



Dynamics of Disruption

Shaping global access to space: Leveraging stakeholder interests for collective gain



Abstract

The article, "Shaping global access to space: Leveraging stakeholder interests for collective gain," elaborates on the compelling possibilities provided by the burgeoning space economy. It emphasizes the necessity for peaceful exploration, and makes the case that conventional terrestrial warfare tactics could have cascading destructive effects when implemented in space. The piece stresses the role of public-private partnerships in influencing global interest toward preserving space for civil and commercial use, leveraging diplomatic and commercial influence to maintain peace in space. Ultimately, as the prospect of geopolitical conflict extending into space continues to increase, the responsibility falls on Space Powers, commercial enterprises, and the global community to foster a commitment to peaceful use of space.



Commercial players have a crucial role to play in reinforcing diplomatic efforts to prevent such scenarios, underpinning the paramount importance of fostering a collaborative and peaceful environment in space."

The opportunity of the new space economy

The new space economy offers untold possibilities to expand current space economic verticals and to develop new services that start to orient the economy from terrestrial interest to those on-orbit.¹ But the opportunity and possibility can only be achieved if the long-lasting peace in space continues.

Promoting the peaceful exploration of space

To promote peace and cooperation in space, it is essential to understand that traditional strategies used in terrestrial conflicts may not be effective in this unique domain. The destruction of even a single spacecraft, as demonstrated by anti-satellite tests, can have far-reaching consequences, negatively impacting numerous other satellites. This chain reaction of destroying satellites means that any nation with space capabilities risks significant harm to its own assets if it initiates an orbital attack. Retaliation in space is not a simple matter and can lead to immediate or future self-destruction. These realities must be considered when assessing the risks of any offensive action in space.

There may be instances where certain space-capable nations feel marginalized or compelled to pursue attacks in order to address geopolitical imbalances, even at the potential cost of chaos on adversaries. In such cases, commercial players have a crucial role to play in reinforcing diplomatic efforts to prevent such scenarios. This underscores the immense importance of fostering a collaborative and peaceful environment in space. To achieve this, governments and commercial space operators must provide incentives for global interest in preserving space for civil and commercial purposes. Countries without a significant space presence need to understand and value stability and safety in space. By doing so, we can promote global access and shared interests in space.

Promoting global access and shared interests in space

The unique dynamics of space conflicts suggest that repercussions are not straightforward, with the potential for immediate or future self-harm. This factor must be delicately considered in evaluating the risk of any potential actions within and across commercial space. Yet, should space-capable nations feel disadvantaged or driven to engage in actions to address geopolitical inequalities, the resulting disruption for their rivals may exceed their own challenges. Therefore, it's crucial that commercial entities play a significant role in supporting diplomatic efforts to avoid these scenarios; this highlights the need for promoting peace and cooperation in space.

An obvious risk is Russia, which may not be willing to enter agreements that include nations that oppose its geopolitical objectives. However, their ILRS and terrestrial trade partners could conceivably constrain Russian actions in space if given the proper incentive.

China is already motivated to preserve its huge stake in space, giving it incentive to keep Russia from causing irreparable harm in space.² However, it might take a broader coalition of Russia's Global South trading partners and the larger ILRS coalition to dissuade an increasingly belligerent Russian presence in space.

When we say everyone needs a space strategy, it begins here. Numerous countries stand to gain significantly from space services, which are often underestimated by the established Space Powers. These services include civil Earth observation and scientific data, broadband connectivity for areas with limited internet access, and involvement in international space missions. Such opportunities could broaden the list of countries that profit from the peaceful utilization of space. However, the costs of these services often exceed the budgets of nations with restrictive access to space. Space Powers, with the exception of Russia, in tandem with the commercial industry, could create packages of these crucial services. These could be offered freely to nations willing to leverage their research or trade relationships to ensure the preservation of space.

The role of public-private partnerships

Collaboration between government and commercial enterprise is essential. Commercial operators can communicate and advocate to governments and can often do so in a way that is distinct and possibly more lucrative for national interests than geopolitical diplomacy. Commercial operators already engage with national governments across the globe to open new markets for sales and new locations for infrastructure. There is an opportunity in those communications to underline and emphasize the importance of peace in space to the local government's national space aspirations, whatever they may be.



There is growing competition in both commercial and military sectors of outer space. Striking the right balance between competition and collaboration is essential for achieving the highest level of innovation and scientific advancements in space. The private sector is increasingly competitive in meeting economic objectives in space, and many countries are striving to assert themselves as Space Powers and achieve military dominance in space. However, by continuing to focus on international alliances and promoting cooperation among governments and corporations, collaboration in all areas of space can be achieved.”

Grant McDonald,
Global Aerospace and Defense Leader, KPMG

All aspects of space now include some blend of commercial and public investment and the effort to maintain harmony must be coordinated between both commercial and public stakeholders. Partnerships must reflect that shared interest and responsibility.



Governments could consider the implementation policies that foster commercial space development, thereby enhancing its significance to the global community encompassing more than just the Space Powers and their allies. Increasingly, the responsibility also falls on commercial space enterprises to inspire governments to conserve space for peaceful commerce and scientific exploration. This responsibility may extend to backing diplomatic space endeavors of governments, as well as working to soften the impacts in space due to aggressive governmental actions. Commercial space is well positioned to work together, both domestically and internationally, to help build trust with global stakeholders. Commercial operators can facilitate lines of communication between Space Powers and other countries in the event of emergencies. As drivers of innovation and valuable space-based services, commercial operators can also help peace-minded nations to develop incentives and carrots to facilitate international cooperation for the preservation of space, particularly lower Earth orbit.

Government call to action

The Space Powers, other than Russia, must work to incentivize the global community to recognize the value of the collaborative and shared use of space. The US diplomatic efforts that are based on space situational awareness data provide a blueprint for success. There are other space applications, earth observation, and broadband connectivity, which might encourage other nations with less developed space programs to support global norms for space operations. The Space Powers have access to these services in spades—it is now time to use them to preserve their existence.

A multilateral standards body is also critical. The International Telecommunications Union (ITU) offers a blueprint, but it seems unlikely that it has the resources or member support to expand into a space-oriented approach.³ It's hard to envision the UN creating a new organization in the current geopolitical climate.

A Chinese or US-led body is unlikely to succeed, nor would Japan or Europe be viewed as neutral parties.

A number of other industries show that member-led and industry-led organizations can be very successful in setting norms for industries to operate. This could be an option for the space sector, and organizations such as CONFERS are already demonstrating their ability to lead here.

Other industry examples include:

- The international SWIFT payment network, which is governed by 25 international banking executives
- Energy market operators, such as the Australian Energy Market Operator, which oversees generation, transmission, distribution, and financial markets of energy
- Stock exchanges, such as the NYSE, were originally formed by stockbrokers, and many were still member owned until recently. Some exchanges, such as the Bombay Stock Exchange, remain member owned.

“Inclusive space strategies can provide nations significant benefits through Earth observation, broadband connectivity, and international space missions, making it necessary to develop affordable service packages to ensure the universal and peaceful utilization of space.”

Brian Miske,
National Ignition Leader, KPMG

India, however, as a member of both BRICS and the Artemis Accords, could represent a sufficiently independent party to lead a multilateral effort and rally the smaller global space stakeholders to take interest in the process. India alone has the blend of neutrality and space credentials to potentially engage the various parties that can't or won't engage directly and work towards building a forum for developing an international standard for operations in space.

Finally, the Space Powers must take steps to pressure their allies who might threaten the collective use of space with force. They are, collectively, the richest countries on Earth,⁴ which gives them considerable leverage, collectively, to encourage the global community behind preserving space.

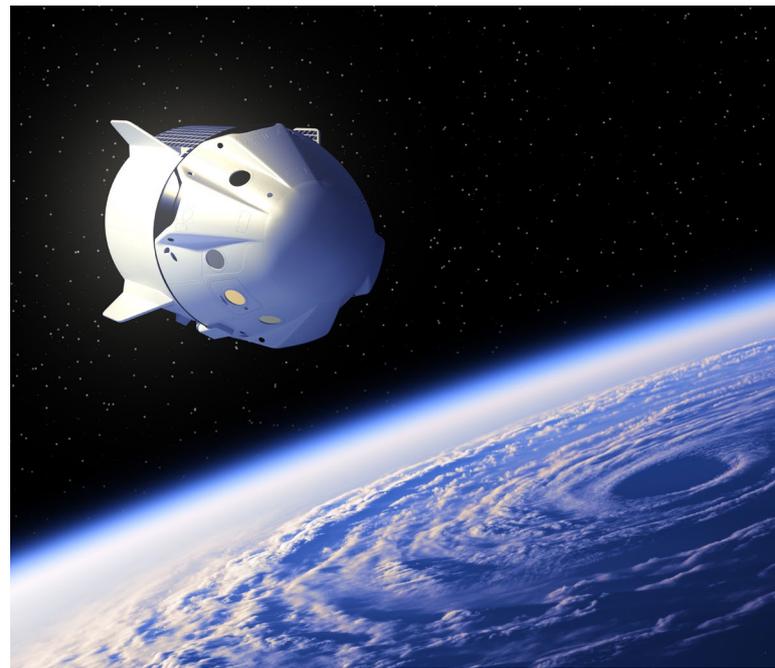
Commercial call to action

The commercial industry also has an important role to play. Many of the valuable space services discussed above come from commercial or partially commercial sources. Commercial space operators engage governments and commercial stakeholders across the world. It is incumbent on the commercial sector to emphasize the need for peace in space.

Commercial actors should also collaborate, as they often do for spectrum⁵ or orbital debris,⁶ on this message globally. For the commercial space sector, the prospect of geopolitical conflict rising to space is unfathomable. It is critical, then, that commercial stakeholders start incorporating the need for peace in space into the advocacy and lobbying.

Conclusion

The Space Powers have generally facilitated the unprecedented development of the modern space sector by maintaining harmony in orbit. However, as the geopolitical situation on Earth deteriorates, the prospect of conflict in space has increased.



There are ways to foster a renewed global commitment to the peaceful use of space through proven diplomatic and economic methods. We have proposed steps that both the public and private sectors can take to preserve their access to space and our ability to benefit from their services.

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