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Beijing 51WORLD Digital Twin Technology Co., Ltd.

北京五一视界数字孪生科技股份有限公司

(A joint stock company incorporated in the People's Republic of China with limited liability)

(Stock Code: 06651)

VOLUNTARY ANNOUNCEMENT – BUSINESS UPDATE

The board of directors (the “**Board**”) of Beijing 51WORLD Digital Twin Technology Co., Ltd. (the “**Company**”) is pleased to announce that, recently, the Company officially established a strategic partnership in the aerospace sector with Huantian Wisdom Technology Co., Ltd. (环天智慧科技股份有限公司) (“**Huantian Wisdom**”). Huantian Wisdom is a leading domestic commercial space enterprise which focuses on the overall development and in-orbit operation of space-based remote-sensing satellites for Earth observation. It is also the largest commercial space entity in Southwest China with fully independent and controllable capabilities for the construction and operation of remote-sensing satellite constellations. The two companies will cooperate on the acquisition of high-precision satellite remote-sensing data and the reconstruction of “physics-grade usable” data assets, and will jointly customize the world’s first commercial remote-sensing satellite specifically designed for Physical AI training and simulation applications – “ECS-1”, the Earth Clone Star. This cooperation marks the first in-depth joint development at the satellite payload level between China’s Physical AI industry and its commercial space sector.

The Earth Clone Star “ECS-1” is the world’s first commercial remote-sensing satellite purpose-built to meet Physical AI data requirements, featuring multiple industry-leading metrics. The ECS-1 satellite is equipped with an optical imaging payload with a 0.5-meter ground sampling distance (GSD), and has a ground imaging swath width of ≥ 60 km. The satellite adopts an advanced dual-linear-array stereo pushbroom imaging architecture with stereo mapping capabilities, enabling it to generate high-precision digital surface models (DSMs) and digital elevation models (DEMs) through a single-orbit, single-pass observation. In contrast, conventional commercial optical remote-sensing satellites typically require joint processing of multi-pass imagery from multiple orbits to complete three-dimensional (3D) terrain reconstruction at comparable precision.

In terms of overall performance: (1) significantly optimized efficiency in 3D terrain reconstruction: leveraging a single-orbit simultaneous stereo imaging configuration, the satellite can complete regional stereo mapping in a single pass. Compared with the multi-orbit mosaicking-and-modeling approach used by conventional single-linear-array optical satellites, the operation cycle for regional 3D reconstruction is remarkably shortened; (2) multiplied data processing efficiency: by integrating the Company’s “51WORLD MODEL” with the 4DGS (4D Gaussian Splatting) AI processing pipeline, the end-to-end cycle from satellite imaging to deliverable scenarios is targeted to be shortened from the industry’s conventional timeframe of days to hours; and (3) substantially reduced data acquisition costs: the comprehensive acquisition cost of real-scene 3D data ranging from municipal to provincial scales can be reduced by approximately 90% as compared to traditional aerial oblique photography.

In terms of project progress, ECS-1 has recently completed the review of its construction plan and has officially initiated the tendering process. The satellite launch and constellation deployment are planned to be completed by the end of 2027.

For a long time, the commercial value of commercial satellite data has been difficult to fully unleash, mainly due to certain technical interfacing challenges between raw remote-sensing imagery and the training and simulation requirements of Physical AI. As a leading enterprise in China's Physical AI simulation sector, the Company possesses full-stack capabilities to rapidly transform raw geographical remote-sensing data into "physics-grade usable" simulation scenarios. Under this cooperation, a direct pipeline will be established between satellite-end data acquisition and Physical AI scenario reconstruction, enabling an evolution from "perceiving the Earth" to "understanding the Earth".

Based on its self-developed Physical AI engine and the "51WORLD MODEL", the Company undertakes the core functions of "understanding" and "generation". Through multi-modal perception and large-scale spatial semantic learning, the model is capable of uniformly encoding multi-source heterogeneous data from ECS-1 as well as existing satellites, aerial and ground sources, enabling cross-scale reconstruction from pixel-level imagery to a semanticized digital world. Leveraging the 4DGS (4D Gaussian Splatting) neural rendering pipeline, raw stereo imagery is processed sequentially through an automated workflow, including stereo matching and DSM/DEM generation, sparse point-cloud reconstruction and densification, 4DGS neural rendering, full-scene semantic segmentation and feature-level annotation, standardized semantic-system mapping and physical attribute binding (such as friction, reflectance, traversability, and load-bearing capacity). This ultimately produces out-of-the-box, "physics-grade usable" data assets that are "understandable, interactive and trainable", with outputs that can be directly invoked by downstream Physical AI applications.

In addition, the two parties are planning ECS-2 as a supporting SAR satellite. ECS-2 will carry a fully polarimetric synthetic aperture radar, have InSAR deformation monitoring capabilities, and provide an imaging swath width of 40 km. Relying on the cloud- and fog-penetrating characteristics of microwaves, it will enable all-time, all-weather observation. When cloud cover renders ECS-1's optical imaging ineffective, ECS-2 will carry out synergistic supplementary observations to ensure uninterrupted data acquisition in key regions.

ECS-1 satellite data can provide stable underlying data support for the Company's Physical AI business across all its product lines, expand commercial space application scenarios, and empower fields such as digital twins, autonomous-driving simulation, robotics training, the low-altitude economy, geological emergency response, and management of natural resources and major engineering projects, thereby making up for existing capability shortcomings and gaining cost advantages. In the future, it can support the Company's deployment of space-based computing power and, by extending the ground-based computing system to near-Earth orbit, build a complete closed loop of space-ground integrated intelligent perception and applications.

Shareholders and investors of the Company are reminded that this announcement is published as a voluntary announcement to inform the public of the latest business developments of the Company. Shareholders and potential investors of the Company are advised to exercise caution when dealing in the shares of the Company.

By order of the Board
Beijing 51WORLD Digital Twin Technology Co., Ltd.
北京五一視界數字孿生科技股份有限公司

Mr. Li Yi
Chairman of the Board, Executive Director and Chief Executive Officer

Hong Kong, July 12, 2026

As of the date of this announcement, the executive Directors are Mr. Li Yi, Mr. Wang Chenkang, Ms. Du Jinyan, Ms. Tong Shan and Ms. Pu Ge; the non-executive Director is Mr. Yang Gu; and the independent non-executive Directors are Mr. Li Pan, Mr. Lin Chen and Mr. Zhang Lening.