Space Sustainability: An Indian Perspective

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Structure

- Concerns and Challenges
 - Advanced military space programs in Asia including ASAT capabilities
 - Unregulated international missile & space cooperation
 - Proliferation of space technologies
 - State of the Regime the biggest challenge
- Existing space governance mechanisms
- Weaknesses
- Utility of a space code

Space Sustainability

- To ensure long-term peaceful, sustainable use of outer space
- Identify/ codify "good behaviour" in space, reach common understanding on what is the acceptable behaviour, create certain limits, discourage harmful/ unfavourable behaviour
- Institute structures, norms to regulate the undesirable activities

India's Challenges

- Advanced military space programs in Asia
 - ASAT testing in Asia
 - ASAT weapons' potential to disable GPS satellites, that could affect targeting & navigation systems using GPS
- Regional capabilities
 - India has the most advanced satellite fabrication and launch capabilities in Southern Asia
 - But external cooperation can change this

International Cooperation

- International cooperation in space needs regulation
- Exploiting space necessary for development
- But international cooperation should not increase regional/international insecurity
- Hence 'rules of the road' needed

International Space Norms

- State of Space Norms
 - Near consensus at the theoretical level in identifying challenges
 - Lack of consensus among the major powers to deal with the challenges contributing to slow development of space norms
 - Institutionalized discussions needed to develop appropriate norms for international space cooperation and space developmental activities

India's Position

- India, as part of G-21 countries actively supported the legislation of a treaty banning the placement of weapons in outer space
- TCBMs important complimentary measures
- Insistence on legal measures but pragmatic to understand it has to start from a normative exercise and gradually move to legal ones

Existing Space Governance Mechanisms

COPUOS

• 1967 OST

CD

Weaknesses of Current Mechanisms

- Existing arrangements inadequate
 - Military activities not part of the COPUOS mandate
 - OST: 1967 good measure but several loopholes
 - CD yet to have a productive session on PAROS:
 PAROS UNGA Resolution: 1981

Utility of A Space Code

- An overcrowded, congested, competitive space
 - → need for an international space code more critical than ever
 - Increasing securitization of issues, partly in Asia
 - Security dilemma → arms race including space

Indian Interests In A Space Code

- Interested in the normative process & institutionalizing a space code, being an active party shaping the debate along with major space powers
 - Important since India has invested enormous wealth, thus,
 a material stake in the kinds of rules now being written
 - India's interests driven by the fact it is one of the earliest space powers
 - Interested in writing rules that would affect & curtail certain activities
 - Interested in rules that are holistic in approach & content
 - EU clearly lost out an opportunity by not involving India

Indian Interests, Contd.

- Being norm-shaper is important for India
 - Send out clear signals to friends & foes about the potential role of India in any normative exercise
 - The geopolitical value of India's efforts in this normative exercise
- The need for an inclusive mechanism
 - Absence of it → repeat of H-COC
 - Not part of creation process → Lack of ownership issue
 & the "not invented here" syndrome
 - Responsible powers such as India should have been part of the debate → shaping the debate rather than being shaped by it (political & geopolitical value)

Future Course

- A US-led effort may reduce the gap bet EU & non-EU capitals
- Feasibility of an IPCC-like model of experts on space issues
- Space traffic management being a major issue

 ICAO model?
- CD still relevant platform to discuss space? CD has been stagnant; ICAO-model may be more appropriate
- A grouping of of established spacefaring powers?

Conclusion

- Space sustainability
 - Concept gaining greater relevance, greater interest among different stakeholders
- Emerging consensus on issues space debris, weapons in outer space, accidents & collision
- Bilateral/ Multilateral CBMs/ International space code?
- Voluntary vs. legally-binding measures