



## OPPORTUNITY #16

What if space traffic was internationally regulated?

# RULES FOR SPACE, INC.

Using the analogy of air traffic control, an international space transport association defines and enforces 'space traffic' rules for safety and best practice for future growth in space transport and commercial development.



### MEGATREND

Borderless World - Fluid Economies

### TRENDS

Future of Space  
International Collaboration  
Legal Transformation

### SECTORS AFFECTED

Automotive, Aerospace & Aviation  
Communication Technologies & Systems  
Cyber & Information Security  
Data Science, AI & Machine Learning  
Education  
Financial Services & Investment  
Infrastructure & Construction  
Insurance & Reinsurance  
Logistics, Shipping & Freight  
Manufacturing  
Travel & Tourism  
Government Services



## WHY IT MATTERS TODAY

There are more than 70 space agencies around the world, of which 16 have successfully conducted a space launch and 7 have been able to probe extra-terrestrial locations – such as the Moon, Mars or deep space and more than a dozen additional national agencies are on the way, along with an increasing number of private space agencies, such as Blue Origin and SpaceX.<sup>354</sup> No fewer than seven missions are planned for 2023; from the United Arab Emirates, the United States, Japan, South Korea, Russia and India along with several from private companies.<sup>355</sup>

It is estimated that 85% of all known satellites, probes, landers, crewed spacecraft and space station flight elements launched into earth's orbit or beyond have been registered with the UN's Office for Outer Space Affairs (UNOOSA).<sup>356</sup> In the latest press releases from UNOOSA, 14,000 satellites had been launched<sup>357</sup> and 11,000 satellites could be orbiting the earth.<sup>358</sup>

The global space industry could generate \$1 trillion in revenue by 2040.<sup>359</sup> That is just over double the size of the space economy in 2021, estimated at \$470 billion,<sup>360</sup> which is partly driven by more attractive investing in the space economy as the cost of launching a satellite has gone down from \$200 million to about \$60 million via reusable rockets, with the potential to decrease further to \$500,000 via mass production.<sup>361</sup>



The global space industry could generate

**\$1**  
**TRILLION**

in revenue by 2040



---

## THE OPPORTUNITY

Space, as a new economy, has multiple stakeholders and is covered by various non-binding global regulations and treaties, some that have limited signatories and do not cover commercial interests.<sup>362</sup>

While UNOOSA promotes responsible development in space and outer space activities, fostering international solutions to problems will be important.<sup>363</sup> Space will see the arrival of more sectors in the future, spanning transportation, food, energy, mining, tourism, science and more.

An international space transport association – with a multilateral agreement – could play a valuable role in accelerating the benefits of space-related opportunities. Such an organisation could make development in space safer and more cost-effective and reduce technological risk and human error in this complex area. The association could ensure common language and agreement on the interpretation of changing terms.<sup>364</sup> This can help to resolve disputes about how the space economy can be developed.<sup>365</sup> It can also facilitate the process of defining vertical limits in outer space beyond national and international airspaces.

Increased space traffic provides numerous opportunities for learning and tourism, but with these activities come a greater risk of accidental or malicious damage. As earth's orbits are more frequently used for transport (of both people and goods), research and technological applications, there will be more need for transparency and oversight. It will be important to consider who and what is transported, when and what trajectories and orbits are used, how the increase in [space debris](#) is managed and how to preserve space for future generations.

---

## BENEFITS

Increased safety and security while enabling economic growth through space travel and exploration.

## RISKS

A lack of collaboration among public and private actors. Unfair lobbying efforts by well-capitalised special interest groups.



# 14,000 SATELLITES

have been launched, and



# 11,000 SATELLITES

could be orbiting  
the earth