

## JIIA Strategic Comments(No.6):

## The Multi-Domain Defense Force: Assessment and Challenges

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On December 18, 2018, the Japanese government adopted the new "National Defense Program Guidelines" (NDPG). The NDPG stipulate the modalities and levels of defense capabilities that Japan should possess over the next decade or so. Evaluations of the NDPG have already appeared in various media, but this paper will only assess the concept of "Multi-Domain Defense Force" presented in the NDPG and point out issues that need to be addressed in future.

The security environment surrounding Japan has deteriorated at an unimagined speed, with China further expanding its missile, submarine, cyberattack and anti-satellite capabilities, North Korea's denuclearization making no headway, and Russia bolstering its military posture in the Northern Territories and the Far East. In addition, as some countries threaten other countries' sovereignty by the use of military and law enforcement organizations without using force as defined by international law in other countries as well as by social networks and other means to manipulate public opinion, these so-called "gray-zone situations" are becoming persistent. Much attention was paid to what defense concept the new NDPG would provide.

The "Multi-Domain Defense Force" advocated by the new NDPG is defined as one "organically fuses capabilities in all domains including space, cyberspace and electromagnetic spectrum; and is capable of sustained conduct of flexible and strategic activities during all phases from peacetime to armed contingencies." The important point is aiming to overcome inferior capabilities in any particular domain through synergistic effects produced by cross-domain capabilities that span the conventional domains of land, sea and air as well as all new domains and carrying out cross-domain operations at all stages, from times of peace to gray-zone situations and contingencies.

The "cross-domain" idea is one found at the very foundation of the AirSea Battle concept adopted by the US military in 2010 to counter China's expanding military capabilities. More specifically, this is an operational concept calling for closer coordination between air and naval forces in response to China having stepped up its capabilities to deny US aircraft carriers and other US forces access to the western Pacific by submarines and air-launched cruise missiles in particular. The US military is an expeditionary forces, and the cross-domain concept assumes an temporary withdrawal from the front lines at the beginning of hostilities to avoid attack, followed by power projection toward the front lines.

The US military is currently developing a new operational concept known as the "Multi-Domain Battle." The Multi-Domain Battle concept presupposes that operations will be carried out in all domains simultaneously and seeks to adopt a posture capable of responding to the enemy in all domains. The US has been testing this Multi-Domain Battle concept at various opportunities, including the Pacific Rim joint exercise ("RIMPAC") conducted in June 2018. One characteristic of Multi-Domain Battle is that its scope extends from before a conflict begins to after armed attacks have been launched. The US military is expected in 2019 to officially adopt this as "Multi-Domain Operations" to serve as a framework for integrated operations by the Army, Navy, Air Force and Marine Corps.

Although the term "cross-domain" is still used in the NDPG, the reality seems closer to Multi-Domain Battle, given the definition of "Multi-Domain Defense Force." "Multi-Domain Battle" is more suited to Japan's geographical conditions than "cross-domain," and could be expected to be more effective in integrating the Japan Self-Defense Force (JSDF) and in boosting interoperationality with the US military. To achieve "Multi-Domain Defense Force," the NDPG calls for constructing 0comprehensive air and missile defense that enhances the JSDF's ability to counter simultaneous aerial threats, substantially strengthening Japan's cyber-defense and cyber-counterattack capabilities, improving surveillance capabilities vis-à-vis threats to satellites, upgrading early warning and communications capabilities, bolstering electronic warfare capabilities, and effectively exploiting the electromagnetic spectrum. These can be regarded as indicative of the right direction.

However, problems can also be pointed out.

First, the elements of AirSea Battle have not been completely eliminated from "Multi-Domain Defense Force." With large naval vessels and short-range strike capabilities becoming increasingly vulnerable to China's precision-guided weapons, there are doubts about the utility of refitting *Izumo*-class destroyers to operate fixed-wing aircraft, which could constitute a waste of limited resources. Replacing all F-15 fighter aircraft not suited for modernization with F-35 fighters would also entail tremendous costs, and there are misgivings from the perspective of comprehensively enhancing air defense capabilities, including fighter support functions such as radar, aerial refueling aircraft, and air defense missiles. Ensuring more efficient defense spending will require reviewing investments in platforms that are vulnerable in modern warfare as well as pursuing concerted public-private efforts to develop the technology needed for future warfare.

Next, further jointness in the JSDF operations be essential for realizing "Multi-Domain Defense Force." but the expected establishment of joint operations commander has been postponed. The disaster relief efforts undertaken in the wake of the Great East Japan Earthquake offered a real-life example of the physical difficulties faced by the Chief of Staff, Joint Staff in commanding the three services of the JSDF while at the same time serving as an advisor to the Prime Minister and the Minister of Defense during a contingency, and the creation of a joint operations commander remains an issue that needs to be addressed in future.

It can also be noted that the JSDF is insufficiently capable of responding to scenarios in which it might find itself at a disadvantage in multiple domains. The US military's Multi-Domain Battle grants units operating in each domain a certain degree of autonomy. This is because, while the US military deems it necessary to disperse units to a certain degree to avoid a saturation missile attack by China, these dispersed units must still be able to act with autonomy even if the command and control functions exercised through communications networks linking up the dispersed units are disrupted. The JSDF, too, needs to consider developing a system that gives units on the ground a certain measure of autonomy, while introducing technology such as secure communications devices and mobile sensors.

To overcome the above challenges, a standing joint task force should be created to defend the Nansei Islands, a top priority for Japanese security. In March 2018 the Ground Self-Defense Force established an Amphibious Rapid Deployment Brigade (ARDB) whose primary objective is the defense of remote islands centered on its station at Sasebo, but it is uncertain how much assistance the Maritime and Air Self-Defense Forces would be able to provide when needed. Nevertheless, making this part of a Multi-Domain Battle joint task force and giving it operational capabilities in cyberspace, outer space, and the electromagnetic spectrum would further the jointness of the JSDF, enable the effective operation of the ARDB, and reinforce the defenses for the Nansei Islands. (2018-12-28)