

SPACE PLATFORM PROJECT NEWSLETTER

Issued: February 22, 2021

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HIGHLIGHTS

- The human, social, economic and cultural **cost of COVID-19 and related governmental measures is severe**. We risk **scaling back years of progress**. The (often unintended) **consequences of the crisis** in the form of social unrest, political fragmentation and geopolitical tensions **will shape the effectiveness of our responses to other key threats**.
- Whilst "infectious diseases" and "livelihood crises" have been identified in 2020 as the top 2 short-term world-wide risks, the top 5 global risks (by likelihood) are all related to the environment.
- Recent events have exacerbated the debate around the **role of digital platforms in our societies** and whether they bear certain **responsibilities as systemic actors**, beyond the mere role of content provider.

INTERNATIONAL-

UNITED NATIONS

- The world's largest survey of public opinion on climate change ever conducted has revealed that 64% of the world population believe climate change is a global emergency. A majority of people call for wide-ranging actions. Those in the environmentally friendly countries often want the most far-reaching climate policies. The most popular policies are: conserving forests and land (54% public support), more solar, wind and renewable power (53%), adopting climate-friendly farming techniques (52%) and investing more in green businesses and jobs (50%).
- The UN Climate Change Conference (COP26) in Glasgow November 2021 will be a crucial moment to decide whether to increase global ambition.

EU AND US

- Work is underway on setting up an extraordinary meeting between President Biden and EU leaders later this year as well as a meeting at NATO.
- President von der Leyen indicated that the EC intends proposing a framework for digital platforms and would like to invite the United States to join such initiative.
- A survey concluded that the research community is hoping for greater international cooperation in science notably on both sides of the Atlantic to address key challenges.



• The main text of the December 2020 EU and <u>China Comprehensive Agreement on Investment (CAI)</u> has been released. It contains provisions relating to investments and sustainable development, including a recognition that investments that reduce the level of protection afforded in the parties' domestic environmental laws are inappropriate. In the meantime, it firmly establishes the right of each

party to decide the appropriate levels of environmental protection. It contains sector specific provisions, including on air and space transport services (the text of the annexes has not yet been released).

The EU SME Centre has entered into a new phase to increase the presence and development of EU SMEs business activities in China.





The EU and UNDP launched a 2-year project to address urgent adaptation financing gaps in Africa, focusing on the need to enhance knowledge and evidence to scaleup climate change adaptation action in Africa.

EUROPE



RECOVERY PLANS

- As previously reported, political agreement has been reached in December 2020 to allow the European Commission (EC) to borrow up to €750 billion (subject to national/regional (retroactive) ratifications, not to occur before mid-2021). The EC indicated its intention to issue in 2021 €62.9 billion worth bonds under the following existing programmes: SURE, EFSM and MFA.
- Under NextGenerationEU, the temporary recovery instrument to support national recovery plans, 70% of € 312 billion will be paid in grants in 2021 and 2022 (the rest in 2023). These payments may occur as from Q1/2021, subject to EU Council agreement.
- The guidance document relating to the national recovery plans supports cross-border cooperation in strategic sectors such as space and defence.
- A "green" scoring system has been developed (based on OECD Rio markers system with some adaptations). Activities marked as "green-friendly" will likely receive more (public and private support) in the future.
- Since unprecedented amounts of public money are floating around, ways to refinance budgets need to be found. In addition to its "traditional" revenue (VAT, custom duties sources & contributions), the EC has introduced a new national contribution based on non-recycled plastic packaging waste, and will propose in June 2021 the following: (i) a financial transaction tax; (ii) a

financial contribution linked to the corporate sector; and (iii) a new common corporate tax base. Decisions in these areas will require unanimity.

EU COUNCIL

- The preliminary results of the ongoing study on EU Space economics and the global context, with a focus on New Space, where presented by the EC and the contractor.
- The Council envisages to draft new conclusions on the topic of **New Space for People.**

NEW EU SPACE PROGRAM/EUROPEAN PARLIAMENT (EP)

The EP will adopt without amendments (in second reading) the EU Regulation on the Space Programme (based on the text agreed upon at EU levels on December 15, 2021). This means that the Regulation will soon enter into force.

HORIZON 2020 AND EUROPE (2021-2027) PROGRAM

- Despite the official launch of the Horizon Europe program, administrative and legal steps remain to be complete by April 2021, when the first call for grant applications will be launched.
- A large number of proposals (788) has been received for the last and largest green deal December 2020 call under the Horizon 2020 program. The results will be communicated to the applicants within 5 months.

EUROPEAN DEFENCE AGENCY (EDA) & FUND

- Agreement has been reached on the setting up of the European Defense Fund (€7.9 billion envelope for 2021-2027, with between 4 to 8% for breakthrough innovation), subject to Coreper confirmation. Actions will ensure SME participation and be subject to an ethics assessment by the EC.
- In 2019, total defence expenditure by the 26 EDA Member States stood at €186 billion, marking a 5% increase on 2018, and making it the highest level ever in 15 years. However, collaborative defence spending has gone backward and R&D spending remains at 2007 levels.
- A conference on the impact of disruptive technologies on defense will be organized on April 20, 2021 in Porto, Portugal.

EU BLUE GROWTH

<u>GALATEA</u>, the blue growth accelerator, is calling for expression of interests by SME until March 31, 2021 to integrate technologies from aerospace and ICT communities to 4 key blue growth domains: smart port, smart ship, smart shipyard and maritime surveillance.

EUROPEAN INVESTMENT BANK (EIB)

The EIB and Eutelsat announced a €200 million financing agreement to back investments related to the satellite advanced broadband services in Europe and neighboring areas.

EUROPEAN INNOVATION COUNCIL (EIC)

- The European Commission (EC) has preselected 37 companies to receive funding to develop and scale up ground-breaking innovations in Europe (4200 applications were received, the highest number ever). A number of space-related entities have been pre-selected for projects relating to launch vehicles, electric propulsion and space laser communications to satellites.
- The EIC could be granting € 602 million to startups and € 507 million for targeted calls addressing specific areas of research in the next 11 months. However, no space-specific activities are listed in the draft 2021 program document (apart from the EIC Horizon Prize for Low-Cost Space Launch, due to be awarded in 2021).

EUROSTARS

Applications for R&D innovative projects funded under the <u>Eurostars</u> program can be **filed** until February 4, 2021.



- Jan Wörner announced that he will resign at the end of February to allow the incoming director general, Josef Aschbacher, to take over on March 1, 2021.
- ESA signed a contract for the construction of 3 more European service modules for Orion, NASA's spacecraft that will fly astronauts to the Moon and lunar Gateway as part of the Artemis programme.
- An invitation to tender to develop space ressourcesrelated projects (€200K to each winning team) will

- be launched on April 19, and a related webinar will be held on April 14, 2021.
- Young graduates with a Master can apply now to work on inspiring space missions (until March 1, 2021).
- ESA and the <u>DFKI</u> are establishing a tech transfer lab located on the premises of DFKI in Kaiserslautern, Germany.
- A partnership project uses laser technology to reduce the time for sending information from low-Earth orbiting spacecraft to Earth.
- European space and non-space companies can apply to get involved in the modernisation of Europe's Spaceport in Kourou, French Guiana (€140 million budget until 2024)
- An overview of the financing instruments that space entities are eligible for will be organized on February 11, 2021.
- The EMITS system, the primary point of contact between economic operators and ESA for many years, will be replaced by esa-star publication, which has new tools to better interact and communicate, and a tool to better coordinate (R&D) activities (called esa-star ECM).
- **ESA match module** is the Agency's new matchmaking platform to showcase, find partners and establish business relationships.
- A <u>report</u> shows how satellite applications have supported sustainable development during these last 10 years.



As part of its national recovery plans (see previous newsletters), the French government has announced plans of more than €500 million to support the space sector (including € 365 million in terms of new loans). The CNES will lead the implementation of the space plans, which will be also monitored by a steering committee made up of several other public bodies. The plans ambit to cover all needs of the space sector (including for "dual-use technologies), focusing on SME and mid-caps' needs, with calls for tenders and for projects to be launched in Q1/2021 in priority areas such as (i) optical communications, (ii) flexible telecommunications satellites, (iii) ground segment satellite virtualization, (iv) terminals for telecommunications and (v) data economy.



CONGRESS

The **Space Research Innovation Act was introduced**, directing NASA to (i) establish a university-affiliated research center to facilitate NASA capabilities and (ii) use the research center to fund analyses and engineering support related to cis-lunar and deep-space missions and interplanetary research.

THE WHITE HOUSE & NATIONAL SPACE COUNCIL

- The President Biden has decided for the United States to re-join the Paris Agreement on climate change.
- There are indications that the Biden administration would continue the Artemis program, but not necessarily the 2024 goal and the human landing efforts remain underfunded.
- There are ongoing discussions as to whether Russia and China could participate to the \$10 million traffic management (STM) pilot program. A possible approach could be to keep the civilian/commercial and military aspects of STM programs separate.
- There are growing speculations to the Biden administration will put greater resources into Earth science programs at NASA and NOAA, as part of a broader emphasis on climate change.
- Following the December 2020 release of the <u>space</u> <u>nuclear power strategy</u> (see previous newsletter), the White House issued an order to <u>promote</u> <u>development of space and defense nuclear power systems</u>.



- NASA and the Government of Japan have finalized an agreement for the lunar Gateway.
- NASA and the NSF have signed a memorandum of understanding affirming the agencies' intent to continue their longstanding partnership and pursue new collaborations. The MOU does not contain specific provisions relating to support measures for small business.
- NASA and the FAA signed a new memorandum of understanding reaffirming the agencies' longstanding relationship to foster robust American commercial space transportation capabilities, including commercial crew and cargo activities.
- NASA selected university teams to develop ways to deal with Moon dust.

US SPACE FORCE

- **Huntsville**, Alabama, was selected as preferred location to **host USSPACECOM**.
- There does not seem to be plans to revisit the decision to establish the Space Force.



China encourages international cooperation on lunar sample study.

JAXA ***

JAXA will host a **programming competition involving free-flying robots** of JAXA and NASA in ISS and is calling for team participation.

- 4