

ARF INTER-SESSIONAL SUPPORT GROUP MEETING ON CONFIDENCE-BUILDING MEASURES AND PREVENTATIVE DIPLOMACY

Agenda Item 7.2.4

ASEAN Regional Forum Space Security Workshop Updated Draft Concept Paper

Proposal

At the 8-9 December 2011 ISG Meeting in Phnom Penh, Australia circulated a Concept Paper proposing an ad hoc Workshop on Space Security to be held under the auspices of the ASEAN Regional Forum (ARF). Following extensive, useful consultations with ARF members, this proposal has been refined, and Vietnam has agreed to join Australia as co-sponsors of the proposed Workshop.

Australia and Vietnam now propose to hold the ad hoc Space Security Workshop as outlined below in December 2012 or January 2013 at Hoi An, Vietnam. Australia and Vietnam seek the agreement of the ISG on Confidence-Building Measures and Preventive Diplomacy to refer this updated Concept Paper to the ARF SOM for consideration before submitting to ARF Ministers in July.

Background

The opportunities and challenges of making use of space and space assets are common to all nations. Space has emerged as a critical factor for international prosperity and therefore has enormous implication for the security as well as the welfare of our nations. Space-based systems are critical elements of our national economic infrastructure, supporting telecommunications, aircraft, ship and land navigation, climate monitoring and electronic commerce. An increasing number of countries are also acquiring space-based military assets, including communications and surveillance capabilities. Broader dimensions of space include cooperation on the international space station, space-related research and astronomy.

Space-based assets are vulnerable to an increasing number of threats. Satellites and manned space vehicles are facing serious hazards from orbiting space debris. Current estimates suggest that there are as many as 500,000 pieces of orbiting debris large enough to cause serious damage to satellites or spacecraft. A substantial proportion of the more recent additions to this resulted from weapons testing in space, while another significant source was the 2009 Iridium/Cosmos satellite collision. An increasing range of weapons is being developed to counter space-based assets in times of war.

The issue of space security is currently attracting renewed attention on the international stage. Space security is, for many nations, a relatively new concern, but all nations' equities in space security are increasing quickly. A particular focus of that attention has been the development of transparency and confidence-building measures (TCBMs). The European Union, together with other countries, is now advancing a proposal for a non-binding *International Code of Conduct on Outer Space Activities*, and a Group of Government Experts on Space TCBMs is being established under a

mandate from the UN General Assembly. The UN Conference on Disarmament addresses as one of its four core issues Preventing an Arms Race in Outer Space (PAROS), while the security of civilian space objects is a key concern of the UN Committee on the Peaceful Uses of Outer Space (COPUOS). A draft *Treaty on the Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force Against Outer Space Objects* (PPWT) has been proposed through the Conference on Disarmament. Several other approaches have been floated by other countries or by academic specialists on space security. A fuller understanding of these diverse approaches and their implications is important for all ARF members to enable them to actively participate in international discussions on this topic.

An increasing number of ARF members are active in space. The majority already have satellites, and most of the remaining members have plans to acquire space assets. The ARF membership is responsible for more than 95% of payloads currently in orbit; of the 20 countries with the most satellite payloads in orbit, 16 are represented in the ARF; most ARF members already have or are developing plans to acquire satellites; by one count, 14 out of the total of 18 countries globally which have space launch capabilities are represented in the ARF; the highest concentration of Global Navigation Satellite Systems (GNSS) is over the ARF region; all of the key proponents of different international approaches to space security are represented in the ARF; and almost all current or anticipated counter-space weapons capability resides in ARF members. These factors make it entirely appropriate for ARF members to consider the issue of space security.

The Workshop

The proposed ARF Space Security Workshop is intended to contribute towards strengthening the individual capacities of ARF members to participate and contribute effectively in international discourse on space security issues, by sharing information and perspectives on the challenges facing the space environment, and exploring the issues involved in international efforts to address these challenges. The Workshop is intended to be a one-off awareness-raising event. It is not intended to lead to an on-going stream of ARF work, as these issues are best and most appropriately addressed on a global basis through existing international mechanisms.

The Workshop, which would run for two days, would begin with specialist presentations designed to clarify the space security environment, the increasing dependence of modern societies on space-based assets, the problem of congestion and the danger posed by orbiting space debris, and the development of counter-space weapons systems. A session would consider measures to address the problem of space debris, incorporating work of UN COPUOS on debris mitigation. Another session would explore the international legal framework relating to space security, including treaties, non-binding arrangements and resolutions, and the application of international law to space. A key session would focus on current work underway to develop space TCBMs, including the work of the GGE on Space TCBMs and the possibility of developing a Code of Conduct on the use of space. The Workshop would also consider the question of arms controls and space, including the draft PPWT and other possible approaches to space arms controls. A further session would look at current Asia-Pacific regional cooperation mechanisms, including the

role of ARF and how they contribute to space security. A Preliminary Workshop Program is attached.

Most Workshop speakers would be from member governments, but experts from international organisations, academics and NGO speakers would also be invited to contribute particular expertise and different perspectives.

Language, Venue, Date, Duration

Language: English

Location: Hoi An, Vietnam

Date: TBD, December 2012 or January 2013

Duration: two days

Participants

Each ARF member would be invited to send representatives at around Deputy Director-General level from foreign and defence ministries responsible for international security, disarmament and arms control issues as they apply to space. These officials might be supported by experts on space as appropriate.

Each ARF member would be invited to send a delegation of 3 or 4 participants.

Administrative Arrangements

The co-chairs will share the administrative costs of the workshop, including meeting venue, technical support, hospitality and administrative assistance.

International travel, accommodation, and other relevant costs for workshop participants will be the responsibility of participating countries.

ASEAN Regional Forum Space Security Workshop

Hoi An, Vietnam, Late 2012 or Early 2013

Provisional Program of Activities

Session 1: Opening Session

Welcome and Introductory Remarks by the Co-Chairs

Keynote Address

Session 2: The Space Security Environment

Dependency on Space and the Consequences of Losing Access to Space

Threats to Access to Space: Space Debris and Counter-Space Weapons

Morning Tea

Session 3: Current International Space Security Framework

Role of the Major Space Treaties, Resolutions and Declarations

Applicability of International Law to Space

Lunch

Session 4: Measures to Address the Problem of Space Debris

Space Debris Mitigation Guidelines UN COPUOS Work on Sustainability of
Outer space Activities

Role of Cooperation on Space Situational Awareness (US)

Afternoon Tea

**Session 5: Development of Space Transparency and Confidence-Building
Measures**

UNGA First Committee Group of Government Experts on Space TCBMs
Proposed International Code of Conduct on Outer Space Activities

Session 6: Prospects for a Space Arms Control Treaty

Proposed draft PPWT
Alternative Approaches to Space Arms Controls

Morning Tea

Session 7: Discussion in Breakout Groups

Free discussion in up to four groups around a series of questions.

Lunch

Session 8: Contribution of Regional Cooperation Organisations to Space Security

Asia-Pacific Regional Space Agencies Forum
Asia-Pacific Space Cooperation Organisation
Other Regional Space Forums -APEC GNSS,
Role on the ASEAN Regional Forum

Afternoon Tea

Session 9: Closing Session

Reports from Breakout Groups
Co-Chairs Summary of Key Issues and Themes
Concluding Remarks