



## **Radar technology: Project PaBiRa – a study with potential**

**armasuisse S+T has currently set up a study to investigate the potential and future development of a new radar technology. This will allow an estimate of its potential to be made for the next 10 years. Potential which also, however, poses risks. The knowledge gained has closed existing gaps, something that is of great importance for making sound assessments of passive and bistatic radar systems.**

Project PaBiRa (passive/bistatic radar system) sounds at first like an exotic sort of parrot, yet only in the widest possible sense does it have anything to do with the capability displayed by bats, for example, when they locate their prey in flight. Most drivers become familiar with radar when that unwelcome souvenir photo arrives in the post a few weeks later together with a paying-in slip. When it comes to monitoring airspace, radar is essential for ensuring both military and civil aviation safety. Experiments and simulations undertaken so far have shown that several passive radar sensors need to be employed in order to achieve wide-area coverage. As part of Project PaBiRa, S+T has developed several passive radar simulation tools which, in conjunction with measurements carried out and the resultant measurement data, has allowed an effective skills base to be built up. Classically, a passive radar's potential increases if several, or ideally all, the available sites are used. Comprehensive knowledge has been gained from experiments with a view to achieving long-term, seamless airspace monitoring, for example in Dübendorf.

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