

UK explores TV transmitter option to track aircraft

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Credit: Magnus Rosendahl, Public-domain-photos.com

(Phys.org)—UK's Technology Strategy Board, a government agency looking for innovative ways of using technology, is funding research into a new way of locating and tracking aircraft. The research project is calling upon Thales, which is to explore the use of TV signals to locate and track aircraft. The project could possibly bear impact on the future of air traffic control, as an improvement to current airport radar systems. The Thales effort is a two-year project to investigate how the current system can be overhauled.

"Multi-static primary surveillance radar," as the concept is known, involves harnessing television transmitters all around the UK. According to *Airport International*, the [air traffic control](#) plan in mind would harness this transmission infrastructure in England, Scotland, Wales and

Northern Ireland. Signals would be sent to each transmitter but the receipt times would vary, and the differences between signals broadcast and signals received could determine the location of an aircraft.

According to the BBC, Thales sees one advantage in drawing upon the large number of TV transmitters as providing a more reliable infrastructure than the current one. The other benefit of having an [air traffic](#) control system based on [TV signals](#) would involve spectrum: The spectrum used by airport traffic control services could be reallocated. Those who would benefit would be next-generation mobile service groups. This translates into more spectrum to accommodate 5G [mobile phone technology](#).

Last year, it was made known that, minding the need for more mobile spectrum in a [post-4G environment](#), Ofcom, the UK telecoms regulator, was looking to avert the risk of a capacity crunch in mobile data. The concern was that, as people consume more bandwidth on mobile devices, attention had to focus on how the [mobile infrastructure](#) in the UK can continue to support growth in consumer demand. Ofcom has reckoned that, by 2030, demand for mobile data could be 80 times higher than today. At the time, they said that an estimated 20 million Gigabytes of data was consumed per month over mobile networks in the UK, a dramatic increase from the monthly consumption rate in the previous year.

As for the current radar project, Thales Air Traffic Management chief John Smith commenting to the BBC, said, "We have to prove, first and foremost, that it is safe."

More information: www.bbc.co.uk/news/technology-21373771

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