**I affirm the resolution resolved the appropriation of outer space by private entities is unjust.**

**Because we discussing a matter claiming to be unjust, my value is justice. This is the only moral conclusion that is fair for all and guarantees that everyone has equal advantages. Robert71**

Cavalier, Robert. “A Theory of Justice(1971).” John Rawls, <http://caae.phil.cmu.edu/Cavalier/Forum/meta/background/Rawls.html>.

//LHP MSV

#### Rawls's theory of justice revolves around the adaptation of two fundamental principles of justice which would, in turn, guarantee a just and morally acceptable society. The first principle guarantees the right of each person to have the most extensive basic liberty compatible with the liberty of others. The second principle states that social and economic positions are to be (a) to everyone's advantage and (b) open to all. A key problem for Rawls is to show how such principles would be universally adopted, and here the work borders on general ethical issues. He introduces a theoretical "veil of ignorance" in which all the "players" in the social game would be placed in a situation which is called the "original position." Having only a general knowledge about the facts of "life and society," each player is to make a "rationally prudential choice" concerning the kind of social institution they would enter into contract with. By denying the players any specific information about themselves it forces them to adopt a generalized point of view that bears a strong resemblance to the moral point of view. "Moral conclusions can be reached without abandoning the prudential standpoint and positing a moral outlook merely by pursuing one's own prudential reasoning under certain procedural bargaining and knowledge constraints."

**Thus, creating a more balanced way to regulate outer space appropriation would include the benefit of the common. This brings me to by Value Criterion, protecting the common good.**

**In this specific situation the best way to truly achieve justice is to protect the common good. This is because people are due the benefits of space. We should treat space as a commons or public area that benefits everyone. Allowing private entities to take ownership of space violates the rights of people who are due the resources space has to offer. This brings me to my 1st Contention**

# Contention 1: All humans are due Common Human Heritage

**The OST is a good outline for establishing a way to balance space exploration**

. Saletta, Morgan Sterling, and Kevin Orrman-Rossiter. "Can space mining benefit all of humanity?: The resource fund and citizen's dividend model of Alaska, the ‘last frontier’." *Space Policy* 43 (2018): 1-6.

**Morgan-Rossiter 18(1)**

<https://www.sciencedirect.com/science/article/abs/pii/S0265964616300704>

Economically profitable resource exploitation in space is becoming increasingly feasible as more actors - na- tional, public and private-are engaging in space exploration. **The Outer Space Treaty (OST**), which serves as the basis for the current corpus juris spatialis, **declares that no government can claim sovereignty over celestial bodies or outer space itself. Because this is generally interpreted as denying private ownership, the OST is sometimes claimed to be an obstacle to commercial venture, particularly resource exploitation. Such claims ignore a wealth of terrestrial models which promote profitable commercial resource exploitation independent of fee-simple ownership. To achieve an approach to space exploration and exploitation which balances national, international, and commercial interests** and a need to prevent conflict and militarization of outer space, **terrestrial approaches to managing resource exploitation** should be carefully examined for frameworks and mechanisms with potential to **serve** as models **in further elaborating an international regime for space resource exploitation**. A previously overlooked terrestrial example, the Alaska Permanent Fund, and its unique citizen's dividend, is explored as one possible model for such a balanced approach that could encourage profit-driven exploration and exploitation of extra-terrestrial resources, reduce the risk of conflict between actors in outer space and simultaneously accrue tangible benefits to all of humanity.

**The best way to regulate space is through a global commons**

Saletta, Morgan Sterling, and Kevin Orrman-Rossiter. "Can space mining benefit all of humanity?: The resource fund and citizen's dividend model of Alaska, the ‘last frontier’." *Space Policy* 43 (2018): 1-6.

**Morgan Rossiter 18(2)**

Some studies have optimistically suggested that profit making ‘space mining’ ventures could be undertaken with little or no govern- ment funding [8]. This does not, however, reflect that which has al- ready been invested in research, surveys and mapping of celestial bodies and the development of space technology by governments (in- cluding public/private partnerships), or the necessary technological developments likely to emerge from future missions by NASA and other Space Agencies. NASA's use of Space Act Agreements to engage in public-private partnerships such as that with SpaceX and Orbital ATK is part of a broad reshaping of the aerospace industry that will see in- creased privatization and commercial activities in space and new forms of Public-Private Partnerships (PPPs) which may also play a role in space resource exploitation [13]. **As greater numbers of actors, with complex relationships to stakeholders, including national governments, become active in outer space, the need to insure peaceful interactions, one of the primary goals of the OST, will be increasingly important. Advocates of space exploration argue that human exploration (and utilization) of space has and will benefit all of humanity**. Indeed, the rhetoric of space exploration has been, since at least the time of Konstantin Tsiolkovsky, imbued with both techno-utopian and religious overtones by many of its advocates, many of whom speak in prophetic terms of a space faring human destiny [14–17]. The influence of the ‘Spaceship Earth’ metaphor [18], Apollo era Earth-rise photographs and what Frank White has called the “overview effect” [19] have been cited by numerous environmentalists as having an influence on the devel- oping environmental movement of the 1970's as well as offering humanity a vision of the Earth absent the political divisions seen on **1 programs have already benefitted much of humanity, access to these benefits remains uneven and challenges remain for the future in this regard [20]. Advocates of the privatization and commercialization of space also often frame their advocacy in terms of the benefits to man- kind and humanity as a whole [21], and there have been attempts to outline frameworks for the exploitation of resources in space which both provide for private entrepreneurship and profit making while also benefiting mankind as a whole [2**2]. Peter Diamandis, co-founder of the asteroid prospecting and mining company Space Resources, has re- cently cited Tsiolkovsky's famous UB in advocating a moral duty to explore and colonize space and expounding on the many riches of outer space which will drive this project, end terrestrial conflicts over resources, and enrich humanity [24]. Unsurprisingly, there is a ‘Silicon Valley’ venture capitalist mar- keting spin in the discourse surrounding the prospect of commercial resource exploitation in space, characterized by appeals to the mythos of the Wild West, gold rushes and with not infrequent echoes of Manifest Destiny. While companies and entrepreneurs justifiably intend to enrich their investors, claims that this will in turn enrich humanity more generally sound suspiciously like trickle-down economics [25**]. Private enterprise and the profit motive certainly have an increasingly crucial place in space exploration, and the current authors support commercial endeavors in space, but Space is not the Wild West frontier of Frederick Jackson Turner [26], with ‘free’ land for the taking-it is an international commons regulated by the Outer Space Treaty as ‘the common province of all mankin**d [27].” Thus, we argue that in a very real and legal sense, the sky belongs to everyone. Indeed, the current authors follow Virgiliu Pop [28] and others [29] in the view that outer 1 “When you're finally up at the moon looking back on earth, all those differences and nationalistic traits are pretty well going to blend, and you're going to get a concept that maybe this really is one world and why the hell can't we learn to live together like decent people.”— Frank Borman, Apollo 8, Newsweek Magazine, 23 December 1968. space is a res publica internationalis, or res communis, as is the atmo- sphere, much of the oceans and the sea floor. Is it possible to create a ‘balanced’ framework for the exploitation of outer space which encourages private enterprise while also tangibly accruing benefits to all humanity by a means more certain than vague platitudes and promises? Certainly, the need to create a stable frame- work for space exploration and resource exploitation has been high- lighted by many authors [30]. However, underlying the many different approaches to space exploration and exploitation at the international, national and subnational levels are various and often divergent poli- tical, economic, philosophical and ideological visions of property, the commons, and the appropriation of natural resources [31,32] with important implications for humanity's future in space and how the benefits of such a future will accrue and be apportioned. In considerations of future regimes governing outer space**, it is common to look to analogous terrestrial examples of 'global commons' management such as the UN Convention on the Law of the Seas (UNCLOS) and the Antarctica Treaty System (ATS) for inspiration [22].** While acknowledging the importance of these treaty systems as po- tential models, the current authors suggest that to establish a balanced, pragmatic framework for the exploitation of outer space, other terres- trial resource regimes can provide useful models and mechanisms that can enrich these discussions. In what follows, the present authors will briefly examine current debates with regard to the exploitation of outer space and the current corpus juris spatialis embodied in the Outer Space Treaty. It is our view that to achieve a balanced regime for the exploitation of outer space, building on the existing treaty system, policy makers, space agencies and would-be space mining entrepreneurs must be willing both to carefully examine existing terrestrial regimes of resource exploitation of public lands and global commons. The authors then examine one po- tential, and largely overlooked, terrestrial model of resource exploita- tion from Alaska, frequently referred to as the ‘last frontier’. **The Alaska Permanent Fund, a type of Natural Resource Fund**, is thus explored as a successful terrestrial example that encourages profit driven resource exploration and exploitation by commercial entities while also accruing tangible and sustainable benefits directly to re- sidents of Alaska. Adapted to the ‘final frontier’ of outer space, the **Alaska Permanent Fund and its citizen's dividend provide one possible model for building a balanced economic and legal framework with a purpose to encourage commercial enterprises**, whether private or public, while simultaneously accruing tangible, quantifiable benefits to all of humanity, in keeping with the visionary ideals fitting for a human future in space. The Outer Space Treaty (OST) came into force in 1967 and, having been ratified by all the major space faring governments as well as some 100 other nations, the Outer Space Treaty serves as the basis for in- ternational space law, the current corpus juris spatialis. The treaty de- clares the exploration and use of outer space shall be for, “the benefit and in the interests of all countries [27]” and that outer space, as mentioned previously, “shall be the province of all mankind [27]”. With the increased commercialization of space, and the entrance of new actors, both national and private, the OST has come under in- creased scrutiny, with calls to expand, modify, and even to abrogate it [35,36]. Issues surrounding the mining of celestial bodies have received particular attention and debate [37]. Of particular concern is the matter of exploitation licences and property rights [38]. The OST expressly forbids the “national appropriation by claims of sovereignty, by means of use or occupation, or by other means” [27] of outer space and ce- lestial bodies. This is frequently interpreted to mean that the OST de- nies private property claims in outer space, some authors and in- dividuals [39–41] have argued that appropriation by non-national entities is allowed. The Outer Space Treaty, and its terrestrial analogues, UN Convention on the Law of the Seas (UNCLOS) and the Antarctica Treaty System (ATS) are ‘global commons regimes', though the terminology governing these commons differs and juridical concepts such as “common heritage of humanity” found in UNCLOS (and the Moon Treaty of 1979) and the “common province of mankind” found in the Outer Space Treaty have been interpreted in various manners. Due in part to these varying wordings, interpretations and attendant uncertainties, the need for a more comprehensive framework governing the environmental, ethical, and commercial aspects of space explora- tion, exploitation and colonization has been highlighted by many au- thors [30,33,34]. Some advocates for the commercial exploitation of space claim that the absence of property rights is a barrier to such ventures, and in particular to the mining of celestial bodies such as the Moon or near earth asteroids [35]. Some have gone so far as to suggest an abrogation of the OST in favor of a treaty that allows something like fee-simple ownership and what might best be called a California gold rush ap- proach to outer space resource exploitation [36–38]. Advocates of this approach would give something like fee-simple ownership of outer space resources on a ‘first in time, first in right’ basis with no clear licensing regime for such activities [39]. In recent US law, Title IV of H.R. 2262- the U.S. Commercial Space Launch Competitiveness Act, grants ownership of asteroid resources to entities obtaining them but attempts to walk a fine line between this approach and international treaty obligations. It does not grant ownership of asteroid themselves, and explicitly states that resource exploitation must be in accordance with federal laws and existing treaty obligations, i.e. the OST [40]. How such eventual exploitation occurs, and under what precise national and international regulatory and licensing regimes, is thus still a matter for the future to decide. On the other hand, it has also been suggested that modifications and additions to the OST based on terrestrial models will provide sufficient guarantee of the right to make profits from the exploitation of outer space resources. Henry Hertzfeld and Frans von der Dunk argue the current regime does not pose a problem for exploitation rights and that terrestrial models would allow private ventures the right to reasonable returns on investment from resource exploitation in space [41]. Furthermore, in addition to important, and possibly irreconcilable, differences between a California gold rush style approach and the OST [42], arguments suggesting fee-simple or similar ownership is necessary for profitable private outer space resource exploitation simply do not stand in the face of contrary evidence from numerous terrestrial ex- amples. These include offshore oil drilling, mining, timber and grazing operations in the United States and internationally which are regularly and profitably undertaken without ownership [43]. Thus P. M. Sterns and L. I. Tennen argue that the current international regime does pro- vide an adequate framework for commercial development in space, that fee-simple ownership is unnecessary and: “those who advocate the renunciation and abandonment of the non- appropriation principle are either seeking to increase their own bottom line by disingenuous and deceptive constructs, or lack an appropriate appreciation and respect for international processes [[44], p. 2439]”. Thus, claims that a lack of private property rights in outer space will be a deterrent to commercial resource exploitation ventures in space do not reflect an adequate reflection and analysis of the manner in which current terrestrial practices might be extended into outer space without abrogating the current treaty regime. Nor would a system based on fee simple ownership be likely to tangibly benefit more than a small pro- portion of the world's population. Instead, the eventual wealth from exploiting celestial bodies would be concentrated in the hands of a few, exacerbating rather than alleviating existing problems for humanity and global sustainable development. The Outer Space Treaty has provided an effective legal framework for the exploration of outer space for over 50 years. Based on the history of treaty regimes governing other international spaces, UNCLOS and the ATS, it seems likely that, in future, additional protocols and agreements will be layered onto the OST and that calls to abrogate and to negotiate a wholly new treaty system are unlikely to succeed. While low participation in the Moon Agreement, also known as the Moon Treaty of 1979, which has not been ratified by either the United States, Russia, or China, has raised questions of legitimacy, it has recently been argued that the Moon Treaty may receive renewed interest in the in- ternational community. René Lefeber argues that, far from stifling commercial ventures, the Moon Agreement “provides the best available option for mankind, states and industry to develop space mineral re- sources in a harmonious way [[5], p. 47]”, and that, as resource ex- ploitation in outer space now seems likely, the need to elaborate an international regime to prevent conflict over resources may bring other parties to ratify, accede to, or sign the treaty. **Ultimately, some form of international governance of outer space as a global commons [45] building on the OST** and the current corpus juris spatialis **seems both more likely and more desirable than an abrogation of the OST and its replacement with an entirely new treaty regime**. Thus, an international regime built upon this existing regime will need to be constructed which takes a balanced approach to space explora- tion, development and exploitation and **which encourages en- trepreneurial development but also moves beyond vague utopian pla- titudes to real and concrete benefits for all of humanity.**

**The Alaska Permanent fund is a prime example of how to implement justice through appropriation of the common good**

. Saletta, Morgan Sterling, and Kevin Orrman-Rossiter. "Can space mining benefit all of humanity?: The resource fund and citizen's dividend model of Alaska, the ‘last frontier’." *Space Policy* 43 (2018): 1-6.

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**The Alaska Permanent Fund was proposed** **by** then **Governor Jay Hammond** and established in 1976 by a constitutional amendment **with the purpose of investing a portion of the royalty payments from oil production on state owned land**. The purpose of the fund was twofold: to create a sustainable investment fund with the revenues from a de- pleting non-renewable resource, but also to limit the ability of politi- cians to spend these revenues on wasteful projects. Indeed, it is im- portant to note that while the APF is considered a model in terms of its transparency, in some countries resource funds have undermined the public interest and contributed to nepotism and corruption [49]. The creation of the Alaska Permanent Fund was motivated by lib- ertarian principles rather than 'socialist' ideology**. In 1977 Gov. Hammond proposed that a portion of the investment proceeds be payed as dividends to all Alaskan residents as part of his “Alaska, Inc.” plan** [50]. This is a unique feature of the APF- although many states have created wealth funds for various purposes, none pays a **dividend to all residents, regardless of age**. Indeed, the fund is a unique and democratic experiment in “intergenerational transfer of wealth and in the redis- tribution of public funds back to the private sector [[51], p. 139].” Many, if not most, Alaskans view the dividend as their right as share- holders in the natural resources of the state [52]. In keeping with the desire to shield the Fund from politicians, the establishment of an in- dependent trust corporation and a mandated ‘prudent investor' policy (adopted in 1980) means that the Fund is insulated from political pressure to invest in pet projects, and the dividend has created a vested and personal interest on the part of Alaskan residents in the health of the fund [50]. The APF is now worth some 63 billion dollars and recent payments from the Alaska Permanent Fund Dividend (APFD) to **each Alaskan resident have ranged from $2072 (US) in 2015 to $1100 in 2017** [53,54]. As the size of the dividends has generally grown over time and become an expected component of household budgets, there is active political support for the APFD across the political spectrum with active proponents including former Governor Sarah Palin. By investing the revenue from resource leasing rights in the global commons of outer space, and paying a ‘citizens’ dividend’ to all eligible residents of Earth, a **hypothetical 'outer space resource fund' modelled on the APF could create a vested public and international interest in its management**. By bypassing national governments and paying a divi- dend directly and equally to all eligible individuals (for example, adults over the age of 18) **such an approach could help prevent the potential mismanagement by politicians of funds from leasing outer space re- sources**. Most importantly, such a system would provide a framework encouraging commercial exploitation of outer space by ensuring legal clarity while simultaneously ensuring that the exploitation of “the common province of all mankind” [27] accrues tangible benefit to all of humanity. Such a system would also be consistent with the Moon Treaty should it gain renewed interest and increased participation by space faring nations. By accruing tangible benefits equally to all eligible human beings directly, a properly adapted Alaska Permanent Fund and citizen's dividend model applied to outer space resource licensing fees offers one possible means **with which to** **ensure future benefits** **from resource[resources] exploitation in outer space accrue to all of humanity-indeed** such a model **might very well be applicable to analogous terrestrial commons such as the Sea Floor and Antarctica. While the technological challenges in creating a payment system for all eligible members of the Earth's population are significant, they are probably less than the technological challenges in successfully mining asteroids or other celestial bodies**. Technological innovations such as mobile banking are rapidly penetrating the developing world [55,56] and represent one way that challenges to creating and distributing a ‘space dividend’ to all eligible members of the Earth's population could be overcome. Alternatively, as previously mentioned, the international commu- nity might implement a system in which royalties on production from outer space resource exploitation were apportioned to national gov- ernments rather than to individual citizens. That such an approach might be pragmatically more acceptable in the current international environment neither means that this will necessarily be the case in the future, nor should it preclude the serious discussion of alternatives such as we have outlined here from informing the discussion concerning the elaboration of future international regimes for managing the exploita- tion of resources in outer space. Furthermore, because even moderate dividends by developed countries standards would be proportionally much more significant in developing nations, such dividends, whether payed to nation states or to individual citizens, could be instrumental in achieving some of the most urgent goals of sustainable global development, goals embodied in the UN's Sustainable Development Goals Astronomers often point out that we share the same sky [58], and in many ways this sentiment is enshrined in the Outer Space Treaty. Providing a framework for the exploitation of space resources that balances international, **national and commercial interests while also benefitting all of humanity is both achievable and desirable**. Policy makers and academics should thoroughly explore terrestrial examples, including business-as-usual practices of royalties on production as well as more unusual models such as the APF for possible mechanisms and frameworks to further the goal of achieving an international regime that balances the many national, international, commercial and hybrid public/private interests in **outer space while minimizing the risks of conflicts between actors, including nation states and commercial or other interests acting as nation state proxies**. The exploitation of outer space resources may be a reality in the next 50 years. The resource fund model, built on royalties on production and with a system for the dis- tribution of benefits, of which the citizen's dividend mechanism of the Alaska Permanent Fund is but one example, provides one possible pathway, worth wider discussion and consideration, to build an inter- national regime for space exploration and exploitation that encourages entrepreneurial ventures while tangibly and truly benefiting all of humanity.

# Contention 2: Damage from Private Appropriation

#### Private space appropriation leads to a massive increase in space junk, Holden 18

John Holden, July 12, 2018, The Irish Times, Why space capitalism will eat itself, https://www.irishtimes.com/business/innovation/why-space-capitalism-will-eat-itself-1.3556368

Which is great because when it comes to exploring space the end justifies the means. But now we must deal with the fallout from turning our galaxy into another market. Wild West It would be trite to compare the commercial space sector to the American Wild West. But with no one policing the burgeoning industry, **businesses operate untethered in a market where there are no rule**s and no open channels of communication**. It means satellites are launched unchecked every day by anyone** – from the amateur enthusiast in her back garden to major international space co-operatives. **It’s nearly impossible to know what’s really going on up there**. US officials believe there are about half a million man-made objects floating around in orbit. But that’s about as specific as they can get. Not very scientific. The only thing more predictable than tired Wild West analogies is the human species itself. We are a predictable bunch, prone to making the same mistakes over and over. As such, we enter a new era where space pollution is an issue. What could be a more iconic symbol of our wretched love for creating waste than flying devices designed never to return? Earlier this year, India broke all previous records by launching 104 satellites at once into orbit. Cool. Except those 104 satellites are destined to become 104 (or more) pieces of trash floating around in space. That’s right. Satellite technology, in its current state, is the new “lightbulb” of planned obsolescence. What could be a more iconic symbol of our wretched love for creating waste than flying devices designed never to return? When a satellite’s mission is complete, or it malfunctions, it’s gone. Girl, bye. **“Space junk” makes up a significant proportion of the guesstimated 500,000 plus objects floating around in orbit. About 23,000 of these objects are currently being tracked and maintained by the US Strategic Command. These so-called resident space objects are either satellites still in use or are known objects no longer fit for purpose. They could be as small as a tennis ball or the size of a double decker bus. In addition, however**, **there are hundreds of thousands of other objects – bolts, exploded satellite pieces, large rockets and other space debris – that are unaccounted for. Efforts have been made to try to consolidate public with private data on what is up there but, for various reasons, the space community does not openly share information on where all objects are located.** Lack of regulation For the entrepreneurially inclined, it is probably not that surprising to hear **many are taking advantage of the severe lack of regulation in space**. Sure why wouldn’t you? Moreover why would anyone publicly disclose how and where their interests lie in a given market, intergalacticor otherwise, if they weren’t obliged to? But space isn’t just another market. Thinking one can apply the same rules up there as we use on earth is shortsighted for so many reasons. Down here the economic “unknowns” are known. Space is replete with unknown unknowns. If a satellite that is used to collect data to sell on to business customers one day stops sending data, and you haven’t the foggiest notion why, what do you tell the customers? How do you attribute cause? How does a company predict the likelihood of loss or damage to its equipment in space or perform other prudent exercises before getting into the space game? One of the chief concerns for any new business is risk and how to mitigate it. There couldn’t be a much riskier bet than entering a market with no regulation, patchy knowledge of your competitors’ location or size, and to top it all off, little understanding of the physical environment within which the business will operate. Until everyone is economically incentivised to behave responsibly in space, the chaos will continue. With aplomb. It won’t last forever though. The current lack of regulation is, in itself, the mother of all gaps in the biggest market civilization may ever exploit. And the Trump administration is the first to corner it. Suddenly the decision to give responsibility for space traffic management issues to the commerce department, and not the FAA, begins to make sense.

#### Only a cooperative approach ensures peaceful space exploration

Pershing 19

Abigail Pershing (J.D. Candidate @ Yale, B.A. UChicago). “Interpreting the Outer Space Treaty’s Non-Appropriation Principle: Customary International Law from 1967 to Today.” Yale Journal of International Law 44, no. 1. 2019. JDN. https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1697&context=yjil

Under the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (commonly known as the Outer Space Treaty), no State has the right to claim as sovereign territory the moon or any other celestial body. 4 Some critics see the Outer Space Treaty as merely an outdated relic from the Cold War era,5 but there are good reasons for maintaining the fundamental principles undergirding the law in its current form. If the Treaty were repealed or interpreted to allow a free-for-all, first-come, first-served method of allocating space property rights (as some have suggested either should, or will, happen),6 this would likely produce an extremely chaotic and unequal allocation of resources. Developing nations that currently lack space capabilities would be at a significant disadvantage relative to States possessing such capabilities, and the ensuing State actions would likely result in an unequal territorial grab leaving few, if any, resources for those nations technologically incapable of space exploration.

#### The Earth is overdue for asteroid strikes and is underprepared the only way to solve is through unified –, which private appropriation makes impossible, Krekonian 18

Kerkonian, Aram Daniel. "The Possible Regulation of Certain Space Activities through an International Orgnaization: Tutmonda Spaco Agentejo." ZLW 67 (2018): 279.

**Statistically, planet Earth is 10,000 years overdue for a significant asteroid strike**"; **protecting the planet** from such a strike **requires the ability to detect, track and alter the orbit of an asteroid**. While **individual States have developed certain extremely** 26 **limited capabilities, they remain powerless in the face of a serious threat**. **Even if**, however, **a State had the capability to stop an asteroid, legal questions remain**: **can it act unilaterally? Must it consider the interests of other States? How would it perform risk assessments**? Further, the **tools necessary to stop an asteroid** (such as lasers or nuclear-powered space objects) **could likely also be used as weapons: would other 2 States perceive such preparatory activities as military positioning**? Would this vio- 2 late established law? 8 Realistically, **effective planetary protection cannot be conducted by one State. What is required is a** **concerted global effort to upgrade our detection and tracking capa- bilities, establish programmes to avert asteroids and develop protocols to respond to disasters**. Would a TESA be well suited to carry out these tasks? Would its **interna- tional composition offer impartiality** in decision making, **transparency** in the use of dual-purpose technologies and an unmatched **collective expertise** when dealing with emergencies? Of course, asteroid strikes are only one threat a body tasked with plan- 29 etary protection must address. Regardless of the nature of the threat, however, when the planet and all of its inhabitants are at risk, **authority ought to be wielded by an organization representing the diverse interests of humanity** rather than a single State.