

# **Export controls on academic research**

These case studies aim to help academics and postgraduate researchers understand when and if their work may need a licence to comply with export control legislation.

These case studies illustrate the principles involved in export controls. They are not an authoritative interpretation of the legislation.

## **Overseas students studying in the UK**

### **Case study scenario**

Several students from a Middle Eastern country would like to study medical science, including core subjects such as microbiology or toxicology, in the UK.

The core elements of the course are capable of misuse in a chemical and biological weapons programme.

### **Legislation that applies**

Article 10 of the [2008 Export Control Order](#) applies to teaching in the UK.

### **When an export licence is needed**

The subject matter of a medical science degree course is likely to be in the 'public domain'. Therefore the transfer of such 'technology' would be exempt from these controls. Article 10 does not apply. The course tutor need not seek an export licence.

A licence may be required if the students undertake more advanced research projects or practical study of pathogens or toxins. This is when using information or data not normally in the public domain.

A tutor must apply for an export licence on becoming aware or informed that the 'technology' being taught is intended for 'WMD purposes'. Generalised concerns about weapons of mass destruction (WMD) programmes is not normally sufficient justification.

Practical research in areas such as virology, bacteriology and toxicology fall under strict regulatory requirements in addition to export controls, such as:

## **Overseas students studying in and outside the UK**

## Case study scenario

Two postgraduate students from South Asia wish to study on advance postgraduate programmes on the design and development of satellites.

One plans to attend full-time at a university in the UK. The other wants to study based on a split-site programme, part-time at the UK university and part-time with an institution in their home country.

## Legislation that applies

Technology for the development and production of spacecraft is normally controlled under the relevant entry in the [Dual-Use List](#) (Category 9, Aerospace).

Face-to-face teaching of the student in the UK falls under the controls in Article 10 of the [2008 Export Control Order](#) (transferring 'technology' within the UK).

## When an export licence is needed

Course tutors must apply for dual-use export licences to transfer course notes containing information not already in the 'public domain', outside the UK. This applies for both course notes that are physically exported or transferred electronically.

Technology for the development, production or use of satellites specially designed or modified for military use, falls under the [UK Military List](#). Any electronic transfer to any destination is licensable.

A licence is only required for face-to-face teaching when the tutor is aware or informed that either student intends to put their teaching to 'WMD purposes'.

The course tutor must get an export licence for online teaching of the student undertaking the split-site study when it involves the electronic transfer of teaching material. This is unless that information is already 'in the public domain'.

Export licence approval is required for the transfer of 'technology', including by intangible methods such as:

- electronically via email
- file downloads
- video conferencing
- virtual learning environments
- telephone conversations

## International collaborative research projects

## **Case study scenario**

A researcher at a UK university wishes to enter a collaborative commercial research project with the research division of an aerospace company based in an East Asian country. The project will investigate the surface electrical properties of a specific material when stimulated to low-energy microwave radiation.

## **Legislation that applies**

On initial consideration the research topic as described does not fit with anything listed under export controls.

## **When an export licence is needed**

Given the nature of the non-UK party it would be advisable to investigate the types of activities they are involved in more generally. If the company for example was involved in defence, then consideration should be given to the potential military application of any research.

In this case the 'surface electrical properties of a specific material when stimulated to low-energy microwave radiation' is a somewhat technical way to describe radar stealth material, which has clear military applications.

Whilst the 'technology' in this case may not be 'specially designed' for military use, and therefore not listed on the UK Military List, the [Dual-Use List](#) also controls certain 'stealth materials'. This means that an export licence may be required to transfer any 'technology' as a dual-use listed item.

The exemption for 'basic scientific research' does not apply as the:

- research involves a commercial party
- intended outcome of the research appears to be applied

The 'public domain' exclusion does not apply if the commercial research is not published.

With this example, even if the 'technology' was not normally controlled, then the 'WMD End-Use' control could apply as stealth materials can have application in relation to WMD means of delivery.

## **Further guidance on how export controls apply to academic research**