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Advisory Panel to Comprehensively Discuss Defense Capabilities as National Strength (Second Session)

Summary of Funabashi Statement

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Introduction: National power should not be regarded as static

In Japan, the growth and perception of national power is still stuck in the legacy of the post-war "Showa" period, an era of linear growth. Therefore, when discussing national power, we must begin by updating our view of national power.

First, it should be noted that national power increases non-linearly by making use of revolutionary technology and innovations.

China's leapfrog development strategy in technology, which has made the most of the digital revolution since the 1990s, is typical of these non-continuous breakthroughs.

Second, it should be known that national power is exerted, expressed, and recognized within the framework of rules, standards, and protocols, and can increase its influence on the international system through institutions rulemaking, and standardization. Countries can extend their national power by actively creating rules, standards, and protocols that serve to enhance their own national power. The EU's standard strength in decarbonization and green transitions and anti-economic coercion measures (currently under discussion) is an example of this.

Third, while the foundation of national power is science and technology, these only become scientific and technological power, as well as national power, when the results of

research and development are implemented in society and new markets are formed. In order to translate science and technology into national power, the ability to implement these within society is necessary. In addition, strengthening economic and scientific and technological capabilities at the national level, strategic dialogue and collaboration between government and business, public and private, industry and academia are essential. Strategic dialogue and cooperative work between government and businesses, the public and private sectors, and between industry, government, and academia, are indispensable for strengthening economic power as well as scientific and technological power at the national level.

The United States, which quickly developed, approved, produced, and marketed mRNA vaccines in the midst of the COVID-19 crisis, demonstrated its ability to the fullest extent to implement technological innovations in society. Japan, on the other hand, exposed its weaknesses.

Fourth, we must rediscover the power of manufacturing.

While digital technology (computing and communications) and digital infrastructure will be the decisive elements of national cyber power, the new cyber-physical defense industrial base will require manufacturing capabilities in advanced and innovative production processes to meet the changing equipment systems due to the expansion of space, cyber, electromagnetic, and other domains.

Fifth, national power requires supply chain resilience and strategic indispensability in the face of China's strategic subsidies, civil-military fusion, and economic coercion, which threatens the liberal international order.

In strengthening the elements of defense power, we should not dream of a defense capability that surpasses our national strength. Defense power greater than national power cannot be sustained. At the same time, however, national power should not be viewed in fixed terms, such as "defense power commensurate with national power." When the expansion of deterrence is urgent and indispensable in terms of national strategy, it is at

times necessary to advance the defense capability beyond the national power – and now is the time to make the move. In order to prepare for a possible "Taiwan contingency" by the early 2030s - and above all, to prevent such a crisis from occurring - it is necessary to begin drastically strengthening deterrence capabilities.

1) Policies on Economic Security are indispensable for maintaining and developing economic strength

The world is likely entering an era of geopolitical and geoeconomic upheaval for the next 30 years.

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Economic policies that allow for states to protect, nurture, and, when necessary, leverage their economy for deterrence have become necessary to maintaining and developing national wealth and power. Macroeconomic strategy had traditionally been based on the two pillars of full employment and price stability. The goal has been to achieve and maintain an equilibrium between supply and demand. However, the “economically rational behavior” of markets and firms cannot adequately respond to risks whose frequency and certainty are not quantifiable. The limits of market response, where necessary goods are not supplied through markets, have become more visible and are increasingly becoming the norm. Therefore, macroeconomic strategy should be based on three pillars: full employment, price stability, and economic security. Economic security policy needs to be placed on the policy agenda of the Council on Economic and Fiscal Policy.

At the same time, economic security policy should be positioned as part of national security policy. It should be the policy agenda of the National Security Council (NSC), especially the four ministerial meetings. The government should prepare an economic security strategy document together with the national security strategy document. A full-fledged economic security policy department should be established within the National Security Secretariat. National security policy and economic security policy should not be stovepiped into each bureaucratic department’s sphere of interests. National security

policy must involve the whole of government. Integration is key.

The Department in charge of economic security policy should not be primarily dedicated to work related to the Economic Security Promotion Bill. Energy resources, sea lanes (maritime transport), protecting and developing strategic technology (semiconductors, quantum computing, AI, biotechnology, etc.) , strategic infrastructure finance and investment, as well as rules, standards, and protocol strategy development will be key areas of responsibility. Most importantly, it requires long-term strategic planning and coordination among the agencies.

When it comes to economic security, businesses are important actors. Given the importance of strategic dialogue between governments and business, it is essential to appoint private sector experts to the economic security policy department.

2) Computing Power and Next-Gen Semiconductors

Computing power that is high-performance and low-power consumption is essential for national power and defense in the 21st century. Next-generation semiconductors (beyond 2nm) will support next-generation computing versions of AI, quantum computers, biotechnology, as well as IoT and post-5G.

In terms of semiconductors, while Japan remains an important player in the global semiconductor industry given some of the essential parts it manufactures, it is a backward country in the field of advanced logic. The development and implementation of next-generation semiconductors may be the last opportunity for Japan to regain its semiconductor industry's edge. In order to establish a design and manufacturing base for next-generation semiconductors (and quantum computing) in the latter half of the 2020s, private companies must be given support for capital, technology development, and mass production.

At the same time, under the framework of the Japan-U.S. alliance, it is necessary to cooperate with the U.S. to promote the acquisition of technology and R&D of next-

generation semiconductors (and quantum computing). At the Japan-US Summit on May 23, 2022, both countries agreed to establish a joint task force on next-generation semiconductor development based on the "Basic Principles for Semiconductor Cooperation." Japan-U.S. semiconductor cooperation for the development, production, and implementation of next-generation semiconductors should be regarded as "the Article II Mandate" of the US-Japan Security Treaty (encouraging economic collaboration).

Semiconductors are dual-use and even multi-use, and are "the keystone of a country's economic security", according to Prime Minister Fumio Kishida.

Not only the Ministry of Economy, Trade, and Industry (METI) but also the Ministry of Defense (MOD) should participate in the development, production, and implementation of next-generation semiconductors (and quantum computing). Japan-U.S. cooperation in semiconductors should be executed through an "economic version of 3+3," which includes the Department of Defense (DOD), the Ministry of Defense, as well as the Japan-U.S. Economic Policy Consultative Committee (economic version of "2+2"; State Department and Commerce Department on the US side and MOFA and METI on the Japan side). This is because the DOD and the MOD are the most critical users of next-generation semiconductors.

3) Broaden the Scope of the Defense Industrial Base: Expanding and Strengthening the Supply Capacity of Strategic Industries

With the dynamic expansion of concepts such as national power and military power and the increasing sophistication of the technological base supporting military power, it is necessary to broaden the scope of the "defense industrial base" from its traditional narrow definition (e.g., manufacturers of weapons, aircraft, and other defense equipment) to the defense industrial base in the broad sense (e.g., space, cyber, electromagnetic waves, and supply chain resilience). This will create a new defense capability that encompasses a wider range of industries. Currently, the most critical defense industrial base and technology is computing and the semiconductors that enable it. ***

Amid the long-term deflationary trend since the 1990s, production bases continued to

move overseas in response to the progress of economic globalization, and the foundation of defense capabilities was hollowed out as a result. However, under the geopolitical and geoeconomic dynamics since the 2010s, supply chain instability has become chronic, and companies have begun to return to the domestic market. Government support measures for strategic industries, including machine tools and aircraft materials, are also needed to counter China's drive to subsidize strategic industries. By developing policies to promote domestic investment that also take into account the longer trend of the weak yen, it is necessary to expand supply capacity through increased domestic investment in industrial sectors. The greatest contribution to defense that industry is expected to make is to expand and strengthen the domestic supply capacity of strategic goods and services.

In order to strengthen the broadly defined "defense industrial base" in the medium to long term, it is necessary to develop the technology to underpin this and collaborate with industry, government, and academia to avoid stovepiping.

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Professor Ken Ishii of the Institute of Medical Science at the University of Tokyo had been working on an mRNA vaccine since around 2015, but the research was terminated when the government failed to provide a budget for clinical trials. Japanese pharmaceutical companies were also unable to see profitability, and the Ministry of Health, Labor, and Welfare (MHLW) was captive to a system of inaction that evaded and postponed approval, fearing the risk of litigation due to the vaccine disaster. Thus, the domestically produced mRNA vaccine project was abandoned. A Japanese company had developed a fully automated PCR testing device. Around March 2020, when Japan's PCR testing system was reportedly clogged, it was France, not the Japanese government, that jumped to snag the testing equipment. In order to sell the company's device in Japan, it was necessary to obtain approval for insurance coverage from the Ministry of Health, Labor, and Welfare, and approval was not granted until June, after the first wave of sales had been completed. The company stumbled between the regulatory authorities and the private sector to promote societal implementation. MHLW lacks the industrial policy perspective to foster industry to establish health security and the will for strategic autonomy in terms of economic security.

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There is a strong likelihood that the geoeconomic trend will continue for a long time to come. It is based on the following structural factors.

1. The inward-looking and divisive politics of the U.S. domestically will prevent the U.S. from fully fulfilling its role as the builder/rule maker of a free and open international order. (For example, the WTO's dispute settlement system will cease to function after 2019.)

2. Eurasian geopolitics based on a "Sino-Russian bloc" will act to break up the regional order into spheres of influence.

3. China's tendency to weaponize its markets and supply chains and use economic coercion for geopolitical purposes will be further reinforced.

4. The transition to decarbonization will lead to divestment in fossil fuels and a green upheaval, creating a struggle for energy and resources as well as strategic mineral resources and food.

5 De-facto decoupling of the U.S. and Chinese economies will encourage onshoring, reshoring, and friendshoring of global supply chains, and companies will change their business behavior patterns from "just in time" to "just in case."

6 In R&D and innovation in strategic technologies such as semiconductors, quantum computing, AI, and biotechnology, China is strengthening the state's control of data, talent, and investment through "military-civil fusion" and the National Intelligence Law. In the U.S., a bipartisan movement is emerging toward new industrial policies to achieve geoeconomic policy goals. Major countries will increasingly securitize investment, technological development, and human resource acquisition.

In the broad sense of defense industrial as well as the area of economic security resilience, the Japanese government has selected eleven "specified critical commodities" (antimicrobial agents, ship-related equipment, semiconductors, online cloud computing, permanent magnets, storage batteries, aircraft parts materials, etc.) to be supported under the Economic Security Promotion Bill, and has decided to embark on measures to support domestic production of these items.