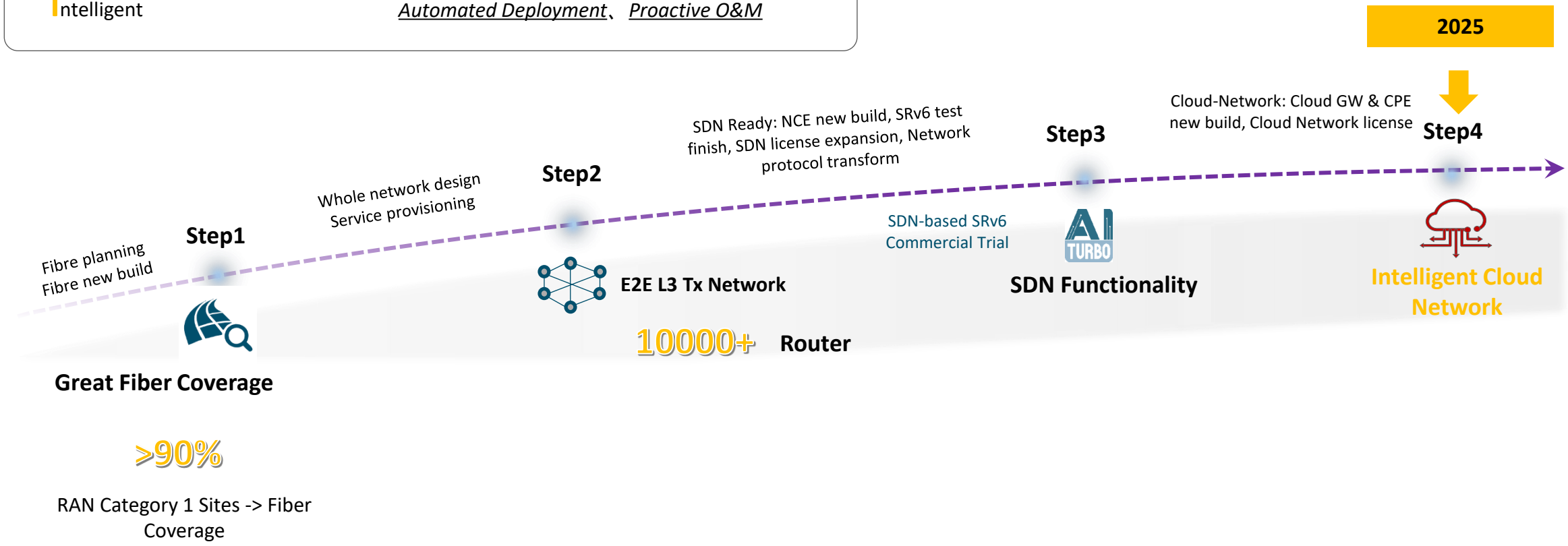
- SRv6 can automatically optimize network paths, which is very helpful to leverage the capabilities of the network

Benefit

- The green part of PLR(<0.01%) is improved by **27%**, and the ret part of PLR(>=10%) was eliminated
- The green part of latency(<5ms) is improved by **22%**, and the ret part of latency(>=4%) was almost eliminated

IP Strategy: Four stages towards an intelligent cloud network

Converged & Congestion free	*Fiber preferred*、*Bandwidth upgradable*
Always On	*Mesh Network*、*FRR Protect*
Scalable	*Reliability*、*Multi-Cloud Connectivity*
Simplified architecture	*Integrated Transport*、*IPv6+*
Intelligent	*Automated Deployment*、*Proactive O&M*



Thank you!