

CASE STUDY:

UK Space Agency – European Space Agency Space Science Programme

The European Space Agency Space Science Programme conducts frontier space research, but how is this contributing to UK industrial competitiveness? Winning Moves evaluated the impacts of the programme.

The challenge

The mandatory European Space Agency (ESA) Space Science Programme (SSP), designed to undertake frontier scientific research concerning the Solar System, our Sun and the Universe beyond, is simultaneously charged with stimulating competitive industrial capability. UK industry secures ESA contracts to provide mission spacecraft platforms, support mission operations and develop major subsystems and subassemblies. UK Space Agency (UKSA) provides national grant funding to academic and industrial space groups and national laboratories working in support of these contracts. UKSA commissioned Winning Moves to understand the impacts and benefits resulting from the Space Science Programme and its' impacts as well as to inform future level of involvement in the ESA Space Science Programme.

**The approach**

Seven missions funded since 2000 and covering an estimated £523.2 million of funding were selected for the evaluation and, following a desk based review of information provided by UKSA, data was obtained from 19 organisations. A semi-structured discussion was undertaken with key respondents to explain the project, for them to explain their organisation's involvement in the missions and to identify other, suitable respondents to approach. Following this, a spreadsheet of key potential benefits of the Space Science Programme was shared with respondents to be completed prior to undertaking a face-to-face interview. These, and further semi structured interviews, were used to discuss the data and gather insight into the benefits achieved for respondents and how the Space Science Programme had contributed to these benefits.



CASE STUDY:**The result**

The programme has a range of benefits. For industry, the benefits include the creation and safeguarding of employment; further sales and contracts; development of IP, knowledge transfer and spin out activity; productivity gains; creation or improvement of facilities; internal investment; reputational benefits; and new or strengthened collaborations. For academia, the programme delivers the opportunity for high level science at senior, research fellow and PhD levels.

In particular, the programme delivers large employment benefits. Nearly 1,000 person years of employment were reported to have been created for SSP contracts and over 9,000 person years of employment were reported to have been safeguarded. The programme is important to companies in developing their capabilities and skills and establishing their credibility to deliver space science.

Technology developed through this programme has been used in some very high value commercial activity which has contributed to nearly £2.5 million of additional income for organisations participating in the programme.

Other benefits included productivity gains, improved facilities, IP, knowledge transfer and boosted reputation. [Our full report has been published.](#)

