



European Space Policy Institute

Questions raised by the Covid-19 crisis for the European space sector

1. Space put to use for crisis monitoring and management

As the number of Covid-19 cases continues to dramatically increase worldwide, an unprecedented economic crisis is also emerging as an inevitable outcome of the pandemic and lockdown measures taken by governments. According to the latest World Economic Outlook of the IMF, the real GDP (i.e. inflation-corrected GDP) is expected to decrease by at least 3% in the World in 2020 and by 7.7% in the Euro area according to economic forecasts of the European Union.

Various space-based solutions have been used to monitor the crisis and will continue to provide insights to assess its outcome. Space capabilities were also put to use to support crisis management and enable some innovative countermeasures. In an official message, the President of the European Commission Ursula Von der Leyen referred to the contributions of Copernicus for the monitoring of the impact on traffic at European borders; the EC has also developed the app “Galileo for Green Lane” together with the GSA, to facilitate freight traffic – with two interfaces for border control authorities and drivers. In April, Italy activated the Copernicus Emergency Management Service (EMS) and its Rapid Mapping service, to provide public authorities with almost real-time critical data to enable informed and immediate decision-making. ESA also announced a joint initiative with EC-NASA-JAXA to cooperate on space data for the management of the crisis, monitoring climate effects and economic activities. Other outstanding initiatives and contributions from space systems were reported in the latest [ESPI Insights Issue 5](#).

Continually delivering a “big picture” of the crisis through information gathering, space assets have confirmed to be a significant support for public action in times of crisis. Furthermore, space solutions are expected to play a role in the economic reboot and to support epidemiologic research.

2. Impacts of the crisis on the European space sector

The space sector is also impacted by the effects of the pandemic. In the aftermath of the 2008 financial crisis, the space sector proved to be quite resilient and dynamic. However, the different nature of the Covid-19 crisis may point to different outcomes. The global lockdown forced the adoption of measures that negatively impacted the space sector, despite being often considered strategic/essential. Restrictions, containment measures, shutdowns and disruptions in supply chains have seriously affected public and private stakeholders, resulting in programme delays and crunch of commercial activity in many markets.

For instance: Airbus had to comply with the emergency measures, temporarily closing most of its activities in Spain and France; the Guyana Space Centre was shut down for two months and only resumed operations on May 11th; ESA and Roscosmos announced the postponement of the ExoMars 2020 mission to the late summer of 2022, referring to difficulties in completing tests exacerbated by the Covid-19 crisis; ESA had to reduce the workforce at its facilities and briefly stopped operations and data gathering on four scientific missions... These are only a few examples of how the European space sector was directly impacted by the crisis.

Despite the outstanding reactivity of ESA and national space agencies to [take measures](#) to tackle the crisis, there is serious cause for concern for the European space sector at large. In a letter to

Commissioner Thierry Breton, seven EU parliamentarians estimated that the European space industry could see its turnover decrease by €1 Billion in 2020 (i.e. about 12% of 2018 industry turnover). Beyond the fact that Europe has long been the epicentre of the pandemic, the European space industry may also be more vulnerable than its competitors due to its “over-exposure to commercial and export markets, and dependence situations associated to low security of supply”, as Eurospace recalled in a recent [position paper](#).

3. Consequences of the crisis for public strategy and space policy

In Europe, the space sector employs, directly and indirectly, over 230,000 people (*source: EC*) including approx. 45,000 in the manufacturing industry (*source: Eurospace*). The sector relies on a global supply chain – highly dependent on commercial markets, with a strong participation of SMEs. The importance of space assets for Europe has been recalled at various occasions and space will remain essential for the implementation of public action and a pillar for European flagship policies and strategic autonomy.

A cut in European space budgets, for example under the next Multiannual Financial Framework 2021-2027, would seriously jeopardise the highly capable and competitive industrial base that Europe has successfully established after decades of public investments. In turn, this would put at risk Europe’s capacity to ensure the continuity and evolution of its space programmes and assets that are unanimously praised for their relevance and invaluable contributions in the current context.

The Covid-19 crisis raises a number of questions concerning the public support to the space sector, in terms of instruments and policies to adapt to and cope with this unprecedented situation:

- On the short-term, the major challenge is to ensure the continuity of business plans, which can be favoured by:
 - adopting a flexible approach to contracts and procurement processes but also optimising the industrial supply chains in coordination with stakeholders;
 - avoiding negative spill-overs on space from other businesses severely affected by the crisis, such as aviation;
 - setting up immediate measures against liquidity crunch to sustain stability and growth.
- On the longer-term, the lessons learnt from the current crisis might trigger some fundamental changes in the principles that shape the European public acquisition policies in order to:
 - give shape to a technological and industrial policy with a stronger focus on strategic autonomy and commercial vision;
 - rethink accordingly the supply chains and the associated procurement processes as well as the investment, innovation and export policies;
 - emphasise the role of space diplomacy to better promote European capabilities and know-how.

The critical role of public actors to facilitate the transition from a scattered demand to an adjusted offer was highlighted after the 2008 financial crisis. Handling the Covid-19 crisis will require a tailored and concerted action from public stakeholders. To be effective and improve Europe’s resilience in future crises, it may also entail to reconsider some aspects of the European approach to space. Raising important questions about European priorities and ambitions in the space sector and putting topics such as industrial policy and space diplomacy under the spotlight, the ultimate outcome of the Covid-19 crisis could very well be an acceleration of long-standing European space policy debates.

Available for download from the ESPI website:

www.espi.or.at

Short title: “ESPI Briefs” No. 41
Published in: May 2020

Editor and publisher:
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Schwarzenbergplatz 6 • A-1030 Vienna • Austria
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