# Pillar 4 : Extending Efforts for Security and Safe Use of the “Sea” to the “Air”

## Case (47): Strengthening Maritime Domain Awareness (MDA) capacity

**1. Basic concept**

- In order to maintain the safety of sea lanes and realize a “free, open, and stable sea” based on the rule of law, it is indispensable to strengthen Maritime Domain Awareness (MDA) capacity among various countries, and based on this view, Japan has carried out initiatives such as supporting MDA-related capacity building and providing equipment and materials.
- In recent years, there has been a growing interest in the utilization of artificial satellites as well as artificial intelligence and other cutting-edge technologies for maritime security and safety in the international community, and Japan, is also strengthening international cooperation in this field.

⇒ **Japan will maintain and strengthen “the free, open, and stable sea” by leading international cooperation to enhance the MDA capacity of various countries in the Indo-Pacific region through the combination of traditional capacity building, provision of equipment and materials and cutting-edge technology.**

**2. Items of cooperation**

- Active involvement in the Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)
- Information exchange based on memorandums, etc., with friendly countries
- Support to enhance the MDA capacity of countries and territories facing sea lanes

  (Example) Cooperation for MDA schools through UNODC, provision of MDA-related equipment and materials such as patrol ships and radars through ODA, and development of vessel traffic service (VTS) personnel in the ASEAN region
- Promotion of information sharing through the deployment of the MDA Situational Indication Linkages (MSIL) and capacity building support
- Deployment of Argo floats, etc., in the implementation of the International Argo Project as well as analysis of the global marine environment and forecasts of changes therein

  (Example) Strategic deployment of Argo floats, deep floats, and biogeochemical (BGC) floats
- Implementation of basic ship observations

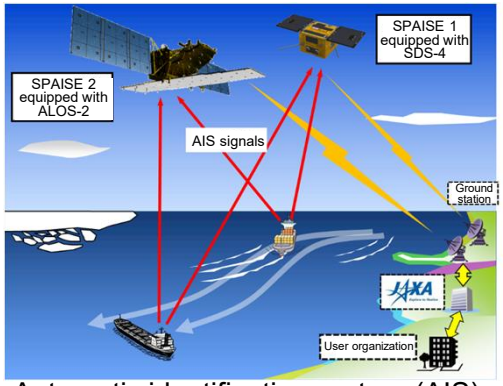
  In accordance with the international observation framework, implementing embarkation on research vessels owned by Japan to conduct high-precision, multi-item joint observations and international joint observations.

  (Example) High-precision observations in the Northwest Pacific, tropical Pacific, and Indian Oceans
- Implementation of observations using mooring systems

  Japan participates in the international observation framework, deploying mooring systems in cooperation with its neighboring countries in the Pacific and Indian Oceans. Obtaining long-term, chronological, and real-time observation data on interactions between the atmosphere and the ocean, which contributes to weather and disaster forecasts

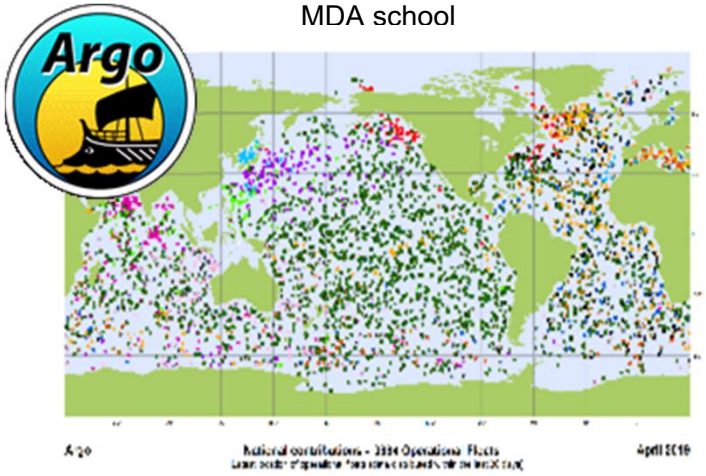
  (Example) Deployment of mooring systems for observations of the atmosphere and the ocean in the tropical Pacific
- Cooperation in the space field

  (Example) Support for utilizing satellites in capacity building in the areas of climate change, disaster risk reduction, and oceanography, JICA training related to electronic base points, meteorological satellites, and earth observation satellites, and testing of quasi-zenith satellites (Fiji)




Automatic identification system (AIS) mounted on satellites

MDA school




International deployment of Argo floats