

HMDC Presents... CRISIS - FUTURISTIC SC: Full Report

HMDC Presents... Futuristic Security Council: Security Council of 2100: Use of Space (Research Report, December 2026)

Prepared for HMDC Forensics delegates attending Harvard Model United Nations Online, December 5-6, 2026. Every fact below comes from a page or official document that was opened and read in October 2026. Each evidence entry repeats its publication and date so the source is always visible.

This committee is set in the year 2100, but the year 2100 does not exist yet. Everything in the evidence entries is about the real world of 2026 and earlier. Anything about 2100 is clearly marked **FICTION (2100 ASSUMPTION)** so that no delegate mistakes an invented scenario for a fact.

WHAT OUR CHAIRS WILL FOCUS ON

Harvard tells us that our committee is a meeting of the Security Council in the year 2100, at a time when space technology has grown very fast and many more nations are active in space. Our chairs will ask us to deal with three main questions: weapons and military power in space, whether a nation may claim part of space as its own territory, and what a nation can do when another nation damages its satellites, bases or other equipment in space. We will mix real policy and technology from today with an imagined future, and we will respond to new problems as the crisis changes. In the end, the Council must decide rules and make sure they are followed, so that we "enforce rulings for fair behavior in the next frontier" (Harvard Model United Nations, HMUN Online Committee Page, Last Accessed: October 2026).

<https://www.harvardmun.org/security-council-online>

The parts of this report that match that focus most closely are Sections 1B, 1C and 1D (weapons, behaviour rules and anti-satellite tests), Section 1F with Sections 3A, 3B and 3F (claims on the Moon and on space resources), Sections 2B, 2C, 2E and 2H (the treaties, the Security Council votes and where each bloc stands), Section 2I (redress after damage) and Section 2J (claims to regions of space).

How we use this report: Our first priority is weapons, territorial claims and repair or payment after damage, because those are the three areas Harvard names. Space debris takes up a large share of this report (much of Section 1A, plus Sections 1E, 2D, 3C and 3H), so we use debris mostly as background, or as one kind of damage that one nation causes to another, not as the main topic of our speeches. Sections 2F (disasters and development) and 3I (radio frequencies) are background only. Redress is the question of how a nation that was harmed gets its loss repaired or paid back. Section 2I collects the real tools that exist today (the Liability Convention, the Cosmos 954 settlement, reports to the UN and ITU interference complaints), and Section 2J collects the real disputes over claims to space, so we read both closely and then prepare our own ideas for how the Council could judge a complaint and enforce its decision.

TABLE OF CONTENTS

Introduction: Understanding the Topic

Fiction Box: What the Year 2100 Might Look Like (2100 Assumptions)

PART 1, THE TOPIC

- 1A. The Harms
 - European Space Agency, April 1, 2025 (Measuring the growing debris cloud)
 - NASA Orbital Debris Program Office, Last Accessed: October 2026 (Explaining why tiny debris kills)
 - United Nations Secretary-General Policy Brief 7, May 2023 (Counting the coming satellite flood)
 - Jonathan's Space Report, October 12, 2026 (Tracking seventeen thousand active satellites)
 - Nature Astronomy, July 11, 2022 (Exporting falling-rocket risk southward)
 - Secure World Foundation, April 8, 2026 (Spreading counterspace weapons worldwide)
 - Center for Strategic and International Studies, April 25, 2025 (Jamming satellite navigation in war)
 - RAND Corporation, May 21, 2025 (Learning space lessons from Ukraine)
 - Pew Research Center, July 20, 2023 (Expecting a major debris problem)
 - European Space Agency, September 14, 2026 (Rising debris despite better habits)
 - Brookings Institution, June 25, 2026 (Asking permission for a million satellites)
 - Center for Strategic and International Studies, October 5, 2026 (Fighting a real war through space)
 - Center for Strategic and International Studies, October 5, 2026 (Turning company satellites into targets)
 - Associated Press, September 25, 2025 (Shadowing satellites without a remedy)

- 1B. Major Solution 1: A Binding Treaty Against Weapons in Space
 - United Nations General Assembly (A/RES/80/20), December 1, 2025 (Urging talks on a treaty)
 - United Nations Office for Disarmament Affairs, Last Accessed: October 2026 (Failing to agree on a treaty)
 - Center for Strategic and International Studies, October 5, 2026 (Admitting weapons already in orbit)
- 1C. Major Solution 2: Norms of Responsible Behaviour
 - United Nations General Assembly (A/RES/75/36), December 7, 2020 (Defining responsible space behaviour)
 - RAND Corporation, June 9, 2026 (Judging behaviour, not hardware)
 - Brookings Institution, July 14, 2026 (Reviving an old rule for crowded space)
- 1D. Major Solution 3: Banning Destructive Anti-Satellite Tests
 - United Nations General Assembly (A/RES/77/41), December 7, 2022 (Stopping destructive missile tests)
 - RAND Corporation, July 28, 2025 (Protecting satellites through resilience)
- 1E. Major Solution 4: Debris Rules and Space Traffic Management
 - United Nations Office for Outer Space Affairs, Last Accessed: October 2026 (Adopting long-term sustainability guidelines)
 - European Space Agency, Last Accessed: October 2026 (Aiming for zero debris by 2030)
- 1F. Major Solution 5: A Shared Framework for Space Resources
 - United Nations Office for Outer Space Affairs, April 22, 2015 (Declaring the Moon common heritage)
 - National Aeronautics and Space Administration, October 7, 2026 (Setting rules through Artemis Accords)
 - Luxembourg Space Agency, February 4, 2026 (Owning what is mined)
 - Library of Congress, September 15, 2021 (Spreading national mining laws)
- 1G. Lesser Solutions

PART 2, THE UNITED NATIONS RECORD

- 2A. Table of UN Resolutions and Instruments
- 2B. The Treaty Foundation
 - United Nations Office for Outer Space Affairs, Last Accessed: October 2026 (Banning claims and nuclear weapons)
 - COPUOS Legal Subcommittee (A/AC.105/C.2/2025/CRP.9), May 5, 2025 (Counting parties to space treaties)
 - United Nations Office for Outer Space Affairs, Last Accessed: October 2026 (Growing COPUOS membership sixfold)
- 2C. The Security Council and Weapons of Mass Destruction in Orbit
 - United Nations Security Council (S/2024/302), April 24, 2024 (Proposing a nuclear-free orbit)
 - United Nations Press (SC/15678), April 24, 2024 (Vetoing the space nuclear draft)
 - United Nations Press (SC/15700), May 20, 2024 (Failing the rival space draft)
 - United Nations General Assembly (A/RES/79/18), December 2, 2024 (Reaffirming the nuclear ban elsewhere)
- 2D. Debris and Sustainability at the UN
 - United Nations General Assembly (A/RES/62/217), December 22, 2007 (Endorsing debris mitigation guidelines)
 - United Nations Office for Outer Space Affairs, Last Accessed: October 2026 (Compiling national debris standards)
 - United Nations General Assembly (A/RES/74/82), December 13, 2019 (Welcoming twenty-one sustainability guidelines)
- 2E. Security Talks and the Pact for the Future
 - United Nations General Assembly (A/RES/76/231), December 24, 2021 (Opening a working group)
 - United Nations General Assembly (A/RES/79/1), September 22, 2024 (Calling for new space frameworks)
 - United Nations General Assembly (A/RES/80/21), December 1, 2025 (Merging the space security talks)
 - United Nations Institute for Disarmament Research, February 9, 2026 (Bridging two camps on space rules)
 - United Nations Institute for Disarmament Research, October 2026 (Splitting space talks between two cities)
- 2F. Space for Disasters and Development
 - United Nations General Assembly (A/RES/61/110), December 14, 2006 (Creating UN-SPIDER for disasters)
 - UN-SPIDER, Last Accessed: October 2026 (Sharing satellite data in emergencies)
- 2G. What Is Working and What Is Not
- 2H. Where the Major Blocs Stand (Present Day, 2026)
- 2I. Redress: What a Nation Can Do When Another Damages Its Space Property
 - United Nations Office for Outer Space Affairs, Last Accessed: October 2026 (Claiming payment for space damage)
 - Government of Canada, April 2, 1981 (Settling a famous space claim)
 - McGill Law Journal, September 1982 (Recovering only part of the cost)
 - United Nations Committee on the Peaceful Uses of Outer Space (A/AC.105/1262), December 6, 2021 (Reporting danger to the UN)
 - International Telecommunication Union, Radio Regulations Board, July 15, 2024 (Condemning deliberate satellite jamming)
- 2J. Claims: May Any Nation Own a Part of Space?
 - Netherlands Treaty Database, Last Accessed: October 2026 (Rejecting a claim to orbit)
 - National Aeronautics and Space Administration, October 13, 2020 (Defining safety zones in writing)

PART 3, INTERNATIONAL EFFORTS

- 3A. Artemis Accords (Multilateral, Led From the United States)
 - National Aeronautics and Space Administration, September 25, 2026 (Signing on seventy-six nations)
 - National Aeronautics and Space Administration, September 28, 2026 (Growing the Artemis coalition)
- 3B. COPUOS Working Group on Space Resources
 - United Nations Office for Outer Space Affairs, Last Accessed: October 2026 (Drafting principles for space mining)
- 3C. The Zero Debris Charter
 - European Space Agency, Last Accessed: October 2026 (Gathering two hundred signatories)

- 3D. UNIDIR Space Security Work
 - United Nations Institute for Disarmament Research, Last Accessed: October 2026 (Building trust through transparency)
- 3E. Independent Monitoring by International NGOs and Think Tanks
 - Secure World Foundation, April 8, 2026 (Counting debris from weapons tests)
 - Center for Strategic and International Studies, May 22, 2026 (Watching new moves in orbit)
 - Stockholm International Peace Research Institute, June 2026 (Stalling the multilateral space talks)
- 3F. China-Russia International Lunar Research Station
 - Reuters, April 24, 2025 (Building a rival Moon base)
- 3G. COPUOS in 2026 and the Proposed UNISPACE IV
 - Secure World Foundation, July 16, 2026 (Straining the consensus rule)
- 3H. Inter-Agency Space Debris Coordination Committee (IADC)
 - Inter-Agency Space Debris Coordination Committee, Last Accessed: October 2026 (Coordinating debris research across rivals)
- 3I. International Telecommunication Union (ITU)
 - International Telecommunication Union, February 16, 2026 (Keeping satellite signals apart)
- 3J. The Proposed EU Space Act (Regional Law)
 - European Commission, June 25, 2025 (Writing binding regional space rules)
- 3K. The United States Space Superiority Order (National Policy With Global Effects)
 - Center for Strategic and International Studies, October 5, 2026 (Racing back to the Moon)
- 3L. Other Efforts, Past, Ongoing and Proposed

KEY VOCABULARY

DISCUSSION QUESTIONS

INTRODUCTION: UNDERSTANDING THE TOPIC

Outer space is no longer the home of a few government satellites. In 2026 there are roughly 17,000 working satellites in orbit, and most of them belong to private companies. People use satellites every day for phone calls, internet, weather forecasts, farming, banking and navigation. Militaries depend on the same satellites to see, talk and aim weapons. That means a war in space would harm ordinary people on Earth, not only soldiers.

The basic law of space is the 1967 Outer Space Treaty. It says no country may claim space or the Moon, that weapons of mass destruction may not be put in orbit, and that countries are responsible for what their companies do in space. The treaty was written when only two countries could reach orbit. It does not clearly answer today's questions: who may mine the Moon, who must clean up space debris, how to manage traffic among tens of thousands of satellites, and whether weapons that are not weapons of mass destruction are allowed.

The Security Council is the UN body responsible for international peace and security. Its decisions under Chapter VII of the UN Charter are binding on all UN members. In the real world, the Council has tried only rarely to act on space, and a 2024 draft resolution on nuclear weapons in orbit was blocked by a veto. In this committee, delegates sit on the Security Council of the year 2100 and must decide how humanity uses space when the problems of 2026 have had seventy more years to grow.

FICTION BOX: WHAT THE YEAR 2100 MIGHT LOOK LIKE (2100 ASSUMPTIONS)

Everything in this box is **FICTION (2100 ASSUMPTION)**. None of it is a fact, and none of it should be cited as evidence. It is here to help delegates imagine the crisis the committee staff may present.

1. **FICTION (2100 ASSUMPTION):** Permanent research stations may exist on the Moon and perhaps on Mars, with several countries and companies operating side by side near the lunar south pole, where water ice is thought to exist.
2. **FICTION (2100 ASSUMPTION):** Mining of the Moon or asteroids may be a real industry, which would turn today's legal arguments about "ownership of resources" into arguments about money, jobs and territory.
3. **FICTION (2100 ASSUMPTION):** Low Earth orbit may hold far more satellites than today. If debris is not controlled, some orbits could become too dangerous to use.
4. **FICTION (2100 ASSUMPTION):** Private companies may control more space power than most countries, which raises the question of whether the Security Council can bind them at all.
5. **FICTION (2100 ASSUMPTION):** New weapons, such as lasers, cyber tools, or satellites that can grab other satellites, may be common. The line between a "repair satellite" and a "weapon" may be harder to see than ever.

Delegates should build their arguments on the real evidence below and then apply it to whatever 2100 scenario the committee presents.

PART 1, THE TOPIC

1A. THE HARMS

The harms of today's space environment fall into three groups. First, debris is piling up faster than it falls back to Earth, which threatens every satellite and the services people depend on. Second, weapons and electronic attacks on satellites are spreading to more countries and are already used in real wars. Third, the risks are not shared fairly: the countries with the most satellites gain the most, while poorer countries carry a large share of the danger.

European Space Agency, April 1, 2025: About 40,000 tracked objects and over 1.2 million debris pieces larger than 1 cm

Tagline: Measuring the growing debris cloud

Source: According to... European Space Agency, April 1, 2025

Link: https://www.esa.int/Space_Safety/Space_Debris/ESA_Space_Environment_Report_2025

Fact: It states... Space surveillance networks track about 40,000 objects, and only about 11,000 of them are working satellites. ESA estimates more than 1.2 million debris objects larger than 1 cm and more than 50,000 larger than 10 cm. Fragmentation events in 2024 alone added at least 3,000 tracked objects. Near 550 km altitude, the number of dangerous debris objects is now about the same order of size as the number of active satellites. Even if all launches stopped, the debris population would keep growing because collisions and break-ups create debris faster than it falls back.

This means... Debris is already a problem that grows on its own. By 2100 (a fiction assumption), a Council that does nothing could inherit orbits that are too crowded and dangerous to use. Delegates must decide whether clean-up should be required rather than voluntary.

NASA Orbital Debris Program Office, Last Accessed: October 2026: Debris hits at about 10 km per second and can stay in orbit for centuries

Tagline: Explaining why tiny debris kills

Source: According to... NASA Orbital Debris Program Office, Last Accessed: October 2026

Link: <https://orbitaldebris.jsc.nasa.gov/faq/>

Fact: It states... In low Earth orbit, debris travels about 7 to 8 km per second, and the average collision happens at about 10 km per second, more than ten times the speed of a bullet. Debris below 600 km usually falls back within several years, but debris near 800 km can stay for centuries, and above 1,000 km for a thousand years or more. Two events, the 2007 Chinese anti-satellite test on the Fengyun-1C satellite and the 2009 collision between the Iridium and Cosmos satellites, make up about one-third of all catalogued debris.

This means... One weapons test or one accident can damage orbits for generations. Any 2100 resolution must treat debris as long-lasting pollution, not a short-term problem.

United Nations Secretary-General Policy Brief 7, May 2023: About 2,470 satellites launched in 2022, compared with 210 in 2013

Tagline: Counting the coming satellite flood

Source: According to... United Nations Secretary-General, Our Common Agenda Policy Brief 7, May 2023

Link: <https://www.un.org/sites/un2.un.org/files/our-common-agenda-policy-brief-outer-space-en.pdf>

Fact: It states... About 2,470 satellites were launched in 2022, compared with 210 in 2013, mainly because of private networks of small satellites. Countries have filed radio frequency requests for more than 1.7 million non-geostationary satellites that could launch by the early 2030s. More than 24,000 objects 10 cm or larger are in orbit. No international body currently monitors debris or coordinates its removal, and there are no agreed rules for settling collision risks between operators.

This means... The UN's own leadership says the governance system has gaps. The Council must decide whether a new international body for space traffic and debris should exist, and whether it should have real powers.

Jonathan's Space Report, October 12, 2026: 16,988 active satellites, about 65% of them Starlink

Tagline: Tracking seventeen thousand active satellites

Source: According to... Jonathan's Space Report (astronomer Jonathan McDowell's satellite catalogue), October 12, 2026

Link: <https://planet4589.org/space/stats/active.html>

Fact: It states... As of October 12, 2026, there were 16,988 active satellites in orbit. Of these, 11,114 (about 65%) were Starlink satellites operated by one private company, SpaceX.

This means... A single company now operates most of the world's working satellites. A Security Council that only regulates governments may miss the actors that matter most, so delegates must decide how resolutions can reach private operators through the states that license them.

Nature Astronomy, July 11, 2022: Uncontrolled rocket reentries create about a 10% chance of casualties in a decade

Tagline: Exporting falling-rocket risk southward

Source: According to... Nature Astronomy, July 11, 2022

Link: <https://www.nature.com/articles/s41550-022-01718-8>

Fact: It states... If rocket bodies keep falling back to Earth without control, as they have for the past 30 years, there is roughly a 10% chance that one or more people will be killed or injured in the next decade. The authors call this a cautious estimate, because launches are increasing quickly. The risk falls mostly on the Global South: cities such as Jakarta, Dhaka, Mexico City, Bogota and Lagos are at least three times as likely as Washington, New York, Beijing or Moscow to have a rocket body fall over them.

This means... Countries that launch the most rockets are pushing risk onto countries that launch few or none. Delegates from developing countries have strong evidence to demand controlled reentry rules and fair compensation under the Liability Convention.

Secure World Foundation, April 8, 2026: Thirteen countries studied, and only non-destructive counterspace weapons used in real wars

Tagline: Spreading counterspace weapons worldwide

Source: According to... Secure World Foundation, April 8, 2026

Link: <https://swfound.org/counterspace/>

Fact: It states... The 2026 Global Counterspace Capabilities report studies 13 countries: the United States, Russia, China, India, Australia, France, Germany, Iran, Israel, Japan, North Korea, South Korea and the United Kingdom. Research into counterspace weapons is spreading, but so far only non-destructive methods, such as jamming and cyber attacks, have been used in active wars. More countries are interested in "bodyguard" satellites and spaceplanes. Jamming in Iran has increased sharply, including spoofing of Starlink signals.

This means... The space arms competition is no longer limited to the United States and Russia. A 2100 Council must consider rules that cover many space powers and many kinds of weapons, including weapons that leave no debris but still cut off services.

Center for Strategic and International Studies, April 25, 2025: Widespread GPS jamming and spoofing in and near conflict zones

Tagline: Jamming satellite navigation in war

Source: According to... Center for Strategic and International Studies, April 25, 2025

Link: <https://www.csis.org/analysis/space-threat-assessment-2025>

Fact: It states... Over the past year there was widespread jamming and spoofing of GPS signals in and around conflict zones, including near and inside Russia and across the Middle East. Chinese and Russian satellites in both low and geostationary orbit are showing increasingly advanced manoeuvres that could support warfighting. The United States and its partners remain concerned that Russia could decide to deploy a nuclear anti-satellite weapon, although no public information shows how close Russia may be.

This means... Satellite services that airlines, ships and farmers depend on are already being disrupted by military action. The Council must decide whether interference with civilian navigation signals is a threat to international peace.

RAND Corporation, May 21, 2025: Commercial satellites gave Ukraine major help but created new weaknesses

Tagline: Learning space lessons from Ukraine

Source: According to... RAND Corporation, May 21, 2025

Link: https://www.rand.org/pubs/research_reports/RRA2950-1.html

Fact: It states... In the war in Ukraine, Western commercial satellite communications strengthened Ukraine's armed forces without Ukraine needing its own satellites. Satellite navigation faced ongoing disruption from jamming on the ground. Commercial imagery made the war far more visible to the public. RAND concludes that key space services are likely to be disrupted in future conflicts, and that depending on a single private provider creates vulnerability.

This means... Private companies are now part of wars whether they want to be or not. Delegates must decide whether a commercial satellite that helps one side in a war becomes a lawful military target, and what that would mean for civilians who use the same network.

Pew Research Center, July 20, 2023: 69% of Americans expect a major space debris problem within 50 years

Tagline: Expecting a major debris problem

Source: According to... Pew Research Center, July 20, 2023

Link: <https://www.pewresearch.org/science/2023/07/20/americans-views-of-space-u-s-role-nasa-priorities-and-impact-of-private-companies/>

Fact: It states... In a survey of 10,329 US adults, 69% said a major debris problem from rockets and satellites will definitely or probably happen in the next 50 years. Asked about private space companies' record on limiting debris, 26% said they were doing a mostly poor job, 21% said a mostly positive job, and 53% were not sure.

This means... Even in the country with the most satellites, most people expect debris to become serious and are unsure that companies are handling it. Public opinion can support stronger international rules on debris.

European Space Agency, September 14, 2026: Strain on the orbital environment rose from about 4 to 50 times the sustainable level in one year

Tagline: Rising debris despite better habits

Source: According to... European Space Agency, September 14, 2026

Link: https://www.esa.int/Space_Safety/Space_Debris/ESA_Space_Environment_Report_2026

Fact: It states... ESA's 2026 Space Environment Report, which covers data up to the end of 2025, finds that debris is growing again even though operators are following debris rules more often. In 2025 there were more than 300 launches, which put more than 4,000 new payloads into orbit, and on average more than three whole satellites or rocket bodies fell back into the atmosphere every day. Not enough satellites leave the most crowded orbits when their working lives end, which creates a growing risk of collisions. ESA's Space Environment Health Index, which measures how many times more strain is placed on orbits than is sustainable, jumped from about 4 to 50 in just one year, and ESA shortened its long-term forecast from 200 years to 100 years.

This means... The newest official European data shows the problem getting worse faster, not slower, even as companies improve their habits. Delegates can argue that voluntary progress is real but far too slow, and that by 2100 (a fiction assumption) a Council that waited would face orbits under many times more strain than they can bear.

Brookings Institution, June 25, 2026: One company has asked US regulators to approve one million satellites

Tagline: Asking permission for a million satellites

Source: According to... Brookings Institution, June 25, 2026

Link: <https://www.brookings.edu/articles/orbital-data-centers-feasibility-gap-is-a-governance-risk/>

Fact: It states... SpaceX has asked the US Federal Communications Commission (FCC) to approve one million satellites, partly to support a plan for computer data centres in orbit. Experts warn that this could worsen light pollution in the night sky, space debris and the risk of collisions. Some scientists calculated that cooling a single orbital data centre would need about 2.15 million square feet of radiators, so it is unclear whether the idea can even work. Brookings argues that US agencies that deal with space, including the FCC, the Federal Aviation Administration and NASA, work separately, which makes coordinated oversight difficult, and that companies can use the gaps between regulators to serve their own financial interests.

This means... One company's single request is far larger than every satellite now in orbit (about 17,000, see Jonathan's Space Report above). If one national regulator can approve such a plan alone, the rest of the world has no say in orbits that everyone shares. Delegates can argue that the Council should require international review before any state licenses a giant constellation.

Center for Strategic and International Studies, October 5, 2026: The United States said its military gained "space superiority" over Iran in a real war in 2026

Tagline: Fighting a real war through space

Source: According to... Center for Strategic and International Studies, October 5, 2026

Link: <https://www.csis.org/analysis/what-space-superiority>

Fact: It states... In late March 2026, about a month into the US military campaign against Iran called Operation Epic Fury, the commander of US Central Command announced that the US Space Force had delivered "space superiority" over Iran. He had earlier said US forces struck "Iran's equivalent of Space Command." US Space Command described support including precision strikes, missile warning and secure communications. Iran still received space-based intelligence from other countries. CSIS warns that success against Iran does not show that the United States could achieve the same against a peer such as China, where a conflict would be far larger and longer.

This means... Space is no longer only a support tool for wars; armies now openly fight to control it. Delegates can argue that 2026 is the year space became a recognised battlefield, so the 2100 Council (a fiction assumption) may inherit decades of military competition in orbit, and that a war between two major space powers would put far more satellites at risk.

Center for Strategic and International Studies, October 5, 2026: Russia has warned that private companies helping its enemies could become military targets

Tagline: Turning company satellites into targets

Source: According to... Center for Strategic and International Studies, October 5, 2026

Link: <https://www.csis.org/analysis/how-commercial-industry-can-form-bedrock-space-superiority>

Fact: It states... Commercial companies now supply much of the launch, broadband internet and satellite imaging that the US military depends on. Russia has said that private firms that help its enemies could be treated as "legitimate targets for retaliatory measures, including military ones." The author argues that the US Department of Defense lacks the ability to defend private space systems, and proposes that companies be allowed to carry out, or hire others to carry out, counterattacks in orbit, similar to "hacking back" in cyberspace.

This means... The line between civilian and military satellites is breaking down from both sides: one power threatens company satellites, and some experts in another want companies to fight back. Delegates can use this to argue that the Council must decide whether commercial satellites may ever be attacked, and whether private companies should ever be allowed to use force in orbit, because both could spread a conflict quickly.

Associated Press, September 25, 2025: Germany said two Russian satellites were tracking satellites its military uses

Tagline: Shadowing satellites without a remedy

Source: According to... Associated Press (as published by PBS NewsHour), September 25, 2025

Link: <https://www.pbs.org/newshour/world/russia-is-tracking-two-satellites-used-by-germanys-military-defense-minister-says>

Fact: It states... Speaking at a space conference in Berlin, German Defence Minister Boris Pistorius said that two Russian Luch-Olymp reconnaissance satellites were tracking two Intelsat satellites used by the German military and others. He said Russia and China "can jam, blind, manipulate, or kinetically disrupt satellites," and that the German military had already been hit by jamming attacks. Germany will invest 35 billion euros (about 41 billion US dollars) in its space programmes over the next five years. Russia did not immediately comment.

This means... When a satellite is followed closely or jammed, there is no court or claims process that a nation can easily use, so Germany answered with a public warning and more spending. Delegates can argue that the lack of a clear way to get redress pushes states toward self-defence, which raises the risk of conflict in orbit.

1B. MAJOR SOLUTION 1: A BINDING TREATY AGAINST WEAPONS IN SPACE

The first major solution is a new treaty that would ban placing any weapons in space, not just weapons of mass destruction. Russia and China proposed a draft treaty, the "Treaty on the Prevention of the Placement of Weapons in Outer Space" (often called the PPWT), at the Conference on Disarmament in 2008 and revised it in 2014. The advantage is a clear legal rule that would be binding. The disadvantages, as critics argue, are that a ban on placing weapons in orbit does not cover missiles fired from the ground, which is how the destructive anti-satellite tests in 1A were carried out, and that there is no agreed way to check whether countries obey it.

United Nations General Assembly (A/RES/80/20), December 1, 2025: Encouraging a political pledge of "no first placement" of weapons

Tagline: Urging talks on a treaty

Source: According to... United Nations General Assembly, December 1, 2025

Link: <https://undocs.org/en/A/RES/80/20>

Fact: It states... The resolution "No first placement of weapons in outer space" reaffirms that preventing an arms race in space is urgent. It says the Conference on Disarmament is the single multilateral forum for negotiating disarmament treaties and urges early work based on the updated draft treaty on preventing the placement of weapons in outer space. It encourages all states, especially spacefaring nations, to consider a political promise not to be the first to place weapons in space.

This means... Many countries support moving toward a treaty, but a political pledge is not binding law. The 2100 Council could turn this pledge into a binding Chapter VII decision, although critics argue a pledge is meaningless if no one can check it.

United Nations Office for Disarmament Affairs, Last Accessed: October 2026: A 2017 expert group failed to agree on a binding instrument

Tagline: Failing to agree on a treaty

Source: According to... United Nations Office for Disarmament Affairs, Last Accessed: October 2026

Link: <https://disarmament.unoda.org/topics/outerspace/>

Fact: It states... Russia and China submitted a draft treaty to the Conference on Disarmament in 2008 and a revised version in 2014. In 2017, the General Assembly created a Group of Governmental Experts (A/RES/72/250) to study the main elements of a legally binding instrument to prevent an arms race in space. The group held in-depth discussions but did not reach consensus on a substantive report. By contrast, a 2010 expert group on voluntary transparency and confidence-building measures did reach consensus in 2013.

This means... Binding treaty talks on space weapons have repeatedly stalled, while voluntary measures have been easier to agree. Delegates must weigh a strong rule that may never be agreed against weaker rules that can be agreed now.

Center for Strategic and International Studies, October 5, 2026: The US Air Force Secretary confirmed that the Space Force has "on-orbit space control weapons"

Tagline: Admitting weapons already in orbit

Source: According to... Center for Strategic and International Studies, October 5, 2026

Link: <https://www.csis.org/analysis/space-weapons-disclosure-isnt-enough-deterrence>

Fact: It states... On September 14, 2026, US Air Force Secretary Troy Meink said the Space Force has "on-orbit space control weapons," without saying what type they are or what they do. Russia has carried out close approaches to other satellites in low and geostationary orbit since the 2010s, and a senior US general called one Russian satellite, Cosmos 2558, a space weapon. Chinese satellites have carried out close manoeuvres that a US general described as "dogfighting," as well as refuelling in orbit, and one Chinese satellite grabbed a dead satellite and towed it to a higher "graveyard" orbit. CSIS notes that China and Russia often describe these activities as "peaceful."

This means... This is the strongest point against a treaty that only bans placing weapons in orbit in the future: by the major powers' own statements, some weapons may already be there. Supporters of a treaty can reply that this makes a ban more urgent, while critics can argue that a ban nobody can check would only reward the side willing to hide its weapons.

1C. MAJOR SOLUTION 2: NORMS OF RESPONSIBLE BEHAVIOUR

The second major solution, supported mainly by the United Kingdom, the United States and many of their partners, is to agree on "norms of responsible behaviour": shared expectations about what countries should and should not do in space, such as not coming dangerously close to another country's satellite without warning. The advantage is that norms focus on actions that can be seen and measured, and they can be agreed faster than a treaty. The disadvantage is that norms are usually voluntary, and countries that break them may face no penalty.

United Nations General Assembly (A/RES/75/36), December 7, 2020: Asking states to identify responsible and irresponsible space behaviour

Tagline: Defining responsible space behaviour

Source: According to... United Nations General Assembly, December 7, 2020

Link: <https://undocs.org/en/A/RES/75/36>

Fact: It states... The resolution "Reducing space threats through norms, rules and principles of responsible behaviours" encourages member states to study threats to space systems and to describe which actions could be considered responsible, irresponsible or threatening. It asks the Secretary-General to collect member states' views in a report. Later resolutions (A/RES/76/231 in 2021 and A/RES/78/20 in 2023) set up open-ended working groups to continue this work.

This means... The UN has already started defining space behaviour that crosses the line. A 2100 Council could build on this approach by naming specific actions, such as destructive tests or unannounced close approaches, as threats to peace.

RAND Corporation, June 9, 2026: Governing dual-use space systems by observable behaviour

Tagline: Judging behaviour, not hardware

Source: According to... RAND Corporation, June 9, 2026

Link: https://www.rand.org/pubs/research_reports/RRA4003-3.html

Fact: It states... Most space systems serve both civilian and military purposes, so harmless activity can be misread as hostile, and fear can lead to escalation. There is no agreed definition of "dual use" for space systems and no international framework that covers these risks. RAND recommends assuming that all space systems are dual use and building rules around behaviour and effects that can be observed, rather than trying to sort satellites into "civilian" and "military".

This means... Banning a type of satellite may not work, because a repair satellite can also be a weapon. Delegates can argue that the Council should regulate what satellites do, not what they are.

Brookings Institution, July 14, 2026: The "due regard" rule in the Outer Space Treaty is "neglected and inconsistently applied"

Tagline: Reviving an old rule for crowded space

Source: According to... Brookings Institution, July 14, 2026

Link: <https://www.brookings.edu/articles/due-regard-and-the-evolving-law-of-outer-space-operations/>

Fact: It states... Article IX of the Outer Space Treaty requires states to act with "due regard" for the interests of other states, and to consult them sincerely when their activities might cause harmful interference with another state's space operations. Experts at a Brookings session said the principle "has been neglected and inconsistently applied in space," and that the rules for new activities will likely be shaped by what states actually do. The US Congress has already used due regard to protect the Apollo landing sites from commercial interference. With dozens of Moon missions planned by 2030, most aiming for the lunar south pole, the dust thrown up by each landing could affect other missions nearby.

This means... The advantage of building norms on due regard is that every party to the Outer Space Treaty has already accepted it, so no new treaty is needed. The disadvantage is that the rule is vague, and each country may read it in its own way. Delegates can propose that the Council define what due regard requires in practice, such as advance warning and consultation before landings or close approaches.

1D. MAJOR SOLUTION 3: BANNING DESTRUCTIVE ANTI-SATELLITE TESTS

The third major solution is a ban on destructive anti-satellite tests, especially missiles fired from the ground that blow up satellites and create large debris clouds. The advantage is that it targets the single most damaging action for the space environment, and it can be agreed without solving every other question. The disadvantage is that it only covers tests, not use in war, and it does not cover jamming, lasers or cyber attacks.

United Nations General Assembly (A/RES/77/41), December 7, 2022: Calling on all states to commit not to conduct destructive anti-satellite missile tests

Tagline: Stopping destructive missile tests

Source: According to... United Nations General Assembly, December 7, 2022

Link: <https://undocs.org/en/A/RES/77/41>

Fact: It states... The resolution calls upon all states to commit not to conduct destructive direct-ascent anti-satellite missile tests. It describes this commitment as an urgent first step to prevent damage to the space environment and to help develop further measures to prevent an arms race in space.

This means... The General Assembly has already asked for a test ban, but its resolutions are recommendations. Only the Security Council can make such a ban binding, so delegates must decide whether 2100 is the moment to do so.

RAND Corporation, July 28, 2025: Large satellite networks make a single knockout attack unlikely

Tagline: Protecting satellites through resilience

Source: According to... RAND Corporation, July 28, 2025

Link: <https://www.rand.org/pubs/commentary/2025/07/why-the-united-states-should-not-fear-a-space-pearl.html>

Fact: It states... Fears of a sudden attack that destroys a country's satellites are overstated, because large networks of small satellites are hard to knock out. Destroying one Starlink satellite is easy, but degrading a network of more than 7,600 would take hundreds of strikes over months. Small satellites cost several million dollars, while each anti-satellite missile costs at least 5 to 11 million dollars. Attacking many satellites would also create debris that threatens the attacker's own satellites.

This means... Some countries argue that resilience, not arms control, is the best protection. Delegates who oppose binding limits can use this argument, while delegates who support limits can reply that debris from such attacks would still harm everyone.

1E. MAJOR SOLUTION 4: DEBRIS RULES AND SPACE TRAFFIC MANAGEMENT

The fourth major solution is stronger rules for debris and an international system for managing space traffic, similar to air traffic control. The advantage is that every country and company gains from safer orbits, so agreement may be easier than on weapons. The disadvantage is that today's rules are voluntary, and operators may resist the cost of removing old satellites.

United Nations Office for Outer Space Affairs, Last Accessed: October 2026: Long-term sustainability guidelines adopted in 2019

Tagline: Adopting long-term sustainability guidelines

Source: According to... United Nations Office for Outer Space Affairs, Last Accessed: October 2026

Link: <https://www.unoosa.org/oosa/en/ourwork/topics/long-term-sustainability-of-outer-space-activities.html>

Fact: It states... The Committee on the Peaceful Uses of Outer Space (COPUOS) adopted the Guidelines for the Long-term Sustainability of Outer Space Activities in June 2019, recorded in document A/74/20. A first set was agreed in 2016 and a preamble plus nine more guidelines in 2018. In 2019 the Committee set up a new working group to continue the work.

This means... Countries have already agreed in principle on how to keep space usable. The 2100 Council could decide that following these guidelines is required, not optional.

European Space Agency, Last Accessed: October 2026: The Zero Debris Charter aims for zero debris by 2030

Tagline: Aiming for zero debris by 2030

Source: According to... European Space Agency, Last Accessed: October 2026

Link: https://www.esa.int/Space_Safety/Clean_Space/The_Zero_Debris_Charter

Fact: It states... The Zero Debris Charter, announced in June 2023, sets guiding principles and shared targets for reducing and cleaning up debris. More than 200 companies, research centres and international organisations have committed to it, along with more than 20 countries in Europe and beyond. Its goal is to reach "Zero Debris" by 2030.

This means... Companies and countries can agree on ambitious debris goals when they are voluntary. Delegates must decide whether a 2100 Council should turn voluntary goals into duties, and whether that would discourage cooperation.

1F. MAJOR SOLUTION 5: A SHARED FRAMEWORK FOR SPACE RESOURCES

The fifth major solution is an international agreement on mining the Moon, asteroids and other bodies. Two models compete. The 1979 Moon Agreement calls the Moon's resources the "common heritage of mankind" and calls for an international system to share them, but few countries have joined. The US-led Artemis Accords allow resource extraction under the Outer Space Treaty and use "safety zones" to avoid conflict. The advantage of a shared framework is that it could prevent disputes before mining begins. The disadvantage is that the major space powers disagree about which model to use.

United Nations Office for Outer Space Affairs, April 22, 2015: The Moon Agreement calls lunar resources the "common heritage of mankind"

Tagline: Declaring the Moon common heritage

Source: According to... United Nations Office for Outer Space Affairs, April 22, 2015

Link: <https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/intromoon-agreement.html>

Fact: It states... The Moon Agreement, adopted by the General Assembly in 1979 (resolution 34/68), says the Moon and its natural resources are the "common heritage of mankind". It calls for an international system to govern resource use once mining becomes possible. Celestial bodies may be used only for peaceful purposes, and the UN must be told where any station is and what it is for. The agreement entered into force in July 1984.

This means... A model for sharing space resources already exists, but the major space powers have not joined it. In 2100 (a fiction assumption), delegates must decide whether sharing should be required or whether those who invest should keep what they mine.

National Aeronautics and Space Administration, October 7, 2026: The Artemis Accords use "safety zones" and allow resource extraction

Tagline: Setting rules through Artemis Accords

Source: According to... National Aeronautics and Space Administration, October 7, 2026 (page last updated)

Link: <https://www.nasa.gov/artemis-accords/>

Fact: It states... The Artemis Accords, first signed in 2020, are principles for civil space exploration that support the Outer Space Treaty, the Registration Convention and the Rescue Agreement. Signers agree to share the location of their operations and to use temporary "safety zones" to avoid harmful interference. The Accords say that extracting and using resources on the Moon, Mars and asteroids should follow the Outer Space Treaty. They also cover debris reduction and the protection of historic sites.

This means... The Accords are a fast-growing alternative to the Moon Agreement. Supporters say they offer practical rules now; critics say safety zones could become claims of territory in practice, which the Outer Space Treaty forbids.

Luxembourg Space Agency, February 4, 2026: Luxembourg's 2017 law says "Space resources are capable of being owned"

Tagline: Owning what is mined

Source: According to... Luxembourg Space Agency, February 4, 2026 (page last updated)

Link: <https://space-agency.public.lu/en/support/industry-portal/legal-framework/law-of-july-20th-2017.html>

Fact: It states... Luxembourg's law of July 20, 2017, on the exploration and use of space resources says in Article 1: "Space resources are capable of being owned." Article 2 says that no person can explore or use space resources "without holding a written mission authorisation" from the ministers in charge of the economy and space activities.

This means... One country has written into its own law that a company may own what it takes from space, as long as the government gives permission first. Delegates must decide whether owning resources that have been removed is different from owning the land they came from, because the Outer Space Treaty forbids any nation to claim the land itself.

Library of Congress, September 15, 2021: Japan became the fourth country with a space resources law

Tagline: Spreading national mining laws

Source: According to... Library of Congress, Global Legal Monitor, September 15, 2021

Link: <https://www.loc.gov/item/global-legal-monitor/2021-09-15/japan-space-resources-act-enacted/>

Fact: It states... Japan's Space Resources Act (Act No. 83 of 2021) was published on June 23, 2021, and came into force on December 23, 2021. It defines space resources as water, minerals and other natural resources in outer space, including on the Moon. A company "needs to obtain a permit" to extract them, and the permit holder "owns the space resources that the person exploits in accordance with the approved activity plan." The article notes that the United States (2015), Luxembourg and the United Arab Emirates already had such laws, that "Japan is the fourth country in the world to pass a space resources law," and that no international agreement yet decides whether taking space resources is allowed.

This means... While the UN is still drafting shared principles (see 3B), individual countries are writing their own ownership rules one by one. Delegates from countries without such laws can argue that this creates a "first come, first served" system that favours rich space powers, while supporters can argue that clear national rules give companies the confidence to invest.

1G. LESSER SOLUTIONS

These ideas appear in UN debates but are smaller in scope or less developed. Delegates may add them to a resolution as supporting clauses.

- 1. **Transparency and confidence-building measures:** voluntary notice of launches, manoeuvres and risky activities, as recommended by the 2013 expert group (see A/RES/68/50 in Part 2).
- 2. **Better registration of space objects:** making every launching state register its satellites promptly with the UN (see A/RES/62/101 in Part 2).
- 3. **Controlled reentry rules:** requiring rocket stages to fall into empty ocean areas, which would reduce risk to the Global South (see the Nature Astronomy entry in 1A).
- 4. **Capacity-building for developing countries:** training and data-sharing through UNOOSA programmes such as UN-SPIDER, so that more countries benefit from space.
- 5. **A fourth UN conference on outer space (UNISPACE IV) in 2027:** proposed in the Pact for the Future to update global space governance.

PART 2, THE UNITED NATIONS RECORD

The UN has built most of space law. Between 1963 and 1979 it produced a declaration and five treaties that remain the foundation of space law today. Since then, the UN has mostly produced non-binding guidelines and recommendations, because countries have not agreed on new treaties. The Security Council itself has adopted no resolution on space in the official record checked for this report, and its one major attempt, in April 2024, was vetoed.

2A. TABLE OF UN RESOLUTIONS AND INSTRUMENTS

Every symbol below was confirmed on an official UN site (documents.un.org, undocs.org, press.un.org or unoosa.org); each one was rechecked against the official UN document on October 14, 2026.

Symbol	Year	Body	What it does
A/RES/1348 (XIII)	1958	General Assembly	Created an ad hoc committee on the peaceful use of outer space, the first step toward COPUOS.
A/RES/1472 (XIV)	1959	General Assembly	Set up the Committee on the Peaceful Uses of Outer Space (COPUOS) with 24 members.
A/RES/1721 (XVI)	1961	General Assembly	Stated that international law applies to space and asked states to register launches with the UN.
A/RES/1884 (XVIII)	1963	General Assembly	Called on states not to place nuclear weapons or other weapons of mass destruction in orbit.
A/RES/1962 (XVIII)	1963	General Assembly	Adopted the Declaration of Legal Principles for the exploration and use of space.
A/RES/2222 (XXI)	1966	General Assembly	Approved the Outer Space Treaty,

			the foundation of space law.
A/RES/2345 (XXII)	1967	General Assembly	Approved the Rescue Agreement on returning astronauts and space objects.
A/RES/2777 (XXVI)	1971	General Assembly	Approved the Liability Convention on paying for damage caused by space objects.
A/RES/3235 (XXIX)	1974	General Assembly	Approved the Registration Convention requiring states to register space objects.
A/RES/34/68	1979	General Assembly	Approved the Moon Agreement, which calls lunar resources the common heritage of mankind.
A/RES/37/92	1982	General Assembly	Adopted principles on using satellites for international direct television broadcasting.
A/RES/41/65	1986	General Assembly	Adopted principles on remote sensing of the Earth from space.
A/RES/47/68	1992	General Assembly	Adopted principles on the safe use of nuclear power sources in space.
A/RES/51/122	1996	General Assembly	Declared that space cooperation should benefit all states, especially developing countries.
A/RES/59/115	2004	General Assembly	Clarified which state counts as the "launching state" responsible for a space object.
A/RES/61/110	2006	General Assembly	Created UN-SPIDER to share satellite data for disaster response.
A/RES/62/101	2007	General Assembly	Recommended ways for states to improve registration of space objects.
A/RES/62/217	2007	General Assembly	Endorsed the COPUOS Space Debris Mitigation Guidelines.
A/RES/68/50	2013	General Assembly	Encouraged states to use voluntary transparency and confidence-building measures in space.
A/RES/68/74	2013	General Assembly	Recommended what national space laws should include.
A/RES/72/250	2017	General Assembly	Created an expert group to study a binding instrument against an arms race in space.
A/RES/73/91	2018	General Assembly	Annual resolution on international cooperation in the peaceful uses of outer space (UNISPACE+50 year).
A/RES/74/82	2019	General Assembly	Welcomed the 21 Guidelines for the Long-term Sustainability of Outer Space Activities.
A/RES/75/36	2020	General Assembly	Asked states to identify responsible and irresponsible behaviour in space.
A/RES/76/3	2021	General Assembly	Adopted the "Space2030" Agenda on space as a driver of sustainable development.
A/RES/76/230	2021	General Assembly	Urged further practical measures to prevent the placement of weapons in space.
A/RES/76/231	2021	General Assembly	Created an open-ended working group on norms of responsible behaviour in space.
A/76/20, Annex III	2021	COPUOS	Adopted the mandate and five-year workplan of the Legal Subcommittee's Working Group on Legal Aspects of Space Resource Activities (see 3B).
A/AC.105/1262	2021	COPUOS (document)	Circulated China's report under Article V of the Outer Space Treaty on two Starlink close approaches to its space station (see 2I).

A/RES/77/41	2022	General Assembly	Called on all states to commit not to conduct destructive anti-satellite missile tests.
A/RES/78/20	2023	General Assembly	Created a new open-ended working group on reducing space threats.
A/RES/78/238	2023	General Assembly	Annual resolution on further practical measures for the prevention of an arms race in outer space.
S/2024/302 (draft, vetoed)	2024	Security Council	Draft affirming the ban on nuclear weapons in orbit; vetoed by Russia, 13 in favour, China abstaining.
S/2024/383 (draft, not adopted)	2024	Security Council	Russian-led draft on not placing any weapons in space; failed with 7 in favour, 7 against, 1 abstention.
A/RES/79/1	2024	General Assembly	Pact for the Future; Action 56 calls for new frameworks on space traffic, debris and resources.
A/RES/79/18	2024	General Assembly	Affirmed the duty not to place weapons of mass destruction in orbit.
A/RES/79/19	2024	General Assembly	Annual resolution on preventing an arms race in outer space.
A/RES/80/19	2025	General Assembly	Annual resolution on preventing an arms race in outer space; welcomed the new consolidated working group set up by decision 79/512.
A/RES/80/20	2025	General Assembly	Encouraged a political pledge of "no first placement" of weapons in space.
A/RES/80/21	2025	General Assembly	Further practical measures against an arms race in space; noted the working group's 2025-2028 timetable.

2B. THE TREATY FOUNDATION

The Outer Space Treaty and its four companion treaties are the core of space law. Most space powers have joined the first four, but the Moon Agreement has few parties. The committee that writes these rules, COPUOS, has grown from 18 members to 110.

United Nations Office for Outer Space Affairs, Last Accessed: October 2026: The Outer Space Treaty forbids national claims and weapons of mass destruction in orbit

Tagline: Banning claims and nuclear weapons

Source: According to... United Nations Office for Outer Space Affairs, Last Accessed: October 2026

Link: <https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introouterspacetreaty.html>

Fact: It states... The Outer Space Treaty says space exploration should benefit all countries, that no state may claim space or celestial bodies, and that nuclear weapons and other weapons of mass destruction may not be placed in orbit or on celestial bodies. The Moon and other bodies are for peaceful purposes only. States are responsible for their national space activities, including those of private companies, and are liable for damage their space objects cause.

This means... The treaty bans weapons of mass destruction, but not other weapons such as missiles, lasers or jammers. This gap is at the centre of the Council's debate.

COPUOS Legal Subcommittee (A/AC.105/C.2/2025/CRP.9), May 5, 2025: 116 states are parties to the Outer Space Treaty, but only 17 to the Moon Agreement

Tagline: Counting parties to space treaties

Source: According to... COPUOS Legal Subcommittee, May 5, 2025

Link:

https://www.unoosa.org/res/oosadoc/data/documents/2025/aac_105c_22025crp/aac_105c_22025crp_9_0_html/AC105_C2_2025_CRP09E.pdf

Fact: It states... As of January 1, 2025, the Outer Space Treaty had 116 states parties and 23 more that had signed only. The Rescue Agreement and the Liability Convention each had 100 parties, the Registration Convention had 76, and the Moon Agreement had 17. The Outer Space Treaty was adopted on December 19, 1966, opened for signature on January 27, 1967, and entered into force on October 10, 1967.

This means... About 77 UN members are still not full parties to the Outer Space Treaty. A 2100 Council could require universal acceptance of its core rules, but it must recognise that the Moon Agreement has very little support.

United Nations Office for Outer Space Affairs, Last Accessed: October 2026: COPUOS has grown from 18 members in 1958 to 110 in 2025

Tagline: Growing COPUOS membership sixfold

Source: According to... United Nations Office for Outer Space Affairs, Last Accessed: October 2026

Link: <https://www.unoosa.org/oosa/en/ourwork/copuos/members/evolution.html>

Fact: It states... COPUOS began with 18 members in 1958 (resolution 1348 (XIII)) and 24 in 1959 (resolution 1472 (XIV)). Membership reached 100 in 2021, 102 in 2022, 104 in 2024 and 110 in 2025. Mongolia was among the members added in 1961.

This means... More countries want a voice in space rules, but COPUOS works by consensus, so every new member makes agreement harder. Delegates must decide whether the Security Council should act when COPUOS cannot agree.

2C. THE SECURITY COUNCIL AND WEAPONS OF MASS DESTRUCTION IN ORBIT

In April 2024, a Security Council draft resolution co-sponsored by dozens of states would have reaffirmed the ban on nuclear weapons in orbit. It came amid concern, noted by CSIS (see 1A), that Russia could deploy a nuclear anti-satellite weapon. Russia vetoed it. The General Assembly then adopted similar language later that year.

United Nations Security Council (S/2024/302), April 24, 2024: A draft co-sponsored by dozens of states on keeping nuclear weapons out of orbit

Tagline: Proposing a nuclear-free orbit

Source: According to... United Nations Security Council, April 24, 2024

Link: <https://undocs.org/en/S/2024/302>

Fact: It states... Draft resolution S/2024/302, dated April 24, 2024, was co-sponsored by a long list of states from every region, including Albania, Argentina, Australia, Bangladesh, Canada, Colombia, France, Germany, Japan and many others. It would have affirmed the obligation of all parties to the Outer Space Treaty not to place nuclear weapons or other weapons of mass destruction in orbit.

This means... Support for the rule was broad, but broad support is not enough in the Security Council. Delegates in 2100 must plan for the veto when they draft any space resolution.

United Nations Press (SC/15678), April 24, 2024: Russia vetoed the draft, 13 in favour, 1 against, 1 abstention

Tagline: Vetoing the space nuclear draft

Source: According to... United Nations Meetings Coverage and Press Releases, April 24, 2024

Link: <https://press.un.org/en/2024/sc15678.doc.htm>

Fact: It states... The Security Council failed to adopt the draft resolution. Thirteen members voted in favour, the Russian Federation voted against, and China abstained. Because Russia is a permanent member, its negative vote was a veto. The draft would have affirmed that all parties must fully comply with the Outer Space Treaty, including not placing nuclear weapons in orbit, on celestial bodies or anywhere in space.

This means... Even a rule that repeats an existing treaty can be blocked. In 2100, delegates must find language that all five permanent members can accept, or decide whether to work around the Council through the General Assembly.

United Nations Press (SC/15700), May 20, 2024: A rival Russian draft banning all weapons in space failed, 7 in favour, 7 against, 1 abstention

Tagline: Failing the rival space draft

Source: According to... United Nations Meetings Coverage and Press Releases, May 20, 2024

Link: <https://press.un.org/en/2024/sc15700.doc.htm>

Fact: It states... Less than a month after the April veto, the Council voted on a second draft (S/2024/383, dated May 20, 2024) proposed by Russia with Belarus, China, North Korea, Nicaragua and Syria. It would have reaffirmed that states must not place any kind of weapon in space, not only weapons of mass destruction. Seven members voted in favour (Algeria, China, Ecuador, Guyana, Mozambique, Russia and Sierra Leone), seven voted against (France, Japan, Malta, the Republic of Korea, Slovenia, the United Kingdom and the United States) and Switzerland abstained. A draft needs nine votes in favour, so it failed. The United States said the draft was a distraction from a Russian satellite it believed was a likely counterspace weapon; the Republic of Korea said that because space systems are dual use, defining a "weapon" in space is very difficult.

This means... In 2024 each camp blocked the other's text in the same month. The Council splits not over whether space should stay peaceful, but over which weapons to ban and how to define them. A 2100 resolution needs a definition of "space weapon" that both camps can accept.

United Nations General Assembly (A/RES/79/18), December 2, 2024: The General Assembly affirmed the ban on weapons of mass destruction in orbit

Tagline: Reaffirming the nuclear ban elsewhere

Source: According to... United Nations General Assembly, December 2, 2024

Link: <https://undocs.org/en/A/RES/79/18>

Fact: It states... The resolution "Weapons of mass destruction in outer space" affirms the obligation of all parties to the Outer Space Treaty not to place in orbit any objects carrying nuclear weapons or other weapons of mass destruction. It warns of the serious consequences of such weapons for the long-term sustainability of space, for sustainable development and for civilian services. It urges all states to join and comply with the treaty.

This means... When the Council was blocked, the General Assembly adopted the same idea. This shows a real path for delegates: if the Council cannot agree, the General Assembly can still state the world's position, even though it cannot bind anyone.

2D. DEBRIS AND SUSTAINABILITY AT THE UN

The UN has adopted voluntary guidelines for reducing debris and keeping space usable over the long term. These guidelines have helped, but they are not binding, and debris keeps growing.

United Nations General Assembly (A/RES/62/217), December 22, 2007: Endorsing the Space Debris Mitigation Guidelines

Tagline: Endorsing debris mitigation guidelines

Source: According to... United Nations General Assembly, December 22, 2007

Link: <https://undocs.org/en/A/RES/62/217>

Fact: It states... In this resolution on international cooperation in the peaceful uses of outer space, the General Assembly endorses the Space Debris Mitigation Guidelines of COPUOS. It also urges states that have not joined the space treaties to consider ratifying them.

This means... The world has had voluntary debris rules since 2007, yet debris has grown sharply since then (see the ESA entry in 1A). Delegates can use this as evidence that voluntary rules alone are not enough.

United Nations Office for Outer Space Affairs, Last Accessed: October 2026: UNOOSA keeps a compendium of national debris standards

Tagline: Compiling national debris standards

Source: According to... United Nations Office for Outer Space Affairs, Last Accessed: October 2026

Link: <https://www.unoosa.org/oosa/en/ourwork/topics/space-debris/index.html>

Fact: It states... The UN General Assembly endorsed the Space Debris Mitigation Guidelines in 2007. At the request of states, UNOOSA compiled a public compendium of space debris mitigation standards adopted by states and international organisations to support discussions in the Legal Subcommittee.

This means... Each country sets its own debris standards, so the rules differ from place to place. A 2100 Council could set one minimum standard so that companies cannot choose the weakest country to license their satellites.

United Nations General Assembly (A/RES/74/82), December 13, 2019: Welcoming 21 guidelines for long-term sustainability

Tagline: Welcoming twenty-one sustainability guidelines

Source: According to... United Nations General Assembly, December 13, 2019

Link: <https://undocs.org/en/A/RES/74/82>

Fact: It states... The General Assembly welcomed with appreciation COPUOS's adoption of a preamble and 21 guidelines for the long-term sustainability of outer space activities. It noted the creation of a working group to continue the work, and urged all members, especially those with major space capabilities, to help prevent an arms race in space.

This means... The 21 guidelines are the most detailed agreed rules for safe space behaviour. Delegates can reference them directly instead of writing new rules from nothing.

2E. SECURITY TALKS AND THE PACT FOR THE FUTURE

The General Assembly has created several working groups on space security and, in 2024, agreed in the Pact for the Future to discuss new frameworks for traffic, debris and resources.

United Nations General Assembly (A/RES/76/231), December 24, 2021: Opening a working group on responsible space behaviour

Tagline: Opening a working group

Source: According to... United Nations General Assembly, December 24, 2021

Link: <https://undocs.org/en/A/RES/76/231>

Fact: It states... The General Assembly decided to convene, beginning in 2022, an open-ended working group to take stock of existing international law and other rules about state behaviour in space, and to consider current and future threats. The Secretary-General was asked to send its report to the Conference on Disarmament and the Disarmament Commission. In 2023, resolution A/RES/78/20 created a new working group in Geneva to continue this work.

This means... The UN keeps talking about space security in working groups, but the talks produce reports, not binding rules. The Security Council is the only UN body that could turn their findings into binding decisions.

United Nations General Assembly (A/RES/79/1), September 22, 2024: The Pact for the Future calls the Outer Space Treaty the cornerstone of space law

Tagline: Calling for new space frameworks

Source: According to... United Nations General Assembly, September 22, 2024

Link: <https://undocs.org/en/A/RES/79/1>

Fact: It states... In Action 56 of the Pact for the Future, world leaders agreed that the Outer Space Treaty is the cornerstone of space law and that the growth in objects in orbit and the return of humans to deep space demand urgent action. They decided to discuss new frameworks for space traffic, space debris and space resources through COPUOS, invited the private sector to take part, and encouraged consultation on holding a fourth UN conference on outer space (UNISPACE IV) in 2027.

This means... World leaders have already agreed that new frameworks are needed. Delegates in 2100 (a fiction assumption) can imagine what those frameworks became and debate whether they worked.

United Nations General Assembly (A/RES/80/21), December 1, 2025: One combined working group on space arms now meets from 2025 to 2028

Tagline: Merging the space security talks

Source: According to... United Nations General Assembly, December 1, 2025

Link: <https://undocs.org/en/A/RES/80/21>

Fact: It states... The resolution "Further practical measures for the prevention of an arms race in outer space" notes that the General Assembly, in decision 79/512 of December 2, 2024, set up an open-ended working group, and welcomes the group's agreement by consensus on its agenda and an indicative timetable for 2025-2028. The same day, resolution A/RES/80/19 welcomed this "new consolidated" working group on the prevention of an arms race in outer space "in all its aspects". Resolution 80/21 also recommends considering the main elements of a legally binding instrument, including on preventing the placement of weapons in space.

This means... The UN joined its separate space security talks into one group that runs until 2028. The group can only recommend, and its timetable runs to 2028, so delegates can argue that slow, consensus-based talks are exactly why a binding Council decision may be needed.

United Nations Institute for Disarmament Research, February 9, 2026: The new working group is seen as a bridge between the binding-treaty camp and the voluntary-rules camp

Tagline: Bridging two camps on space rules

Source: According to... United Nations Institute for Disarmament Research, February 9, 2026

Link: https://unidir.org/wp-content/uploads/2026/02/UNIDIR_Outer_Space_Security_Conference_2025_Report.pdf

Fact: It states... UNIDIR's report on its 2025 Outer Space Security Conference, held in Geneva on September 9-10, 2025 with more than 1,000 participants, says panellists saw the combined working group on preventing an arms race in space as a forum to bring together states that favour legally binding instruments and states that favour non-binding measures. Some speakers warned against treating it as a "silver bullet." Some said non-binding measures "cannot substitute" for binding ones, while others valued them as steps along the way. Panellists also said commercial companies "are under pressure to offer exclusive services to States," with unclear rules on responsibility, and one proposed defining a threat by three elements: intent, behaviour and harmful impact.

This means... Even inside the UN's own research institute, experts do not agree whether binding or voluntary rules should come first. Delegates can borrow the three-part test (intent, behaviour, harmful impact) to write a definition of a "space threat" that both camps might accept.

United Nations Institute for Disarmament Research, October 2026: Space safety is handled in Vienna and space security in Geneva, and some issues fall between them

Tagline: Splitting space talks between two cities

Source: According to... United Nations Institute for Disarmament Research, event notice for October 26, 2026

Link: <https://unidir.org/event/strengthening-coordination-in-space-safety-and-space-security-governance/>

Fact: It states... At the UN, space safety is handled in Vienna by the General Assembly's Fourth Committee and COPUOS, while space security is handled in Geneva and New York by the First Committee, the Conference on Disarmament and the working group on preventing an arms race in space. The split has historical roots and helps keep COPUOS a cooperative forum. However, issues such as debris, crowded orbits and activity on the Moon do not fit neatly on either side: they "require technical cooperation to manage safely" but are "increasingly shaped by strategic competition and security concerns among States." UNIDIR warns that such issues risk being handled twice without coordination, or passed back and forth between forums and delayed. UNIDIR is holding a side event on this question at UN Headquarters on October 26, 2026, during the 81st session of the First Committee.

This means... The UN's space work is divided in a way that lets important problems slip through the gaps. The Security Council is the one body whose mandate covers both peace and security, so delegates can argue that it is the natural place to join safety and security together for issues such as debris and the Moon.

2F. SPACE FOR DISASTERS AND DEVELOPMENT

Not all UN space work is about danger. The UN also helps countries use satellites to save lives and support development.

United Nations General Assembly (A/RES/61/110), December 14, 2006: Creating UN-SPIDER

Tagline: Creating UN-SPIDER for disasters

Source: According to... United Nations General Assembly, December 14, 2006

Link: <https://undocs.org/en/A/RES/61/110>

Fact: It states... The General Assembly established the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER). The resolution expresses serious concern about the devastating impact of disasters, which cause loss of life and property and destroy livelihoods.

This means... Satellites help poorer countries respond to floods, earthquakes and storms. Any rule that limits satellites, or any war that destroys them, would also harm disaster response.

UN-SPIDER, Last Accessed: October 2026: A single access point for space-based disaster information

Tagline: Sharing satellite data in emergencies

Source: According to... UN-SPIDER, Last Accessed: October 2026

Link: <https://www.un-spider.org/about/what-is-un-spider>

Fact: It states... UN-SPIDER helps all countries access satellite data and build the skills to use it across the whole disaster cycle, including risk reduction. It links the disaster management and space communities, builds capacity especially in developing countries, and has offices in Vienna, Bonn and Beijing.

This means... The UN already runs a working programme that shares space benefits. Delegates can argue that protecting satellites is also protecting humanitarian work.

2G. WHAT IS WORKING AND WHAT IS NOT

1. **Working:** The Outer Space Treaty has held since 1967. No state has placed a nuclear weapon in orbit, and no state has openly claimed territory on the Moon.
2. **Working:** Voluntary guidelines on debris (2007) and long-term sustainability (2019) were agreed by consensus, and many operators follow them.
3. **Working:** UN programmes such as UN-SPIDER share satellite benefits with developing countries.
4. **Not working:** Debris keeps growing despite voluntary guidelines (see ESA, 1A).
5. **Not working:** Binding treaty talks on space weapons have stalled for decades (see UNODA, 1B).
6. **Not working:** The Security Council's only major space draft was vetoed in 2024 (see 2C).
7. **Not working:** There is still no international body to manage space traffic or coordinate debris removal (see the Secretary-General's Policy Brief, 1A).

2H. WHERE THE MAJOR BLOCS STAND (PRESENT DAY, 2026)

Everything in this section describes the real positions of countries and groups in 2026, not in 2100. The committee is set in the future, but delegates who know where today's space powers stand can reason about how those positions might have changed by 2100 (a fiction assumption). Each position is drawn from a source already opened for this report.

1. **United States:** The United States prefers voluntary norms, resilience and its own military strength over new binding treaties, and in 2025 it voted against basic UN resolutions on preventing an arms race in space. In 2026 its officials confirmed that the Space Force has weapons in orbit, and a December 2025 order aims to return US astronauts to the Moon by 2028.
 - According to... Stockholm International Peace Research Institute, June 2026; Center for Strategic and International Studies, October 5, 2026
2. **Russia:** Russia calls for a binding treaty that bans placing any weapon in space, and it put forward its own Security Council draft on this in May 2024, one month after it vetoed the draft on nuclear weapons in orbit. Western members say Russia's proposals distract from its own suspected counterspace satellite.
 - According to... United Nations Meetings Coverage and Press Releases, May 20, 2024
3. **China:** China co-sponsored Russia's 2024 draft, abstained on the nuclear draft, and accused "a certain country" of treating space as a war-fighting domain, while saying "It will take long-term efforts to build consensus." China leads the International Lunar Research Station with Russia and signalled in a 2025 white paper that it is willing to engage in multilateral space security talks.
 - According to... United Nations Meetings Coverage and Press Releases, May 20, 2024; Stockholm International Peace Research Institute, June 2026
4. **United Kingdom, France, Japan, the Republic of Korea and the European Union:** These Council members voted against Russia's 2024 draft, arguing that a "weapon" in space is hard to define because most systems are dual use, and they support norms of responsible behaviour. The European Union is also writing its own binding EU Space Act on safety, cybersecurity and debris that would apply to any operator, European or not, that serves the European market.
 - According to... United Nations Meetings Coverage and Press Releases, May 20, 2024; European Commission, June 25, 2025
5. **African and other developing Council members:** Algeria, Mozambique, Sierra Leone, Guyana and Ecuador voted for Russia's 2024 draft, with Guyana calling space a "shared global commons" and Sierra Leone calling any resolution on preventing an arms race in space a "pivotal step." At COPUOS in 2026, a dispute over the term "developing countries" helped block the Committee's report, showing how strongly these states want their place in space rules recognised.
 - According to... United Nations Meetings Coverage and Press Releases, May 20, 2024; Secure World Foundation, July 16, 2026
6. **The Artemis Accords group:** Seventy-six countries, nearly 40% of the world's nations, have signed the US-led Artemis Accords, which allow resource extraction and use "safety zones" on the Moon. The group now meets twice a year outside the UN system.
 - According to... National Aeronautics and Space Administration, September 28, 2026

2I. REDRESS: WHAT A NATION CAN DO WHEN ANOTHER DAMAGES ITS SPACE PROPERTY

Redress means getting a loss repaired or paid back. Today a nation has three main paths when another nation's space activity harms it: a claim for money under the 1972 Liability Convention, a formal report to the UN under the Outer Space Treaty, and a complaint about radio interference to the International Telecommunication Union (ITU). The best-known claim, over the Soviet satellite Cosmos 954, ended in an agreement rather than a ruling, and none of these paths comes with a way to force a state to comply. That gap is what the Council of 2100 (a fiction assumption) is asked to fill.

United Nations Office for Outer Space Affairs, Last Accessed: October 2026: The Liability Convention sets a claims process that ends in a Claims Commission

Tagline: Claiming payment for space damage

Source: According to... United Nations Office for Outer Space Affairs, Last Accessed: October 2026

Link: <https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/liability-convention.html>

Fact: It states... The Convention on International Liability for Damage Caused by Space Objects (approved by resolution 2777 (XXVI) in 1971, in force since September 1972) says a launching state "shall be absolutely liable to pay compensation" for damage its space object causes on the surface of the Earth or to aircraft in flight (Article II). For damage in space, a state is liable "only if the damage is due to its fault" (Article III). A claim "shall be presented to a launching State through diplomatic channels" (Article IX), normally within one year of the damage (Article X). If no settlement is reached within one year, either side may ask for a Claims Commission (Article XIV). The Commission's decision is "final and binding if the parties have so agreed"; otherwise it gives a "recommendatory award" that the parties must consider honestly and seriously (Article XIX).

This means... For damage in orbit, the harmed nation must prove the other nation was at fault, which is hard when no one can see clearly what happened hundreds of kilometres up. Even then, the Claims Commission's answer is only advice unless both sides agreed in advance to obey it. Delegates can propose that the Council make Claims Commission decisions binding, or that the Council itself enforce them.

Government of Canada, April 2, 1981: The Soviet Union paid Canada 3 million Canadian dollars after Cosmos 954 fell on Canadian territory

Tagline: Settling a famous space claim

Source: According to... Government of Canada, Canada Treaty Series 1981 No. 8, April 2, 1981

Link: <https://www.treaty-accord.gc.ca/text-texte.aspx?id=103429>

Fact: It states... In a protocol signed in Moscow on April 2, 1981, the Government of the Union of Soviet Socialist Republics agreed to "pay to the Government of Canada the sum of three million Canadian dollars" in "full and final settlement of all matters connected with the disintegration of the Soviet satellite" Cosmos-954 in January 1978. Canada accepted the payment as settlement of all those matters, "including the claim advanced by Canada in this respect." The protocol entered into force on the date of signature.

This means... The one famous case of a nation being paid for space damage ended in a deal between two governments, not a court ruling, more than three years after the accident. Delegates can use it to show that redress is possible, but slow, and depends on both sides being willing to talk.

McGill Law Journal, September 1982: Canada claimed about 6 million dollars for the Cosmos 954 cleanup and accepted half

Tagline: Recovering only part of the cost

Source: According to... McGill Law Journal, Volume 27, No. 4, September 1982 (Bryan Schwartz and Mark L. Berlin)

Link: <https://lawjournal.mcgill.ca/?p=15061>

Fact: It states... Cosmos 954 was a Soviet nuclear-powered satellite that re-entered the atmosphere in January 1978, and "radioactive debris scattered over Canadian territory" near Great Slave Lake. Canada's search and clean-up effort, Operation Morning Light, lasted until mid-October 1978 and cost nearly fourteen million dollars in total, but Canada claimed only its extra costs of \$6,041,174.70. Canada based its claim on the Liability Convention and on general international law. The authors call the final agreement "a three million dollar settlement which did not expressly acknowledge legal liability."

This means... Canada spent far more than it asked for, asked for far more than it received, and the Soviet Union never admitted it was legally responsible. Delegates can argue that the Liability Convention needs a faster and fairer system, especially for dangers such as radioactive debris that could harm people for a long time.

United Nations Committee on the Peaceful Uses of Outer Space (A/AC.105/1262), December 6, 2021: China reported two close approaches by Starlink satellites to its space station

Tagline: Reporting danger to the UN

Source: According to... United Nations Committee on the Peaceful Uses of Outer Space, December 6, 2021

Link: https://www.unoosa.org/res/oosadoc/data/documents/2021/aac_105/aac_1051262_0_html/AAC105_1262E.pdf

Fact: It states... In a note dated December 3, 2021, China's Permanent Mission in Vienna told the UN Secretary-General, under Article V of the Outer Space Treaty, that SpaceX Starlink satellites had made two close approaches to the China Space Station, on July 1 and October 21, 2021. Each time, "For safety reasons, the China Space Station took the initiative to conduct an evasive manoeuvre." China asked the Secretary-General to remind all treaty parties that "States Parties to the Treaty shall bear international responsibility for national activities in outer space," including those of private companies.

This means... No damage occurred, so China had no claim for money, but it used the UN to put the incident on the public record and to remind the United States that it is responsible for its companies. Delegates can point to this as a peaceful first step that a harmed or threatened nation can take before any claim for redress.

International Telecommunication Union, Radio Regulations Board (RRB24-2/13), July 15, 2024: The ITU condemned deliberate interference with European satellites traced to Russia

Tagline: Condemning deliberate satellite jamming

Source: According to... International Telecommunication Union, Minutes of the 96th Meeting of the Radio Regulations Board, July 15, 2024

Link: https://itu.int/dms_pub/itu-r/md/24/rrb24.2/c/R24-RRB24.2-C-0013!!PDF-E.pdf

Fact: It states... Luxembourg, Sweden, France, the Netherlands and Ukraine complained that their satellites, which mainly carried Ukrainian television and radio, were receiving interfering signals that had been "geolocated" to the Russian Federation or Crimea. Meeting in June 2024, the ITU's Radio Regulations Board "expressed its grave concern regarding the use of signals to cause intentional harmful interference" and "condemned such actions in the strictest terms," saying they broke No. 15.1 of the Radio Regulations. The Board asked Russia "to immediately cease any deliberate action to cause harmful interference" and told the ITU's Bureau to bring the countries together to resolve the problem.

This means... A UN agency can publicly name and condemn a nation for jamming, but it cannot punish that nation or order it to pay. Delegates can argue that the Council of 2100 (a fiction assumption) could give such findings real force, for example by treating repeated deliberate jamming as a threat to peace.

2J. CLAIMS: MAY ANY NATION OWN A PART OF SPACE?

Article II of the Outer Space Treaty says outer space, including the Moon and other celestial bodies, "is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means." Even so, nations keep testing this rule. In 2024 Colombia stated that part of the geostationary orbit belongs to it, and other states objected. The Artemis Accords, meanwhile, say that taking resources is not a claim of territory and introduce "safety zones," which critics fear could work like claims.

Netherlands Treaty Database, Last Accessed: October 2026: Six European and North American states objected to Colombia's claim to part of the geostationary orbit

Tagline: Rejecting a claim to orbit

Source: According to... Netherlands Treaty Database (Government of the Netherlands), Last Accessed: October 2026

Link: https://treatydatabase.overheid.nl/en/Treaty/Details/003428_b

Fact: It states... When Colombia ratified the Outer Space Treaty, it made an "interpretative declaration," recorded with the date April 15, 2024, saying that "the segment of the geostationary orbit corresponding to Colombia is part of Colombia." Germany objected on January 27, 2025, saying the declaration "has no effect with regard to the legal obligations" of Colombia under Article II and is "incompatible with the object and purpose of the Outer Space Treaty." France, Canada, the Netherlands, the United Kingdom and Sweden objected between January 31 and March 19, 2025. Germany, Canada and Sweden said the treaty still enters into force between them and Colombia, but without the claim. The same record quotes Article II: outer space "is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means."

This means... A real nation claimed a region of space as recently as 2024, and the answer came from other states' written objections, not from any court or UN body. Delegates can argue that the Council of 2100 (a fiction assumption) needs a clear way to rule on such claims, and delegates from equatorial countries may argue that the orbit above them deserves special protection.

National Aeronautics and Space Administration, October 13, 2020: The Artemis Accords say mining is not a claim of territory and that safety zones "will ultimately be temporary"

Tagline: Defining safety zones in writing

Source: According to... National Aeronautics and Space Administration, The Artemis Accords (signed text), October 13, 2020

Link: <https://www3.nasa.gov/specials/artemis-accords/img/Artemis-Accords-signed-13Oct2020.pdf>

Fact: It states... In Section 10, the signatories "affirm that the extraction of space resources does not inherently constitute national appropriation under Article II of the Outer Space Treaty." In Section 11, a safety zone is "the area in which nominal operations of a relevant activity or an anomalous event could reasonably cause harmful interference." Safety zones "will ultimately be temporary, ending when the relevant operation ceases," and the signatories "should promptly notify each other as well as the Secretary-General of the United Nations" about them.

This means... The Accords promise that safety zones are temporary and reported to the UN, but they do not set a time limit or a size limit. Delegates who support the Accords can quote these words as proof that safety zones are not claims; delegates who are worried can argue that a zone lasting as long as a permanent base could become a claim in practice, so the Council should set limits.

PART 3, INTERNATIONAL EFFORTS

Beyond the UN's own bodies, several international groups, agreements and organisations shape how space is used. Some are led by one country but include many members, and some are run by international non-governmental organisations that track what governments do.

3A. ARTEMIS ACCORDS (MULTILATERAL, LED FROM THE UNITED STATES)

National Aeronautics and Space Administration, September 25, 2026: San Marino became the 76th nation to sign

Tagline: Signing on seventy-six nations

Source: According to... National Aeronautics and Space Administration, September 25, 2026

Link: <https://www.nasa.gov/organizations/oiir/NASA-welcomes-san-marino-signing-the-artemis-accords/>

Fact: It states... San Marino became the 76th nation to sign the Artemis Accords, at a ceremony in Rimini, Italy. The Accords were set up in 2020 by NASA, the US State Department and seven other founding nations. They set out principles for peaceful and transparent exploration of the Moon, Mars and beyond, including helping those in need, sharing scientific data, avoiding interference with others' activities and preserving historic sites.

This means... A large group of countries has accepted one set of rules for the Moon outside the UN. Delegates must decide whether the 2100 Council should build on the Accords, replace them, or combine them with the rival China-Russia lunar research station plan (see 3F).

National Aeronautics and Space Administration, September 28, 2026: Nearly 40% of the world's nations now work with NASA under the Accords

Tagline: Growing the Artemis coalition

Source: According to... National Aeronautics and Space Administration, September 28, 2026

Link: <https://www.nasa.gov/news-release/nasa-celebrates-as-artemis-accords-surpasses-75-signatories/>

Fact: It states... Albania, Croatia, Côte d'Ivoire and San Marino joined the Accords, bringing the total to 76 countries. Nearly one-third of all signatories joined after the start of President Trump's second term. NASA says nearly 40% of the world's nations now cooperate under the Accords, and nearly two-thirds of the countries that signed the 1967 Outer Space Treaty have also signed the Accords. Since 2024 the signatories have met twice a year under an agreed method of operations, with a principals' meeting held at the International Astronautical Congress in Antalya, Türkiye, beginning October 5, 2026.

This means... The Accords are becoming a club with its own regular meetings, outside the UN system. Delegates must decide whether a parallel club of this size strengthens space law or splits the world into rival rule systems.

3B. COPUOS WORKING GROUP ON SPACE RESOURCES

United Nations Office for Outer Space Affairs, Last Accessed: October 2026: Draft principles on space resources due for finalisation in 2027

Tagline: Drafting principles for space mining

Source: According to... United Nations Office for Outer Space Affairs, Last Accessed: October 2026

Link: <https://www.unoosa.org/oosa/en/ourwork/copuos/lsc/space-resources/index.html>

Fact: It states... The Working Group on Legal Aspects of Space Resource Activities, under the COPUOS Legal Subcommittee, has a five-year workplan from 2022 to 2027. Its tasks are to study existing law, assess whether new rules are needed and develop initial recommended principles for consensus. A first draft of principles was issued on March 27, 2025, with updated drafts in July, October and December 2025. The final principles are planned for 2027.

This means... For the first time, all COPUOS members are negotiating shared principles for space mining. In 2100 (a fiction assumption), those principles may be the starting point for any dispute the Council faces.

3C. THE ZERO DEBRIS CHARTER

European Space Agency, Last Accessed: October 2026: Over 200 organisations and 20+ countries committed

Tagline: Gathering two hundred signatories

Source: According to... European Space Agency, Last Accessed: October 2026

Link: https://www.esa.int/Space_Safety/Clean_Space/The_Zero_Debris_Charter

Fact: It states... The Zero Debris Charter was written by 40 space actors with support from ESA and announced at the Paris Air Show in June 2023, with a kick-off on July 10, 2023. More than 200 companies, research centres and international organisations, and more than 20 countries, have committed to it.

This means... ESA is an intergovernmental organisation of European states, and the Charter shows how international bodies can bring companies into rule-making. Delegates can propose that the Council endorse such charters to give them more weight.

3D. UNIDIR SPACE SECURITY WORK

United Nations Institute for Disarmament Research, Last Accessed: October 2026: Running a yearly Outer Space Security Conference and a space security lexicon

Tagline: Building trust through transparency

Source: According to... United Nations Institute for Disarmament Research, Last Accessed: October 2026

Link: <https://unidir.org/focus-area/space-security/>

Fact: It states... UNIDIR's Space Security programme aims to build shared understanding of space security problems and develop solutions for a more secure, sustainable and predictable space environment. It runs the yearly Outer Space Security Conference (the 2026 conference was held on September 8-9, 2026), a Space Security Portal for transparency and confidence-building, and a Lexicon for Outer Space Security so that countries use the same words in the same way.

This means... Countries cannot agree on rules if they do not agree on what words mean. Delegates can use UNIDIR's work to define terms such as "space weapon" in a resolution.

3E. INDEPENDENT MONITORING BY INTERNATIONAL NGOS AND THINK TANKS

Secure World Foundation, April 8, 2026: 6,904 catalogued debris pieces from weapons testing, 2,773 still in orbit

Tagline: Counting debris from weapons tests

Source: According to... Secure World Foundation, April 8, 2026

Link: <https://swfound.org/counterspace/>

Fact: It states... Counterspace testing by the United States, Russia, China and India has produced 6,904 catalogued debris pieces, of which 2,773 are still in orbit. The report also notes cyber attacks, including major breaches of ESA computer systems, and geostationary communications satellites that do not encrypt their data.

This means... Independent organisations provide the public evidence that governments may not share. A 2100 Council could create its own monitoring body or rely on independent groups, and delegates must decide which is more trustworthy.

Center for Strategic and International Studies, May 22, 2026: Satellites refuelling, swarming and spoofing in 2025-2026

Tagline: Watching new moves in orbit

Source: According to... Center for Strategic and International Studies, May 22, 2026

Link: <https://www.csis.org/analysis/what-are-biggest-space-threats-2026>

Fact: It states... At a public briefing with the Secure World Foundation, CSIS experts reported that two Chinese satellites (SJ-21 and SJ-25) appear to have refuelled one another in geostationary orbit, which would be a first, and that five Chinese satellites in low orbit operated within less than a kilometre of each other. Russian satellites made close approaches to other satellites, and jamming and spoofing of navigation and satellite communications are now used by Ukraine, Russia and Iran. In January, Iran reportedly spoofed Starlink terminals and took the service offline for Iranian users until a fix was released. The experts also said the UN working group on space arms runs through 2028 and that progress has at times been blocked.

This means... The same skills that let one satellite repair or refuel another could let it disable a rival satellite. This is real-world evidence for the RAND point in 1C that the Council should judge behaviour, not hardware.

Stockholm International Peace Research Institute (SIPRI), June 2026: UN space security talks stalled in 2025 as states built military space power

Tagline: Stalling the multilateral space talks

Source: According to... Stockholm International Peace Research Institute, SIPRI Yearbook 2026 Summary, June 2026

Link: https://www.sipri.org/sites/default/files/2026-06/yb26_summary_en_1.pdf

Fact: It states... In 2025 several states sped up their pursuit of military space capabilities. The United States announced the Golden Dome missile defence system, which includes space-based interceptors; cost estimates published in 2025 ranged from 175 billion US dollars (White House) to more than 500 billion dollars (independent estimates). France, Germany and the United Kingdom adopted new strategies that include counterspace investment, and the European Union proposed a draft EU Space Act. At the UN, progress stalled: the first session of the new working group in April 2025 was taken up by arguments about procedure, though the July session moved to real discussion. The United States and Israel voted against basic UN space resolutions. SIPRI says China signalled in a 2025 white paper that it is willing to engage, and that shared definitions of key terms could reduce the risk of misunderstanding.

This means... An independent research institute finds that countries are arming in space faster than they are agreeing on rules. Delegates can argue that 2100 began with this gap, and that shared definitions are a realistic first step toward closing it.

3F. CHINA-RUSSIA INTERNATIONAL LUNAR RESEARCH STATION

Reuters, April 24, 2025: Seventeen countries and organisations in the China-led lunar station, with a basic model due by 2035

Tagline: Building a rival Moon base

Source: According to... Reuters (as published by Citizen Digital), April 24, 2025

Link: <https://citizen.digital/article/china-russia-may-build-nuclear-plant-on-moon-to-power-lunar-station-official-says-n361553>

Fact: It states... China is considering a nuclear power plant on the Moon to power the International Lunar Research Station (ILRS), which it leads with Russia; Russia's space agency Roscosmos had said it planned a lunar reactor with China by 2035. The ILRS is made up of 17 countries and international organisations. A "basic model" of the station, centred on the lunar south pole, is due by 2035. China's "555 Project" aims to invite 50 countries, 500 international research institutions and 5,000 overseas researchers. China plans the Chang'e-8 mission for 2028 and aims to land astronauts on the Moon by 2030.

This means... Two groups, one led by the United States and one led by China and Russia, are both aiming for the lunar south pole, where water ice is thought to exist. In 2100 (a fiction assumption), the Council may face a dispute between bases that were built under two different rule systems.

3G. COPUOS IN 2026 AND THE PROPOSED UNISPACE IV

Secure World Foundation, July 16, 2026: COPUOS could not agree its 2026 report, and UNISPACE IV has no consensus

Tagline: Straining the consensus rule

Source: According to... Secure World Foundation, July 16, 2026

Link: <https://www.swfound.org/publications-and-reports/insight-jul2026-copuos-at-a-turning-point-balancing-a-vital-mandate-with-membership-growth-and-global-realities>

Fact: It states... The 69th session of COPUOS met in Vienna in June 2026. Because of the UN's shortage of cash, the session was cut from eight days to seven. COPUOS has 110 member states and 62 permanent observers; six new members joined in 2026 (Côte d'Ivoire, the Gambia, Honduras, Maldives, Malta and Zimbabwe). The Committee did not adopt its report by consensus, so it has no agreed agenda or schedule for 2027; one dispute was over the term "developing countries". Many states supported holding UNISPACE IV in Vienna in 2027, on the 60th anniversary of the Outer Space Treaty, but there was no consensus. Working groups on long-term sustainability and space situational awareness also failed to agree key texts.

This means... The UN's main space committee is growing but finding it harder to agree on anything, even its own report. Delegates can use this as evidence that consensus bodies alone may not be able to manage space, which strengthens the case for Security Council action.

3H. INTER-AGENCY SPACE DEBRIS COORDINATION COMMITTEE (IADC)

Inter-Agency Space Debris Coordination Committee, Last Accessed: October 2026: Thirteen space agencies, including rivals, coordinate on debris

Tagline: Coordinating debris research across rivals

Source: According to... Inter-Agency Space Debris Coordination Committee, Last Accessed: October 2026

Link: <https://www.iadc-home.org/>

Fact: It states... The IADC is an international governmental forum that coordinates work on human-made and natural debris in space. Its 13 members are the space agencies of Italy (ASI), France (CNES), China (CNSA), Canada (CSA), Germany (DLR), Europe (ESA), India (ISRO), Japan (JAXA), South Korea (KARI), the United States (NASA), Russia (Roscosmos), Ukraine (SSAU) and the United Kingdom (UK Space Agency). Members share research, review joint work and identify ways to reduce debris through four working groups on measurements, environment and database, protection and mitigation.

This means... The United States, China, Russia and Ukraine all sit in the same technical forum on debris. Delegates can argue that debris is the area where rivals already cooperate, so it is the most realistic place for the Council to start binding rules.

3I. INTERNATIONAL TELECOMMUNICATION UNION (ITU)

International Telecommunication Union, February 16, 2026: Nearly two-thirds of countries now operate their own satellites

Tagline: Keeping satellite signals apart

Source: According to... International Telecommunication Union, February 16, 2026

Link: <https://www.itu.int/hub/2026/02/next-steps-to-keep-crowded-satellite-lanes-open/>

Fact: It states... Nearly two-thirds of countries now operate their own satellites, and many others want to. The ITU, the UN agency for information and communication technology, has a long-standing mandate to manage radio frequencies; its space sustainability work focuses on preventing harmful interference between satellite signals. Its second Space Sustainability Forum, held in Geneva in late 2025, drew more than 6,000 participants and viewers worldwide, and it runs a monthly "Space Connect" series on topics such as licensing satellites in low Earth orbit.

This means... Space is no longer used by only a few powers. Every new satellite country needs frequencies, so delegates can argue that the ITU's system of sharing radio frequencies is a working model for sharing orbits too.

3J. THE PROPOSED EU SPACE ACT (REGIONAL LAW)

European Commission, June 25, 2025: Binding EU rules on debris, tracking and cybersecurity that would also cover non-EU operators

Tagline: Writing binding regional space rules

Source: According to... European Commission, June 25, 2025

Link: https://defence-industry-space.ec.europa.eu/eu-space-act_en

Fact: It states... The European Commission proposed the EU Space Act on June 25, 2025, to create one set of rules for space activities across the European Union. It rests on three pillars: safety, with rules for tracking space objects and reducing debris; resilience, with cybersecurity requirements for space infrastructure; and sustainability, with operators required to measure and reduce the environmental impact of their activities. The rules would apply to both EU and non-EU operators that provide space services in Europe, with lighter requirements for start-ups and small firms. A public consultation ran from July 15 to November 7, 2025, and the proposal is now being negotiated by the European Parliament and the Council of the EU.

This means... When global talks stall, a large market can set binding rules on its own: any company that wants European customers would have to follow them. Delegates can point to this as a model for debris rules (see 1E), while delegates from other regions may argue that one bloc should not set rules for operators from the whole world.

3K. THE UNITED STATES SPACE SUPERIORITY ORDER (NATIONAL POLICY WITH GLOBAL EFFECTS)

Center for Strategic and International Studies, October 5, 2026: A US order sets the goal of astronauts on the Moon by 2028 and a lasting lunar presence by 2030

Tagline: Racing back to the Moon

Source: According to... Center for Strategic and International Studies, October 5, 2026

Link: <https://www.csis.org/analysis/trumps-space-superiority-executive-order-stressors-will-shape-deep-space-development>

Fact: It states... The US executive order "Ensuring American Space Superiority," released quietly on December 18, 2025, sets a target to "return U.S. astronauts to the Moon by 2028" and to "establish the early elements of a sustained lunar presence by 2030." It also calls for greater use of commercial companies, reform of regulations, and closer alignment of civil, economic and national security goals in space.

This means... The United States now links its Moon programme directly to national security, while China aims to land astronauts by 2030 and build its own station with Russia (see 3F). Two rival powers with deadlines in the same decade, aiming for the same region near the lunar south pole, is the real-world root of the kind of crisis the 2100 Council (a fiction assumption) may face.

3L. OTHER EFFORTS, PAST, ONGOING AND PROPOSED

1. **Conference on Disarmament (Geneva):** the main forum for negotiating disarmament treaties, where the Russia-China draft treaty on weapons in space has been discussed since 2008 (see UNODA, 1B).
2. **Inter-Agency Space Debris Coordination Committee (IADC):** 13 national space agencies coordinating debris research (see 3H).
3. **International Telecommunication Union (ITU):** the UN agency that manages radio frequencies and orbital positions for satellites (see 3I). The 1.7 million satellite frequency filings in the Secretary-General's Policy Brief (1A) show the scale of demand it must manage.
4. **UNISPACE IV (proposed for 2027):** a possible fourth UN conference on outer space, encouraged by the Pact for the Future (see 2E); COPUOS did not reach consensus on it in June 2026 (see 3G).
5. **Golden Dome (United States, announced 2025):** a planned missile defence system that includes space-based interceptors (see SIPRI, 3E).
6. **EU Space Act (proposed 2025):** a binding European law on debris, tracking and cybersecurity that would also cover non-European operators serving Europe (see 3J).
7. **UNIDIR Outer Space Security Conference (yearly, Geneva):** a meeting of diplomats, militaries, companies and researchers; the 2026 conference was held on September 8-9, 2026 (see 3D and 2E).

KEY VOCABULARY

1. **Outer Space Treaty (1967):** the main international treaty on space; it bans national claims to space and weapons of mass destruction in orbit.
2. **COPUOS:** the UN Committee on the Peaceful Uses of Outer Space, which writes space treaties and guidelines; it has 110 member states.
3. **Space debris:** human-made objects in orbit that no longer work, such as dead satellites, rocket parts and fragments from explosions or collisions.
4. **Kessler syndrome:** a chain reaction in which collisions create debris that causes more collisions, until an orbit becomes too dangerous to use.
5. **Anti-satellite weapon (ASAT):** any weapon designed to damage or disable a satellite; a "direct-ascent" ASAT is a missile fired from the ground.
6. **Counterspace:** all tools used to attack or interfere with space systems, including missiles, jamming, lasers and cyber attacks.
7. **Jamming and spoofing:** jamming blocks a satellite signal with noise; spoofing sends a fake signal so a receiver shows an incorrect location.

8. **Dual use:** a system that can serve both civilian and military purposes, such as a navigation satellite used by both farmers and armies.
 9. **Weaponization of space:** placing weapons in orbit or on celestial bodies, as opposed to simply using satellites to support armies on Earth.
 10. **Common heritage of mankind:** the idea that some areas, such as the Moon in the Moon Agreement, belong to all humanity and their benefits must be shared.
 11. **Low Earth orbit (LEO):** the region of space up to about 2,000 km above Earth, where most satellites and most debris are found.
 12. **Veto:** the power of each of the five permanent members of the Security Council (China, France, Russia, the United Kingdom and the United States) to block a resolution with a single negative vote.
 13. **Due regard:** the duty in Article IX of the Outer Space Treaty to respect the interests of other states in space and to consult them before activities that might interfere with theirs.
 14. **Space superiority:** a military term for being able to use space freely in a given time and place while preventing an opponent from doing the same.
 15. **Redress:** a way for a nation that was harmed to get its loss repaired, paid back or officially recognised.
 16. **Liability Convention (1972):** the treaty that makes a launching state pay for damage its space objects cause, and sets up a claims process that can end in a Claims Commission.
 17. **Claims Commission:** a panel under the Liability Convention that decides a claim when two states cannot agree; its decision binds them only if they agreed to that in advance.
 18. **National appropriation:** a nation taking a place as its own territory; Article II of the Outer Space Treaty forbids this for outer space, the Moon and other celestial bodies.
 19. **Harmful interference:** a radio signal that blocks or damages another country's lawful satellite signals; the ITU's rules forbid it.
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DISCUSSION QUESTIONS

1. The Outer Space Treaty bans weapons of mass destruction in orbit but not other weapons. Should the Security Council of 2100 ban all weapons in space, and how could such a ban be checked?
 2. Voluntary debris guidelines have existed since 2007, yet debris keeps growing. Should debris removal become a binding duty, and who should pay for cleaning up old debris?
 3. Most active satellites belong to private companies. How can a Security Council resolution, which binds states, control the behaviour of companies?
 4. When a commercial satellite network helps one side in a war, does it become a lawful military target? What would that mean for the civilians who use the same network?
 5. Should resources mined from the Moon or asteroids belong to those who mine them, or should they be shared as the "common heritage of mankind"?
 6. Russia vetoed the 2024 draft on nuclear weapons in orbit. How can delegates write a space resolution that all five permanent members can accept?
 7. Developing countries carry much of the risk from falling rockets but have few satellites. What should the Council do to make the benefits and risks of space fairer?
 8. FICTION (2100 ASSUMPTION): If a crisis staff announces that a company has claimed exclusive control of a lunar ice field, which existing rules from this report would the Council use to respond?
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