

Milesight Empowering Next-Generation Free Flow Tolling Infrastructure in Brazil



Milesight Partner Fiscaltech	Location Brazil	Industry Segment Traffic	Related Products Milesight DualVision TrafficX Camera Milesight Entrance & Exit AI LPR Bullet Camera Milesight AI Weather-proof Mini Dome Network Camera Milesight AI 360° Panoramic Fisheye Network Camera Milesight 4K H.265 Pro NVR 7000 Series
--	---------------------------	------------------------------------	---

Overview

Driven by Brazil's highway concession reform, tolling operators are accelerating the transition from traditional toll booths to Free Flow tolling systems. To support this shift, **Brazilian technology development company and integrator Fiscaltech** launched a large-scale Free Flow project across the Baixada Santista and Litoral Paulista coastal regions of São Paulo State, contracted by Concessionária Novo Litoral (CNL).

Milesight provided a comprehensive infrastructure solution including traffic cameras, switches, and NVRs, supporting the deployment of a multi-gantry tolling network. The project is being implemented in two phases: Phase 1 deployed 167 cameras, while Phase 2, scheduled for 2027, is expected to expand the system with approximately 150 additional cameras, 120 switches, and 60 NVRs.



Pain Points

Strict Regulatory Compliance

Government requires equipment certification for Free Flow tolling, creating high entry barriers for suppliers.

High Accuracy in Free Flow Scenarios

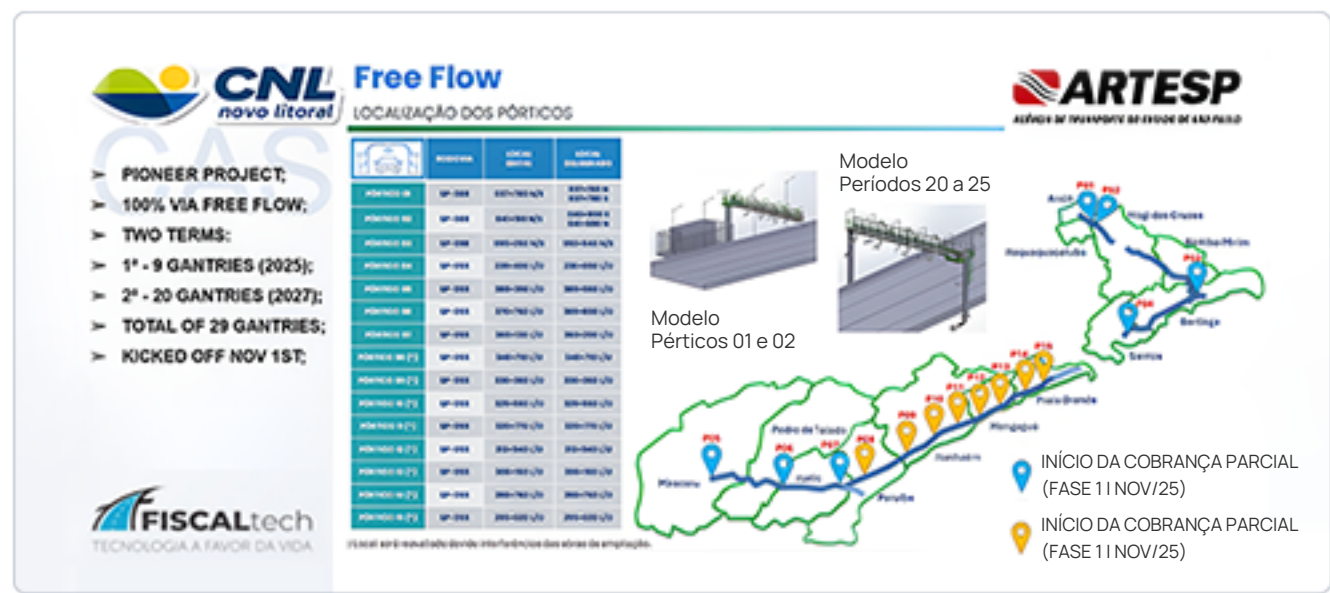
Barrier-free tolling demands precise vehicle capture, license plate recognition, and classification at high speed.

Large-Scale, Multi-Phase Deployment

Two-phase deployment across 29 gantries requires consistent system architecture and long-term operational reliability.

Solution Highlights

- Full-Scale, Two-Phase Deployment**
Milesight delivered a comprehensive traffic monitoring solution supporting Phase 1 with 167 cameras and Phase 2 planned with 150 additional cameras, 120 switches, and 60 NVRs, ensuring scalability and seamless integration across all gantries.
- End-to-End Intelligent Infrastructure**
The solution integrates traffic cameras, switches, and NVRs to enable accurate high-speed license plate recognition, vehicle classification, and continuous video recording, ensuring operational efficiency and compliance with government requirements.
- High-Accuracy Recognition for Free Flow**
Engineered for 100% barrier-free tolling, the solution delivers precise license plate recognition, vehicle classification, and multi-lane tracking at high speeds, minimizing misreads and ensuring billing accuracy.



- Seamless Transition from Traditional Tolling**
Supports hybrid deployment to enable smooth migration from conventional toll booths to Free Flow operations without service interruption.
- Flexible System Architecture for Local Business Rules**
Accommodates Brazil's unique tolling policies, integrating with backend systems for online payment, delayed payment windows, and penalty enforcement.
- Scalable and Consistent Expansion**
Standardized equipment and architecture ensure Phase 2 expansion remains fully compatible with Phase 1, avoiding redundant investment and operational inconsistency.

- Compliance-Ready and Transparent**
All deployed equipment passed government certification, demonstrating technical maturity and full compliance in a highly regulated environment.
- Operational Reliability for Long-Term Concession**
Designed to meet 30-year concession requirements, the solution ensures stable performance, consistent spare parts supply, and ongoing technical support for long-term highway operation.
- Strategic Local Partnership and Industry Benchmarking**
By working with Fiscaltech, Brazil's leading Free Flow technology developer and integrator, this project serves as a pioneer and reference model for future Free Flow deployments across the country.



Conclusion

Milesight's comprehensive Free Flow tolling solution demonstrates how advanced traffic monitoring infrastructure can enable a seamless, accurate, and compliant transition from traditional toll booths to barrier-free operations. By delivering high-speed license plate recognition, multi-lane vehicle classification, and scalable system architecture, the project addresses both regulatory requirements and operational challenges of large-scale deployments. Through its strategic partnership with Fiscaltech and adherence to Brazil's stringent standards, Milesight not only ensures long-term reliability for the Baixada Santista and Litoral Paulista highways but also sets a benchmark for future Free Flow initiatives across the country, empowering Brazil's next-generation tolling infrastructure.

Product Showcase

Milesight DualVision TrafficX Camera

Milesight Entrance & Exit AI LPR Bullet Camera

Milesight AI Weather-proof Mini Dome Network Camera

Milesight 4K H.265 Pro NVR 7000 Series