U.S.-Japan Joint Symposium
U.S.-Japan Relations and Space Cooperation in the AP Region

Session 2
Enhancing Security thru Information Sharing
...Cooperation for MDA...

2015.2.13

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Joint Statement of SCC ("2+2")
Oct 2013

Toward More Robust Alliance & Shared Responsibilities

* Japan-US Defense Cooperation Guidelines
- seamless alliance response in a dynamic security environment
  including challenges in emerging strategic domains like space

* Cooperation in Space
- joint information collection & sharing SSA & space-based MDA
- establishing Japan-US Comprehensive Dialogue on Space
- continued support for multilateral efforts to develop ICCOSA*

* Joint ISR Activities
- establishment of bilateral Defense ISR Working Group

* Defense Equipment and Technology Cooperation
- establishing bilateral discussion at S&TF with RMC dialogue

*ICCOSA: Int’l Code of Conduct for Outer Space Activities
National Security Strategy
Dec 2013

“Proactive Contribution to Peace” based on int’l cooperation

* Strengthening and Expanding Japan’s Capabilities & Roles
-ensuring stable use of space & promoting use for security

* Strengthening Japan-US Alliance
-further strengthening of Japan-US security & defense

* Proactive Contribution to Int’l Efforts for Peace & Stability
-ensuring freedom of access & utilization of space
-proactively to formulate an int’l code of conduct aiming to prevent experiments of ASAT & avoid collision of satellite
National Defense Program Guideline
Dec 2013

“Dynamic Joint Defense Force”

* Responses in outer space
- strengthening information gathering capability using satellites, and reinforcing command, control, and telecommunications capabilities
- enhancing the survivability of satellites through initiatives such as space situational awareness (SSA)
Mid-Term Defense Program (JFY2014~2018)

Major Programs of SDF Capability

* Promotion of Space Use
- enhancing information gathering capability using different satellites with various sensors
- enhancing command, control, information and communication capability by steady improvement of X-band Sat-Com networks
- promoting SSA and study of satellite protection
- activating bilateral cooperation of space related organizations between Japan and the US
Cabinet Decision for Seamless Defense
July 2014

Seamless Security Legislation for National Existence

“Recently, free accesses to Ocean, Space and Cyber domains are at greater risk and barriers to such freedom have grown and worsened. No longer possible for a single country to maintain regional or global peace alone. The international society expects Japan to take more active role suited to its national power.”

* Respond to any non-military incident (grey zone incidents)
* Further contribute to peace & stability of t international society
* Self-defense measures permissible under the Constitution
  (Excise of individual and limited collective self-defense right)

• Expected to establish “New National Security Laws” during the current session of the Diet (spring of 2015)

* 2013.10 “2+2”: Reconfirmed to Strengthen Japan-US Alliance (focusing on the revision of Guidelines)

  - cooperation in the space in the context of alliance
  - Japan-US joint response in the new strategic areas
    ⇒ securing safe and stable use of the space

* 2014.12 “2+2” Joint announcement
  ⇒ postponed till first half of 2015
  ⇒ consistency with legislative works, to “ensure” the development of “seamless national security legislations”
Space Basic Policy for Defense
MOD, Aug 2014

Developing New Direction of Space Basic Policy in light of NSS and NDPG

* Activity Space (information gathering)
  - Acquiring multi-layered images, strengthening remote sensing and reinforcing information gathering satellite (IGS) capability
  - Contributing governmental studies of space use for MDA

* Foundation Space (C4ISR)
  - Strengthening SATCOM for exclusive defense use (Next X-band), securing satellite positioning functions (GPS, QZSS)

* Response Space (various situations)
  - Securing EW functions, accumulating technological knowledge (joint launching of advanced optical sensing satellites)

** Improving space monitoring capability (SSA)
Space Basic Plan  
SDSH, Jan 2015

* Recognition of environment surrounding the space policies
  - Changes in power balance, growing importance of national security, greater risks against the stable use of the space, and needs to resolve global issues, etc.

* Ensuring the space security
  - QZSS, SSA, SATCOM, IGS, Quickly responsible small satellite, EW, MDA, Advanced optical and radar satellites

* Promoting private sector’s use of the space
  - Meteorological, environmental, resource, positioning satellites

* Strengthening industrial and scientific technological foundations
  - New core & Epsilon rockets, TECHSAT, “Working Table”
    Systematically promoting cycle in security, science & industry
Policy and Plan for SSA

**Space Basic Policy**---Preventing collision between space debris with satellite, and attack using anti-satellite weapons, MOD/SDF will take specific measures to enhance the ability of the SSA. Therefore, MOD/SDF will cooperate further with the other ministries or JAXA, in order to newly retain the space surveillance function to grasp accurate motion of space objects.

**Space Basic Plan**---Building an operating system, integrated functions from all relevant agencies of Japan, including the MOD and JAXA by the first half of 2020's. Also promoting to coordinate between Japan’s relevant ministries and agencies with those of the US side, such as USSTRATCOM, for creating such an operating system. (Cabinet Office, MOFA, MEXT, MLIT, MOD, etc.)
SSA (MDA) related J-U Cooperation

* 2012.4 Summit Meeting
  - Security cooperation in the space (focus on SSA)

* 2013.5 Space Situation Monitoring Cooperation Agreement
  - Cabinet Secretariat, MLIT, MEXT, MOD, JAXA

* 2013.10 "2+2" meeting
  - Bilateral security & defense cooperation (cooperation in space)
  - Emphasize the importance of SSA & MDA in use of the Space
Policy and Plan for MDA

**Space Basic Policy**---Since the efficient monitor of the Maritime Domain Awareness (MDA) using satellites is not only for security purposes but also for monitoring various maritime activities including economic and environmental activities, it is necessary to continue extensive discussions within Japan & with ally on the way of doing it, while contributing to the review of the policy.

**Space Basic Plan**---Ministries and agencies relevant to monitor MDA are to utilize, on a trial base, various satellites owned by Japan, to review the use of space technologies for MDA from a comprehensive viewpoint, including the possibilities of combining with activities of airplanes, ships and ground infrastructures, and developing links with the US and others.

Such insights and knowledge will be put together by the end of fiscal 2016, so to reflect them on relevant plans of the future.
Application of MDA from Space

1. National Security and Defense
   - Maritime information gathering/analysis in interested region for defense (including Arctic Sea in future), using space activities
     ⇒ Integration of information gathered with other defense assets
     ⇒ Exercise of individual/collective self-defense rights
   - Systems based on Japan-US Defense Cooperation Guidelines
     ⇒ Japan-US cooperative agreement for space monitoring

2. Maritime Safety and Guard
   - S&R, HA/DR, maritime safety, anti-terrorism, piracy and crimes
   - Information gathering/analysis of maritime safety and guard

3. Economy and Industry
4. Science, Technology and Environment
MDA Cooperation from Space

1. Establishing Japan-US Cooperative System for Space Use
   - Issuing the “Japan-US Space Cooperation Guidelines”
   - Incorporating into revision of “Defense Cooperation Guidelines”
   - Establishing consultation/operation system for MDA cooperation
     ⇒ “Information Protection” may be always challenging

2. Developing and Enhancing Domestic Systems
   - Mutual coordination among relevant ministries/agencies/privates
   - Developing the “SPAISE” Project of JAXA in Japan
   - Fusion of the AIS satellites with other assets (radar satellites)
     ⇒ Joint operational system within SDF may be a key in Japan

3. Developing and Strengthening Cooperation with Partners
   - Developing MDA cooperation guideline with partners
     ⇒ Japan-US cooperation as a lever to develop further to others
3 Points of Space Use for Defense

自盟協立
J-U Joint Development, Procurement, Production, Maintenance, Operation & Utilization

防民共生
Dual Use for Defense & Other (Private Sector) as many as possible

財運分離
Separation of Operational Responsibilities (MOD/SDF) and Financial Resources (NSC/SDSH)