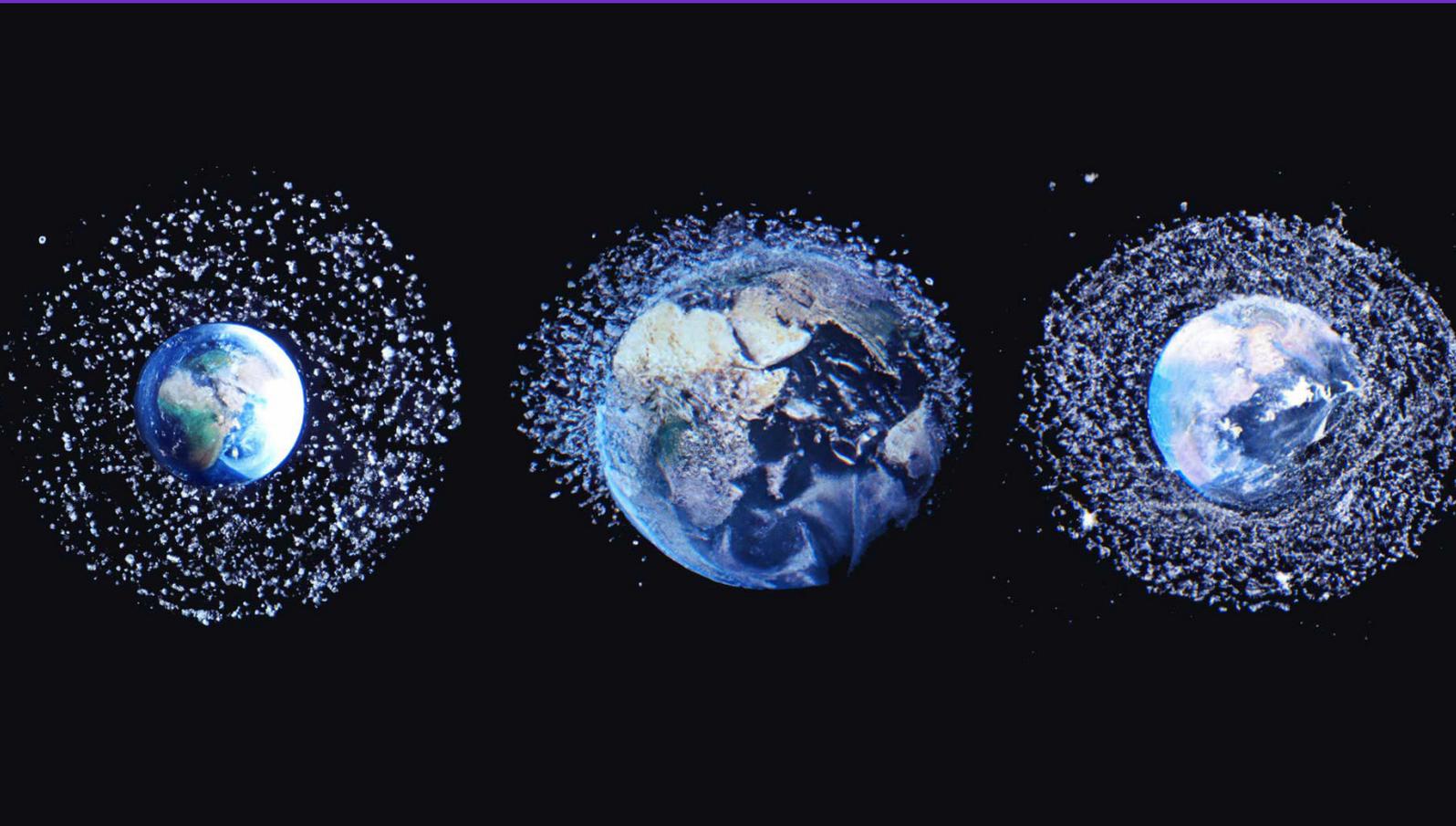


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Space traffic management

EVENT REPORT



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Calls for EU laws on space traffic management

It's getting crowded up there. Satellites and space junk are whizzing around our planet at tremendous speed. It has become a hazard to public and increasingly private operators in what has been called the 'space race' ever since Yuri Gagarin's historic journey around the planet in 1961.

Space agency officials, diplomats, members of the European Parliament, lawyers and private sector space engineers and executives discussed the issue of space traffic management (STM) at a dinner hosted by Friends of Europe. The dinner debate was part of the [Making Space Matter](#) initiative that Friends of Europe is running in partnership with the European Space Agency (ESA).

What kind of rules are needed?

News stories about satellite collisions with debris, as well as debris entering the Earth's atmosphere and falling to the ground, are increasingly common. "There needs to be a zero-trash approach. For 50 years, no one cared about space trash. But there are so many players now. They need to think like mountain climbers who have to take their trash home with them," said one lawyer.

The only existing international legal framework for space is the 1967 Outer Space Treaty. Over 100 countries, including many with no involvement in space at present, are signatories. "The treaty isn't outdated, but it doesn't go far enough," the lawyer said.

The countries most active in space are developing their own rules. For example, the United States Federal Communications Commission (FCC) recently adopted new rules that slash the amount of time a satellite can remain in orbit from 25 years to 5 years. The US initiative was welcomed by both public and private sector actors.

Similar rules are needed in Europe, but one lawyer warned against imposing more stringent rules for European players. "We have to remain competitive. We can't have tougher rules than others."

“ For 50 years, no one cared about space trash

Ten of the European Union's 27 member states have no space law at all. Given the regulatory patchwork here, a Europe-wide set of rules is all the more important, said members of the European Parliament (MEPs).

"We need strong space policy at EU level, as well as globally," said one MEP. "Here, Europe should bang its fist on the table" and steer the wider debate, they added.

One space agency executive pointed out a sad truth: Europe lags behind the US and

China in space. And he questioned the wisdom of Europe actively pursuing a global set of rules while it was in this underdog position.

Greater urgency needed by the European Commission

“We need to start [the legislative process] next year, not in 2024 as the European Commission is currently planning,” said an MEP.

A representative from one national space agency echoed this call for greater urgency from the Commission. “There aren’t clear, agreed definitions for key terms like STM and SSA [space situational awareness],” the MEP said. “There is still no Commission voice – we are waiting to hear their view.”

The elephant in the room was the European Commission, which declined an invitation to attend the dinner debate.

Many private sector and national government representatives agreed on the need for European legislation, but a common view expressed around the table was that Europe-wide action should be a precursor for a global-level initiative. “A European approach should be the first step, but ultimately, there has to be a solution at the global, probably United Nations, level,” said an official from a smaller EU member state that doesn’t presently have a space programme.

The MEPs present were sceptical about the chances of striking an international agreement. “If we hold out for an international solution, I don’t think we’ll find an agreement in the end. We have to start at EU level,” one commented.

Due to the timing of the European Parliament elections in 2024, shortly followed by the changing of the guard at the European Commission, it means that if the Commission doesn’t prepare a legislative proposal this year, there won’t be one until 2027 at the earliest. “If we are too slow, we’ll be left behind by the space industry,” an MEP said.

Another MEP pointed out that while the UN might appear to be the natural body to oversee global governance of STM, the lack of trust between UN Security Council members right now would make it “very hard to make any progress”.

Industry backs efforts to clean up space

In the case of STM, the private sector is right behind the politicians. “There’s a huge interest from industry to reduce the amount of space debris,” said one MEP. “After all, it’s their own assets endangered. They don’t want satellite constellations worth

millions to be completely trashed by one stupid little bolt flying around at high speed.”

You’d expect the space industry to react in horror to the FCC move to reduce the lifespan of satellites to five years, but one space industry executive said it is not so: “Industry welcomed the move.”

A major concern for satellite operators, the executive said, is having to make emergency avoidance manoeuvres because it burns up a lot of fuel. Today, they happen once a year, but they are predicted to become weekly events. When they run out of fuel, satellites effectively become space junk.

The answer to the problem of ever more debris orbiting the Earth is likely to be a technological one rather than a legislative one because companies can move much faster than governments, noted the executive.

Another person from the space industry argued that their guidelines for best practices are used by many but not all companies, and they urged lawmakers in Europe to use these guidelines as a starting point when they begin to draft laws. “Future legislation needs to look at what’s already been done by responsible actors,” she said, adding that this would speed up the drafting process.

One of the MEPs dismissed this argument, saying that self-regulation could not be relied on. Another MEP agreed that there is no way around adopting rules. “I want the European Union to become much more active in space sustainability. We need to adopt rules that place responsibility for objects in space on the shoulders of those who launched the satellites,” they said.

Dangerous behaviour by private operators like Elon Musk “is not acceptable”, they said. Nor is it acceptable for Russia to destroy one of its satellites above Europe. “I am convinced we need strong space policy at the EU level but also at global level.”

Environmental sustainability in space

He added that European rules should go beyond solely STM and also address the issue of space environmental sustainability more generally, with obligations on light pollution and greenhouse gases, for example.

Missions to the EU have given some thought to the environmental dimension of operating in space. “Whoever launches has to recycle. You need a balance of what you put in space and what you take out of it,” said a diplomat. He added that technology exists that would allow the monitoring of greenhouse gas emissions by individual countries.

Dharmendra Kanani, the evening’s moderator and Chief Spokesperson at Friends of Europe, asked why it is that the Conference of the Parties (COP) – the UN climate debate – misses out on the implications of space on climate action. Rarely is space discussed in the context of its impact on climate change or its use for monitoring it.

Issues beyond Europe

The debate about space is rather abstract in Africa. “We have difficulties explaining the significance of what the tools [from space] can bring to the people of Africa,” said a participant. The problem of debris in space is huge and the discussion may help increase awareness of space in Africa, but most people there have more pressing development-related concerns closer to home.

Kanani made reference to Friends of Europe’s first-ever discussion about space, during which the subject of space’s potential impact on the countries of Africa was raised. One question that arose out of that debate was: how can Europe and its space agency executives help emerging space agencies in Africa learn from their mistakes and build a better legacy by working collaboratively with a continent that will grow in significance in the next ten years and become a potential partner of choice? “Instead of looking east or west, sometimes we need to look south,” Kanani said.

Prioritising space in Europe’s Renewed Social Contract

In his concluding remarks, Kanani told dinner guests that Friends of Europe will present ten policy choices for a Renewed Social Contract to the European Commission and European Parliament next year, and that space will be one of the priority issues. “Space has not taken the kind of policy space it needs to,” he said. “It’s not just about security, it’s about economics too and the future of geopolitics.”

Recommendations

Discussions focused on the need for clearer and stricter regulations of space activities. While the extent to which the EU should be leading these efforts was debated, participants agreed on the urgency to produce strategic and legislative frameworks to support both public and private efforts to develop European space activities. The following recommendations emerged:

- Urge the development of a coherent EU policy framework that adopts clear definitions for STM and SSA; defines a strategic framework to address the need for stronger regulations at the EU and global levels; and promotes rules on space environmental sustainability – notably with obligations on light pollution and greenhouse gases.
- Encourage the European Commission to start preparing a legislative proposal prior to the 2024 election to avoid postponing the matter to 2027.

- Affirm that the voluntary basis of the codes and habits upon which space activities are organised is no longer fit for purpose. The pace of change in space and the evolving nature of risks require binding and clearly defined legislation.
- Recommend that the EU involves private actors early in the process of developing a regulatory and policy framework.
- Generate a transatlantic and global discussion on a regulatory framework after the EU has clarified its own position.
- Encourage the EU to include in its future strategy ways to engage, collaborate and partner with stakeholders in Africa in its future strategy, as this yield more in terms of strategic partnerships and advantages.
- Recognise that multilateral conferences, such as COP, ought to better account for the wide range of benefits that space activities offer – a role that the EU may facilitate.

Friends of Europe

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