Policy Brief

The Norwegian Space Industry Enters a New Era

SUMMARY

- Satellites are essential for modern banking, weather forecasting, communication, and navigation services.
- The number of satellites in orbit has tripled since 2021, and commercial actors such as Starlink dominate the market.
- The United States, China and Japan are expanding their space programs, leaving Europe lagging behind. The war in Ukraine has revealed European dependency on US space companies.
- Norway has a strategic location, a spaceport, a large antenna network, and a growing space industry. Key issues include access to EU space programs, new space legislation, and the role of the space sector in national security.

Modern societies require space infrastructure to function. Satellite technology is critical for navigation, communication, power management, financial transactions, weather forecasting, and Earth observation. Even short disruptions can paralyze vital societal functions.

Space activity is accelerating

The space industry is growing rapidly. In April 2021, there were just under 4,000 active satellites orbiting Earth, compared to nearly 12,000 in June 2025. The global space economy could triple by 2035.

Technological breakthroughs have made it cheaper and easier to place satellites in orbit:

- **Modular small satellites** are replacing large, expensive ones. They can be produced quickly, affordably, and in high volumes, while also being capable of performing multiple functions.

- **Mega-constellations** with thousands of small satellites in low Earth orbit can be linked together in a network, providing global coverage and continuous Earth observation.

- **Reuseable rockets**, developed by the largest space companies, can land and be launched again, cutting costs and saving time.

Today, 70 countries have established their own space agencies. In addition to the traditional space powers, countries such as Japan, India, and South Korea are making major investments.

However, commercial space companies are gaining ground. Elon Musk's SpaceX alone accounts for around 65 percent of all active satellites in orbit, mainly through its Starlink mega-constellation.

Other private companies are also striving to capture a share of the space market. Jeff Bezos' Blue Origin is competing with SpaceX to secure key NASA contracts, and the UK-Indian venture OneWeb aims to build a Starlink rival. The number of new startups is increasing rapidly, and a private spacecraft successfully landed on the Moon earlier this year.

The new space race intensifies

China aims to become a space superpower by 2040, and aims to challenge US dominance by establishing a permanent lunar base, producing solar power in space, and building both supercomputers and mega-constellations.

The increasing geopolitical tension has also spurred a new arms race in space. The US recently adopted a framework for space warfare, and the Trump administration plans to build a space-based missile shield, equipped with weapons. Meanwhile, both China and Russia are testing and developing anti-satellite weapons.

Underinvestment leaves Europe vulnerable

Europe risks falling behind in the new space race. The US government has invested at least six times as much in space technology compared to the EU.

Europe accounted for only three of the 263 orbital launches worldwide last year. Due to delays in rocket development in Europe, and the loss of

access to Russian Soyuz launch vehicles, Europe had to rely on SpaceX for satellite launches.

Furthermore, the war in Ukraine has revealed Europe's dependence on US space companies. Starlink has been vital for communication and military operations in Ukraine, and temporary restrictions on access to Maxar's satellite imagery in March 2025 curtailed Ukraine's military capabilities.

Norway's space industry enters a new era

Norway may be a small space actor globally, but it could become the first European country to launch satellites from European soil. With the world's largest commercial antenna network on Svalbard, a growing space industry, and a strategic Arctic location, Norway is well positioned to play an important role in the space industry. To succeed, a few key steps are necessary:

Gaining access to EU space programs

Norway has participated in European space initiatives for a long time, through European Space Agency (ESA) initiatives and EU space programs like Galileo (for navigation) and Copernicus (for earth observations). In addition, Norway has several bilateral agreements with EU countries and organizations.

As EU space programs become increasingly intertwined with military use, their importance for Norway's national security and defense capabilities is growing. The EEA Agreement does not automatically grant access to new European space initiatives. Therefore, Norway must work strategically and negotiate access to EUs largest satellite program Secure Connectivity and future European space initiatives.

Regulating space activities

Space activities are underregulated. No internationally binding agreements have been adopted since 1970. Thus, there are few legal frameworks to address traffic management or mitigation of debris in space.

However, some declarations and guiding principles exists, like the US-initiated Artemis Accords, which have been signed by 55 nations, including Norway. The declaration acknowledges the right for both public and private actors to extract space resources, in a responsible manner.

With a growing space industry, many countries are updating their regulatory frameworks for space activities. In June 2025, the Norwegian government proposed an updated national space law. The purpose of the new national space law is to promote Norway's space industry and ensure peaceful exploration of space. The proposal focuses on responsibility, licensing, and oversight of launches from Norwegian spaceports.

The European Commission has also proposed a new EU Space Act to strengthen safety, resilience and sustainability in space. The proposed law would require all space service providers operating in Europe, including non-European companies such as SpaceX, to mitigate space debris and report the environmental impact of their space activities. Pollution and waste in space could result in substantial fines.

Operators of large satellite constellations would face stricter requirements with regards to the usage of orbital fields and collision avoidance. The draft proposal includes a shared European tracking database for space activities, improved traffic coordination, a streamlined authorization system and mandatory cybersecurity requirements for all satellites. The proposal is now under negotiation within The European Parliament and the Council.

Securing satellite services

Norwegian satellites that provide broadband and maritime surveillance in the Arctic region are of critical importance to national security. As geopolitical tensions rise, protecting space-based infrastructure from sabotage, both in orbit and on the ground, becomes increasingly important. Norway currently has no backup systems for neither navigation nor precise timing, if satellite signals are disrupted.

Developing and maintaining national satellite capabilities for Arctic operations and maritime monitoring is of strategic importance to Norway and its national security. With the rapid rise of private space actors, Norway must also determine which space services should remain under national control and which can be safely outsourced.