

SPACE PLATFORM PROJECT NEWSLETTER

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HIGHLIGHTS

- **Virgin Galactic's** Richard Branson and **Blue Origin's** Jeff Bezos (and others including the first commercial suborbital space traveler) **successfully completed space flights** in their "own" spacecrafts, potentially **opening up a new area in terms of space tourism**.
- The IPCC's **Sixth Assessment Report** underlines that **human influence has unequivocal warmed the atmosphere, ocean and land** (by 0.8°C to 1.3°C). It is likely (>66%) that an observed increase in frequency and intensity of heavy precipitations is due to human influence (extremely likely for salinity changes). Many changes in the climate system become larger in direct relation to increasing global warming.
- The world's first commercial **fully re-programmable satellite lifted off**, ushering in a new era of more flexible communications.

UNITED NATIONS / GLOBAL



- The UN Committee on the Peaceful Uses of Outer Space (**COPUOS**) is working on the draft **Space 2030 agenda**, which aims to enhance space-derived economic benefits and strengthen the role of the space sector as a **major driver of sustainable development**.
- **ESA and NASA have formed a strategic partnership for Earth science and climate change** (the intention is to combine efforts in Earth science observations, research and applications).
- **ESA and NASA are developing missions to test nudging asteroids off collision course with Earth** (respectively Hera and DART).
- **US Space Force** is seeking to develop **partnerships** with European countries to counter perceived **threats in orbit**.
- The **BRICS space agencies have signed an agreement to share remote sensing satellite data**.

EUROPEAN COUNTRIES



- 93% of surveyed Europeans consider **climate change to be the most serious problem** facing the world (Eurobarometer Survey); this is higher than on a global scale.
- **European startup funding is set for record year**, including in capital-intensive, technologically advanced activities such as in the space sector.
- The British telecom regulator **Ofcom plans to change the way satellite constellations** operating in non-geostationary orbits (NGSO) are **licensed**.
- **Germany** officially created a **military space unit** following France and the UK.

EUROPEAN UNION (EU)



NEXTGENERATION EU

The **European Commission (EC)** made its **first payments to the Member States** under the NextGeneration EU instrument to help funding recovery, following the endorsement of the **national recovery and resilience plans** .

EU GREEN DEAL

- The European Commission (EC) adopted a **package of proposals relating to the Green Deal**:
 - draft regulation on ensuring a **level playing field for sustainable air transport**, which requires that all aviation fuel contains a minimum share of sustainable aviation fuel (alternative propulsion technologies for aircraft such as electricity or hydrogen are out of scope).
 - draft regulation setting **mandatory national targets for the deployment of alternative fuels for road vehicles, vessels and aircraft** (hydrogen and electric recharging for aircrafts are in scope and plans for alternative fuels infrastructure in airports must be deployed)
 - draft directive restructuring the framework for the **taxation of energy products and electricity**, which would put to an end the exemption applicable to the aviation (and maritime) sector.
 - The EC is working on a **Communication on space traffic management**, which will determine the EU strategy for **safe and sustainable use of space** (target date for adoption is Q1/2022).

EU SPACE PROGRAM & EUROPEAN COMMISSION

- The so-called **European Connectivity Initiative**, sponsored by the European Commission (EC), to provide **communication services and connectivity**, aims to put an end to dead zones, giving high broadband speed to everyone in Europe and some areas of Africa through a resilient & ultra-secure space and ground-based system.
- The **2nd CASSINI Hackathon will take place on November 5-7, 2021** (it will tackle the challenge of connecting the Arctic with European satellite technologies - application as from September 1, 2021).
- The **EGNOS Annual Workshop** will be live streamed on December 2, 2021.
- The EC issued a draft delegated regulation aiming at **improving the (cyber)security of connected radio equipment**, including machines, sensors and networks that make up the Internet of Things (IoT).
- The EC has released new **Guidance on innovation procurement**, which give practical tools for public buyers to implement procurement strategies that are open to innovators.

EU COUNCIL

- The Council adopted its **conclusions** on a report on the EU space programmes Galileo and Copernicus. It highlighted that more efforts are needed to capitalize on the investments made to achieve the expected societal and economic benefits.
- The Council, under Slovenian Presidency, has several **space-related topics on its agenda**, including in the area of space traffic

management, secure connectivity and “space for green and digital recovery”.

EUROPEAN PARLIAMENT (EP)

The EP report on **railway safety and signaling** recommends using satellite/GNSS-based solutions for train localization in railway signaling.

HORIZON EUROPE/EUROPEAN INNOVATION COUNCIL (EIC)

- **Horizon Europe’s work program for 2021-2022 was adopted for a total of €14.7 billion**, including for cluster 4: digital, industry and space. Space-related entities may benefit from support not only under such cluster but also clusters 1, 3, 5 and 6.
- The **EIC Summit** will be on November, 24-25, 2021 in Brussels and online.
- **The EIC Fund made a second round of equity investments** in highly innovative startups and SMEs for €500 million in total.
- The next **cutoff date for full applications under the EIC Accelerator** is October 6, 2021.
- The **EIC Pathfinder Challenge calls** worth €132 million are **open**.
- **First calls are open under the €60m European Innovation Ecosystems (EIE) work program** to accelerate sustainable business growth, promote female leadership in deep tech and stimulate innovation procurement.

LIFE PROGRAM

The LIFE program to combat climate change has been **launched** with a **budget of €54 billion** for 2021-2027 (the first calls will be launched in Q3/2021).

SINGLE MARKET PROGRAMME

€42 million are allocated for a first call for proposals in Q3/2021 to fund up to **30 cluster partnerships**.

EUROPEAN DEFENCE FUND (EDF) & EUROPEAN DEFENSE AGENCY (EDA)

- **EDF's info & networking day** will be held on September 15-17, 2021 following the **publication of the first calls for proposals and the award of 26 new industrial cooperation projects** for more than €158 million, including on both space-based and maritime surveillance capacities.
- **EDF 2021 work program** was adopted, focusing on large-scale projects, including €50 million for the development of space and ground-based navigation warfare (NAVWAR) surveillance and resilient satellite communications.
- **EDA Annual Conference: Innovation in Defense** will take place on December 7, 2021.

EUROPEAN INVESTMENT BANK (EIB) & EUROPEAN INVESTMENT FUND (EIF)

- The EIB concluded a **venture debt financing agreement of up to €10 million with EnduroSat** (a Bulgarian new space company providing solutions for the global Space market).
- The EIF supported **OTB Ventures**, a leading venture capital firm investing in early-stage technology businesses with R&D in Central and Eastern Europe (CEE), including in cybersecurity, space, fintech and robotic automation.

EUMETSAT

- EUMETSAT will become the **largest operator of the Copernicus programme's Sentinel satellite missions** under a €735 million, seven-year,

contribution agreement signed with the European Commission.

- EUMETSAT will **buy meteorological data from a commercial supplier**.
- EUMETSAT will invest >€58 million between 2022 and 2027 to develop **innovative approaches to translate data from its satellites into services**.



- ESA's virtual **Industry Space Days (ISD)** event will be on December 7-8, 2021.
- ESA is tendering on the creation of a Strategic Programme Line: **Space Systems for Safety and Security** under ESA Telecommunication Programme.
- ESA is exploring **how satellites can help detect and reduce plastic pollution** in the ocean.
- **ESA and Indian space agency ISRO agreed on future cooperation**.



CONGRESS

- The House Appropriations Committee passed a spending bill July 15, 2021, that leaves **intact overall funding for NASA** but tweaks language regarding the Human Landing System and nuclear thermal propulsion.
- A bill directing NASA to **study the merits of establishing an institute related to space resources** was introduced.

THE WHITE HOUSE & NATIONAL SPACE COUNCIL

- Chirag Parikh will be **executive secretary of the National Security Council**, responsible for its day-to-day activities.
- The Biden administration plans to **revise both the charter and the membership of the National Space Council’s advisory group** to better reflect its priorities.



- The agency is seeking proposals for a program to support the development of **commercial space stations** (related development studies may receive up to \$400 million).
- The agency has announced that it is seeking **four candidates for a mocked-up mission to Mars** starting in Autumn 2022.

US SPACE FORCE/DOD/SPACE GUIDELINES

- The **US Space Force** currently has around **6400 total active-duty staff**.
- The **Space Development Agency** has already started the process of **transitioning** to the U.S. Space Force.
- Defense Departments and Agencies have been directed to follow **five tenets of responsible behavior for space operations**.
- Activities to establish **multilateral guidelines** relating to behavior in space, such as those regarding debris mitigation and the long-term sustainability of outer space activities, will continue.



\$70 million was raised to **fund a second Moon mission**.



Japan’s parliament approved **legislation that allows companies to extract and utilize space resources**.
