SPACE – THE FINAL FRONTIER

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When *Sputnik 1*, a simple sphere with radio transmitters was launched in 1957, humanity was thrust into 'the Space Age'. A mere 4 years later, the first human was floating above Earth. By 1969 we were leaving our footprints on the moon – talk about giant leaps for mankind.

Now, there are more than 12,000 satellites orbiting Earth, helping us forecast weather patterns, navigate, and even watch TV. Governments across the globe continue to pump billions of dollars into space related research and technological development. Furthermore, recent decades have seen private companies becoming major players in the industry. By 2030, the global space economy is projected to reach $730 billion. The New Space Age is upon us.

Space-related products and services are becoming increasingly commercialised, with businesses exploring opportunities in areas around satellite communication, space tourism, and resource extraction. There are clear benefits of having both private and public investment in space related ventures, with technological advancements clearly growing and fuelling innovation and expansion in the sector. However, these rapid developments make it difficult to create and implement legislation that allows for this global phenomenon to be governed with sufficient efficacy. Difficult, but not impossible.

The first major treaty: *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies* ("**the Outer Space Treaty**") was agreed upon in 1966. It provides the basic framework for Space Law and mandates *inter alia* that:

- *the exploration and use of outer space shall be carried out for the benefit and in the interests of all countries and shall be the province of all mankind;*
- *outer space shall be free for exploration and use by all States;*
- *outer space is not subject to national appropriation by claim of sovereignty, by means of use or*

occupation, or by any other means;
- *States shall not place nuclear weapons or other weapons of mass destruction in orbit or on celestial bodies or station them in outer space in any other manner;*
- *the Moon and other celestial bodies shall be used exclusively for peaceful purposes;*
- *astronauts shall be regarded as the envoys of mankind;*
- *States shall be responsible for national space activities whether carried out by governmental or non-governmental entities;*
- *States shall be liable for damage caused by their space objects; and*
- *States shall avoid harmful contamination of space and celestial bodies.*

The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space ("**the Rescue Agreement**"), *The Convention on International Liability for Damage Caused by Space Objects* ("**the Space Liability Convention**"), and *The Convention on Registration of Objects Launched into Outer Space* ("**the Registration Convention**") were born from the Outer Space Treaty.

As society and technology evolved, and rights and responsibilities needed to be redefined, 1984 saw the *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies* ("**the Moon Agreement**") come into effect. It proposed to establish an 'international regime' that applies to the Moon and other celestial bodies in the solar system. It expands on the provisions of the Outer Space Treaty and aims to ensure that the Moon, or other celestial bodies, don't become a source of international conflict. It does this by establishing that the Moon should be used exclusively for peaceful purposes and that its resources should be for the "common heritage of mankind". It further prohibits military activities, weapons of mass destruction, and the establishment of military bases on the Moon. While it's pleasing to know that these restrictions exist, it's distressing that only 18 countries are party to this agreement. Key players in space exploration, including the United States, China, and Russia are conspicuously missing.

In contrast, the Artemis Accords, a series of non-binding mutual agreements between the United States government and other world governments, have 55 signatories as of May 2025. The aim of the Artemis Accords is to provide for the operational implementation of the obligations contained in the Outer Space Treaty. While the Accords do advance international Space Law and cooperation, they have also received a great deal of criticism for favouring the commercial interests of the United States especially with regards to space mining. Quite contrary to the Moon Agreement, the Artemis Accords focus on establishing a set of principles for safe and transparent space exploration, including the commercial extraction of resources, without imposing a formal 'international regime'.

Closer to home, South Africa's space law is governed by the *Space Affairs Act of 1993* ("**the Space Act**") and the *South African National Space Agency Act of 2008* ("**the Space Agency Act**").

The Space Act is responsible for controlling space affairs in South Africa. This includes licensing space activities and ensuring compliance with national and international laws. It emphasizes the peaceful and responsible use of outer space.

Meanwhile, the Space Agency Act seeks to encourage research into space science and technology, allowing for advancement in scientific engineering and development of space activities. Our growing involvement in both public and private space initiatives makes us a key player in the New Space Age. As we continue to push the boundaries of human innovation, space is becoming an increasingly accessible domain. The New Space Age presents unparalleled opportunities for scientific discovery, commercial growth, and international collaboration. However, with these advancements comes the

pressing need for comprehensive, inclusive, and progressive legal frameworks. Whether through international treaties, national legislation, or multilateral agreements, we need to balance exploration with responsibility.