

# BRIEFING SERIES FOR UN DISARMAMENT COMMISSION WORKING GROUP II

## PRACTICAL IMPLEMENTATION OF TRANSPARENCY AND CONFIDENCE-BUILDING MEASURES (TCBMS)

10-12 April 2019 | UN HQ Conference Room E

Working Group II of the United Nations Disarmament Commission is presently examining the effective implementation of transparency and confidence-building measures (TCBMs) for space activities, capable of improving security and stability in outer space. To facilitate this process, UNIDIR will hold a series of briefings at the outset of the 2019 Session in order to provide UNDC members with critical background information and a technical understanding of current security challenges in outer space.

### DAY I

APRIL 10	13-15h	Distinguishing between “destructive” and “non-destructive” counterspace capabilities
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Many technologies have emerged that are capable of targeting, disrupting and even destroying space objects. Each of these technologies presents its own physical characteristics and challenges, especially those capable of destroying objects in orbit. This briefing will examine counterspace capabilities and possible strategies for coping with them through TCBMs.

#### Panelists

- *Kinetic weapons and space debris*  
Jaganath Sankaran, Assistant Professor, LBJ School of Public Affairs at the University of Texas-Austin (TBC)
- *Electronic and cyber warfare in space*  
Rajeiswari Pilai Rajagopalan, Senior Research Fellow, Observer Research Foundation (New Delhi)
- *Application of IHL to counterspace capabilities*  
Yuri Takaya, Visiting Researcher, University of Tokyo

### DAY II

APRIL 11	13-15h	Dual-Use Challenges: an examination of co-orbital vehicles and their many applications
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One of the most exciting new types of space object is the co-orbital vehicle, capable of life-extension operations for satellites and even debris removal. However, there is also widespread concern that these vehicles can be used in disruptive or even destructive manners. As such, ongoing developments in this technology are contributing to growing tension among space rivals. This briefing will describe the capabilities of co-orbital vehicles and why space-rivals perceive them as threats.

#### Presenter

- *Adopting rules of the road for co-orbital vehicles*  
Brian Weeden, Director of Program Planning, Secure World Foundation (Washington, DC)

## DAY III

APRIL 12

13-15h

**Contextualizing space activities: what we know and don't know about space operations and orbital maneuvers**

Today, many States and others possess the technology to observe activities in space, whether by radars or telescopes. However, it is not often clear why objects act the way they do, nor what their true purposes might be. In some instances, even peaceful, civilian maneuvers might seem threatening. This briefing will explore what the public can tell about a space object from observation or public information, and why a lack of information can lead to heightened tension in the space environment.

### Panellists

- *What can we tell about a space object?*  
Mazlan Othman, Director of the ICSU Regional Office for Asia and the Pacific, International Science Council (Kuala Lumpur)
- *The problem with a lack of context*  
Alexandra Stickings, Research Analyst for Space Policy and Security, Royal United Services Institute (London)
- *Practical strategies for the sharing of information*  
Andre Rypl, Second Secretary of the Brazilian Mission to the United Nations (Vienna)

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