

Ukrainian Space Industry Can Give ESA's Initiatives a Strong Scientific Boost

Space entrepreneur Max Polyakov believes Ukraine has strong scientific and human potential to become a major contributor to ESA's current initiatives

Picture 1 of Ukrainian Space Industry Can Give ESA's Initiatives a Strong Scientific Boost

At the end of the 20th century, Ukraine was one of the top space countries worldwide — all thanks to its enormous scientific and technological base. The Ukrainian space industry indeed experienced a short period of decline, but today, thanks to the effort of investors and space visionaries like Max Polyakov, the country is back in the space game. In fact, Dr. Max Polyakov believes that Ukraine has great potential and plenty of innovative companies that can soon become major ESA contributors. Over 30 new aerospace companies have been founded in the last decade alone, while the total number of qualified space experts employed in Ukraine exceeds 16,000. In addition to that, around five thousand students graduate with STEM engineering degrees every year.

Recently, ESA has been actively involved in collaborating with promising startups and SMEs, which has already resulted in plenty of innovative, game-changing products. Collaboration with the ESA is not limited to member states alone, as plenty of programs and workshops are available to Associated and Collaborating States. Ukraine, currently paying a very high price for its loyalty to European values and projects, is one of those states that can become prized ESA contributors.

Which Ukrainian Companies Can Conquer the European Space Market?

The most promising companies in the Ukrainian space industry are either startups or SMEs, so the market situation in Ukraine is not that different from the European space segment. According to the ESA official page, about a third of all agency's business participants between 2013 and 2017 belonged to this category. Even now, ESA engages over 2,700 SMEs through its Industry Portal. Most companies come from the ESA Member States, but some are registered in associated countries.

Ukraine has quite a few enterprises that could potentially engage in these programs, even though the competition is high. Still, Ukraine has a whole new range of businesses that offer various technology solutions — from rocket engines and propulsion systems to Mars and lunar rovers. Potentially, some of these companies can become prized contributors to ESA's initiatives because Ukraine's R&D base has always been strong.

Several innovative businesses that can potentially contribute to the ESA missions were either founded or sponsored by Ukrainian space entrepreneur and investor Maxym Polyakov. For example, his EOS Data Analytics (EOSDA) has been providing high-quality satellite imagery since 2015. Today, its primary clients come from various commercial industries, including agriculture, mining, construction, fishery, and forestry.

EOSDA's main focus is to ensure sustainable use of space technologies to replenish and potentially enrich resources back on Earth.

Another project Max Polyakov invested in, Flight Control Propulsion, manufactures technologies related to space flight. Its product range includes liquid rocket engines, pumps, valves, and other flight control systems. Flight Control makes full use of cutting-edge equipment and additive technologies to offer its clients the best rocket component parts at reasonable prices.

Another notable Ukrainian project in Dr. Max Polyakov's investment portfolio is Space Electric Thruster Systems (SETS), established in 2016. In a few years of operation, SETS has already won the Seal of Excellence award and entered into agreements with such prominent satellite providers as Ariane Group, Thales Alenia Space, Airbus, OHB, and others. This is not surprising considering that SETS manufactures top-notch propulsion systems for satellite orbiting and orientation. This includes orbit adjustment and de-orbiting spent satellites to prevent more space junk from accumulating in our orbits.

These are only some examples of new Ukrainian players that can become valuable contributors to ESA's initiatives. As Max Polyakov's Noosphere Ventures investment fund summarizes in its recent report, the primary benefit of the Ukrainian space industry is its highly-motivated and experienced workforce, which is also highly cost-effective. This, along with other factors, gives Ukrainian companies a good chance to compete with the European players.

Scientific Infrastructure Backing Up Ukrainian Human Talent

Ukrainians have already participated in several European space projects, helping to resolve many challenging problems. Thanks to its strong scientific and technical base, Ukraine has always been a top industry player, and its space potential has been growing steadily as of late.

In the last few years, ESA has been paying close attention to education, organizing plenty of programs for students. While most initiatives targeted Ph.D. candidates, the agency also engaged in several educational workshops for the youngest primary school students. The end game is to inspire and prepare a new generation of engineers who would be able to solve any challenges that come their way, no matter if they work in the space sector or any other industry.

In Ukraine, Max Polyakov is investing in a very similar infrastructure, organizing workshops, seminars, and sponsoring scholarships for Ukrainian teens. To date, over 50 thousand Ukrainians have attended these events, and each year, the non-profit organization Noosphere Association chooses competition winners and allocates grants.

Now, when Ukraine is fighting against Russian aggression, the support from European colleagues is more important than ever. That is why ESA should engage Ukraine in more of its missions, especially considering that this collaboration is mutually beneficial.

You finished reading the article "**Ukrainian Space Industry Can Give ESA's Initiatives a Strong Scientific Boost**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.