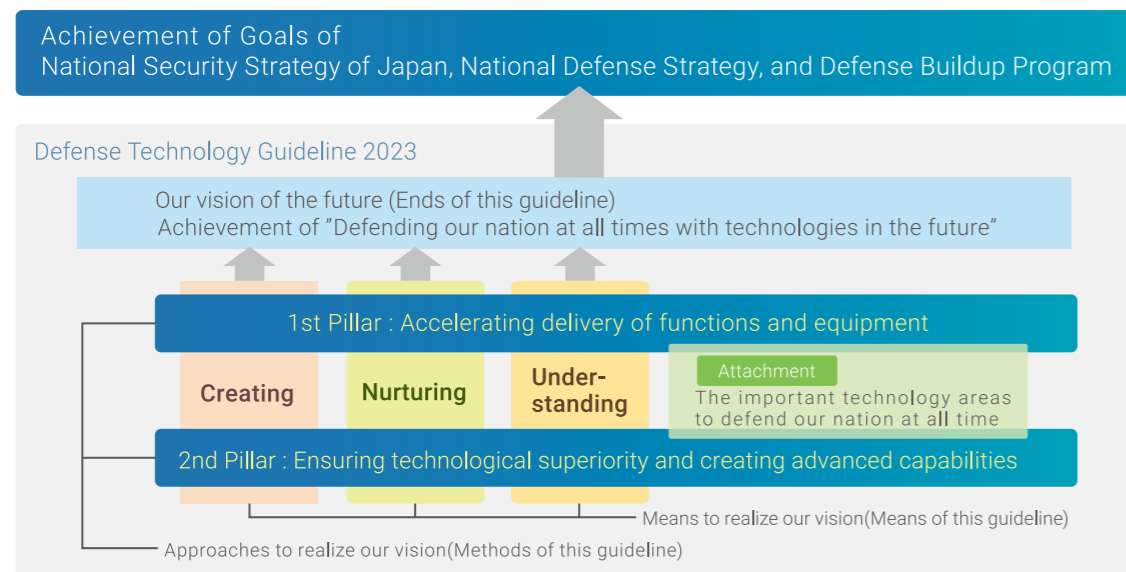


In the National Defense Strategy and the Defense Buildup Program, technology areas and R&D that are focused on by JMOD from the perspective of improving the predictability of industries and others.

1 Purpose

- Determine the direction of reinforcement of defense technology base described in the three documents, including the National Security Strategy of Japan.
- Organize the directions of the various efforts necessary for reinforcement of the defense technology base as a **guideline to actively promote all of Japan Ministry of Defense (JMOD) efforts.**
- By presenting outside the ministry the technology areas in which JMOD will focus on its R&D efforts, we aim to improve the predictability of industries and others, share the common understanding with those outside the ministry, and build the base for technological cooperation.



2 Current Status and Issues

- Advances in science and technology are changing warfare. Therefore, if we just continue incremental update of equipment systems, we may fail to defend our nation at all times.
- Need to maximally utilize Japan's Science, Technology, and Innovation (STI) capabilities for the security purpose (**Spin-on**) while **spinning off** the outcomes of JMOD's R&D

3 Our vision

Achievement of "Defending our nation at all times with technologies"

4 Approaches to achieve our vision (Ways of this guideline)

1st Pillar : Accelerating delivery of functions and equipment

We will deliver the functions and equipment in the seven fields of key capabilities as mentioned in National Defense Strategy to warfighters in a timely manner (**by 5 years until FY 2027 or within approximately the next 10 years**). We will develop these functions and equipment through the reformed R&D process.

2nd Pillar : Ensuring technological superiority and creating advanced capabilities

Over **the next 10 years and further ahead**, we will put our various technologies into practical / operational use as functions and capabilities to defend our nation at all times under the cooperation of the public and private sectors to provide **defense innovation that brings about changes in our national defense**, which ensures our technological superiority in the future, and achieving advanced capabilities **ahead of other countries**.

5 Means to realize our vision (Means of this guideline)

Creating	Nurturing	Understanding
Creating new functions and equipment <ul style="list-style-type: none"> ▶ Accelerating delivery with new means ▶ Establishing new research institutes and creating in a challenging manner ▶ Creating by putting together Japan's capabilities in STI 	Nurturing alone <ul style="list-style-type: none"> ▶ Encouraging even challenging researches based on free thinking as a new approach, and nurturing technologies using diverse means 	Understanding cutting-edge technologies, innovative technologies. <ul style="list-style-type: none"> ▶ Understanding where and how the latest sciences and technologies are created and how they are utilized.
Creating the future concept <ul style="list-style-type: none"> ▶ Creating the concept of future warfare together with the policy and operational sides ▶ Creating the concept of utilizing technologies in the future with experts in a wide range of technologies 	Nurturing with those outside the ministry <ul style="list-style-type: none"> ▶ Communicating JMOD's needs and developing diverse stakeholders and technologies ▶ By fusing with the previously non-defense sector, nurturing technological solutions based on ideas that are different from those in the past 	Understanding the role of technology <ul style="list-style-type: none"> ▶ Understanding the impact and role of science and technology on security and defense ▶ Understanding the needs of JMOD/JSDF and the seeds in the STI fields, and translating the needs and seeds bidirectionally
Creating the technology base <ul style="list-style-type: none"> ▶ Changing systems and mechanisms to increase the participation of start-ups and others, and creating a new technology base ▶ Creating a human base that can fulfill diverse roles 	Nurturing Japan's capabilities of STI <ul style="list-style-type: none"> ▶ Nurturing Japan's capabilities of STI through various R&D ▶ Nurturing technologies in the areas which are unlikely to gain investments in the private sector 	Notifying those outside the ministry of JMOD's efforts <ul style="list-style-type: none"> ▶ Notifying what JMOD is doing now and intends to do in the future

6 Conclusion

- Promoting the efforts of creating, nurturing, and understanding by breaking away from conventional thinking, and implementing the 1st and 2nd pillars
- As an organization which can **build a bridge between security and STI**, actively promoting their further fusion, and actively implementing a wide variety of policies and measures to achieve our vision

Attachment The important technology areas to defend our nation at all time

