

SPACE PLATFORM PROJECT NEWSLETTER

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HIGHLIGHTS

- This moment is an inflection point. We are in the midst of a fundamental debate about our future. There is a need to demonstrate that democracies can still deliver for people.
- **Economies could start showing signs of recovery** in March 2021 (there is a high degree of uncertainty in economic projections).
- There are **difficulties in securing supplies of electronic components** that are the fundamental enablers of innovation in a number of sectors such aerospace and defense.

UNITED NATIONS / GLOBAL



- Proposed norms, rules and principles of responsible behaviors in space are being drafted and may be part of an international effort to adopt at binding UN resolution to make space safer and sustainable.
- UNOOSA has identified an increase in the number of rocket launches and the number of satellites carried per rocket in the last few years, with private companies launching smaller satellites than those launched by non-commercial agencies. The number of unregistered objects has increased in recent years.
- UNOOSA is cooperating with ESA to produce a series of infographics and podcast episodes about space debris.
- It is estimated that 28 210 debris objects big enough to damage or destroy a functioning satellite are in space.

EUROPEAN UNION (EU)



EU FUTURE

Europe plans to start discussing soon how it will look like in 5 to 20 years from now and to give citizens a chance to shape the policy framework.

RECOVERY PLANS

- The €672.5 billion Recovery and Resilience Facility Regulation has entered into force, rendering the following targets legally binding:
 - 30 % of total EU budget expenditure supporting climate objectives
 - 37% of the national recovery plans to support climate objectives, based on a methodology for climate tracking and
 - 20 % of the national recovery plan's allocation for digital expenditure, based on a methodology for digital tagging.

The national recovery plans must be submitted by April 2021, ratified by national parliaments, scoreboards implementation progress by December 2021 and the EC will present in July 2022 a report on the Facility, including these targets.

EUROPEAN COMMISSION

The European Commission (EC) adopted an action plan on synergies between civil, defense and space industries. Concrete policy actions are proposed such as (i) improving coordination of EU programs, (ii) targeted actions for startups and SMEs and (iii) to launch 3 flagship projects: (a) drones (how to integrate civil and defense), (b) space-based global

- secure communications system (focusing on EU and Africa) and (c) Space Traffic Management (STM).
- The EC adopted a proposed regulation setting standards for the provision of information society services. Whilst very large online platforms are subject to higher standards, very small providers are exempt from the proposed obligations. It has also adopted proposed rules to regulate practices of gatekeepers that limit contestability or are unfair.

CLIMATE CHANGE

- The EU strategy on adaptation to climate change promotes the use of space-based data and applications and programs such as Copernicus to support the climate resilient decision-making process.
- The new European Climate and Health Observatory
 was launched. It will focus on the interactions
 between climate change and people's health and
 health systems.

HORIZON EUROPE (2021-2027) PROGRAM

- The Council adopted a position at first reading with a view to the adoption of the Horizon Europe program regulation.
- The EC Commission proposes to set up 10 new European partnerships including on key digital technologies, clean hydrogen, clean aviation and air traffic management. Such partnerships could benefit from around € 10 billion of public funding.
- **UK entities are allowed to participate** to the first calls of the Horizon Europe programs.

EUROPEAN RESEARCH COUNCIL (ERC)

ERC work programme includes 3 calls for proposals for frontier research actions for a total amount of €1.9 billion, including in the field of universe and space sciences. The first calls have been launched.

LIFE PROGRAM

The EC indicated that it will earmarks €121 million for major integrated projects, which is 20% more than last year. The space sector can contribute to such projects.

SURE PROGRAM

The EC has disbursed €14 billion to 9 Member States under the SURE instrument (to preserve jobs)

EUREKA PROGRAM

- A new call has been launched for innovative projects in terms of Al clusters with June 28, 2021 as deadline
- Calls for international collaborative R&D projects are open until 2025.

EUROPEAN DEFENSE AGENCY (EDA)

The EDA and ESA are cooperating to explore technology and capability opportunities for the **next generation of secure satellite communication** (NGSSC) systems.



- Josef Aschbacher is new ESA Director.
- The Agency is starting the process of hiring astronauts for the first time in more than a decade and is hoping to attract applications from a broad range of people.
- STEM-related experts can apply until 15 June 2021 to participate to ESA's first-ever virtual teacher conference.
- ESA and Germany's DFKI institute have launched a new lab for AI research on challenges such as satellite autonomy and the interpretation of data delivered by missions.
- ESA has organized a webinar with other stakeholders to review the funding and financial instruments available for SME and midcaps over the next 3 to 7 years.



- The UK Parliament debated the future of the UK space industry. The Government and the industry ambit to capture 10% of the global space market by 2030.
- The UN and UK signed an agreement to promote space sustainability.

 The UK Space Agency developed a new tool for mapping capabilities of almost 950 organisations, involving 41,900 jobs, that are engaged in the space industry.



RESCUE PLAN

- The American Rescue Plan Act of 2021 passed the House.
- The Rescue Plan will provide small businesses with the funding they need to reopen and rebuild, with \$15 billion grants to those which are hit the hardest and \$175 billion in additional lending and investment. Small businesses's revenue is down 32% and at least 400,000 have permanently closed.

CONGRESS

- A bill, the Rise Act of 2021, to provide for additional funding for future innovations in areas such as quantum, artificial intelligence, robotics, computing, advanced wireless, and space exploration, digital agriculture, earth system observation and prediction has been introduced.
- A bill to build a clean and prosperous future by addressing the climate crisis and putting the country on the path to a net-zero greenhouse gas economy by 2050 has been introduced.
- A bill to provide bonus depreciation for certain space launch expenditures has been introduced.
- A bill to require the President to declare a national climate emergency under the National Emergencies Act and reduce global atmospheric concentrations of the 10 primary global warming pollutant oxide has been introduced.

THE WHITE HOUSE & NATIONAL SPACE COUNCIL

The President Biden has determined in a memorandum how the National Security Council system to assist the President in carrying out his responsibilities should be organized. The National Space Council may be discontinued because it is up to the National Security Council to issue national security memorandums to replace the former administration's space policy directives and the former council is not mentioned in the memorandum.

- The President Biden has issued its first strategic guidance relating to national security priorities.
 Key challenges include the global pandemic, a crushing economic downturn, a crisis of racial justice and a deepening climate emergency. Of concern are the rise of nationalism and receding democracy. China is identified as the main competitor. Proposed actions include to:
- lead with diplomacy
- forge a strong, common agenda with the EU and the UK
- promote shared norms and forge new agreements on emerging technologies, space, cyber space, climate and the environment and human rights
- build 21st century digital infrastructure, including universal and affordable high-speed internet access and secure 5G networks
- explore and use outer space to the benefit of humanity and
- ensure the safety, stability, and security of outer space activities
- The President indicated that there is a need to ensure that the country is well positioned to lead in a new era of competition such as outer space.



NASA

- On February 18, 2021, NASA's Mars 2020 Perseverance rover successfully landed on the Red Planet.
- NASA Administrator indicated that, as per NASA fiscal year 2021 budget proposal, \$25 billion will be invested, a 12% increase (one of the strongest budgets in NASA history. For the first time, there is funding to support the development of a human landing system on the Moon.

US SPACE FORCE

The Space Force is considering future investments to **prepare for the impact of climate change** and extreme weather, including in terms of satellites for weather monitoring.



JAXA and ESA have agreed upon plans for future cooperation, including on 2 future missions.



Russia and China are drafting an agreement on international lunar research station after 2030.
