State Aid: Commission approves €377 million of French and German aid to develop innovative Airbus X6 helicopter

Commissioner Margrethe **Vestager**, in charge of competition policy, said: "The French and German support will stimulate considerable private investment in this project. The support will help bring a new generation of innovative heavy helicopters to the market, without causing undue distortions of competition."

Both France and Germany will provide public support for the development of Airbus' X6 helicopter project. The support will amount to a total of \in 377 million in repayable advances granted over a period of eight years (\in 330 million by France and \in 47.25 million by Germany).

For the X6 helicopter project, Airbus will undertake significant research, development and innovation to develop an innovative and high-technology civil heavy duty helicopter. In particular, the twin-engine X6 helicopter will have a higher range of action, coupled with improved fuel efficiency, as compared to the current generation of helicopters. It aims to simplify access to platforms in the high seas, and also facilitate search and rescue, as well as humanitarian missions. The project is fully in line with the objectives set by the Europe 2020 flagship initiative for an Innovation Union.

The scope of the X6 helicopter project is such that the associated risks are high and the investments required exceed the self-financing capability of Airbus. The financial markets are also reluctant to finance such an ambitious research and development project for which a return on investment is only expected over a long period.

The Commission assessed the measures under Article 107(3)(c) of the Treaty on the Functioning of the European Union (TFEU), which allows state aid to facilitate the development of certain economic activities, where such aid does not adversely affect trading conditions to an extent that is contrary to the common interest.

The Commission found that:

- support for this project is likely to continue to stimulate further investment in a market that is expected to grow in the next decade, and where competitors continue to invest in order to bring new products to the market.
- the significant exposure of the X6 helicopter project to systemic and atypical risks, due to its high ambition in terms of breakthrough research and innovation, as well as the magnitude of the initial investment necessary to start the project, make self-financing in the

absence of public support very unlikely.

On this basis, the Commission concluded that the French and German measures are in line with EU state aid rules, as they will significantly contribute to research and innovation in the EU without unduly distorting competition in the Single Market.

Background

The European Commission adopted in $\underline{\text{May 2014}}$ state aid rules to facilitate the granting of aid measures by Member States in support of research, development and innovation (R&D&I) activities.

As a result of state aid in this field, companies allocate higher budgets to R&D&I and carry out a more ambitious range of research activities. At the same time, the public money invested in line with the rules supplements and does not replace ("crowd out") private investment in R&D&I. By increasing (rather than replacing) private investment, new and otherwise unrealised innovative projects can be carried out in Europe. Thus, state aid rules relating to investment in R&D&I help to build and maintain the foundations of a competitive European economy.

The non-confidential version of this decision will be made available under the cases numbers SA.45183 and SA.45185 in the <u>State Aid Register</u> on the <u>DG Competition</u> website, once any confidentiality issues have been resolved. The electronic newsletter <u>"State aid Weekly e-News"</u> lists the most recent state aid decisions published in the Official Journal and on the website.

Staatliche Beihilfen: Kommission gibt grünes Licht für deutsch-französische Beihilfen von 377 Mio. EUR für Entwicklung des innovativen Hubschraubers Airbus X6

The Council agreed its stance on part of a package of proposals aimed at reducing risk in the banking industry. The Council closed excessive deficit procedures for Croatia and Portugal, confirming their deficits have dropped below the EU's 3% of GDP reference value.

China's two supercomputers still world's fastest



China's Sunway TaihuLight [File Photo]

China's Sunway TaihuLight and Tianhe-2 are still the world's fastest and second fastest machines, but America's Titan was squeezed into fourth place by an upgraded Swiss system, according to the latest edition of the semiannual TOP500 list of supercomputers released Monday.

China's homegrown supercomputers

Sunway TaihuLight, described by the TOP500 list as "far and away the most powerful number-cruncher on the planet," maintained the lead since last June, when it dethroned Tianhe-2, the former champion for the previous three consecutive years.

It means that a Chinese supercomputer has topped the rankings maintained by researchers in the United States and Germany for nine times in a row.

What's more, Sunway TaihuLight, with a performance of 93 petaflops, was built entirely using processors designed and made in China.

"It highlights China's ability to conduct independent research in the supercomputing field," Haohuan Fu, deputy director of the National Supercomputing Center, where Sunway TaihuLight was installed, told Xinhua.

"China is simultaneously developing hardware and software technologies of supercomputers," Fu said. "It is expected that rapid development in homegrown

hardware technologies, supported by homegrown software, will lead to a stronger research and engineering test capacity in many fields, thus promoting an industrial upgrading and, eventually, a sustainable development of China's homegrown supercomputing industry."

Tianhe-2, capable of performing 33.9 petaflops, was based on Intel chips, something banned by the U.S. government from selling to four supercomputing institutions in China since 2015.

Swiss system "really a surprise"

In the latest rankings, the new number three supercomputer is the upgraded Piz Daint, a system installed at the Swiss National Supercomputing Center.

Its current performance of 19.6 petaflops pushed Titan, a machine installed at the U.S. Oak Ridge National Laboratory, into fourth place. Titan's performance of 17.6 petaflops has remained constant since it was installed in 2012.

"This is the second time in the 24-year history of the TOP500 list that the United States has failed to secure any of the top three positions," the TOP500 organizers said in a statement.

The only other time this occurred was in November 1996, when three Japanese systems captured the top three spots.

"Nevertheless, the U.S. still claims five of the top 10 supercomputers, which is more than any other nation," they said.

Fu called the upgraded Swiss system "really a surprise," saying that "it reflects the increased investment in large-scale supercomputers in Europe."

America's strong strength

"Although the U.S. dropped out of the top three, it still has strong strength in high performance computing," Fu told Xinhua. "If everything goes well, we could see two U.S. systems with a performance of 200 to 300 petaflops in the next rankings at the end of the year."

Just days before the TOP500 announcement, the U.S. Department of Energy said it has awarded AMD, Cray, HP Enterprise, IBM, Intel and NVIDIA a total of 258 million U.S. dollars in funding to accelerate the development of next-generation supercomputers.

"Continued U.S. leadership in high performance computing is essential to our security, prosperity, and economic competitiveness as a nation," U.S. Secretary of Energy Rick Perry said in a recent statement.

The immediate goal of the United States is to develop at least one exascale-capable system by 2021, which will be at least 10 times faster than China's Sunway TaihuLight.

"Global competition for this technological dominance is fierce," the U.S.

Department of Energy asserted. "However, the U.S. retains global leadership in the actual application of high performance computing to national security, industry, and science."

In addition, the latest list showed that the United States leads the pack in the total number of TOP500 systems, with 169, while China is a close second with 160. Both countries lost share compared to six months ago, when they each claimed 171 systems.

Besides the United States and China, the most well-represented countries on the list are Japan, with 33 supercomputers, Germany, with 28, France, with 18, and Britain, with 17.

Overall, aggregate performance on the TOP500 rose to 749 petaflops, a 32 percent jump from a year ago.

Such an increase, though, is well below the list's historical growth rate of about 185 percent per year, said the organizers.

"The slower growth in list performance is a trend that began in 2013, and has shown no signs of reversal," they said.

When it comes to companies making these systems, the U.S.-based Hewlett-Packard Enterprise claims the number one spot with 143 supercomputers. China's Lenovo is the second most popular vendor, with 88 systems, and Cray is in third place, with 57.

There are three other Chinese companies in the vendor list: Sugon (No. 4 with 44 systems), Inspur (No. 6 with 20 systems) and Huawei (No. 7 with 19 systems).

The Top500 list is considered one of the most authoritative rankings of the world's supercomputers. It is compiled on the basis of the machines' performance on the Linpack benchmark by experts from the United States and Germany.

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<u>Roseangle temporary closure - 204 bus</u> service



Further to the <u>Temporary Traffic Order</u>

for a temporary road closure from tomorrow in Roseangle to properly restore the setted road surface following temporary repairs, I asked the City Council if special arrangements to ensure the <u>204 bus</u> can run along most of its route [as was done during the last temporary closure] could be undertaken again.

The Transport Controller in the council's Sustainable Transport Team advised me as follows:

"The same diversion will be in place for this closure as the last.

Travelling towards Ninewells, service 204 will omit Rosenangle, Magdalen Yard Road and Windsor Street.

Travelling towards city centre, service 204 will serve Windsor Street and Magdalen Yard Road by using the Riverside Approach junction to turn, before travelling back up Windsor Street and then east along Perth Road to the city centre.

This allows passengers to board the 204, travel to the city centre and then stay on the bus to take them to Ninewells.

Although this increases passengers journey time it means they do not have to walk uphill to Perth Road to catch a bus travelling towards Ninewells."