

Dear Chris,

Dear ESSC colleagues,

dear ESA and EU representatives, colleagues from academia and research institutions, friends and partners joining us internationally,

thank you for welcoming me as I stand before you for the first time as the new Chair of the European Space Sciences Committee, the ESSC.

I take this role with gratitude, with humility, and with a sense of responsibility. The ESSC exists to serve the long horizon: to help keeping Europe's space science anchored in excellence, independence, and community-driven judgement; to protect the difference between what is urgent and what is essential; and, when needed, to say plainly what the scientific ecosystem requires in order to remain strong.

We meet here in Windsor, at the beginning of 2026, in a place that evokes history, continuity, responsibility. And yet the time we live in does not feel like a time of continuity. It feels like a time of thresholds: technological thresholds, political thresholds, moral thresholds. And, above all, scientific thresholds.

For many years we spoke of science as a free territory. Competitive, certainly. But—at least in theory—neutral: a realm where research could cross borders that politics could not cross, and where international collaboration was not only a method, but an idea of the future.

That image has cracked. Not because of a single event, but because of a sequence of fractures that have accumulated: the illusion that globalisation was irreversible; the belief that the circulation of talent would always be an unconditional good; the conviction that sharing data and results was a technical choice, not a strategic one.

We have discovered, with growing sharpness, that science does not live outside the world: it lives inside power relations, inside national and industrial interests, inside new forms of conflict.

A fellow scientist, recently, wrote on *Corriere della Sera*, a simple, cutting sentence: *science has stopped being neutral*. We should not use that sentence to resign ourselves. We should use it to wake up. Because the point is not to accept politicisation as fate; the point is to govern it—without betraying what makes science, science.

In recent decades we built a vast part of progress on the idea of *open science*: accessible data, frictionless collaboration, the exchange of expertise, international networks as the infrastructure of knowledge. Today, however, another expression is rising everywhere: *research security*. It grows out of real needs—interference, theft of intellectual property, cyber vulnerabilities, fragile value chains, technological dependencies—and yet it carries a risk: that the exception becomes the rule; that prudence hardens into systemic mistrust; that protection becomes fragmentation.

Here it helps to recall a foundational intuition from the modern history of science policy. In the aftermath of World War II, Vannevar Bush framed basic research not as a luxury, but as a national—and human—necessity. He argued that science is not a finite

stockpile to be guarded like a mineral deposit. It is an endless frontier: a boundless resource—renewed by curiosity, by long-term investment, by the free movement of people, questions and ideas.

That vision did not deny security. It insisted that security without discovery is short-lived—and that discovery without openness is stunted.

European science had its own architects—Edoardo Amaldi in Italy and Pierre Auger in France, Roy Gibson in the United Kingdom and Reimar Lüst in Germany, who helped shape Europe's space institutions, as well as Robert Schuman among Europe's founders—laying the foundations for a science that could be both strong and autonomous, and yet unmistakably international.

Here we must be clear-eyed: security is necessary. But a closed science is not safer—it is poorer, slower, more vulnerable.

The choice is not between naïve openness and paranoid closure. The choice is between an openness intelligent enough to discriminate, and a closure indiscriminate enough to damage us first.

This is true in every sector; in space it is true twice over.

Because space today is, at once:

- a scientific frontier—where we interrogate origins, matter, planets, life;
- a critical infrastructure—communications, navigation, Earth observation, finance, transport, security;
- a strategic domain—where competition and deterrence rise into orbit, and where the line between civil and military—the famous *dual use*—becomes thin, sometimes invisible.

If there is one arena that has embodied the possibility of cooperation even when the Earth was divided into blocs, that arena is space. Let us remember: international space cooperation is not rhetorical decoration; it is a historical fact, a political laboratory, a test of reality. Space has taught us that it is possible to build together even when it is hard to speak to one another.

But space is also teaching us something else: that cooperation is not automatic, and that knowledge can become leverage of power—or a target.

We live in an age in which orbit is crowded, data is contested, trust is scarce. We see the rise of competitive postures, a technological race across launch systems, microelectronics, artificial intelligence, quantum technologies, advanced sensing, on-board processing. We see new global actors—and the acceleration of strategic programmes at transatlantic and Eurasian scale. And we see, too, the corrosive effect of war and geopolitical crises: partnerships frozen, supply chains broken, scientific communities divided, infrastructures turned into symbols—and instruments—of alignment.

For Europe, this condition is particularly delicate. Because Europe is, by any measure, a scientific power. But it is also a continent confronting a word that returns—often confused, often misused: *autonomy*.

Autonomy does not mean autarky. Autonomy means the capacity to choose. It means not being forced into partners, technologies, architectures, and dependencies simply because “there is no alternative.”

In space, autonomy means reliable access to space; resilience of ground segments and networks; cyber protection; robust supply chains; skills retained and attracted; governance that does not confuse sovereignty with solitude.

And that is why the last months matter.

Because CM25 in Bremen was not only a budget moment. It was a signal moment. A signal that European governments recognise—more clearly than before—that space is no longer an optional endeavour at the margins of policy. It is a central infrastructure of prosperity, resilience, and security. A domain where Europe must remain capable, credible, and present.

But Bremen also highlighted something else: a strengthening, more mature relationship between ESA and the European Union—a relationship that can become one of Europe’s strategic advantages if we shape it wisely. ESA brings technical excellence, programme experience, and a cooperative architecture that has been built for decades. The EU brings political mandate, regulatory capacity, and continental scale.

If we treat this partnership as a bridge—rather than as a boundary—Europe can act with greater coherence: in Earth observation, in navigation, in secure connectivity, in sustainability in orbit, and in the technologies that underpin all of them.

And here, in the United Kingdom—an essential ESA Member State and a global scientific power—we should say this clearly: a stronger ESA–EU relationship must not narrow Europe’s space community. It must widen opportunity. Europe’s space ecosystem is larger than any single institution, and stronger than any single map. Our success depends on keeping the whole ESA and EU family engaged—EU and non-EU members, ESA and non-ESA members, alike—together with our international partners, with whom we share both ambition and responsibility.

This is also where the ESSC must play its part: not as a political actor, but as a scientific conscience; not as a lobby, but as a guardian of the long view. Because Europe’s autonomy will not be achieved by slogans, but by decisions that respect science’s time-scale: priorities that survive election cycles; programmes that survive crises; infrastructures that survive shocks; and a research ecosystem that can compete without isolating itself.

Today I see at least three fractures that risk becoming prisons.

*The first : is the fracture between “science as a global public good” and “science as a national asset.”*

If we reduce research to a function of immediate strategic interest, we risk impoverishing precisely the fundamental research that feeds every future application. Science is not a short-cycle factory: it is a long-time ecosystem. And long time is the first thing politics forgets when it is afraid.

*The second is the fracture between “cooperation” and “alignment.”*

Scientific cooperation cannot become a simple extension of geopolitical coalitions. It is right to protect sensitive knowledge and critical infrastructures. But if every international project is read only as an act of positioning, then science becomes foreign policy by other means. And when science becomes foreign policy, the first casualty is the freedom to ask questions.

*The third is the fracture within Europe itself: between common ambition and real fragmentation.*

We have extraordinary excellence—often dispersed. We have strong programmes and institutions—often with diverging priorities, incompatible decision timelines, fragmented resources. In a world organising itself around major platforms and major ecosystems, European fragmentation is not pluralism: it is vulnerability.

So what can we say—here, today—without rhetoric, but with courage?

I propose four commitments: easy to state, hard to practise. Precisely for that reason, necessary.

*First: defend open science as infrastructure, not as slogan.*

The openness of data, methods, results—especially in areas such as Earth observation, climate science, fundamental physics, much of planetary science—is part of Europe’s credibility. It is also a condition for innovation: innovation thrives where knowledge circulates. But openness must become architecture: access tiers, traceability, standards, protection—clarity on what is truly sensitive and what is not. The alternative is not “everything open” versus “everything closed.” The alternative is governed openness versus chaotic closure.

*Second: build a culture of research security that does not become a culture of suspicion.*

Security means training, procedures, cyber hygiene, risk assessment, protection of people and critical data, attention to supply chains and vulnerabilities. But security must not mean witch-hunts, automatic bans, or indiscriminate barriers to scientific mobility. Science lives on exchange. If we turn every exchange into a threat, we lose the future out of fear of the present.

*Third: relaunch scientific diplomacy in space as a European choice—with global partners at the table.*

Space remains a domain where cooperation can still produce global public goods: climate and environmental monitoring, disaster management, mitigation of natural risks, planetary defence, standards for orbital sustainability, interoperability for rescue, protection of terrestrial infrastructures.

Here Europe can be what it often says it is: a power that unites competence and rules, technology and responsibility. Not naïveté. Not moralism. But leadership grounded in real capability—and shared responsibility.

*Fourth: strengthen the European pillar in a world of great blocs—without breaking the transatlantic bridge, and without abandoning the possibility of future repair where politics has shattered trust.*

The relationship with the United States remains decisive: for science, for industry, for major missions, for the technology ecosystem. But precisely because it is decisive, it must be a relationship between solid partners—not between dependent and provider.

And Europe must also read the Eurasian landscape with realism: with some regions and some actors, there remain spaces for scientific cooperation; with others, there are now deep incompatibilities linked to political choices and violations of international law. Europe cannot ignore geography; but it must not let geography become destiny.

On one point we must be plain: the scientific relationship with Russia—which in the past included important chapters of space cooperation—now sits inside a political and security crisis we cannot pretend does not exist. Yet the strategic question for the future is not “close forever,” but “how to preserve the possibility of rebuilding, one day, channels of knowledge on the basis of legality, reciprocity, security, and peace.”

Because space—as climate—do not wait for wars to end in order to exist.

There is one question beneath all the others:

*“how far is the scientific community willing to accept the non-neutrality of science without losing its soul?”*

We are not romanticising a pure past: science was never completely separate from politics. But for a brief, precious period, we believed it could function as a global infrastructure of knowledge—stronger than blocs, more durable than crises.

We believed—again, in Bush’s language—that science could remain a frontier precisely because it was not fenced off; that its power came from being a boundless resource, renewed by open inquiry.

Today that infrastructure is under pressure. And the answer cannot be nostalgia. The answer must be a conscious choice:

- to choose ambition over fragmentation;
- to choose verifiable trust over indiscriminate mistrust;
- to choose intelligent collaboration over blind competition;
- to choose science as a bridge, without forgetting that bridges must be protected.

Because if we renounce international collaboration in space, we lose more than efficiency.

We lose imagination.

And without imagination, science shrinks into engineering of the present: it stops opening roads and begins merely policing borders.

So, at this start of 2026, I would like this to be our implicit pact:

- not to deny the reality of competition, but to refuse the idea that the only possible future is division;
- not to confuse security with closure;
- not to accept that science becomes merely another theatre of permanent national interest.

The space above us does not belong to a bloc. It does not belong to a flag.

It belongs to our capacity to remain human: curious, rigorous, responsible.

If it is true that science has stopped being neutral, then it is for us to decide what it will become: a tool among others in competition, or a force that, even within competition, continues to produce truth, cooperation, and future.

I wish all of us good work.

Thank you.