

Paris, 19 February 2020 - As the Chinese-American rivalry extends beyond earth and tech giants invest more and more in space, the European Union (EU) cannot afford to rest on the laurels of Galileo and Copernicus. It is urgent to give a new impulse to the European space program and the window to do so is closing fast.

This is why, in the lines of its 2017 report <u>Space: Will Europe Strike Back?</u>, Institut Montaigne is publishing a new policy paper today <u>Space: Will Europe Awaken?</u>. Written by three Finnish, French and German experts, it urges the EU to reach higher now if it wants to ensure its safety, its technological and industrial leadership as well as its geopolitical influence.

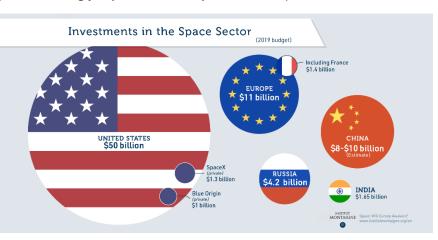
Click here to discover Institut Montaigne's five measures that take into account political acceptance among Member States, as well as financial realism.

"Europe will only exist on the international stage if it is at the forefront in space. Space has become a geostrategic issue and an expression of both hard and soft power, politically and economically" say the authors of Institut Montaigne's policy paper, Juha-Matti Liukkonen, Director Space & New Technologies, Reaktor; Sebastian Straube, leading international New Space Expert, and Arthur Sauzay, Lawyer at Allen & Overy and Contributor to Institut Montaigne on Space Affairs.

GAFA and China: New Giants in Space

On an economic level, Earth's orbit is the new frontier of Big Data. It is only logical that tech giants, both American and Chinese, are investing billions of dollars in new projects such as building constellations of thousands of satellites to provide new connectivity services worldwide. NASA's budget increased by \$2 billion in 2018, reaching 21 \$ billion. Overall, private companies play an increasingly important role in space. For example, Jeff Bezos, founder and

CEO of Amazon, personally invests approximately one billion dollars per year in Blue Origin, his aerospace company. This is as much as the French total annual space budget (1.3 € billion). Amazon plans to invest several billion dollars in a constellation to provide broadband internet. SpaceX, the well-known space company created by Elon Musk, has become one of the main driving forces of the space sector globally. In China, many space startups have emerged. In Europe, the landscape is already changing as private companies adapt to this new reality.



Europe's structural limits are being tested

In this "New Space" context, **Europe has managed to build strong positions in several key aspects of space**, from science and exploration to business applications. ESA, an intergovernmental body separate from the EU, has been instrumental in that regard. The EU, for its part, can be proud of its achievements, starting with its two leading programs, Galileo and Copernicus. However, the EU cannot rest on its laurels, as shown for instance by the outage of Galileo in July 2019. These two programs still need to be successfully completed in the context of the upcoming 2021-2027

institut MONTAIGNE



Multiannual Financial Framework (MFF) to make sure Europe actually reaps the benefits of these investments. **European** space governance (particularly the connection with ESA) remains partly inadequate and needs to be improved, if not deeply transformed.

Lacking its own GAFA ecosystem, the European space program must compensate and become **much more open to** "non-space" for new projects and new sources of financing. The European space industry must be firmly defended and supported, but must also bear more responsibility and risks. This includes new entrants (especially startups) even though confrontations between legacy players and these new players must be avoided.

The EU must have a stronger voice than it does today on new issues in space

Safe management of Earth orbit, economic utilization of celestial bodies, etc.: Europe has the responsibility of bringing its values of peace and cooperation for the determination of future regulations.

Institut Montaigne's Five Concrete Measures For The EU To Reach For The Stars

To move toward these goals, concrete measures should be taken covering the various aspects of space affairs (strategic independence, technological and industrial leadership, geopolitical positioning). While many proposals can be contemplated, this policy paper is limited to just five measures that could be initiated as soon as 2020, with reasonable budgets.

1. Ensure Europe's autonomy in Space Traffic Management by developing EU capabilities for detection (ground-based radars and telescopes as well as space-based solutions) and computing, jointly with ESA and Member States. Such measure has been proposed by key stakeholders but the real challenge is now to determine rapidly the next steps and implement them. This will help ensure Europe's voice is heard and its role as a guardian of Earth orbit is secured, before others establish new rules.

2. Adopt an innovative approach in terms of public space procurement. We propose creating a commercial services procurement unit within the future EU agency for the space program. The EU should, when relevant, support the development of commercial services (in particular, imagery and telecommunications) by European companies, and do so by becoming an anchor customer rather than an owner of satellites.

3. Decide in 2020 on a European strategy regarding broadband constellations. These projects bear significant uncertainties but they are set to become a deciding factor for the future development of space as well as for telecommunications and Big Data. Europe cannot afford to wait to see if they succeed. The EU Commission should take the lead in designing a policy which could include specific regulations as well as the analysis of the need to develop a European capability in this field.

4. Ensure Europe's leadership in small satellites by providing free access to orbit for in-orbit technology validation. This aims at simultaneously developing launch capabilities for these satellites (small launchers, or rideshares using larger launchers), as well as supporting the development and commercial success of small satellite technologies.

5. Give the EU a political role in international space affairs, with an immediate focus on ensuring Europe has a role to play in, and benefits from, the ongoing push to develop activities in the space between Earth orbit and the Moon (so-called "cislunar space"). A potential concrete measure would be landing a probe on the surface of the Moon, by 2023, with a scientific and also commercial goal, which could include a demonstration of Moon resource utilization technology. This could send a strong symbolic message and push European established players as well as start-ups to take on the challenge.

Subscribe to our Newsletter and follow us on Twitter and Instagram

For interview requests and further information, please contact Lara Oliveau, Head of Communications and Press Relations +33 (0)6 99 79 43 62 - loliveau@institutmontaigne.org

About Institut Montaigne: founded in 2000 and based in Paris, Institut Montaigne is an independent think tank dedicated to public policy in France and Europe. Its work is the result of a rigorous, critical and open method of analysis based on international comparisons. This pioneering non-profit think tank brings together business leaders, senior civil servants, academics, civil society and personalities from a wide range of backgrounds. It is run exclusively through private contributions, each representing less than 1,5% of its annual budget, which amounts to € 5.9 million (2019 estimation). Through its various actions - proposals, evaluations of public policies, citizen participations and experimentations - Institut Montaigne aims to play a key role in the democratic debate.