DEFENSE SYSTEMS BUSINESS

Defense Business Briefing

Mitsubishi Electric Corporation

March 12, 2025

MITSUBISHI ELECTRIC
Changes for the Better

Contents

Key Points

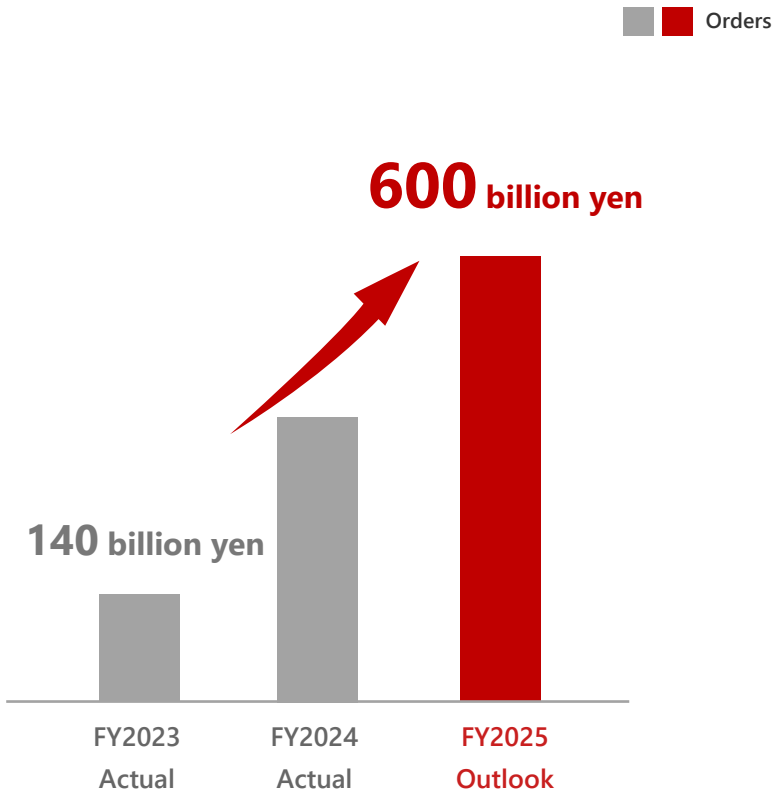
- We contribute to the realization of a safe and secure society by utilizing advanced technological capabilities in the defense and space sectors.
- Our defense business aims to expanding both orders and revenues with a targeted operating profit margin of 10% or more.

1 Overview of Defense Systems Business

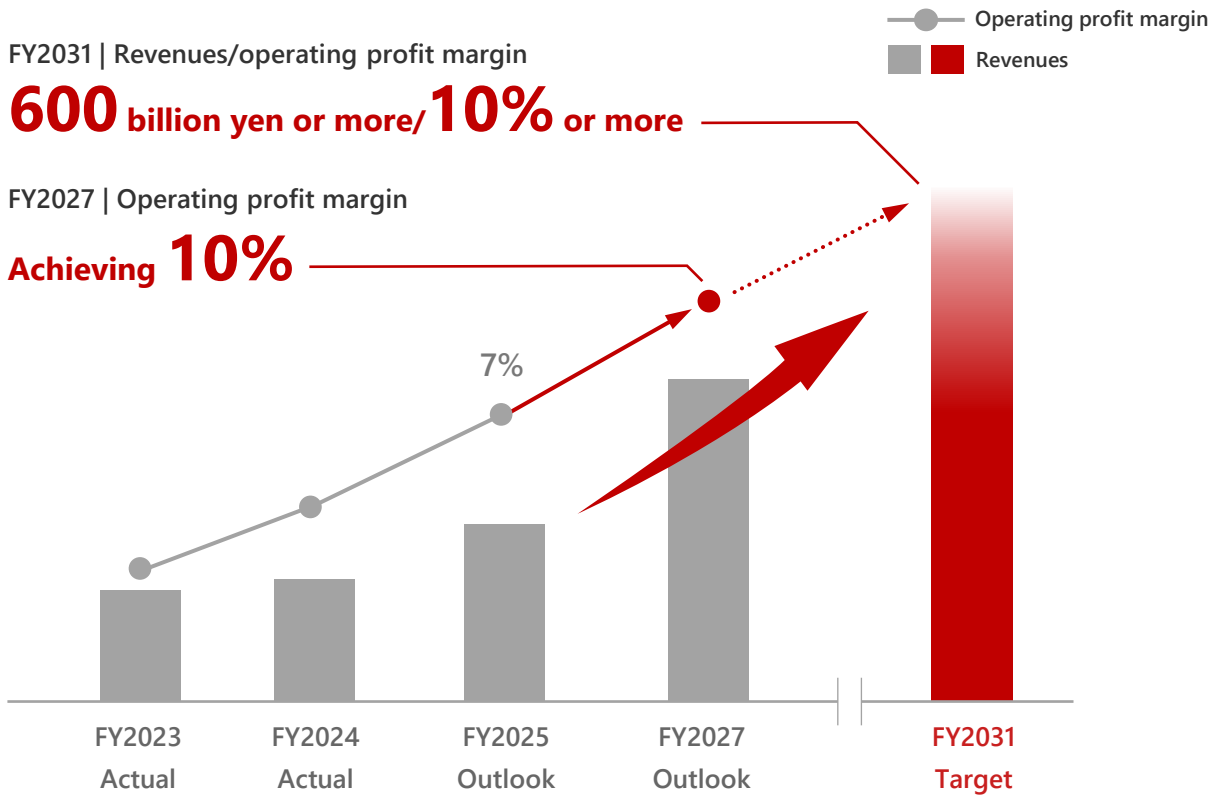
Overview of Defense Systems Business

Leveraging the increase in defense spending, along with the fundamental reinforcement of defense capabilities of Japan, our defense business will expand both orders and revenues, increasing profit margin through improvements in contract systems.

Orders | Defense systems business



Revenues and operating profit margin | Defense systems business



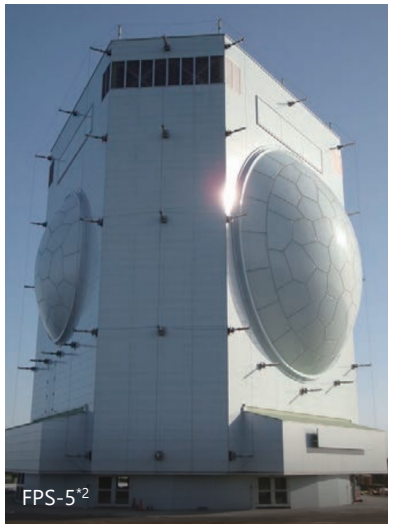
2 Strengths of Mitsubishi Electric Defense Business

Strengths of Mitsubishi Electric Defense Business

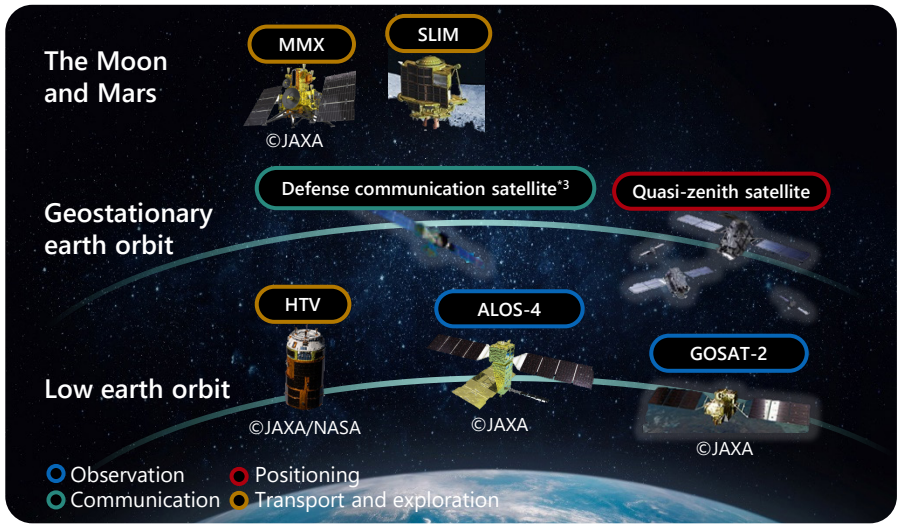
We have a strong track record as a prime contractor for both large-scale defense systems and satellite systems.
Our defense business also has acquired advanced technological capabilities in the defense and space domains.

Space domain has become an essential for ensuring national security.
We have advanced technologies and many track records in both the defense and space domains.

Large-scale defense systems



Satellite systems



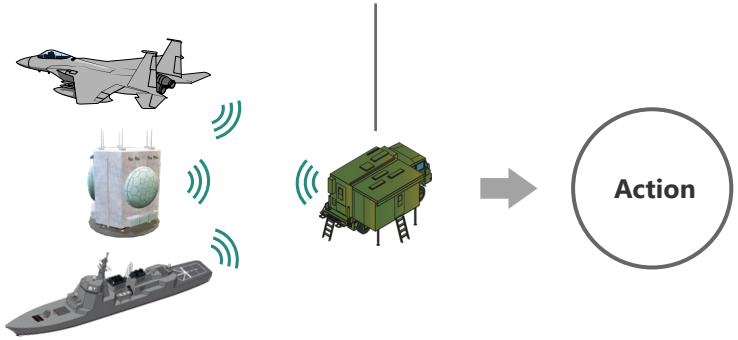
Strengths of Mitsubishi Electric Defense Business

We have many track records in radar, missile, and command and control system and possess sensor and information processing technologies, which are the core of defense equipment.

Networking has increased the added value of sensors and information processing.

The focus on transitioning from individual system operation to cross-domain operation through networks has increased the added value of sensors and information processing.

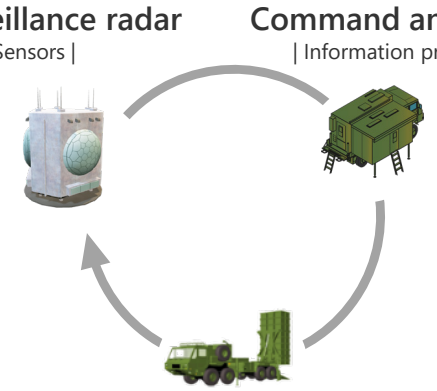
Processing and integrating information from the sensors of each piece of equipment



Each piece of equipment

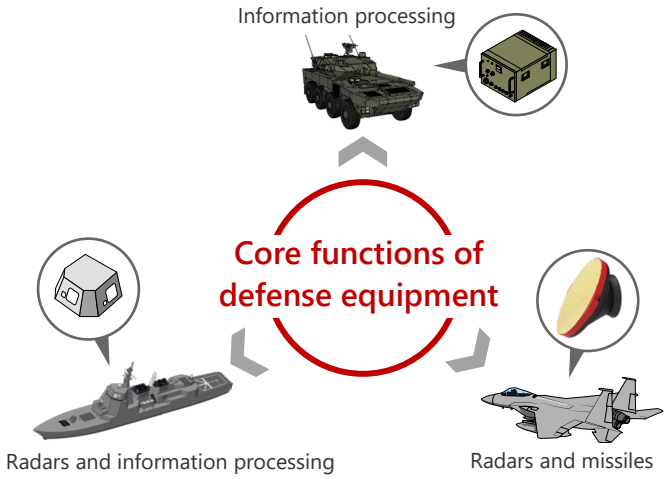
High technical expertise in advanced sensors and information processing

We have high technical expertise in advanced sensors and information processing, which support the operations of the JSDF.



Provision of systems that form the core of equipment

We provide sensor and systems such as information processing, which are the core of various defense equipment for ground, maritime and air in both Japan and abroad.



Strengths of Mitsubishi Electric Defense Business

We have technological expertise in developing and manufacturing advanced high frequency devices and are capable of vertically integrating development of complex and advanced defense systems, from component devices to overall systems.

Developing and manufacturing key devices capable of flexibly meeting the demands of complex and advanced defense systems

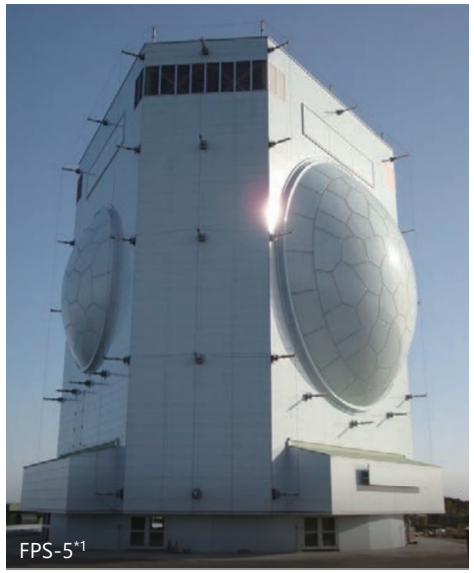
High frequency devices

Developing and commercializing advanced technologies
Collaborating with internal research institutes and business segments

Strengths in high frequency device business
Advanced technologies | High-quality mass production technologies and many manufacturing track records

Accumulation of mass production technologies and a proven track record
Shipping record of over 5 billion products, including consumer products

Defense systems


FPS-5*1

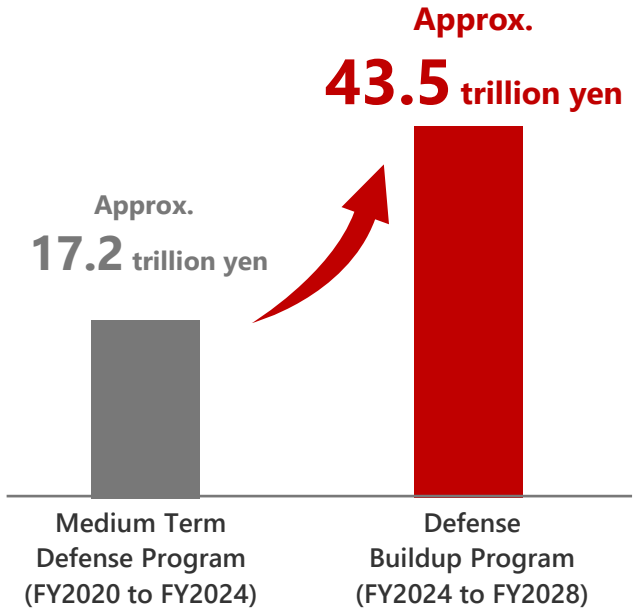

Improved Type 03 Surface-to-Air Missile*2


Air Surveillance Radar System for the Philippine Air Force

3 Japan's Defense Buildup and Mitsubishi Electric Initiatives

Japan's Defense Buildup and Mitsubishi Electric Initiatives

<Defense Buildup Program in Japan>



7 defense capabilities in the National Defense Strategy	Mitsubishi Electric Initiatives
Stand-off defense capabilities	Anti-ship missile seekers; Next-generation fighter aircraft
Integrated air and missile defense capabilities	Improvement of interceptor missile capabilities; Air surveillance radar system
Unmanned defense capabilities	Collaboration between unmanned vehicle sensors and next-generation fighter aircraft
Cross-domain operation capabilities	Defense communication satellite; Space telescopes; Deep space radar; Electronic warfare system; Satellite data solutions
Command and control/intelligence related functions	Cognitive warfare; Command and control system
Mobile deployment capabilities	Defense communication satellite; Next-generation fighter aircraft; Satellite communication system
Sustainability and resiliency	Maintenance; Mission engineering service

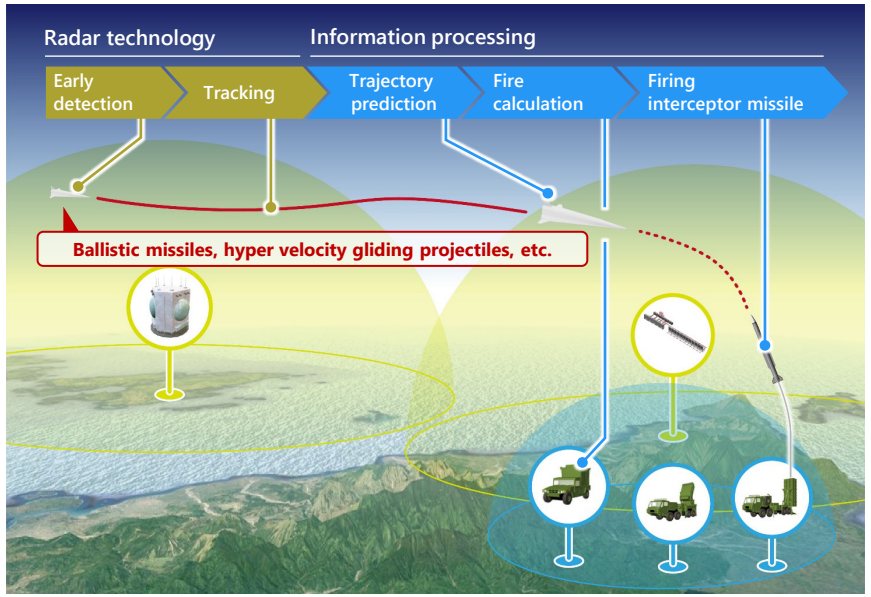
Main initiatives | Growth strategy

Main Initiatives | Integrated Air and Missile Defense Capabilities

We are the only company capable of domestically producing from sensors to interceptor missiles, thereby contributing to the enhancement of integrated air and missile defense capabilities.

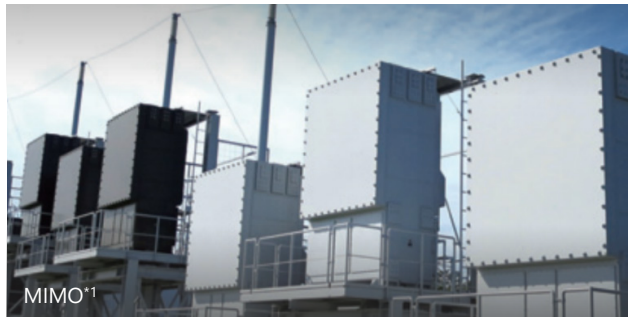
Response measures against incoming missiles | conceptual image

We are the only company capable of domestically developing radar technologies for the early detection and tracking of high-speed, highly mobile threats and providing systems for firing interceptor missiles to rapidly intercept incoming targets through accurate trajectory prediction and fire calculation.



Air surveillance radar system

Strengthening air surveillance against new threats, such as hyper velocity gliding projectiles



Interceptor missile system

Strengthening intercepting capabilities against new threats, such as hyper velocity gliding projectiles

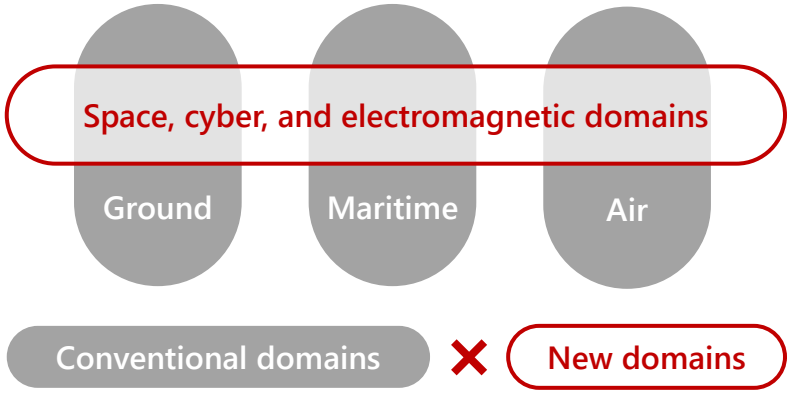
Photo of the Improved Type 03 Surface-to-Air Missile

Main Initiatives | Cross-Domain Operation Capabilities

Considering the importance of utilizing the space domain to develop cross-domain operation capabilities, a budget of approximately 1 trillion yen has been allocated in the Japan's Defense Buildup Program.
With a proven track record in satellite development and manufacturing for both Japan and abroad markets over an extended period, we are well-positioned to contribute to enhancing capabilities in information communication and space domain awareness.

Cross-domain operation strategy | conceptual image

A strategy to enhance the overall capabilities of the JSDF by utilizing new domains such as space, cyber, and electromagnetic across conventional domains like ground, maritime, and air.



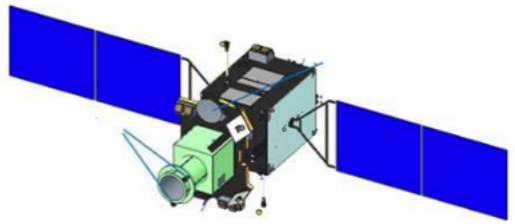
Defense communication satellites

Ensuring smooth communication in the global operations of the JSDF


Defense communication satellite (Kirameki)*1

Space telescopes

Contributing to the stable utilization of space by monitoring space debris and other objects



SDA satellite | conceptual image *2

Main Initiatives | Cross-Domain Operation Capabilities

We can contribute to the enhancement of capabilities in information gathering and monitoring and surveillance functions in new domains such as space and electromagnetic.

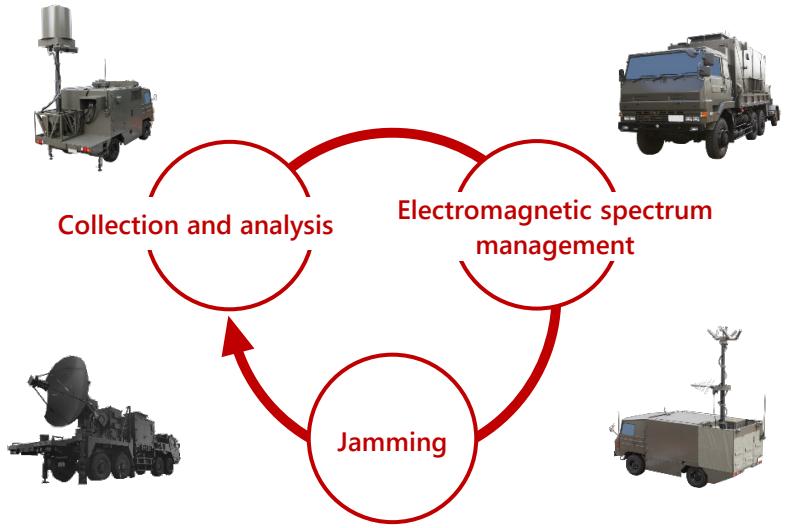
Deep space radar

Merging advanced radar technologies with manufacturing technologies for large-scale telescopes that have been developed in the space business.

Contributing to the stable utilization of space by continuously monitoring the geostationary earth orbit above the area surrounding Japan.

Electronic warfare systems

Contributing to the execution of missions in the electromagnetic domain by leveraging our strengths in advanced technologies such as signal processing.



Collecting, analyzing, and jamming transmitted radio waves

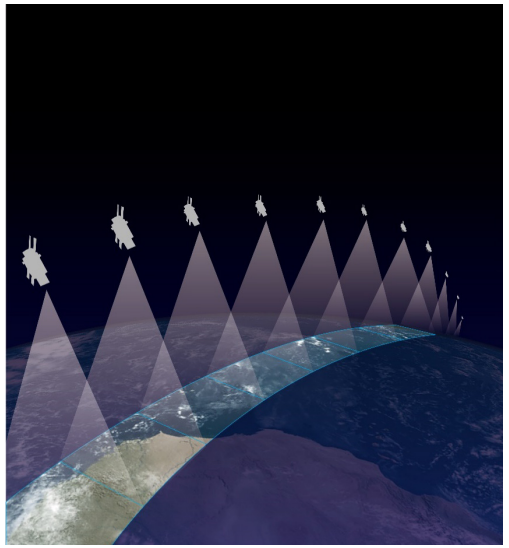
4 Further Growth Strategies

Further Growth Strategies

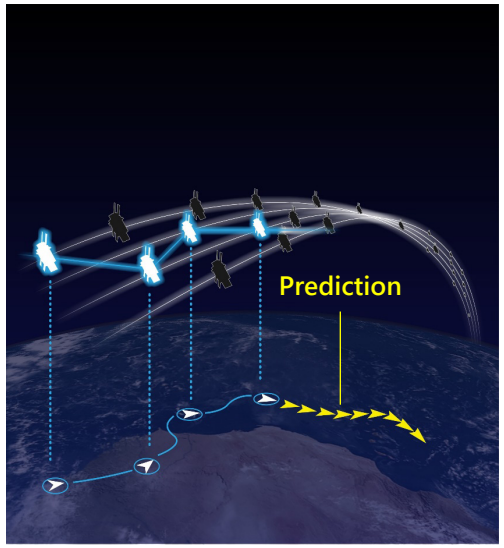
Satellite data solutions

Transformation from a conventional manufacturing business to a service-providing business

- Provision of imaging services in collaboration with Synspective
- Provision of a predictive service based on data analysis



Frequent imaging services using a satellite constellation



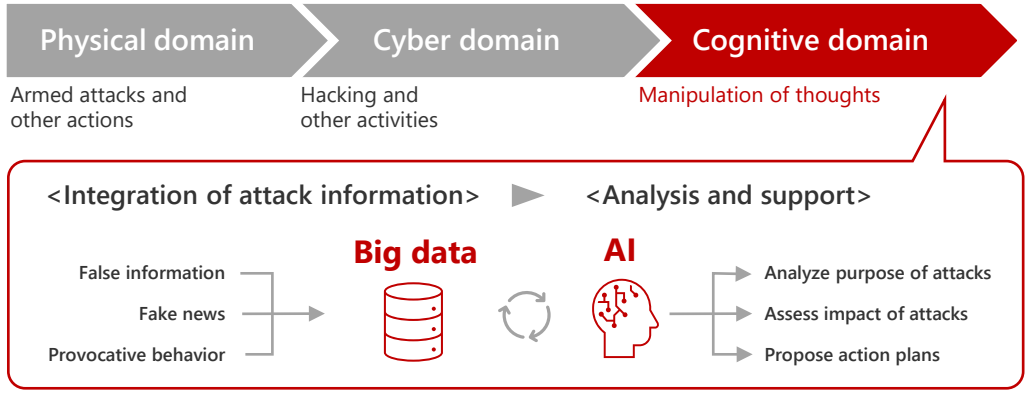
Example of the predictive service

Decision-support system in the cognitive domain

A challenge to the decision-support system in the cognitive domain, including information and psychological warfare as new domains

- Detection of attacks on the thoughts and perceptions of people
- Detection of attacks and hostile thinking from both Japan and abroad sources by digitizing information from social media and other communications
- Proposing action plans to improve the thinking of people in both Japan and abroad, with supporting reasons

<Expansion of domains>



Joint development with Cognitive Research Labs, Inc.

Global Expansion

We expand our global business based on the Three Principles on Transfer of Defense Equipment and Technology. Our defense business has proactively and effectively expanded activities based on three strategies tailored to the characteristics of each market.

Transfer of finished defense equipment
Southeast Asian countries

Contributing to the enhancement of Japan's deterrence capabilities.

Delivered air surveillance radar systems to the Philippine Air Force

International joint development
Europe, Australia, and India

Efficiently developing competitive equipment through shared development costs and technological risks.

Japan-UK-Italy joint development of next-generation fighter aircraft avionics[*1]

Participation in global supply chains
US

Contributing to global security through participation in the defense industry's supply chains.

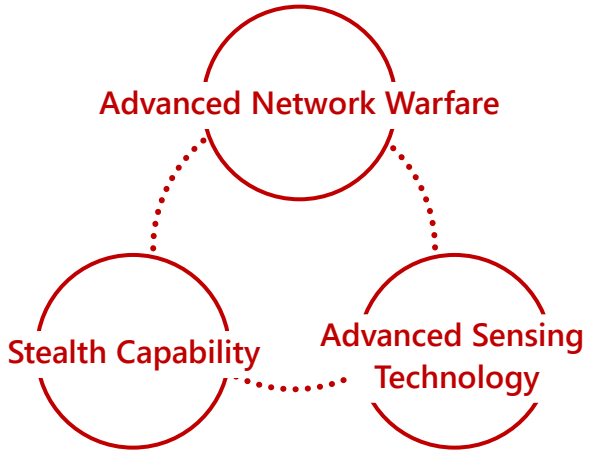
1. SPY-6 radar components loaded onto warships[*2]
2. F-15 fighter aircraft radar repairs[*3]
3. AIM-120[*4]

Global Expansion | International Joint Development | Next-Generation Fighter Aircraft

In collaboration with partners in the UK and Italy, we are jointly developing mission avionics that play a significant role in enhancing the functionality and performance of next-generation fighter aircraft.

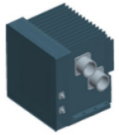
Capabilities required for next-generation fighter aircraft

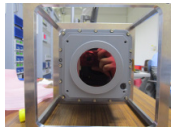
- Capability to enhance sensing technologies gained from the experience of developing the F-2 fighter aircraft and the application of advanced technologies
- Capability to realize network-centric fighting involving multiple friendly aircraft through the integration of sensor information obtained from respective avionics

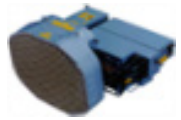


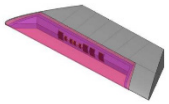
* Source: Modified from the Ministry of Defense website by Mitsubishi Electric Corporation

<Examples of avionics components>


Network system


Infrared sensors*2


Radar*3


Electric warfare system*4


Sensing integration*5

Global Expansion | Participation in Global Supply Chains | SPY-6, F-15 fighter radar, and AIM-120

We contribute to global security by participating in defense industry supply chains in the US.

SPY-6 radar
components loaded onto warships*1

F-15 fighter aircraft radar repairs*2

AIM-120*3

Order received for the “Study on the Domestic Production of AIM-120”

Conclusion

- We contribute to the realization of a safe and secure society by utilizing advanced technological capabilities in the defense and space sectors.

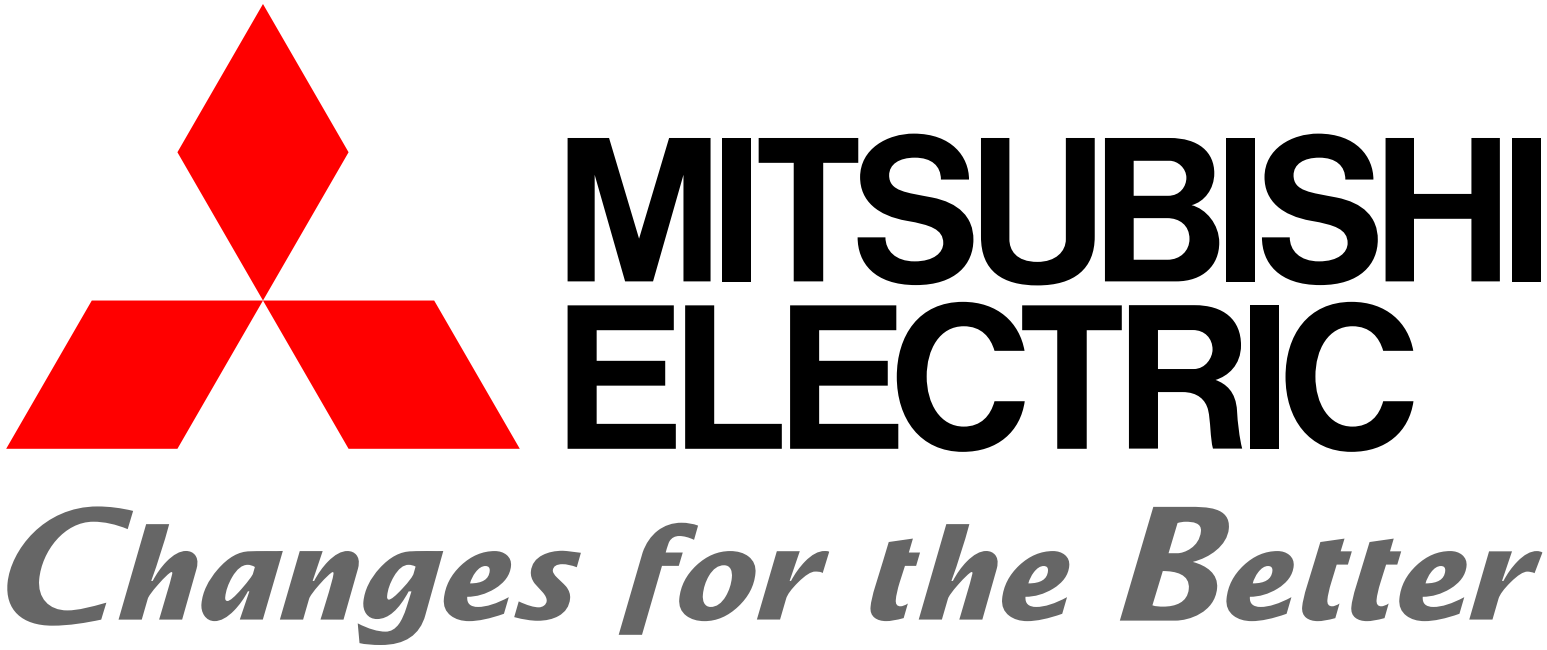
- Our defense business aims to expanding both orders and revenues with a targeted operating profit margin of 10% or more.

Appendix | Sources

P.7	*1 Excerpt from (and modification of) the webpage of the Japan Ground Self-Defense Force (https://www.mod.go.jp/gsdf/gmcc/main/02_department/06yuudou.html). *2 Excerpt from (and modification of) the webpage of the Japan Air Self-Defense Force (https://www.mod.go.jp/asdf/adc/ninmu/ninmu.html). *3 Excerpt from (and modification of) "Japan's Defense and Budget: Overview of Japan's Defense Budget for FY2020" (https://warp.da.ndl.go.jp/info:ndljp/pid/13120860/www.mod.go.jp/j/budget/yosan_gaiyo/2020/yosan_20200330.pdf).
P.9	*1 Excerpt from (and modification of) the webpage of the Japan Air Self-Defense Force (https://www.mod.go.jp/asdf/adc/ninmu/ninmu.html). *2 Excerpt from (and modification of) the webpage of the Ministry of Defense (https://www.mod.go.jp/atla/en/soubi_system.html).
P.12	*1 Excerpt from (and modification of) "Japan's Defense and Budget: Overview of Japan's Defense Budget for FY2018" (https://warp.da.ndl.go.jp/info:ndljp/pid/13120860/www.mod.go.jp/j/budget/yosan_gaiyo/2018/yosan.pdf). *2 Excerpt from (and modification of) the webpage of the Japan Air Self-Defense Force (https://www.mod.go.jp/asdf/adc/ninmu/ninmu.html). *3 Excerpt from (and modification of) the webpage of the Japan Air Self-Defense Force (https://www.mod.go.jp/asdf/seburiyama/). *4 Excerpt from (and modification of) the webpage of the Ministry of Defense (https://www.mod.go.jp/atla/en/soubi_system.html).
P.13	*1 Excerpt from (and modification of) "Japan's Defense and Budget: Overview of Japan's Defense Budget for FY2020" (https://warp.da.ndl.go.jp/info:ndljp/pid/13120860/www.mod.go.jp/j/budget/yosan_gaiyo/2020/yosan_20200330.pdf). *2 Excerpt from (and modification of) the webpage of the Cabinet Office (https://www8.cao.go.jp/space/comittee/27-anpo/anpo-dai58/siryou2.pdf).
P.17	*1 Excerpt from (and modification of) the webpage of the Ministry of Defense (https://www.mod.go.jp/j/policy/defense/nextfighter/index.html). *2 Credit (and modification) : DoD, Non-DoD endorsement disclaimer (https://www.surfpac.navy.mil/Media/News/Article/3511027/uss-jack-h-lucas-to-commission-in-tampa-florida/). *3 Credit (and modification) : DoD, Non-DoD endorsement disclaimer (https://www.af.mil/About-Us/Fact-Sheets/Display/Article/104501/f-15-eagle/). *4 Credit (and modification) : DoD, Non-DoD endorsement disclaimer (https://www.af.mil/News/Photos/igphoto/2000043243/).
P.18	*1 Excerpt from (and modification of) the webpage of the Ministry of Defense (https://www.mod.go.jp/j/policy/defense/nextfighter/index.html). *2 Excerpt from (and modification of) the webpage of the Ministry of Defense (https://www.mod.go.jp/atla/research/ats2015/image/pdf/P4.pdf). *3 Excerpt from (and modification of) the webpage of the Ministry of Defense (https://www.mod.go.jp/j/policy/agenda/meeting/sentouki/pdf/houkoku_03.pdf). *4 Excerpt from (and modification of) the webpage of the Ministry of Defense (https://www.mod.go.jp/atla/research/ats2017/img/ats2017_summary.pdf). *5 Excerpt from (and modification of) the webpage of the Ministry of Defense (https://www.mod.go.jp/atla/research/dts2013/R1-2.pdf).
P.19	*1 Credit (and modification) : DoD, Non-DoD endorsement disclaimer (https://www.surfpac.navy.mil/Media/News/Article/3511027/uss-jack-h-lucas-to-commission-in-tampa-florida/). *2 Credit (and modification) : DoD, Non-DoD endorsement disclaimer (https://www.af.mil/About-Us/Fact-Sheets/Display/Article/104501/f-15-eagle/). *3 Credit (and modification) : DoD, Non-DoD endorsement disclaimer (https://www.af.mil/News/Photos/igphoto/2000043243/).

While the statements herein, including the forecasts regarding the Mitsubishi Electric Group, are based on assumptions considered to be reasonable under the circumstances on the date of announcement, actual results may differ significantly from forecasts. The main factors materially affecting the expectations expressed herein include but are not limited to the following:

1. Changes in worldwide economic and social conditions, as well as regulations, taxation and other legislation
2. Changes in foreign currency exchange rates
3. Changes in stock markets
4. Changes in the fund-raising environment
5. Changes in the supply and demand of products, as well as the material procurement environment
6. Establishment of important patents, status of significant licenses and disputes related to key patents
7. Litigation and other legal proceedings
8. Issues related to quality and defects in products or services
9. Laws, regulations and issues related to the global environment, especially responses to climate change
10. Laws, regulations and issues related to human rights
11. Radical technological innovation, as well as the development, manufacturing and time-to-market of products using new technology
12. Business restructuring
13. Information security incidents
14. Large-scale disasters, including earthquakes, tsunamis, typhoons, volcanic eruptions and fires
15. Social, economic and political upheaval due to heightened geopolitical risks, war, conflict, terrorism or other factors
16. Social, economic and political upheaval due to pandemics or other factors
17. Important matters related to Mitsubishi Electric Corporation's directors and executive officers, major shareholders, affiliated companies and other stakeholders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