Five Companies Affiliated with the Chinese Academy of Sciences Institute of Automation

for Addition to the BIS Entity List

(Source: Jeffrey Stoff & Glenn Tiffert, *Eyes Wide Open: Ethical Risks in Research Collaboration with China*, Hoover Institution Report, November 2021.)¹

1. (Beijing) Vistek Co. Ltd. (中科唯实科技 [北京] 有限公司)

Vistek's surveillance technologies center around "intelligent video big data analysis," and the company claims that its video content understanding for security and surveillance applications has been "widely used in state security affairs." It also declares that its "safe city" products are used for anti-terrorism efforts in Xinjiang.

Vistek explicitly states that its products and services are used by public security personnel and organizations. For example, the company claims that its facial recognition technologies include the following:

- Dynamic face capture storage, which can be transferred to central facial management platforms for storage and comparison
- Real-time facial comparisons
- Pedestrian monitoring that can recognize and capture in real time an individual's gender, age range, hair length, clothing color, and specific clothing accessories (such as hats or bags)
- Prison monitoring systems and services²

2. Beijing IrisKing Co. Ltd. (北京中科虹霸科技有限公司)

IrisKing specializes in machine vision, biometric recognition, and AI technology research, with a primary focus on iris recognition technology. It serves China's public security bureaus at the national and local levels. It boasts that its technologies are "widely used in public security."³ For example, IrisKing created an iris data building and application service for the Beijing Public Security Bureau and the Ministry of Public Security (MPS) First Institute.⁴

3. IriStar Technology Co. Ltd. (中科虹星科技有限公司)

IriStar provides iris and facial recognition and claims to be China's first company to produce domestically long-distance iris recognition product that can perform "high precision identity authentication" in large crowds for "public security and justice, counterterrorism, border

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² 中科唯实科技(北京)有限公司 [Beijing Vistek Co. Ltd.], accessed May 9, 2021, http://vistek .cn.

³ 关于我们 [About Us]," 北京中科虹霸科技有限公司 [Beijing IrisKing Co. Ltd.], accessed May 1, 2021, http://www .irisking .com /about .php.

^{4 &}quot;中科虹霸虹膜数据建库及应用服务技术荣获公安部科学技术三等奖 [Iris Database Building and Application Services Wins Third Prize for S&T by Ministry of Public Security]," November 12, 2020, http://www .irisking .com /newsn .php ?id =660.

inspection, security, finance, and education" customers.⁵ IriStar also develops technologies that can aid in "multi-person detection, big action recognition, and other complex scene applications" by "accurately locating" facial and body features and positioning, including head, neck, shoulder, elbow, hand, hip, knee, and foot.⁶ IriStar's iris and facial recognition machine received operational and quality certifications by the MPS First Institute.⁷

4. Watrix.ai (银河水滴科技 [北京] 有限公司)

Watrix claims to have the world's most advanced human gait recognition and visual detection technology geared to public security departments. In October 2018, Watrix launched a new product for public security departments that can target and identify suspects by monitoring their posture and gait up to fifty meters away from any angle day or night, regardless of what the individual is wearing, or whether his or her face is covered "without the suspect being aware."⁸

5. Beijing ViSystem Corporation Ltd. (北京多维视通技术有限公司)

ViSystem is a subsidiary of Beijing Hisign Technology Co. Ltd. (北京海鑫科金高科技股份有限公司). It claims to be one of the largest biometric identification companies in China to handle facial recognition, fingerprint identification, palm print matching, and handwriting and vehicle license plate recognition. Hisign states that it primarily serves "public security, antiterrorism, and procuratorial" applications.⁹ ViSystem offers human and facial image identification and analysis at different resolutions and postures of individuals, 3D portrait scanning technology, 3D portrait reconstruction and comparison technology, and other video forensics for evidence processing in criminal investigations. ViSystem describes one of these products as a "Police Vision Human Image Intelligent Reconstruction System." This product compares collected video with the "suspect target for analysis . . . based on a library of suspect targets to determine the identity of the suspect."¹⁰

⁵ "产品系列 [Product Series]," 中科虹星科技有限公司 [IriStar Technology Co. Ltd.], accessed May 2, 2021, http://www .iristar .com .cn /iristar -product.

⁶产品系列 [Product Series]," 中科虹星科技有限公司 [IriStar Technology Co. Ltd.].

^{7 &}quot;虹星科技虹膜人脸识别一体机通过公安部一所检测认证 [IriStar's Integrated Iris and Facial Recognition Machine Passes Ministry of Public Security First Institute Testing Certification]," August 20, 2020, http://www .iristar.com.cn /news -details /37.

⁸ "步态识别 [Gait Recognition]," 银河水滴科技(北京)有限公司 [Watrix Technologies (Beijing) Co. Ltd.], accessed May 12, 2021, http://www .watrix .ai /anfang; and "Gait Recognition" (English page), http://www .watrix .ai /en /gait -recognition.

⁹ "About Us," Beijing Hisign Technology Co. Ltd., accessed May 12, 2021, http://en .hisign .com .cn /About .asp.

¹⁰ "公司简介 [Company Profile]," 北京多维视通技术有限公司 [Beijing ViSystem Corporation Ltd.], accessed May 13, 2021, https://www .visystem .cn /company -profile; and "产品 [Products]," https://www .visystem .cn /product ?filter =1&f =product line&k =2.