

## INSIGHTS

## Joint Efforts Needed to Maintain Global Cyberspace Security

## Opinion

By TANG Zhexiao

Cyber-attacks may occur every single day.

People think that cybersecurity is something that's highly technical. Yes, some roles require deep technical expertise, but cybersecurity is a vast domain, said Bobby Ford, chief security officer at Hewlett Packard Enterprise, in the World Economic Forum (WEF)'s *Global Cybersecurity Outlook 2023*.

According to the research, which examines the cybersecurity trends, 91 percent of all respondents believed that a far-reaching, catastrophic cyber event is likely happen in the next two years.

Latin American and Caribbean countries were beset with unprecedented cyber threats last year. Costa Rica's Revenue Service suffered a ransomware attack in May 2022, forcing citizens to pay taxes by hand, reported Global Americans, a think tank which provides analysis and opinions.

In October 2022, a group called Guacamaya hacked Mexico's Defense Ministry, causing a massive leak of secret government and military documents.

China has continued to strengthen international exchanges and cooperation in cyberspace for years. It released *Global Initiative on Data Security* in 2020, calling for all states to "take a balanced approach to technological progress, economic development and protection of national security and public interests."

With an open and inclusive attitude to promote global data security governance, the country had established in-



A man walks past a stand during the Gulf Information Security Expo and Conference (GISEC) held at the Dubai Trade Center, Dubai, the United Arab Emirates, on March 14, 2023. Various companies take part in GISEC with high-end Cybersecurity products. (PHOTO: VCG)

ternational partnership with 274 computer network emergency response organizations in 81 countries and regions as of 2021.

In 2022, the State Council Information Office issued a white paper, calling for jointly building a community with a shared future in cyberspace.

The National Conference on Cybersecurity and Information Technology Application held this mid July emphasized that international exchanges and pragmatic cooperation should be deepened in cyberspace affairs, while cyber legislation, law enforcement and administration of justice should also be strengthened.

Apart from signing memorandums to step up cooperation in cybersecurity with Indonesia and Thailand, China held two sessions of cyber dialogue with

ASEAN, reaching agreement to ensure the peace, security and resilience in cyberspace through dialogue and cooperation.

As cyber risks intensify, cybercrime and cyberterrorism have become a global scourge, governments around the world are stepping up their efforts to combat the rising digital threats.

The operation "First Light 2022", running from March to June last year by Interpol, saw 76 countries take part in an international clampdown on the organized crime groups behind telecommunications and social engineering scams, according to Interpol's official brief.

Cybercrime, especially ransomware, is a global problem, Gabby Portnoy, director general of Israel's National Cyber Directorate, told csoonline.com. "We have to deliver, of course, internally on the

state level but also internationally," he added.

"There needs to be a collaborative and coherent response to these [ransomware] threats, and the United Nations Office on Drugs and Crime (UNODC) has been working closely with Member States to strengthen their national and cross-border operational capacity to respond to ransomware," said Alexandru Caciuloiu, UNODC cybercrime and cryptoterrorism advisor for Southeast Asia and the Pacific.

According to Cao Shumin, vice-minister of the Cyberspace Administration of China, the country stands ready to partner with other countries to make the Internet more beneficial to humanity and contribute to building a fair, open, inclusive, safe, stable and energetic cyberspace.

## U.S. Chip Policy Impotent

By QI Liming

Since the introduction of *The CHIPS and Science Act* in August 2022, U.S. politicians have stuck to their guns, constantly directing the country's trade and technology policies through generalized and vague instructions. It's time for these "amateurs" to stop the haphazard intervention on the economy and technology.

These self-harming policies have their own inborn defects, and thus won't proceed as envisaged. Rather than coercing its allies to take sides at the expense of their own development, the U.S. should seek common progress for humankind in a rational and inclusive manner.

In addition, losing China, a huge semiconductor market, would be unwise. In the past, Chinese local chip-makers had stepped up to fill the market vacuum created by American export restrictions.

**Losing Chinese market intolerable**  
From the perspective of U.S. manufacturers, chief executives from the U.S.-based Semiconductor Industry Associa-

tion (SIA) have already realized they couldn't lose the huge market in China.

On July 17, according to Reuters, as U.S. politicians were fermenting more stringent policies to curb the development of China's chip technology, chief executives of Intel Corp, Qualcomm Inc and Nvidia met with top Biden administration officials, calling on the Biden administration to "refrain from further restrictions" on chip sales to China.

As Chris Meserole, director of the artificial intelligence and emerging technology initiative at the Brookings Institution said, "The biggest firms have to navigate some of the tumultuousness ahead. But it's going to be costly, and it's going to introduce a lot of challenges in their operating environment."

With the U.S. attempting to leverage control over the advanced technology race, tech businesses are caught in the middle, said Meserole.

**Great loss cannot be retrieved**  
As senior researcher Martin Chorzempa noted on the website of Peterson Institute for International Eco-

nomics, export controls have become one of the most contentious battlegrounds. Semiconductor export controls aimed at China, however, have also embroiled allies such as South Korea and Holland, he said.

The downward trend in trade data comes amid increasing efforts by the U.S. to restrict China's access to advanced chips and related equipment, especially the key players in the global chip supply chain.

Semiconductor shipments from South Korea to China saw a 35.7 percent year-on-year drop in May, and trade in memory chips plunged 53.1 percent, according to South Korea's Ministry of Trade, Industry and Energy.

Andrew Sheng, distinguished fellow at the Asia Global Institute, University of Hong Kong, told the *South China Morning Post* that the U.S. chip war on China weaponizes interdependence, but the outcome is far from certain.

**Self-reliance manufacturers harvesting and promising**  
Cutting off China's access to essen-

tial technology at vulnerable choke points, in turn, has promoted China's chip manufacturers self-reliance.

"I don't underestimate China's ability and resolve to find a way to build next generation technologies and to also utilize some lagging technologies to still build really important products," Daniel Newman, CEO and principal analyst at research firm Futurum Group, told CNBC.

Paul Scharre, vice president and director of studies at the Center for a New American Security, said that, "Nothing's impossible."

"I certainly think in the long run, we should expect the Chinese to be able to make these technological advancements. It's quite possible that they're able to do so faster than maybe others might expect," said Scharre.

According to UK website Verdict, Chinese chip supplier profits are soaring as China shrugs off U.S. chip curbs. China's manufacturers are now relying on domestically sourced parts, which has led to a massive boost in revenue for domestic technology companies.

## Comment

## China and Germany Are Partners, not Rivals

By GONG Qian

Germany published its first and long-anticipated China strategy on July 13, which will serve as a compass for its relations with China. The strategy is shaped by internal division from various interested parties. It treats China as "a partner, competitor and systemic rival." Some Western media and politicians argued that it signals a "split" from Sino-German relations in the past. But it is too early to come to that conclusion.

Responding to the 64-page document, Chinese Foreign Ministry spokesperson Wang Wenbin said that the two countries are partners, not rivals.

On one hand, the German government has obviously adjusted its policy towards China given the rapidly changing international environment and rising geopolitical tensions. Specifically, the strategy comes amid China's growing global influence and the so-called "derisking" from China, along with the ongoing Russia-Ukraine conflict.

"The publication of the China Strategy indicates that Europe's largest economy is adjusting its position and terms of engagement with China, in ways that are likely to benefit the transatlantic relationship," said the Center for Strategic and International Studies in Washington DC.

On the other hand, it is also clear that the cooperation between the two significant economies far outweighs competition in many aspects. The newly released document said China and Europe have benefited greatly from increased political, economic and societal exchanges, as China has achieved strong economic growth, considerable prosperity and an impressive reduction in poverty over the past few decades.

The bilateral economic and trade ties between China and Germany are highly complementary. Trade between the two countries rose to a record level in 2022, with goods worth 298.9 billion Euros (nearly 325 billion USD) being traded, up around 21 percent from 2021, according to German Federal Statistical Office. This means that China remains Germany's single biggest trade partner

for the seventh consecutive year.

China provides a vast consumer market for German business, including Volkswagen (VW), BASF and BMW. Taking VW as a specific example, as one of Germany's largest companies, it has profited from the rise of China's economic development. The company depends on China for at least half of its annual profits, which reached 22 billion euros in 2022, according to *The Financial Times*. VW has also recently revealed its new strategy -- "in China, for China".

Besides that, two-thirds of Germany's rare earth metals requirements, which are indispensable in producing batteries, semiconductors and magnets in electric cars, are imported from China, according to Reuters.

More importantly, as the strategy puts it, China remains an indispensable partner for Germany in climate change, debt crises and food security. In an interview with the *South China Morning Post*, Dirk Messner, head of the German Environment Agency, said that interaction with China was critical in fighting climate change. The two countries had similar industry structures and could learn from each other and cooperate on decarbonizing the car, steel and concrete industries, he added.

On his visit to Germany this June, Chinese Premier Li Qiang also proposed tackling climate change as one of the guiding visions for future Sino-Germany cooperation, adding that the two countries should promote cooperation in green technology and industry. The two sides has agreed to set up a dialogue and cooperation mechanism on climate change and green transition.

While the world is accelerating the move toward a green economy, China's tech and experience in new energy can give Germany leverage to achieve its energy transition and sustainable development goal.

"We hope Germany will adopt a rational and practical China policy, and work with China to respond to global challenges and contribute more certainty and positive energy to world peace and development," said Wang.



The R&D test site, located in the park of Volkswagen Anhui R & D center in Hefei, China's Anhui province, is under construction in March, 2023. (PHOTO: VCG)

## China Remains Vital Market for Korea

## Research Box

Amid intensifying U.S.-China rivalry, Korea Chamber of Commerce and Industry Chairman Chey Tae-won has warned, "Losing the huge Chinese market would be irrecoverable for us." Other Korean businesses probably feel the same way.

Korean semiconductor manufacturers are particularly nervous. They were given just a one-year grace period under the U.S. *CHIPS and Science Act* designed to boost investment in American high-tech research and development and bring semiconductor manufacturing to the U.S. Samsung manufactures 40 percent of its NAND flash chips in China, while SK Hynix produces 40 percent of its DRAM and 20 percent of its NAND flash chips there. SK paid Intel 7 billion USD for a NAND flash plant in Dalian, China

and could end up suffering losses if no more investment can be made.

U.S. manufacturers are also reeling. China accounts for a third of global semiconductor sales, while computer chips manufactured in the U.S. are ultimately assembled and tested in China. U.S. media reports are saying that Washington cannot afford to shut out Beijing because of the heavy dependence of the American semiconductor industry on China.

The Chinese economy is bigger than those of the G7 combined excluding the U.S., which is why the EU for instance does not always toe U.S.' line when it comes to China. The role of the Korean government, too, is to find a wise balance between maintaining its principles and ensuring flexibility at the same time in dealing with China.

Editorial, *The Chosun Ilbo*, 14-07-2023.

## Hi! Tech



Filled with Phase Change Material (PCM), the cooling vests provided for volunteers at the Chengdu Universiade can be used to lower the temperature to about 23°C for two hours without producing condensing water. (PHOTO: VCG)



To keep the ingredients fresh, this smart snack machine in the Chengdu Universiade village adopts the ultra-quick freezing technology, with the whole process of cold chain delivery being stored in an environment of -18°C. (PHOTO: VCG)