Subcommittee on Security Export Control Policy, Trade Committee, Industrial Structure Council Interim Report (Overview)

October 8, 2019

The Subcommittee on Security Export Control Policy under the Industrial Structure Council's Trade Committee engaged in intensive discussion from July 10 to September 25, 2019 on trends in issues regarding international critical technology control as well as Japan's future strategy in this regard.

1. Changes in the international order and the implications for Japan's economic policy

1.1 Changes in the international order

Growing domestic disparities and dissatisfaction and unease over the emergence of different political and economic regimes has led to a marked rise in the number of countries prioritizing their national interest above all else. The international order built on the values of democracy and free and fair trade that inform the WTO system and the European Union is destabilizing in all areas from international politics through to trade and technology.

The US-China rivalry has escalated beyond mere trade friction and competition for economic power into a struggle for supremacy. Regardless of the US decision to incorporate China asymmetrically to liberal capitalism following its 2001 accession to the WTO, expectations of convergence with Western values such as the protection of intellectual property rights (IPR) and rejection of state capitalism have been disappointed, and concern has been growing over increasing civil-military integration¹ and state-led economic policies such as protection of state-owned enterprises and illicit IPR acquisition. The US is not only imposing duties as a way of reducing its trade deficit but also aiming to secure technological supremacy.² In parallel with this rivalry, countries in both Europe and Asia are increasingly adopting various industrial policies such as massive government investment in critical domestic industries (Table 1).

While continuing to emphasize economic internationalism focused on the WTO, Japan too needs to adopt "economic policy more closely integrated with security".³ Our challenge will be to maintain and increase our economic advantage in partnership with like-minded countries who share our values and principles.

1.2 How to implement "economic policies more closely integrated with security"

(1) Importance of a holistic approach

With the loss of technological superiority and technological vulnerabilities increasingly regarded as security concerns, countries around the world are expanding their measures for preventing the outflow of critical technologies for security reasons, and also promoting economic policies with a focus on domestic industry.

¹ Made in China 2025 <u>http://www.gov.cn/zhengce/content/2015-05/19/content_9784.htm</u>

² Defense industry policy expansion under the 2019 National Defense Authorization Act and execution of the Foreign Investment Risk Review Modernization Act and the Export Control Reform Act; introduction of cybersecurity-related measures such as adding Huawei-affiliated companies to the Entity List.

³ Industrial policies pursued in Europe and elsewhere as noted at the 24th general meeting of the Industrial Structure Council of METI.

Instituting measures to stop the outflow of critical technologies so as to prevent the proliferation of technologies that could be diverted to military use is Japan's international responsibility, and the importance of this remains unchanged. In so doing, we need to avoid impeding economic growth and innovation even as we address the diversification of channels for technological outflow accompanying globalization and open innovation.

Simply instituting measures for preventing the outflow of critical technologies ("protecting" critical technologies) will not, however, be sufficient to secure a technological advantage and remove technological vulnerabilities. As a starting point critical technology information held by all entities from universities and research institutes to large companies and the small and medium enterprises (SMEs) that underpin them needs to be properly identified and shared and analyzed (critical technology information has to be "known") across the government and industry. Then, Japan must also focus on measures to "develop" domestic capacity so as to further advance those critical technologies in which we currently have an advantage while simultaneously reducing our current technological overreliance on other countries in certain areas. This will be essential in securing Japan's technological advantage and dealing with technological vulnerabilities.

The holistic approach⁴ suggested by the 24th general meeting of the Industrial Structure Council will therefore be vital. This approach starts by identifying technologies related to key areas essential for economic policies more closely integrated with security. In this regard, the Subcommittee defines "critical technologies" as "important technologies in which Japan should maintain superiority and remove vulnerabilities in order to ensure Japan's security and realize the sound development of the Japanese economy."

(2) The Integrated Innovation Strategy⁵

The Integrated Innovation Strategy 2019 showed a policy direction of innovation promotion in the area of safety and security. This lays out a holistic approach of economic policies to be pursued by Japan (Table 2).

2. Components of "economic policies more closely integrated with security" and their improvements to be achieved

With regard to "economic policies more closely integrated with security", the Subcommittee discussed (a)inward foreign direct investment screening as an urgent issue to be improved, and then, as issues to be reviewed, (b)export control and (c) other measures for preventing the outflow of critical technologies ("protecting" critical technologies) and for "knowing" and "developing" critical technologies.

⁴ (1) Responding to the Fourth Industrial Revolution and the plunge into a 5G era, measures shall be considered to maintain and strengthen critical areas vital to Japan's security and economy (critical components and materials, etc.); (2) based on the trend toward strengthening investment control and technology control in the US, policy discussion shall be pursued on an international framework for the expansion of regulatory scope, including AI and other new technologies, in a manner that does not impede innovation; (3) a system shall be built for appropriate investment control and technology control, boosting information-gathering capacity and security awareness at both the government and private-sector level in relation to critical technologies; and (4) policy dialogues and international rules shall be actively utilized in order to redress technology transfer demands and to secure intellectual property and license protection.

⁵ The Integrated Innovation Strategy was originally created in 2018 by the Cabinet based on the recognition that with the rapid advance of disruptive innovation worldwide and other fundamental game changes, simply continuing along the same policy trajectory will not be enough to sustain global competitiveness. Taking a global perspective and addressing the whole spectrum from basic research to deployment out in society, the strategy aims to exploit Japan's strengths and overcome its weaknesses, creating a society that flexibly and autonomously identifies the optimal socioeconomic structure.

2.1 Foreign direct investment screening

In addition to foreign direct investment's short-term advantages of a positive impact on the economy and employment and the consumer merit of new services and products, over the medium- to long-term too, it helps to promote innovation in areas right through to business models and work modes. In 2012, the government accordingly set the goal of doubling foreign direct investment to 35 trillion yen by 2020, and we will need to continue to grow that investment.

At the same time, amidst increasing international concern over the security challenges presented by foreign direct investment, the European and North American countries have recently been bolstering their foreign direct investment controls (Tables 3 and 4). This presents the possibility that investors will avoid such countries with stronger foreign direct investment controls and begin to invest more heavily in business related to Japan's critical technologies with a view to acquiring said technologies, which not only raises the security concern of critical technology outflow but could also impact negatively on foreign companies' development of business relationships with Japanese companies, dealings in critical technologies included.

Even as we work to further promote foreign direct investment, we also urgently need to review our system in light of the stronger foreign direct investment controls in the West. The Subcommittee consequently discussed the direction of such a review based on the principle of boosting predictability for foreign investors as a result.

(a) Exemptions from the across-the-board prior notification obligation with rigorous delineation of transactions covered by national security review

In the case solely of investment presenting limited national security risk, consideration should be given to exemptions from the prior notification obligation. In such cases, the government will need to engage in ex post facto monitoring, and where necessary (such as in cases of a risk to national security), the government must also be able to take appropriate measures. Consideration should further be given to the development of a coordination mechanism amongst the relevant ministries so as to ensure the effectiveness of ex post facto monitoring.

(b) Foreign direct investment by entities without legal personality

In the case of foreign direct investment by entities without legal-personality such as investment limited partnerships, where foreign investors as associates, mutual, partners under certain conditions such as limited liability partners acquire stocks, consideration should be given to measures to reduce the burden on such limited liability partners putting up funds, such as the requirement of filing a notification under the foreign exchange law only for association partners who could exercise substantive influence over the company receiving the investment (for example, unlimited partners in investment limited partnerships).

(c) Addressing concerns

There have been numerous cases overseas of parties using their influence on the management of the company in which they have invested to access information held by that company and business management in a form outside the existing scope of Japan's foreign direct investment screening.

Overseas examples

• Fund X acquires around one percent of the stocks of Company A, then pressures Company A to change its business strategy and to accept a director dispatched by Fund X. In the end, the head of Company A quits, and the president of Fund X is appointed as a director at Company A.

• Company P acquires around one percent of the stocks of Company B, then criticizes the business strategy of Company B and demands talks with the CEO of Company P. As a result, a business segment that was supposed to be expanded under the original business strategy is forced to be sold.

Because Japan too could see its national security compromised through foreign direct investment by foreign investors that leads to their involvement with the critical technologies of Japanese companies and the operation of critical infrastructure, we need to look at (i)lowering the threshold for the stock acquisition ratio requiring notification (from ten to one percent for listed companies), (ii)widening the notification requirement to more types of behavior post stock-acquisition (for example, acquiring executive position and transferring critical business sectors), so as to prevent that national security concern and (iii)redressing practical imbalances in relation to the fact that a transfer of critical business sectors to a Japanese subsidiary of a foreign entity is not required to be notified where a Japanese subsidiary has to notify when it acquires shares of a newly established company with critical technologies separated from a Japanese company forced by a foreign entity.

(d) Strengthening information exchange mechanisms with related government institutions in Japan and overseas

We need to strengthen information exchange mechanisms with related government institutions in Japan and overseas so as to ensure effective control and boost the sophistication and efficiency of foreign direct investment screenings.

(e) Operational mechanism for foreign direct investment screening and other related issues We should work to clarify, based on a consistent approach, (i) criteria for exemption from prior notification and (ii) factors to be considered in national security screenings for foreign direct investment and post stock-acquisition behaviors that has already been announced by the competent authorities. Consideration must also be given to reducing the burden of enquiries by foreign investors where there is doubt about legal interpretations on whether a foreign direct investment is subject to prior notification. The competent authorities must strengthen their screening systems in terms of both quality and quantity by introducing mechanisms for using staff with specialist knowledge for critical technologies and by actively utilizing experienced human resources at companies and universities who have been involved in research and management in relation to leading-edge critical technologies.

In addition, economic globalization and technological innovation will inevitably extend the scope of critical technologies and change the types of behavior by foreign investors which represent a source of concern. As such, reviews need to be undertaken as appropriate through ongoing dialogue among experts in critical technologies, government institutions involved with these technologies, and other related parties on (i) the scope of industrial sectors subject to foreign direct investment screening and (ii) elements to be considered in national security screenings, etc.

2.2 Export control

Japan has implemented export control for items agreed under international export control regimes from the risk of diversion to military use. However, there are moves in the West to strengthen export control, with the United States considering adding emerging technologies and foundational technologies (Table 5) to the scope of control without waiting for agreement from international export control regimes, while Europe is considering implementing export control for the purpose of human rights protection. The Subcommittee consequently discussed medium- to long-term challenges in Japan's export control based on these trends.

(a) Conformance with international consensus on items subject to control

The dramatic advance of digital technologies has seen a similarly dramatic increase in the speed of technological development, giving rise to dual-use technologies such as AI that have great strategic significance but that are difficult to distinguish their commercial developments from military-use ones. Because international export control regimes operate on the principle of unanimity, a country wishing to add items to the control list needs to coordinate with other regime members, which takes at least one or two years, and may not result in consensus even then. In our current statutory framework, Japan could add extra items to its export control list in conformance with international agreement amongst a small number of like-minded countries, but consideration should also be given as to whether Japan needs its own export control that is not based on any international agreement.

With countries currently considering how to handle export control for technologies in the process of development which are still difficult to define, such as emerging technologies, as well as for technologies that serve as the foundation for all industries, such as foundational technologies, Japan should look at how to handle export control for results derived from basic scientific research which are not subject to export control.

(b) Acceleration of outreach to universities and SMEs

Outreach to universities and SMEs, etc., should be accelerated for the purposes of building an appropriate export control system for each entity.

(c) Deemed exports and non-residents

From the perspective of export control as one means of preventing the outflow of Japan's critical technologies, further consideration should be given in accordance with the actual status of technology outflow from Japanese to any foreigners ("deemed export") to the pros and cons of implementing export control for deemed exports based on the concept of "residence".

(d) Importance of outreach to countries and regions developing export control systems and "inreach"⁶ to countries participating in international export control regimes

2.3 Means other than government measures to prevent critical technology outflow

To realize "economic policies more closely integrated with security", or in other words, a holistic approach in relation to critical technologies, it will be important to appropriately combine government measures to prevent the outflow of critical technologies ("protecting") with measures to prevent technology outflows that are driven by universities, companies, and other non-government entities, analyzing what comprises critical technologies ("knowing") and promoting R&D of them ("developing").

(1) "Knowing"-related measures

The government as a whole needs to develop and utilize specialist human resources and strengthen mechanisms so as to grasp critical technology information held by universities and companies, etc., and share and analyze ("knowing") that information across the government as a whole.

(2) "Developing"-related measures

Consideration should be given to new mechanisms and measures for "developing" critical technologies to identify critical areas for "developing" based on information gained through

⁶ For example, Japanese and U.S. export control have a catchall system that includes both weapons of mass destruction and conventional weapons, but some countries that are part of international export control regimes do not.

"knowing"-related measures and redress vulnerabilities in areas where Japan is vulnerable, as well as to secure further advantage in areas where Japan currently has an advantage. This includes allocating resources (earmarking funds, etc.), building highly reliable global supply chains in partnership with countries and regions that share Japan's values and ethics, and strengthening information security, including industrial security⁷ as a means of promoting international R&D cooperation.

(3) "Protecting"-related measures other than inward direct investment control and export control The mechanism whereby some government or public funding agencies guarantee compliance with laws and regulations of export control by parties commissioned for government projects needs to be widened across the entire government. Consideration should also be given to how to release or control R&D results related to government funds (papers, patent applications, etc.) based on R&D categories from the perspective of critical technology control, also bearing in mind a balance with merits of publication such as promoting innovation. In addition, licensing of research results based on government funds should be subject to a consistent licensing policy.

A critical technology control perspective should be included in the implementation of entry and stay permission procedures or other related ones for foreigners.

In-house systems for access to critical technologies and remuneration systems need to be reviewed from the perspective of preventing critical technology outflows through employees who have quit or retired from Japanese companies. It will also be important for them to take preventive measures with technology against unintended critical technology outflows through reverse-engineering

2.4 Roles of government and private sector to ensure effective critical technology control

As to the further study on the above, the government-led measures with binding force will not necessarily be the greatest results in a cost-efficient manner, and some should instead be implemented with the leadership of the private sector, thereby making the best mix of efforts as an entire nation.

2.5 Other point

IT networks underpinning the distribution of various types of data are defined as critical infrastructure. The protection of IT networks as well as the data including personal data flowing on the networks which may have impact on security is another point to be studied as a part of critical technology control.

Conclusion

The Subcommittee has put together its basic thinking in terms of reviewing "economic policies more closely integrated with security" (Table 6). The government must engage in sufficient exchanges of views with industry and other actors in considering the various types of measures, and work actively to strengthen mechanisms as the foundation for implementing necessary measures effectively, including securing technical expertise.

It is the Japanese government's responsibility to maintain and improve Japan's economic advantage and build a more resilient economy while also working in partnership with like-minded countries that

⁷ When disclosing or transferring confidential information to foreign governments and their industrial sectors (militaryrelated companies, etc.), ensuring that this information is protected and safe. Includes facility and personnel security clearance, information confidentiality categorization and labeling, on-site inspections, and rules on information exchange at meetings, etc.

share our values and principles and maintaining our basic focus on WTO-based economic internationalism. Issues in that regard are wide-ranging, with many requiring review, and it will be incumbent upon the government to work as a unit to address these.

(Table 1)The US-China power struggle and Beefing up industrial policies in Europe and Asia

The US-China rivalry is essentially a battle for supremacy. If it drags on, we could see a split into two economic zones, presenting the strong risk of global supply chain fragmentation and the immediate loss of Japan's national power.



Amidst the US-China power struggle, Europe and Asia too are beefing up industrial policies such as investing huge amounts of state funds into domestic industry. With countries around the world perceiving security and the economy as intrinsically linked and shaping their industrial policy around domestic industry, to enhance our economic resilience, Japan too needs new industrial policies that integrate security concerns.

France: Stronger government support for the digital sector

- > The French government has always had a strong influence in key sectors (electricity, aviation, cars, semiconductors, etc.)
- The government has announced a policy promoting <u>digitalization of the manufacturing industry</u>, including <u>funding of 500</u> <u>million euros</u>.
- A state plan for <u>AI R&D</u> has also been announced along with <u>665 million euros in funding over four years.</u>

Germany: National Industrial Strategy 2030

- Aims to increase manufacturing's added value.
- Notes that industrial policies are being revived around the world and that almost no countries have succeeded relying solely on market strength.
- Noting the importance of industrial policy rather than leaving everything up to the market, <u>lays out guidelines for industrial policy creation</u>.

Korea: Major investment in key areas

- Investment plan for injecting 1.49 trillion won into strategic investment areas and 3.52 trillion won into leading business
- Announcement of <u>comprehensive support, including tax breaks, technological development and HRD support, and</u> <u>dedicated funds</u> with the aim of making Korea a <u>semiconductor superpower</u>

(Table2) Overview of Integrated Innovation Strategy 2019

Realizing the future vision for security noted in the Strategy will require pursuing "Know," "Develop," "Keep," and "Utilize" initiatives in relation to Japan's science and technology (from the "Safety and Security" section of the Integrated Innovation Strategy)

○ Future vision	 Amidst an increasingly harsh security environment, Japan will realize comprehensive security against a wide range of threats to people's lives and socioeconomic activities The relevant ministries, industries and academia will work together to unite Japan's advanced scientific and technological capabilities Whilst guarding against science and technology information leaks, we will deploy our advanced scientific technologies out in society and secure and maintain our technological superiority, thereby realizing a society in which that superiority may be widely utilized for ensuring people's safety and security. 				
Objectives	 "Know": Overview our science and technology and clarify fields to promote, fields to supplement, and fields to properly "Develop": Focus the allocation of budget and human and other resources on the fields identified through the above process to drive ahead science and technology contributing to safety and security. "Keep": Prevent science and technology information leaks so as to secure and maintain our technological superiority and preventing our R&D results from being used in the manufacture of weapons of mass destruction, etc. "Utilize": Ensure the safety and security of our country and its citizens by deploying out in society the results acquired via the above processes of "Know," "Develop" and "Keep." 				
 Current status and issues 	 Japan's advanced science and technologies need to be broadly utilized to prevent and mitigate disasters, deal with terrorism and crime, and combat threats in a range of spheres including cyberspace, space and the oceans. Science and technology information must be appropriately controlled so as to secure and maintain our technological superiority and prevent that information from being used for international terrorism and crime, such as the manufacture of weapons of mass destruction. 				
 ○ Future directions 	"Know" Clarify priority areas and issues	"Develop" Develop science and technology through collaboration amongst relevant ministries, industries and academia	"Keep" Prevent science and technology information leaks		
	"Utilize" Deploy out in society the results acquired via the above processes of "Know," "Develop" and "Keep."				

(Table3)Outline of US investment control system

1. The Omnibus Trade and Competitiveness Act of 1988 (the Exon–Florio Amendment) amended the Defense Production Act of 1950. According to the amendment, the President may suspend or prohibit mergers, acquisitions or takeovers of US firms by foreign companies "there is credible evidence that leads the President to believe that the foreign interest exercising control might take action that threatens to impair the national security." This also applies retroactively and such decisions are not subject to judicial review.

2. The power to investigate the impact of a transaction on national security lies with the CFIUS, which comprises representatives from the CIA and other intelligence agencies, the Defense Department, State Department, Department of Trade and other federal agencies.

3. The Foreign Investment Risk Review Modernization Act (FIRRMA), which was passed in August 2018 and will go into effect by February 2020, broadens the scope of presidential powers to (1) non-controlling investment related to sensitive infrastructure, (2) non-controlling investment related to critical infrastructure, (3) non-controlling investment related to the sensitive personal information of US citizens, and (4) purchase and lease of real estate in the proximity of sensitive facilities.

4. Governance and information rights are regarded as pertaining particularly in relation to (1) to (3), including appointment as an executive or director, the right to appoint these parties, access to non-public technology information at the company being invested in, and involvement in decision-making in relation to sensitive technologies, etc.

US Investment Control	(Review Conducted b	v CFIUS): Befo	re and After FIRRMA

	X Updates are in red.				
	Prior to FIRRMA	After FIRRMA			
Type of Review	(1) Ex post facto intervention (indefinite) %Voluntary declaration in advance by investors	 Expanded the covered transactions subject to ex post facto intervention 	(2) Added mandatory declaration (prior- notification).		
Covered Transactions	Transactions related to mergers, acquisitions of, e.g., voting rights or proxy voting rights that may constitute control over a US business (irrespective of the number of acquired shares) %Transactions include: •Purchase or lease of assets (including business and real estate)	(indefinite) to include the following: Non-controlling and non- passive investments that afford membership rights on the board of directors, rights to nominate, access to nonpublic information and involvement in substantive decision-making related to: • critical technologies,	 Covered transactions are as follows: Foreign government– controlled investments in critical infrastructure or technology having potential implications for business management 		
Business Sector	Sectors not specified	 critical infrastructure, sensitive personal data of US citizens. 	(irrespective of the number of acquired shares)		
Factors to be Considered	Effects on domestic production needed for projected national defense requirements, etc.	Factors below have been added. • Security-related effects result in foreign control on critical infrastructure, energy, strategic goods, and sensitive information, etc.			
Characteristics	 (1) Authority by the President to suspend or prohibit transactions (not subject to judicial review) (2) Foreign investors and CFIUS can negotiate a mitigation agreement (President's authority will not be exercised as long as the mitigation agreement is complied with.) 				
※FIRRMA added provisions regarding information sharing with allies.					

(Table4)Recent Developments of Reinforced Investment Controls in Europe

- ♦ EU: <u>New regulation entered into force on April 10, 2019.</u> Created an information sharing mechanism among EU member countries on investment control. Added critical infrastructure and technologies (AI, robotics, semi-conductors, cyber security, etc.) as elements to be considered for review.
- ♦ Germany: <u>Regulation was amended in July, 2017</u>. Expanded the scope of business sectors subject to prior notification (in addition to arms, military engines, etc., included military manufacturing device, items designed for military purposes (electronic goods, video equipment, etc.). Stipulated cyber technology and critical infrastructure, etc., as sectors subject to ex post facto review and conducts, for example, a focused review.
- ◆UK: <u>Amended the Enterprise Act 2002 on June 11, 2018, to bolster investment control.</u> Expanded the scope subject to review to include military technology and advanced dual-use items, cyber security (quantum technology, general-purpose computers).

In July, 2018, a completely new framework to control investment based on national security concerns was placed on public comments to align with the investment control frameworks of other countries, not by amending the existing Enterprise Act.

◆ France: The Action Plan for Business Growth and Transformation bill (PACTE bill), which included the reinforcement of investment control, was presented to the Council of Ministers on June 18, 2018. Article 55 of the PACTE bill on investment control was approved at the National Assembly in October, 2018. Cabinet Order expanded the scope of controlled business sectors in December, 2018. Included strategic business sectors (semi-conductors, space, drones as well as security related AI, cybersecurity, robotics, mass storage data, etc.) subject to review. Strengthened sanctions in case of non-compliance with the regulation.

(Table5)Expanding the scope of technologies subject to control

- Although control of emerging technologies has been discussed at the <u>Wassenaar</u> Arrangement or other occasions in recent years, there have been only sporadic discussions about each individual technology.
- On the other hand, US is considering the expansion of the scope of technologies subject to control based on Export Control Reform Act (ECRA).



(Table6) The basic thinking in terms of reviewing "economic policies more closely integrated with security"

