SPACE has always been considered as a natural resource, the arena of global commons, meant to be used for benefit of mankind. The clamour for peaceful uses of space was a natural outcome of the fear of outer space being used for military purposes spread through the international community at the peak of the cold war years. The United Nations set up a Committee on Peaceful Uses of Outer Space (COPUOS) in 1959 to govern the exploration and use of space for the benefit of all humanity— for peace, security and development. Despite concerted efforts through various multinational initiatives in preventing outer space from being used as a high ground for military objectives, the militarisation persisted. The Gulf War of 1991 (Op Desert Storm) demonstrated how space based C4ISR and Navigation (GPS) could play a crucial role in winning a conventional war. Since then, space has only seen an upward trajectory in militarisation which has become an acceptable practice, though bordering on weaponisation. The present state can be ascribed to the absence of limits for exploitation of space under any international law, barring nuclear tests. The rising trend in Anti-satellite (ASAT) technologies in the past decade is indicative of the strategic importance of space based assets as much as it is disturbing.

While UN mandated forums like the Committee on Disarmament continue with their efforts in brokering treaties like the International Code of Conduct (ICoC) and Prevention of Placement of Weapons in Outer Space Treaty (PPWT) to prevent weaponisation of outer space, the leading space faring nations like the US, Russia and China are continuing with research and development programmes for ‘space control’ with an emerging trend of Directed Energy Weapons. On December 18, 2017, the Trump administration issued its National Security Strategy (NSS)1. It recognises the strategic significance of space as a new domain for safeguarding national security objectives along
with cyberspace. The strategy emphasises free access to space as an imperative because of the quantum of economic and national security activities dependent on it. The US recognises that its leadership in space which existed since the breakup of Soviet Union has eroded with the emergence of Russia and China as competitors. More countries like France, UK, Japan, India, Brazil, Israel, Iran and North Korea are developing independent space capabilities, which has been termed as ‘democratisation’ of space, which has given easy access to imagery, communications and geolocation services to these emerging space powers. This democratisation of space is believed to have an impact on the US’ ability to prevail in conflict.

President Donald Trump’s National Security Strategy is broadly scoped and space is not the focus, though it does promise to defend US space assets, freedom of operation in space, promote space commerce, and maintain American leadership in space and space exploration. Space capabilities figure as a strategic domain where the US seeks to renew capabilities and competitive advantage for preserving peace through strength as a pillar for national security. This is a significant change from President Obama’s security strategy of 2015, which, in a brief mention of space, talked about dealing with threats posed by states who may deny the peaceful use of outer space.

The essence of the document is unrestricted access to space, freedom of operation in space and prevention of disruption of space based services from unlawful interference from state and non-state actors. Towards this, the document states that any harmful interference with or an attack upon critical components of US space architecture that directly affects vital US interests will be met with a deliberate response at a time, place, manner, and domain of choosing. Does this mean US will retaliate with counter attacks on ground, sea, air or space for a satellite attack? This may be difficult to predict, because satellite services may be interfered with covertly in peacetime also, and it may not necessarily be a destructive ASAT attack. However, the US retaliation may trigger an all out war.

The document also mentions a layered missile defence against ballistic missile threats including nuclear missiles from rogue states like North Korea and Iran. The capability will aim to defeat missile threats prior to launch. Such a capability may also include space-based weapons in a layered missile defence system. The capability may extend to engaging missiles during boost and mid-course phases of their trajectories. The concept was first seen in US President Reagan’s Strategic Defence Initiative at the peak of the Cold War. The point of significance here is that a layered missile defence will necessarily extend into the realm of space and weaponisation of space will become inevitable. Space based missile defence would be a logical extension of ground and sea based ballistic missile defence shields. Interestingly, the National Defense Authorization Act for Fiscal Year 2018 authorizes an
expenditure of $8.5 billion for the Missile Defense Agency towards development of an overall missile defence capability including space missile defences\(^3\). Though such actions would not be a violation of the Outer Space Treaty, such a system would be seen as overt weaponisation of space.

Another shift in policies is the desire to extend national security protections to private partners in the space segment. This shows the growing reliance of US space architecture on private players in space domains like launch, satellite manufacture, exploration and providing satellite services like remote sensing data, communications etc. Such a measure may ensure an uninterrupted information cycle even during a conflict.

While US has realised the need to develop new operational concepts and capabilities to win without an assured dominance in the air, sea, land, space, and cyberspace domains, of conventional military conflict, what has emerged is that deterrence today is not easy to achieve, unless capabilities are spread across all domains. The clear shift in favour of weaponisation of space is an attempt in this direction. India needs to be watchful and avoid staying too far behind the curve.

*(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])*

**Keywords:** US National Security Strategy, Militarisation in Space, Peaceful uses of Outer space

**Notes**

