AiTrax Co., Ltd. Conducts Advanced Mesh Wi-Fi Proof-of-Concept Demonstration in Brazil

~ Broadband Coverage of Approximately 22 Hectares Achieved in Just One Hour Using Starlink as the Starting Point ~ Advancing Toward Nationwide Deployment in Brazil Under Strategic Partnership with Microset Tecnologia

From January 28 to February 5, 2026, AiTrax Co., Ltd. (AiTrax; headquarters: Kamakura, Kanagawa; CEO: Tsutomu Tamura), commissioned by Japan's Ministry of Internal Affairs and Communications for the "Contract Research and Demonstration for the Deployment of Simple, Wide-Area, and Optimal Mesh Wi-Fi Solutions in Rural Areas of the Federative Republic of Brazil," conducted advanced mesh Wi-Fi proof-of-concept demonstrations at COMIGO (soybean processing plant, feed factory, and truck yard) in Goias State and GRUPO CESARI (truck yard and container yard) in Sao Paulo State — both hubs of Brazil's agricultural and logistics infrastructure — and hereby announces the results and findings of these demonstrations.

AiTrax used its advanced mesh Wi-Fi technology, leveraging proprietary patented know-how, to build a network originating from Starlink satellite communications. Equipment installation and network deployment were carried out solely by local staff and engineers from Microset Tecnologia Ltda. (hereinafter "Microset Tecnologia"), successfully achieving broadband coverage across approximately 22 hectares in just one hour. Excellent results were achieved across all parameters: LAN speed, internet speed, signal strength (RSSI), coverage, and device connectivity, surpassing the expectations of facility personnel and local system integrators. The invaluable cooperation of Microset Tecnologia was fundamental to the success of this demonstration.

In this demonstration, a mesh Wi-Fi network was constructed connecting a single Starlink unit as the primary node for internet access, with multiple secondary nodes distributing communication resources. Even in harsh environments prone to signal shielding and interference — such as container yards and truck yards densely packed with large vehicles — AiTrax's independently developed on-demand route control algorithm evaluates changes in communication conditions in real time and instantly switches to the optimal route. Millisecond-level route switching and stable communication quality and operational stability were confirmed. The demonstration across two different industries — agriculture and logistics — under varying geographic conditions enabled comprehensive verification of implementation feasibility and field adaptability in both sectors.

Furthermore, it was demonstrated in a real environment that AiTrax's proprietary radio signal visualization indicator allows installation personnel to intuitively confirm signal conditions in real time while optimally positioning equipment. This feature, which enables rapid deployment by local staff alone without specialized RF design knowledge, demonstrates its practical utility as an immediately deployable solution even in regions with underdeveloped communications infrastructure and in industrial environments where it is difficult to have specialists permanently on-site.

■ Future Plans

Building on the results of this demonstration, AiTrax will further strengthen its strategic partnership with Microset Tecnologia and advance full-scale business expansion in the Federative Republic of Brazil.

Rural areas of Brazil, where agricultural and logistics infrastructure is concentrated, have extremely high demand for stable internet connectivity. The deployment of this mesh Wi-Fi solution is expected to generate broad social impact across diverse fields including smart agriculture, logistics efficiency, and reduction of regional digital disparities. Furthermore, the millisecond-level route switching technology confirmed in this demonstration holds significant potential for application in industrial sectors requiring high response speeds, such as drones, robotics, and edge computing. AiTrax will continue working with local partners and stakeholders to develop sustainable communications infrastructure.

■ About the Joint Demonstration Partner

Microset Tecnologia Ltda.

A company engaged in communications infrastructure and network construction in Brazil. In this demonstration, the company was responsible for Starlink base station preparation, electrical work, and installation, achieving rapid construction in coordination with local engineers. Following the demonstration, discussions were held regarding strategic business promotion. Microset Tecnologia

and AiTrax will further strengthen their strategic partnership for expansion within the Federative Republic of Brazil.

Mr. Mario Hirose / Mr. Paulo Dallari Soares

This demonstration was advanced with the support of Mr. Mario Hirose and Mr. Paulo Dalla'ri Soares, directors of major industrial associations in Sao Paulo Prefecture. Their support has also deepened collaboration with the Brazilian industrial sector.

■ About the Commissioned Project

This demonstration was conducted with support from Japan's Ministry of Internal Affairs and Communications' "Support Project for Overseas Deployment of Safe and Reliable Digital Infrastructure." This project supports investigation and demonstration projects by companies that solve global social challenges using digital solutions, or that expand overseas with critical systems and services contributing to economic security assurance. Based on the demonstration results supported by this project, AiTrax will continue to contribute to the development of overseas communications infrastructure.

■ About AiTrax Co., Ltd.

AiTrax has developed an improved relay algorithm in the field of wireless mesh Wi-Fi for wide-area coverage of outdoor spaces and factories — a high-growth segment in the global Wi-Fi market. Through its proprietary patented radio signal visualization indicator and fully automated network construction technology, AiTrax enables anyone to easily and quickly build a multi-node Wi-Fi communication network, achieving millisecond-level route switching for stable, uninterrupted communication. Patents related to the route decision table have been obtained in Japan, the United States, and Europe (radio signal visualization indicator patent application pending). The technology has also received high evaluations in NTT testing compared to existing mesh technologies.

Domestically, there is strong demand from the construction, civil engineering, shipbuilding, and various industrial and manufacturing sectors. In addition to being selected for the Ministry of Internal Affairs and Communications' "Startup Creation Emerging Research and Development Support Program" and NEDO's "SBIR Promotion Program" in FY2023, AiTrax was also selected for METI's J-Partnership and the Ministry of Land, Infrastructure, Transport and Tourism's SBIR project in FY2024 and FY2025. Internationally, demand for last-mile communications from industrial zones in Brazil and Southeast Asia is growing, and the company is preparing for mass production in partnership with an Asian strategic partner with a manufacturing track record for major network equipment manufacturers. AiTrax's revolutionary millisecond-level route switching technology holds significant potential for application in areas requiring high response speeds, such as drones, robotics, and edge computing. The company is currently actively seeking partners in these areas and welcomes inquiries from companies and investors interested in developing new solutions combined with AiTrax's mesh Wi-Fi technology.

■ Press Inquiries

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