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In This Issue

IRAN: Cyber-Attack Likely Executed in Effort to Increase National Security Objectives

Summary: The Iranian hacker group MuddyWater carried out multiple destructive attacks on hybrid environments under the guise of a ransomware operation. The resulting activities will likely increase security operations between Middle Eastern nations and targeted victims.

Development: On 8 April, the Tehran-linked hacker group MuddyWater carried out destructive attacks on hybrid environments. The threat actors targeted both on-premises and cloud infrastructures in partnership with emerging activity cluster DEV-1084, according to The Hacker News. The MuddyWater hacker group remains a persistent nation-state actor known for conducting espionage and malicious cyber-attacks, targeting local governments across Europe, Africa, and Asia. However, the MuddyWater hacker group recently started masquerading activities as a standard ransomware campaign, with the intent of destruction and disruption by working in connection with DEV-1804; the criminal actors interested in extortion. Together it provides strategic motivation for the attack along with persistent access to compromised resources to perform undetectable operations.

Analysis: The Tehran-linked hacker group may have attacked on premise and cloud environments due to Iranian National Security objectives, including espionage, intellectual theft, and destructive or disruptive operations targeted at groups unaligned with Tehran views. In partnership with Tehran's security objectives, DEV-1084 probably became an asset to its operations as it presented itself as a criminal actor interested in extortion. In an effort to support Tehran's espionage operations MuddyWater and DEV-1084 have compromised many organizations that potentially go against standing views or efforts of Tehran-affiliated nation objectives. These forms of destructive attacks and data thefts could form a threat to the local governments within the Middle East, Europe, Asia, and Africa. These destructive attacks may increase espionage and security objectives between Tehran and local governments. This will likely lead the governments to increase security by deploying countermeasures.

 [Isabella Whalen]

CHINA: TikTok's User Data Security Could Lead to International Security Issues

Summary: TikTok's Chinese-owned ties could lead to international security issues if user data remain not securely separated from Chinese soil. Beijing will likely take action to stop any selling of ownership over TikTok. Maintaining control over Chinese-owned companies, Beijing may present a security concern for TikTok users. Other countries enforced bans and restrictions on the use of TikTok. User data remain vulnerable to Beijing and could reveal security issues for all nations with TikTok installed on its devices.

Background: On 23 March, TikTok's CEO Shou Chew testified against the banning of the app in the United States. Chew testified that Beijing never asked TikTok for its data and if Beijing attempted to, it would refuse the request. Mainland China does not use TikTok but runs a partner app called Douyin that follows similar algorithm practices. The Chinese-owned company, ByteDance, maintains both apps. To handle user data security issues of over 150 million Americans, Chew discussed Project Texas. Project Texas plans to transfer Western user data to Western soil under the control of Oracle. A similar plan also started in Europe named Project Clover. Project Clover plans to move European data to local data centers, along with working alongside third parties to establish privacy-enhancing technologies. Cyber security experts state current evidence shows that TikTok did not shared user data or altered the algorithm on behalf of Beijing, according to ABC News.

Beijing's Opposition to Selling TikTok: Beijing's clear statement that it will not allow the selling of TikTok may lead to hostile action by the country, so the app continues under its control. Based on Chinese law, Beijing must authorize the selling of its advanced technology. Beijing first added algorithms to the advanced technologies export list in 2020, after the Trump administration threatened to ban TikTok. Beijing's Commerce Ministry spoke at a press conference stating that Beijing would "firmly oppose" the selling of TikTok, according to the *NY Times*. The loose statement, "firmly oppose," could likely mean Beijing will not let go of its hold on TikTok any time soon. The Foreign Ministry Spokesperson Mao Ning spoke at a press conference on 29 March, stating that Beijing again feels the ban shows the West suppressing foreign companies and that it should respect fair market principles for foreign operating

companies. If countries attempt to force ByteDance into selling TikTok to Western owners, confrontations with Beijing will likely start.

Beijing's Ability to Control TikTok: Beijing likely possesses more control over the user data stored on Chinese soil than initially thought. Chinese Foreign Ministry spokeswoman Mao Ning stated Beijing "has never and will not" ask companies to collect foreign data that would violate those countries' laws, according to *NY Times*. However, Lokman Tsui, an expert on Chinese citizenship, stated his skepticism since this situation appears similar to when Beijing stated it does not censor the Internet in China. In 2017, Beijing released a national intelligence law that requires all Chinese citizens to preserve national security and obligates all public entities to "prevent and stop espionage activities and maintain national security," according to Lawfare Blog. This law also permits Beijing to detain or criminally punish all entities that "obstruct" intelligence activities. ByteDance falls under Chinese ownership and territory, which this national intelligence law controls. With all user data on Chinese soil, it brings up the issue that Beijing could take the data under the guise of the law. Beijing could also use the law to pressure companies or citizens into silence. Current evidence fails to prove if Beijing accessed user data from TikTok in the past. However, with the law in place, Beijing upholds the authority to access the data. Beijing will likely no longer control this law to its full advantage if user data and algorithms transfer to Chinese soil.

Global Bans on TikTok: Countries around the world banned TikTok l, likely leading to more nations evaluating the security of the app. Countries that put TikTok under a ban or restriction include the United Kingdom, France, the Netherlands, Norway, New Zealand, Belgium, Denmark, the United States, Canada, India, Taiwan, Pakistan, and Afghanistan, according to Euro News. TikTok possesses the most users in Thailand, according to Insider Intelligence. Thailand plans to work with TikTok to combat fake news and signed collaborations with TikTok, according to Khaosod English. Thailand likely will remain one of the only countries against the banning of TikTok. The United States comes in second with the most users on TikTok but will likely ban the app later this year. More countries will very likely follow these restrictions and bans in the following years.

Outlook and Implications: For international security, TikTok will likely need to move user data and algorithm controls to local centers for each country. For now, TikTok should probably stay removed from any official devices that may come in contact with sensitive information. However, from a cyber security perspective, Beijing may manipulate TikTok's code to contain backdoors, which would allow Beijing to control the data, algorithm, and code of the app remotely before it leaves Chinese soil. As of recent events, countries will likely just ban the app to avoid the inconvenience of moving data to local centers. Project Texas and Clover may work, but it seems countries may start urgently restricting TikTok before the projects finish. Beijing's control of its advanced technology properties will make selling ByteDance unlikely. Thus, countries will probably ban the app within the upcoming year.

[Mikinzi Strykul]

ISREAL: Jerusalem Likely to Continue Long-Term West Bank Settlement Policy

Summary: Jerusalem continues steps building more Israeli settlements in the West Bank and increasing military presence in Palestinian populated areas by approving the building of over 7,000 new homes in the West Bank. Despite international disproval, Jerusalem will unlikely halt its push for permanent settlements in the area.

Background: On 29 December 2022, Prime Minister Benjamin Netanyahu returned to power in Jerusalem for the third time. Netanyahu's new right-wing coalition government reaffirmed its intentions of expanding Israeli settlements in the occupied West Bank. This reaffirmation of settlement plans also included a security plan using the Israeli Defense Forces (IDF) on Palestinian militant groups. This security plan quickly failed as raids by the IDF into Jenin and Nablus caused over 100 Palestinian casualties. The escalation in violence caused peace talks between Jerusalem and Ramallah, yet the pro-settlement rhetoric from key members of Netanyahu's coalition only increased in the aftermath of the talks. The rhetoric became reality as Jerusalem repealed an act that ordered four Israeli settlements in the West Bank dismantled. This repeal creates further legal avenues for Israeli citizens populating the West Bank. This legitimization of settlements came in defiance of statements from both the United Nations Security Council and the European Union that seriously criticized Jerusalem's settlement plans.

Decision to Build More Settlements: Jerusalem will almost certainly continue its aggressive push of building more settlements in contested West Bank regions. Several key examples of this intention come in the form of Jerusalem's actions taken to make its promises a reality:

- On 23 February, a government committee announced the approval for the construction of over 7,000 new homes in the West Bank. The announcement further specified the construction taking place in a strategic area east of Jerusalem designated E1. This area would effectively bisect the West Bank, cutting off the northern and southern regions, and causing significant damage to any hopes of a viable Palestine state.
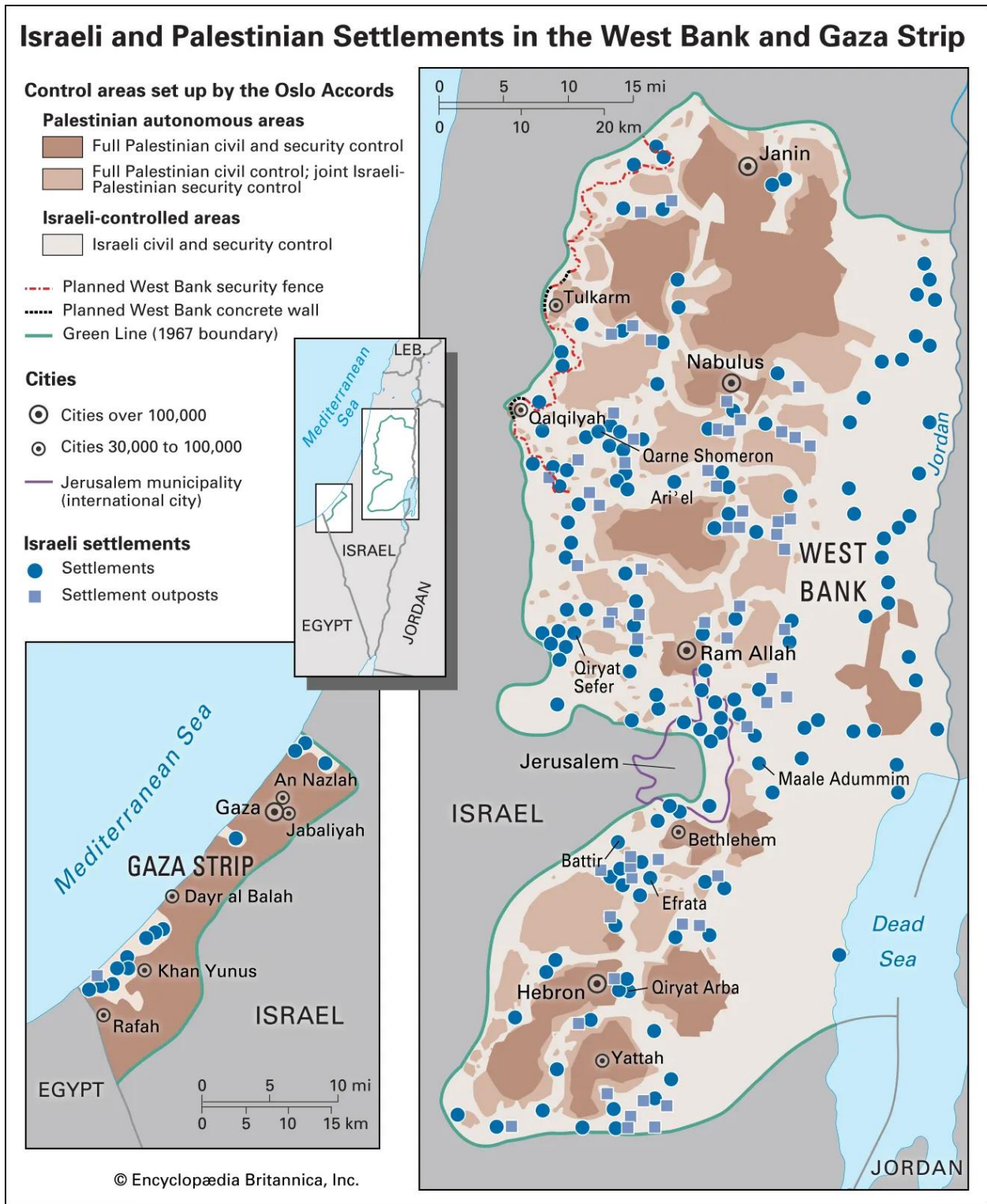
Figure 1: A map of the West Bank and Gaza showing Israeli settlements in both regions.

- On 21 March, the Israeli parliament voted in favor of repealing a 2005 settlement ban that saw four Israeli West Bank settlements evacuated and dismantled. The signing of the bill means that an IDF commander can now sign and enforce it, opening additional opportunities for Israeli West Bank settlement.

- On 24 March, Jerusalem announced yet another housing construction approval, this time for close to 1,000 homes in the settlements of Efrata and Battir. These settlements lie close to the major Palestinian city of Bethlehem, and their expansion signals the overall intention of Jerusalem expanding eastward from the 1967 Green Line. With this move coming just days after the repealing of the 2005 settlement ban, the intentions of Jerusalem appear very clear: West Bank settlement progress will continue at a rapid rate.

Internal and External Pressure: Ramallah, the international community, and various Palestinian militant groups will all likely increase their resistance to Jerusalem's aggressive settlement pushes. The resistance will probably come in the form of diplomatic pressure from Ramallah and the international community and almost certainly come in the form of violence from groups like Hamas.

- The peace talks held on 26 February in Aqaba by delegations of the Palestinian Authority (PA) and Israel demonstrated the PA's inability to cause a change on Israeli policy. The peace talks received much positive international press but received derision from both Netanyahu's ruling coalition in Jerusalem and from Hamas. The peace talks also failed to mitigate violence, as dozens of deadly clashes between Israelis and Palestinians occurred in the weeks following. The first three months of 2023 encompass 88 Palestinian deaths of militants and civilians and 16 Israeli deaths, including one police officer.

- The European Union, the United States, and the United Nations have all strongly condemned Jerusalem's push to build new settlements, yet these criticisms have failed to deter the legislative branch of Jerusalem from its goals.

- On 21 March, in response to the repeal of the 2005 settlement ban, an EU spokesperson said that the move "hampers the possibility to pursue confidence-building measures" and that it represented "a clear step back" away from a solution to the Israeli-Palestinian conflict, according to the BBC.

Outlook and Implications: Despite internal violence and international pressure, Jerusalem appears set on its course of building inroads into the occupied West Bank via settlements. Netanyahu's use of his coalition majority will likely allow him to legitimize as many settlements as possible and avoid any legal hurdles that might prevent West Bank expansion. With enough expansion east of Jerusalem offering the additional result of permanently fracturing Palestinian unity, it appears very unlikely that Jerusalem would willingly give up achieving that goal. For Hamas and other Palestinian militant groups, it appears probable that the plan for stopping Israeli settlements continues in the form of indiscriminate violence against both IDF personnel and Israeli civilians. While violence in the West Bank increases and will likely continue increasing, it appears that Jerusalem will also likely remain steady in its settlement policy. Violence against Israeli civilians unites Israelis against Palestinian terror, and if terror attacks continue to escalate it will likely result in increased domestic support for security actions against Palestine. Either way, it seems unlikely that a continuation of pressure tactics from either the international community or Palestinian groups will result in a long-term halt in West Bank settlements.

[Theodore Feldman]

CHINA: Strategic Positioning May Result in Becoming Artificial Intelligence Superpower

Summary: Over the past couple years, Beijing increased its actions to promote the research and development of artificial intelligence (AI) in China. Policy support by Beijing as well as advancements by Chinese tech companies may result in the country becoming the leader in artificial intelligence.

Background: Since 2017, Beijing implemented AI as part of a national strategy to elevate Beijing as the global leader in AI by 2030. Artificial intelligence plays a key role in Beijing's "Made in China 2025" plan, which outlines Beijing's goal to transform into a self-sufficient economy. President Xi Jinping emphasized the importance of implementing AI as the engine of future growth. Over the years, China's position in the AI field grew exponentially due to the political actions taken by Beijing. Beijing currently holds the largest concentration of artificial intelligence enterprises and talent in China, according to *South China Morning Post.* The Bureau of Economy and Information Technology released a report stating that the rapid development of this industry attracted more than 40,000 AI talent to Beijing, which consists of 1,048 core AI companies. A study by the Australian Strategic Policy Institute showed that China generated almost 50 percent of the world's high-impact research papers and currently hosts seven of the world's top 10 research institutions, according to Reuters.

Government Plans and Support: Beijing will continue supporting the growth of AI by creating new policies focusing on AI-specific research. More research in the AI industry will help Beijing implement discoveries across multiple sectors and demonstrate the nation's position in the AI race. Several recent examples of policies Beijing announced include:

- On 28 March, the Ministry of Science and Technology and the National Natural Science Foundation of China announced a new plan to accelerate the growth of artificial intelligence in science and technology research. The plan focuses on the research needs in basic disciplines, drug development, gene research, and biology breeding. This plan intends to converge resources and enhance innovation capabilities through interdisciplinary research teams.
- On 13 February, Beijing's Bureau of Economy and Information Technology issued its plan for the growth of AI in the city. The plan states that Beijing will support businesses,

universities, and research institutions to promote the development of an artificial intelligence innovation source with global influence.

Chinese Tech Companies' Advancements: With the support of Beijing's AI policies, tech companies play a significant role in AI development. Big Chinese tech companies contributing to the advancements of AI will likely result in the overall integration of AI in China. Chinese companies rushed to create an AI chatbot after the release of ChatGPT, which resulted in competing products and increasing the threshold within the Chinese technology sector. Recent progress in AI made by Chinese tech companies includes:

- On 27 March, tech company Nvidia released new research that AI can help improve chip design. The research revealed that using AI would help find better ways to place big groups of transistors on semiconductors. The researchers got promising results by using reinforcement learning and adding a second layer of AI. These findings may improve semiconductor chip design, which will impact the chip's cost, speed, and power consumption.

- On 16 March, Chinese tech company Baidu released its own AI-powered chatbot. The chatbot's beginning services consisted of generating images from text prompts, composing poetry, and producing audio in Chinese dialects. New videos showed the chatbot producing travel itineraries and human-like advertisements using scripts tailored to a user's needs. Although the bot lacks power compared to ChatGPT, the company still made great advancements in the AI industry. The company plans to integrate its chatbot across its existing businesses and continues to improve the errors found within the chatbot.

- Tencent started developing its own AI foundation model to improve the efficiency of gaming and user experience. The company plans to develop AI technology that will enhance the company's video games and social media operations.

- ByteDance hired the former head of Alibaba's AI multi-model M6 to lead its AI lab and build its own AI model. ByteDance plans to prioritize imaging and language in its AI model and intends for the company's successful apps, such as Douyin and CapCut to inherit the new technology.
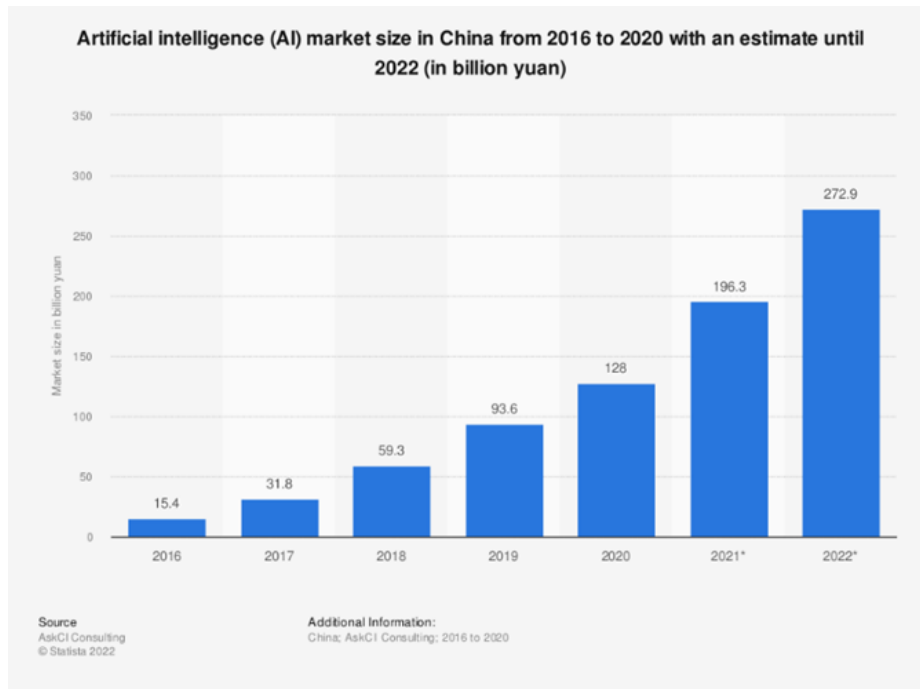
Artificial intelligence (AI) market size in China from 2016 to 2020 with an estimate until 2022 (in billion yuan)

Figure 1: A graph of the AI market size in China from 2016 to 2022 in billion yuan

Outlook and Implications: Beijing's strategic planning to support AI research and encourage tech companies to produce advanced AI will probably result in China becoming the leader in artificial intelligence. The implementations Beijing can produce from its extensive research and high investment in AI will likely result in a more AI-integrated society. The discoveries will probably go towards Beijing's development of smart cities, where Beijing will likely implement more daily usages such as cars, the Internet, traffic lights, and infrastructure. Advancements in AI will likely help the economy in China and help the nation prepare for a future with declining birth rates. Their implementations will probably allow Beijing to its self-sustainability, which would significantly impact world relations. Such considerable advancements in AI may result in China surpassing the U.S. in the AI race. Although U.S. sanctions will probably slow Beijing's progress, China will likely catch up due to the increased number of companies and money invested in the AI industry. The research teams will most likely utilize the benefits of the Chinese population to collect data and appeal to the market. Over time, Beijing's strategic positioning of growing the AI industry in China through policy and support of tech companies will probably result in the nation becoming the next AI superpower.

[Rebekah Sokoloski]

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Embry-Riddle Aeronautical University's (ERAU) Bachelor of Science in Global Security & Intelligence Studies (GSIS) degree program at our Prescott Campus blends both academic and professional studies to equip students with the knowledge and skills necessary to become future leaders in intelligence, security, and law enforcement. The program provides students with a sound foundation in the liberal arts, including international relations, foreign languages and cultures, international law, foreign policy, political and military history, and other essential topics.

About EE

Eagle Eye Intelligence (EE) is an intelligence and research organization led by the students of the GSIS program at ERAU in Prescott, Arizona.

Dr. Philip E. Jones founded EE and Embry-Riddle's GSIS program in 2002, following a career with the Central Intelligence Agency and consulting work in international development and global security. Currently, Professor Dale R. Avery, a former career intelligence analyst, serves as EE's faculty advisor.

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