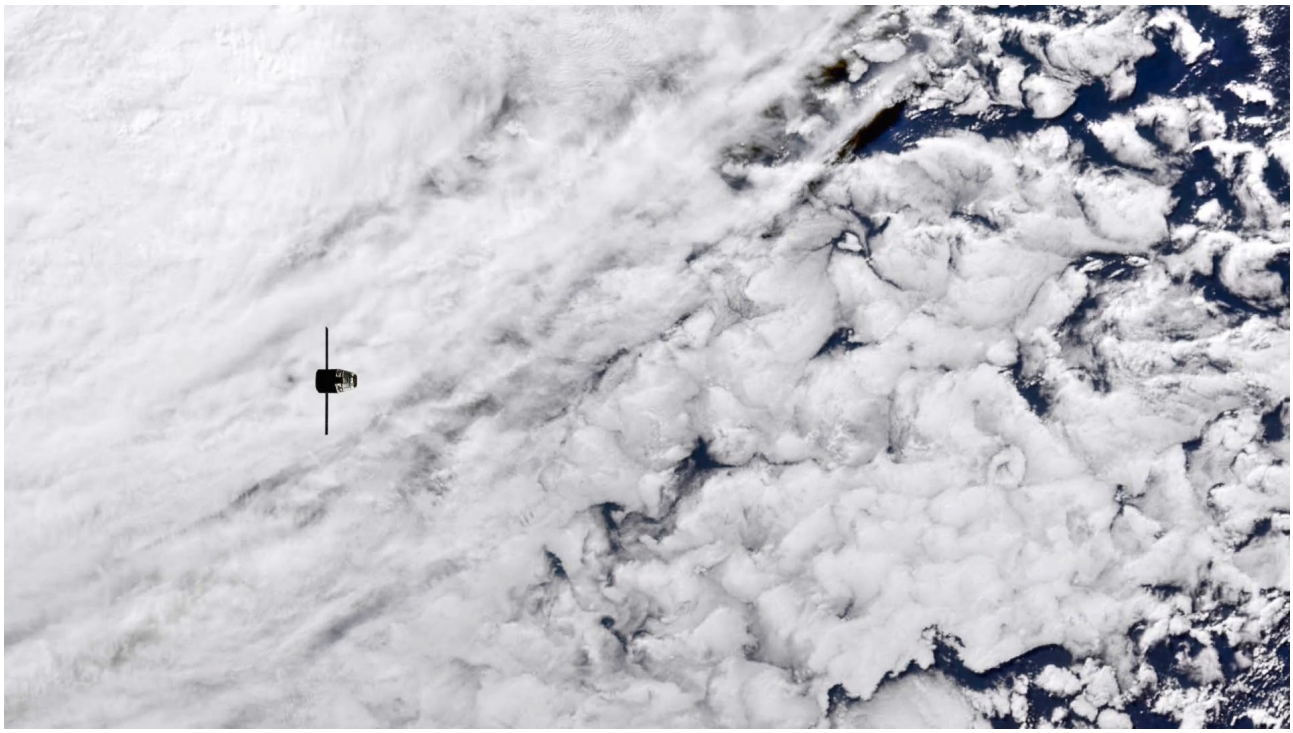
Media release

# Space Sustainability Rating is now live

**The Space Sustainability Rating is an innovative and practical tool to support space actors in designing their missions and managing their operations more sustainably and responsibly.**



**London, UK, and Lausanne, Switzerland, 23 June 2022:** The Space Sustainability Rating (SSR) celebrated its official launch today at the 4th Space Sustainability Summit, hosted by the Secure World Foundation and the UK Space Agency.

The SSR aims to recognise, reward, and encourage space actors to design and implement sustainable and responsible space missions to ensure the long-term sustainability of the space environment. It provides a unique rating system enabling space actors to comprehensively and transparently assess their missions' impact on the space environment and other operators, as well as practical guidance on how to improve sustainability performance & practices.

The launch included the presentation of the SSR's first official rating of a mission to Stellar, a telecommunications company and founding member of the SSR, by Florian Micco, SSR Project Manager, as well as a Spotlight talk by Micco and Adrien Saada, SSR Operations Officer, explaining in detail how the SSR works to incentivise safer behaviour in space and how ratings are performed.

"The flourishing space economy, and ultimately our success, depend on a safe, sustainable space environment that the Space Sustainability Rating (SSR) strives to bolster," says Damien Garot, the Founder and CEO of Stellar. "By becoming the first organisation to accomplish an official rating,

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Stellar demonstrates its commitment to catalyse positive change. We hope this achievement will serve as an inspiration for the industry to join us and embark upon the SSR journey."

**An incentive to advance sustainability in the space sector**

The development of new and innovative space technologies and the opportunities offered by the fast-growing space economy have led to an exponential rise in space traffic. In the coming years, thousands of payloads are expected to be launched, driven by the emergence of new actors and commercial satellite constellations, in already congested orbits, stressing the need to keep the space environment sustainable and safe.

A paradigm shift is needed in how space actors pursue sustainability and the ways in which sustainability practices are assessed. To facilitate this shift, the World Economic Forum's Global Future Council (GFC) on Space appointed a group of experts from the European Space Agency, the Massachusetts Institute of Technology, BryceTech and the University of Texas at Austin to develop a rating system for incentivising safer behaviour in space, which became the SSR. In 2021, eSpace – EPFL Space Center was selected to drive the implementation of the SSR and the vision of its Ambassadors.

The SSR provides a simple and impactful instrument for space actors to measure sustainability design and actions comprehensively, capturing the different mission's elements and using a series of recognised and tested metrics.

"As of today, there is no shared definition of what sustainable behaviour in space means globally, and quantifying, assessing, and verifying international guidelines for space sustainability remains challenging," says Dr. Minoo Rathnasabapathy, Research Engineer, Space Enabled Research Group at the Massachusetts Institute of Technology (MIT). "The SSR can help bridge this gap, by offering an original and hands-on framework for space operators to evaluate the sustainability level of their missions – through integrating metrics modelled by agencies and academic institutes."

Through the rating process, operators can get a clear picture of where their missions and operations stand in terms of sustainability, identify areas where improvements can be made within a feedback loop, and publicly share the rating's outcomes demonstrated by a "bronze", "silver", "gold", or "platinum" rating badge – and without disclosing sensitive mission data or proprietary information.

The SSR methodology has been iteratively tested and fine-tuned through a thorough beta-testing phase ensuring its relevance and robustness. Many space operators have participated in the beta testing phase, including Airbus, Astrocast, Axelspace, SpaceX, Lockheed Martin, Planet, Voyager Space Holdings and CHESS.

"As space traffic is set to dramatically increase in the coming years, the SSR can play a key role in supporting collision-risk mitigation efforts by making sustainable and responsible behaviour a norm in outer space," says Prof. Jean-Paul Kneib, Academic Director of eSpace. "We are proud to see this important initiative taking shape and encouraging space actors to raise the ambition bar for space sustainability."

**Getting on board**

A sustainable and safe space environment depends on bold and collective action. The SSR seeks to engage with operators and space actors across the globe to develop and leverage best

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practices, and support the continued revision and implementation of sustainability guidelines, through transparency and accountability.

The SSR offers a subscription to operators and manufacturers seeking to obtain a rating and benefit from actionable guidance to support their space debris mitigation efforts, and demonstrate their commitment to pursuing long-term sustainability in current and future missions.

It is also possible for organisations with a strong interest in the space exploration and sustainability fields to join the SSR as members, allowing them to have a say in decision-making about the rating process. All space actors, including spacecraft operators and satellite manufacturers are welcome to participate in the SSR.

Over the past months, seven forward-thinking organisations have embarked upon the SSR adventure, including two founding members who were early supporters of the initiative: Nihon University, who will head the development of a regional-hub for the SSR in Japan and the Asia-Pacific region; and Stellar.

ALTER group, EnduroSat, Privateer, the Secure World Foundation and Slingshot Aerospace have joined the SSR providing key expertise and network to enhance the rating system and ensure its relevance and accuracy. As members, they will be instrumental in growing the SSR and helping to achieve a joint ambition for space sustainability.

The SSR Association aims to serve as a non-profit organisation to ensure a fair and independent rating system, relevant and practical for operators. Our members have access to a platform for space actors centered on the rating and sharing a willingness to drive action-focused collaboration.

If you wish to learn more about the rating and explore opportunities for engagement, please visit our website or contact the team.

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**About eSpace – EPFL Space Center**

eSpace is an interdisciplinary hub, working with students, academic institutions, international space agencies and industry partners, with an overall mission to promote space related research and education at EPFL. Its three-fold mission is to inspire the new generation of students in space-related projects and activities, develop novel space science and technology research topics in partnership with EPFL labs and beyond, and foster innovative space initiatives. eSpace achieves its mission through three key areas: education; fundamental research; and innovative development projects.

Please visit the eSpace website to learn more about the center's activities.

**About the Space Sustainability Rating (SSR)**

The Space Sustainability Rating (SSR) is an initiative seeking to foster voluntary action by satellite operators to reduce the risk of space debris, on-orbit collisions, and unsustainable space operations. The ambition of the SSR is to advance sustainability in the space sector and reward operators whose missions comply with the sustainability norms, guidelines, and best practices. It provides a rating system of the sustainability level of space missions informed by transparent, data-based assessments.

The SSR has been designed by a consortium including the World Economic Forum, the European Space Agency, the Massachusetts Institute of Technology, the University of Texas at Austin, BryceTech, and is hosted by eSpace.

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