



Transparency and Confidence Building Measures

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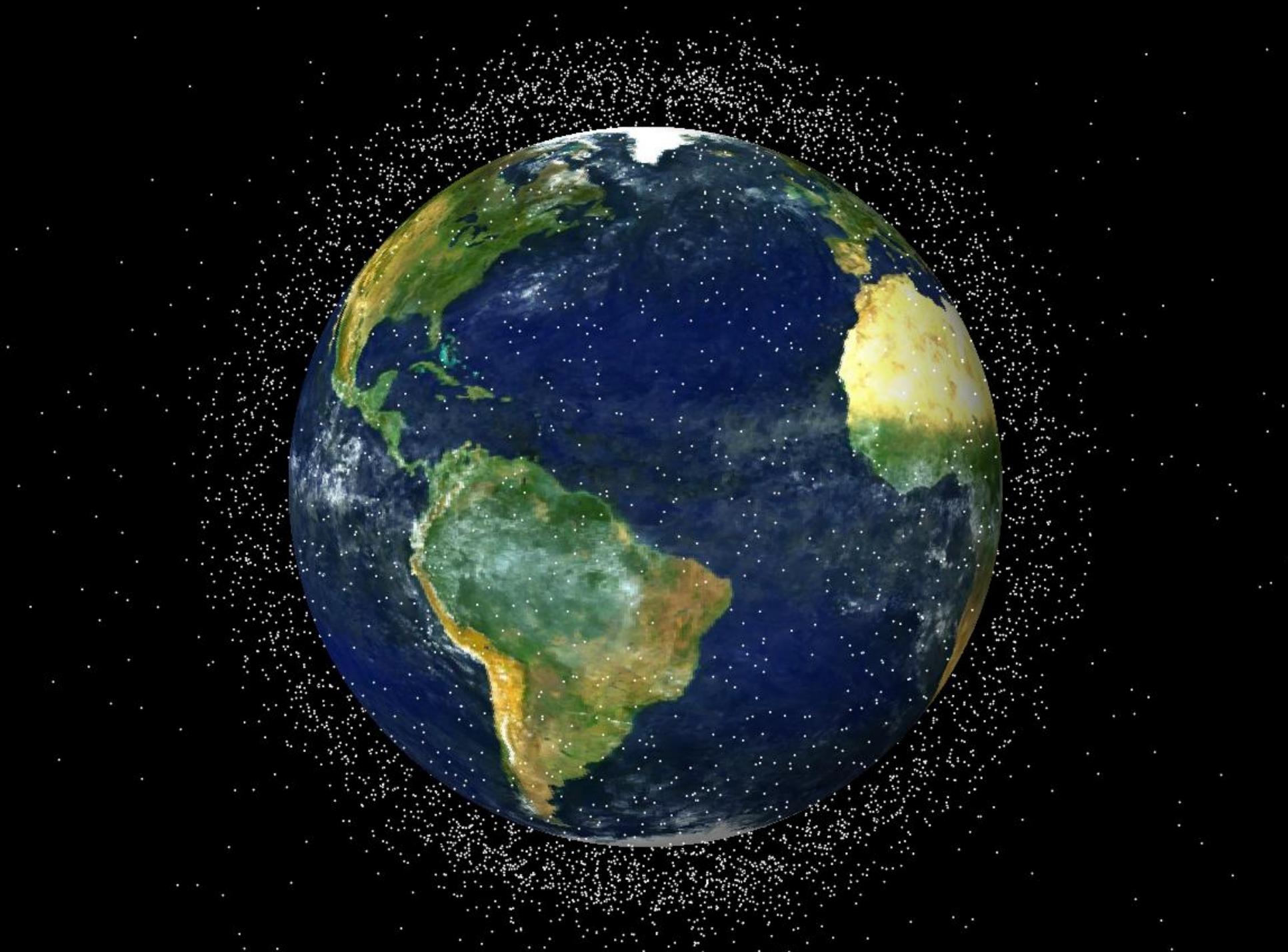
Space is changing

Our goal is a stable space environment.

However, space is becoming more:

Congested, Contested, Competed







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In response, we need to focus on:

Safety, Security, Sustainability



Is the current governance
framework for space
Fit For Purpose?



The Outer Space Treaties

- Basic tenets of international space law developed within UN COPUOS and enshrined in the outer space treaties:
 - Outer Space Treaty (1967)
 - Rescue Agreement (1968)
 - Liability Convention (1972)
 - Registration Convention (1975)



ITU

- International Telecommunications Union (ITU) manages radio-frequency and satellite orbit resources:
 - Decisions
 - Regulations
 - Recommendations
 - Protocol, Rules, Convention



Radio-frequency spectrum:

- Congested, Contested, Competed



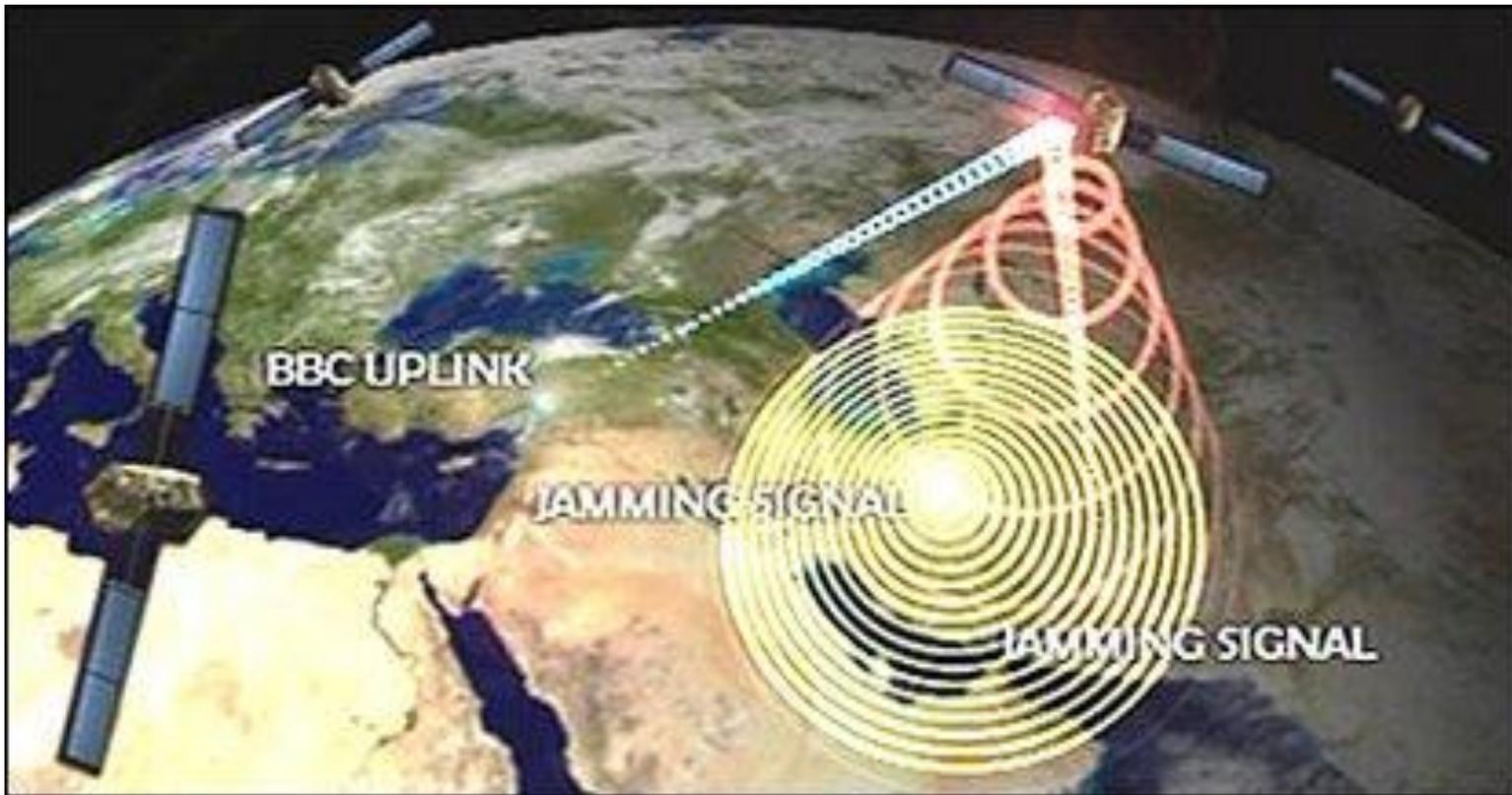
Radio-frequency spectrum:

- Congested, Contested, Competed
= Radio-frequency interference



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Society is dependent on space

- Position, navigation and timing
- Meteorology, Earth resource monitoring
- Intelligence, Surveillance, Reconnaissance
- Communications, Broadcast



Tiered approach to security of space

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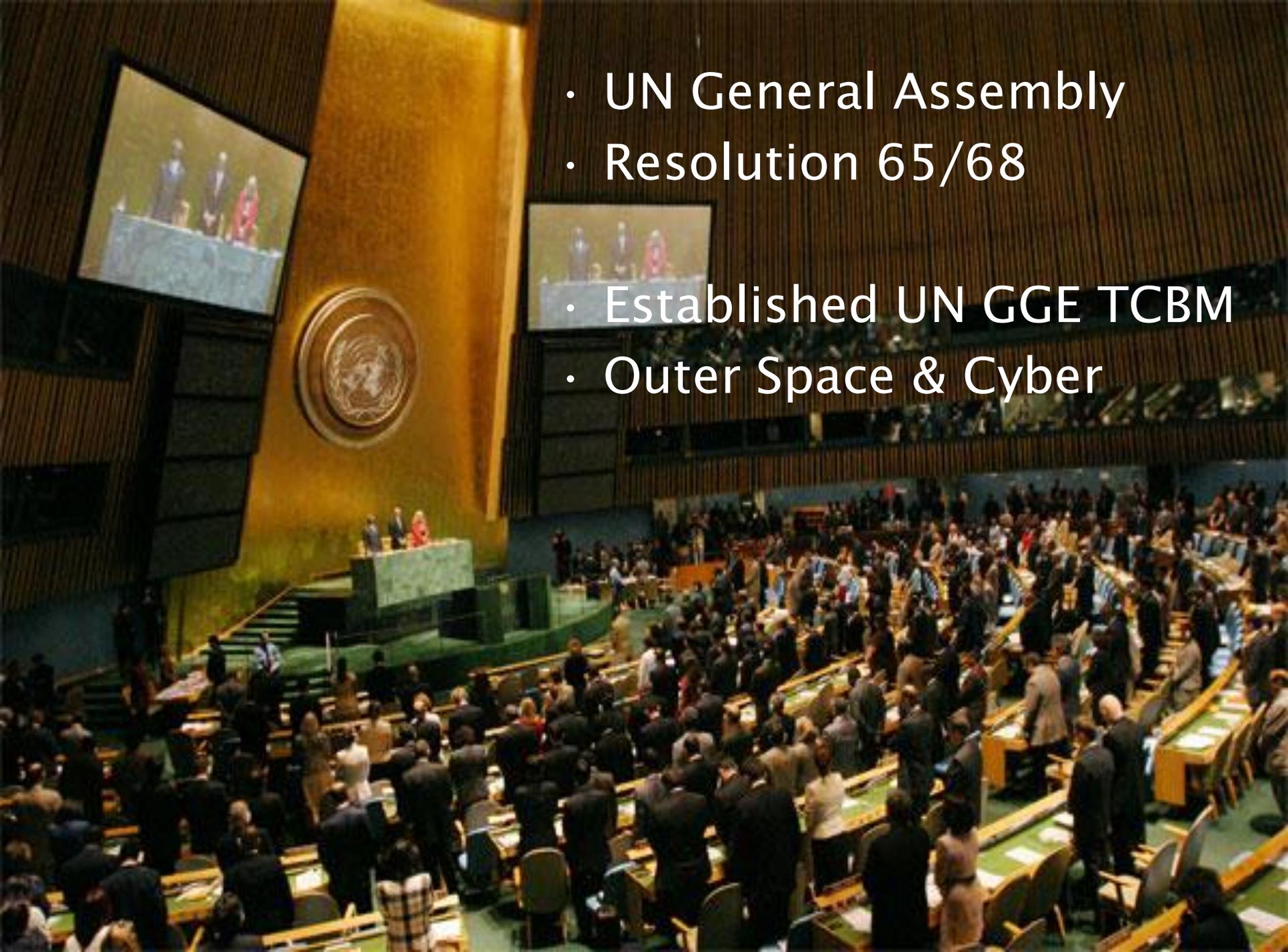


Tiered approach to security of space

- Aim is to deter potentially damaging activities in outer space through:
 - Establishment of norms of behaviour to identify irresponsible actions
 - Building of international partnerships to forge alliances and encourage inter-dependency
 - Development of resilient systems to mitigate consequences of impacts on systems
 - Enabling self-defence to respond to hostile actions/actors



- UN General Assembly
- Resolution 65/68
- Established UN GGE TCBM
- Outer Space & Cyber



UN GGE on TCBMs

UN: United Nations

GGE: Group of Governmental Experts

TCBMs: Transparency and
Confidence Building Measures

Aim is to remove potential for suspicion over
motives and escalation of hostilities



TCBMs

TCBMs include:

- Treaties (Anti-ABM)
- Forums (IADC)
- Codes of Conduct (Hague)
- Removal of capability (SORT)
- Inspections
- Workshops
- Exchanges





The Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities, United Nations, New York, 27 July 2012

From left to right: João Marcelo Galvão de Queiroz - Brazil, Chulmin Park - Republic of Korea, Richard Crowther - United Kingdom, Musthafa M. Jaffeer - Sri Lanka, Peter Martinez - South Africa, Andrii Kasianov - Ukraine, Frank Rose - USA, Victor L. Vasiliev - Russian Federation - Chairman, Augustine U. Nwosa - Nigeria, Gérard Brachet - France, Dumitru-Dorin Prunariu - Romania, Sergio Marchisio - Italy, Huaicheng Dai - People's Republic of China, Hellmut Lagos - Chile, Ruslan Amirgeryev - Republic of Kazakhstan

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