

Promotion of Defense Industry Activity

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Japan

Today's Topic

- 1 . METI's Role**
- 2 . Overview of the Japanese Defense Industry**
- 3 . JP and U.S. companies' roles of International Cooperation**
- 4 . Promotion of Japanese Defense Industry Activity**

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METI

Industries

Products

- *Materials*
- *Robotics*
- *Aerospace*
- *Automobiles*
- *Defense*
- *Electronics*
- *Medical/
Health care*

Service

- *AI/BD/IoT*
- *Cybersecurity*
- *Distribution*

Energy

- *Nuclear*
- *Fossil Fuel*
- *Renewable
Energy*

Regulatory policy

- *Explosives*
- *Chemical /Bio*
- *Environment /
Energy*

R&D&Innovation, IPR, Standard

Trade

Small and Medium Enterprise Policy

METI's Mission in Relation to Defense Industry

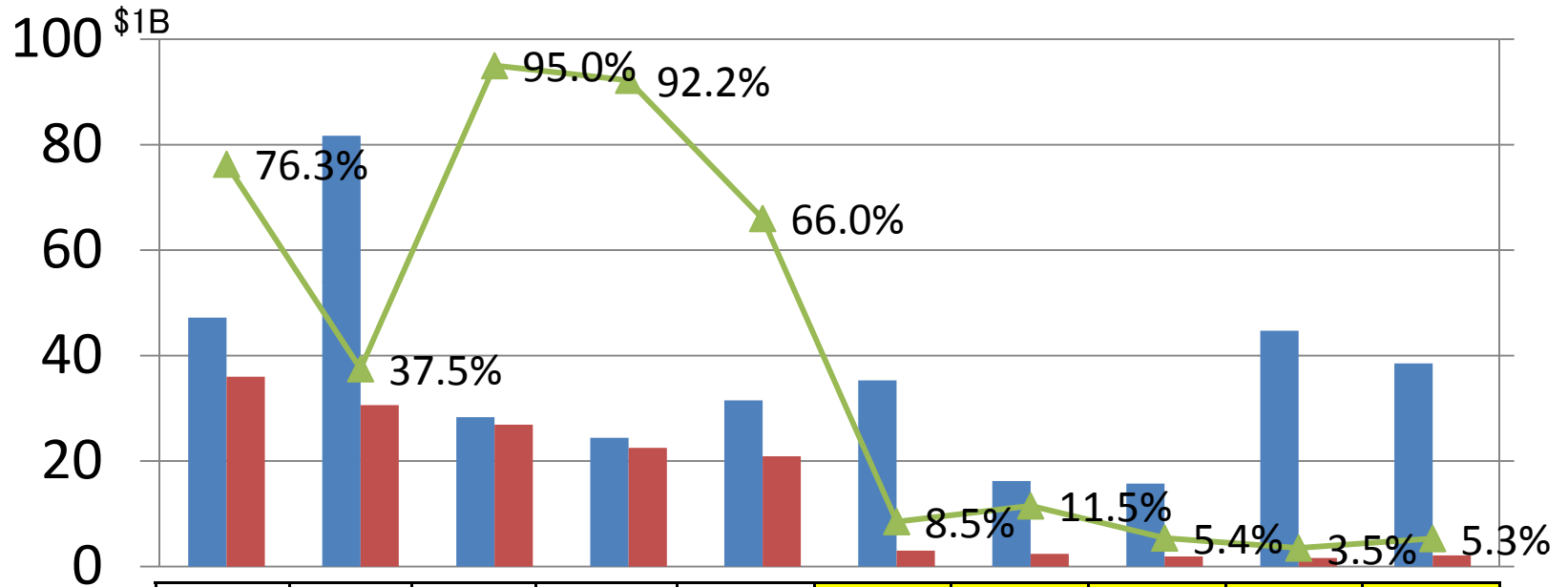
**Trade Control
(Export, import, inbound direct investment)**

**Maintain and Strengthen Defense Industrial
and Technological Bases**

***In close cooperation with industry and
other ministries.**

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Japanese Defense Business in Global Landscape



	LM	Boeing	BAE	Raytheon	GD	MHI	KHI	IHI	MELCO	NEC
■ Total sales	47.2	81.7	28.3	24.4	31.5	35.3	16.2	15.7	44.7	38.5
■ Arms sales	36.0	30.6	26.9	22.5	20.9	3.0	2.4	1.9	1.6	2.1
▲ Arms sales as a % of total sales	76.3%	37.5%	95.0%	92.2%	66.0%	8.5%	11.5%	5.4%	3.5%	5.3%

Global TOP 5

THE SIPRI TOP 100 ARMS-PRODUCING AND MILITARY SERVICES COMPANIES, 2014

1950s The Korean War

1954 Established JSDF

1967 The Three Principles on Arms Exports

1970 Guideline for indigenous development/production

1976 Collateral policy guidelines of the Principles

“Arms” Exports to the other areas not included in the Three principles will be also restrained.

⇒For Domestic Only

1980’s “Exemption”

1983 Transfer of Military Technology to the U.S.

1999 Cooperative research on Ballistic Missiles

2014 The Three Principles on Transfer of Defense Equipment and Technology

※Not stating a measure for “exemption”, but clearly defining limitation where transfer of defense equipment may be permitted

The New Three Principles on Transfer of Defense Equipment and Technology

“3” of The new 3Ps are;

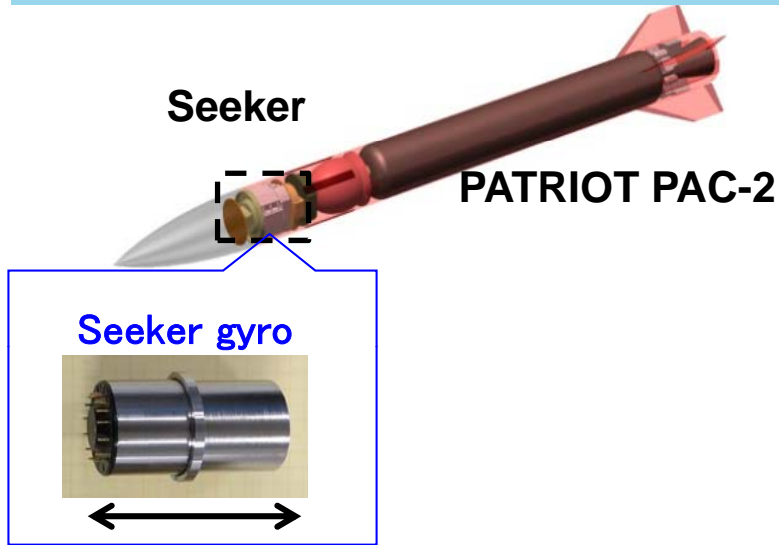
- 1 **Clarification of cases** where transfers are **prohibited**
- 2 **Limitation to cases** where transfers may be **permitted**, conducting strict examination while ensuring transparency
- 3 **Limitation to cases** where **appropriate control**

The new 3Ps set clear conditions and limitations to possible transfers which contribute to;

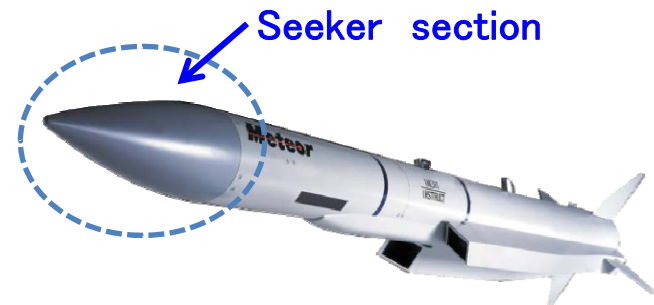
- Active promotion of contribution to peace and international cooperation
- Japan's security through cooperation with its ally and partners

Cases Deliberated at the NSC and Published

Seeker gyro with the U.S.



Seeker technology with the U.K.



Technical information, Co-Development & Production regarding submarines with Australia



“SORYU” class submarine

【reference : web site of Maritime Self-Defense Force】

Aegis display system with the U.S.



Aegis-equipped destroyer



Display system for Aegis-equipped destroyer

Technologies Becoming Borderless

1960s Internet (Defense Use Only)



→Spin-off



Spread of the Internet for commercial

Present Technologies: Borderless

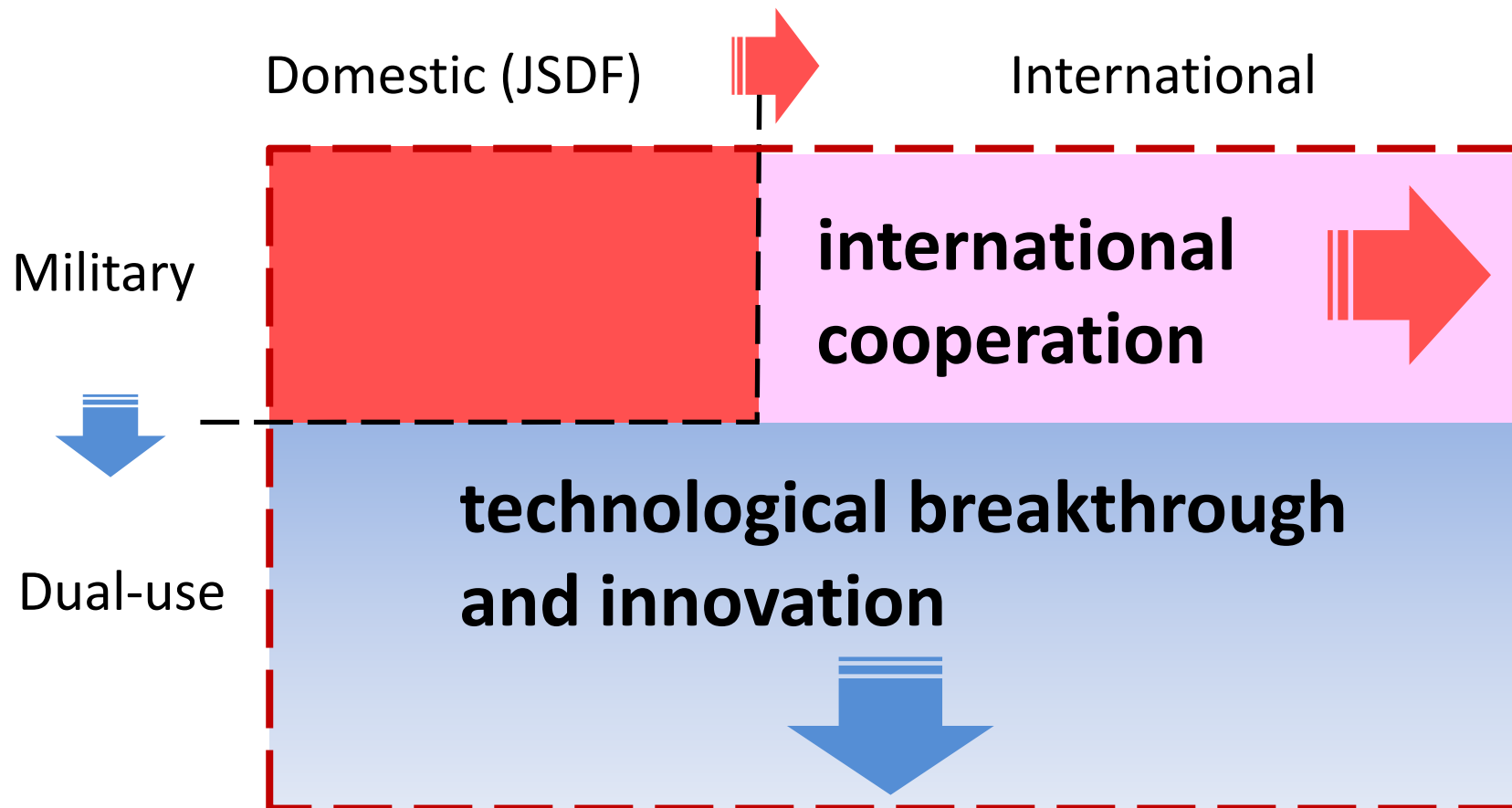
e.g. Robots:

Nursing Care and Welfare Use

Defense Use

Future Vision of Japanese Defence Industry

Japanese defense industry will expand its business scope.



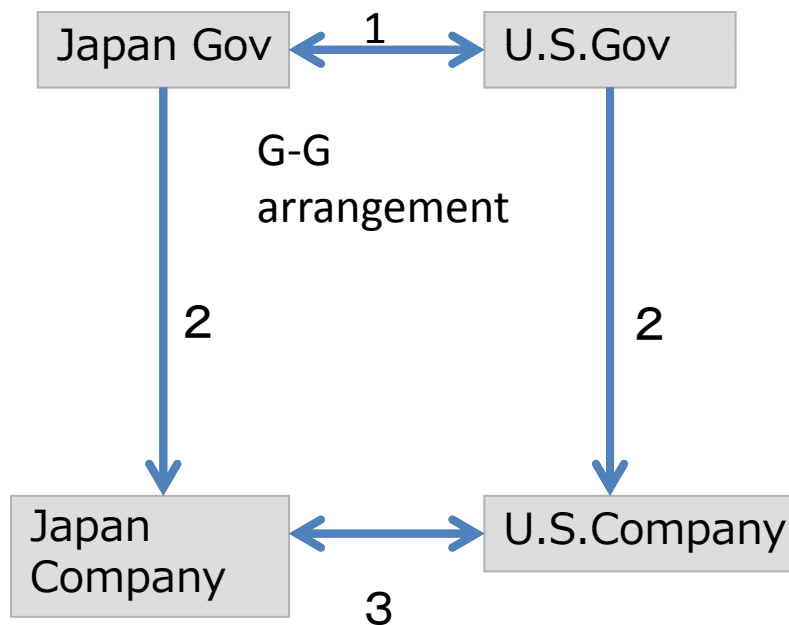
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Envisaged Cooperation and Roles of the Japanese Defense Industry

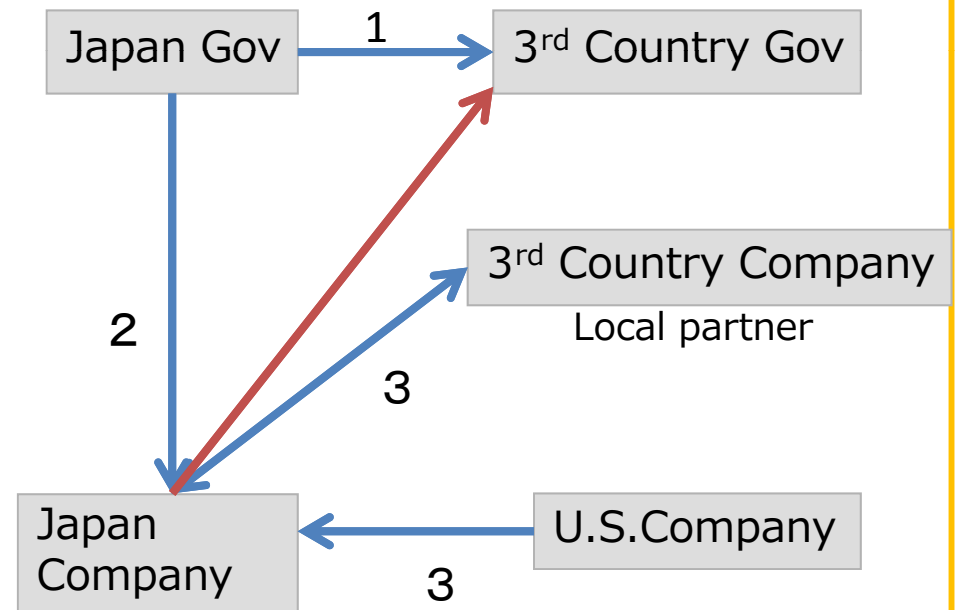
- ◆ **Partner for joint development and production**
- ◆ **Integrator of major platforms to partner countries**
- ◆ **Supplier to the international system for sharing parts / licensed production**
- ◆ **Provider of maintenance services**

Opportunities for U.S. Companies

Co-development, Production Partner



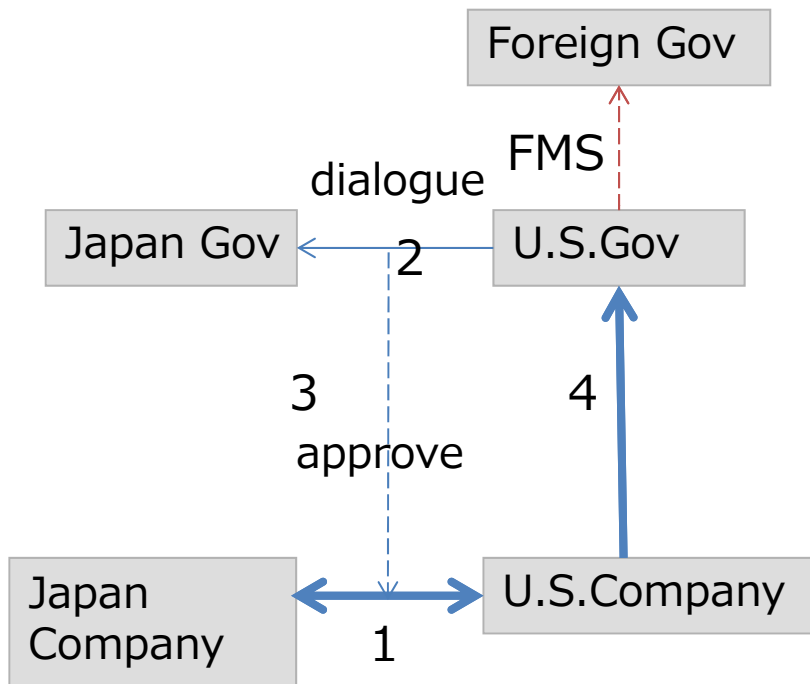
Complementing for Japanese Platform Integrator



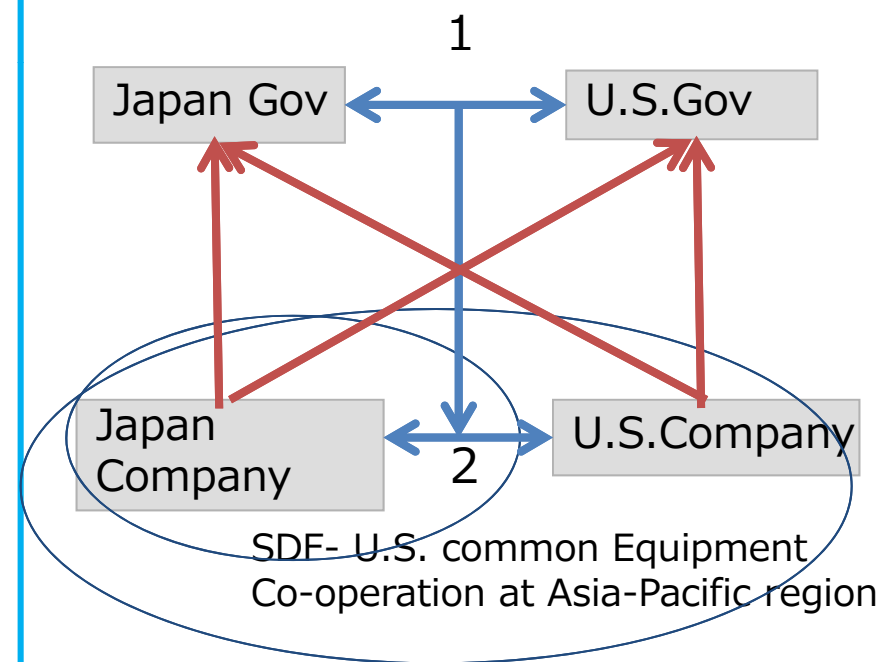
Opportunities for U.S. Companies

Co-Supplier to U.S.Gov

(Through U.S.Gov to 3rd Countries)



Maintenance service partner



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METI's Reinforced Efforts to Expand International Cooperation

◆ G-G Cooperation

Foreign Comparative Testing(FCT) Dec.2014

Dual-Use Technology Workshop Feb.2016

◆ B-B Cooperation

U.S.-JP Technology Forum May(Every year)

Industry Day(U.S. Company-Japanese Companies)

*And more individual meetings

◆ Other countries (Australia, U.K., Germany, India··)

METI's reinforced efforts to strengthen our technological advantages

◆ Support for Activities of Japanese Private Companies

Ceramic Matrix Composites(CMC)

-Coating Technology

Carbon Fiber Reinforced Plastics(CFRP)

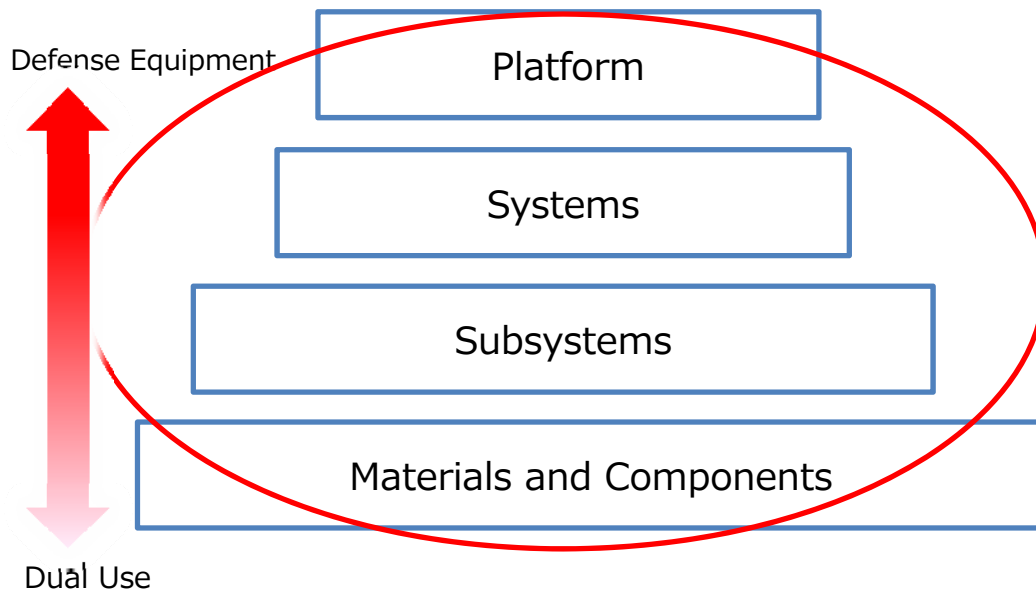
-Thermoplastic CFRP, Structure Health Monitoring, Automatic Laminating

◆ Establish an office for critical technology management

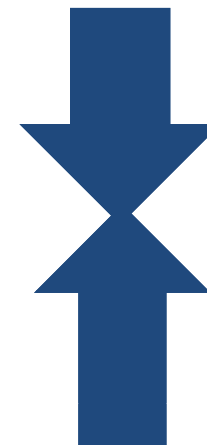
Realization of a cross-sectional policy in relation to critical technologies to be applied for innovation in manufacturing industry (including controlling the technologies)

Challenges -Enabling Environment for International Cooperation-

- Our defense industry system has been optimized for domestic businesses.
- Our defense industry structure should be built up by focusing on international business opportunities as well.



Ministry of Defense: Approaches based upon Major Equipment Products



Ministry of Economy, Trade and Industry:
Approaches based upon Critical Technologies

GOJ

- Contributing to national security



Defense Industry

- New opportunities for global business

Thank you for your attention

Eiji Wakai