Guidance on export control in informal or unfunded research activities

The University of Cambridge is committed to complying with export control in all its research activities. For funded research projects the University Research Office will provide direct due diligence and export control support as part of the grant application and post-award process. Where research activities are informal or unfunded the responsibility for ensuring that appropriate due diligence is undertaken falls to the Principal Investigator (PI) of the project.

This guidance is designed to support PIs in understanding their responsibilities and to establish when and how to undertake due diligence on informal or unfunded research activities. It provides an overview of PI responsibilities, provides examples of when export might occur in such activities. Appendix 1 provides more detailed case studies to illustrate how this can apply in practice.

General Awareness and Responsibility

It is the responsibility of Principal Investigators (PIs) in scientific and technology disciplines to be aware whether export controls have the potential to apply to research within their research group. A recommended process for assessment of export control risk is provided in Appendix 1 of the Export Control Procedure and Guidance. Where a PI has established that export control may apply to their work they must familiarise themselves with the University's Export Control page and the Procedure and Guidance.

PIs who have identified that export control may apply to their work must undertake export control due diligence and classification:

a) At the outset of a new activity that has the potential to include the export of physical, electronic or verbal items outside of the UK, or the transfer of items within the UK for use in a WMD programme outside the UK.
b) When major changes are made to an ongoing research project or collaboration that increases the likelihood of an export or changes the type of goods, software or technology that could be exported.
c) At the point that a decision is made to export goods, software or technology outside the UK (or to transfers within the UK for use in a WMD programme outside the UK including through teaching).

These requirements apply to both funded and unfunded or informal research activities. Details of how to undertake export control due diligence and classification can be found in:

a) The University's Export Control Procedure and Guidance; and
b) The University's Export Control Classification Guidance

Where a researcher identifies that export control might apply, they must ensure that no export is undertaken without a licence or formal confirmation that no licence is required. Failure to obtain a licence or observe the terms of a licence can be a criminal offence for which the primary liability lies with the responsible researcher. To apply for a licence contact researchgovernance@admin.cam.ac.uk providing a completed export control enquiry form.

How can exports occur in unfunded or informal research?

PIs need to be aware that a variety of activities undertaken as part of everyday formal and informal research activities have the potential to constitute an export under export control legislation and so would trigger the requirement to undertake due diligence and classification.

Examples of such activities include:

a) Physical exports of goods: a piece of controlled equipment is sent to an overseas facility as a permanent export or temporarily exported for an upgrade or repair, including to the original manufacturer or vendor.
b) Electronic transfer: controlled technology (i.e. data on relevant to the development of controlled items) is sent to a collaborator abroad as part of working on a manuscript or controlled software is made available following a request from an ex-PhD student who is now based overseas via access to a University shared server or a cloud server.
c) Travel: controlled technology is taken abroad on (e.g. on a laptop, other device or on paper) when visiting a collaborator, going on holiday or attending a conference.
d) Remote data sharing: controlled data is shared as part of remote teaching, a video conference or via telephone.
e) Military end use: you become aware that an overseas collaborator is a military end user in an arms embargoed country. This creates the potential for a licence requirement for any applied research export.
f) WMD end use: you suspect that an overseas collaborator is a WMD end user. This creates the potential for a licence requirement for any export.
g) Technical assistance: supporting the development, production or use of items intended for a military or WMD end use, for example by advising an overseas research team on the development of a new piece of equipment that will be used for a military purpose.
h) WMD transfer: in the very unlikely event that you have been informed or suspect that the someone you are providing something to intends to use it within a Weapons of Mass Destruction (WMD) programme outside of the UK this creates the potential for a licence requirement.

NOTE: If you plan to export goods, software or technology that originate from the US, your activities may be subject to US Export Controls. Researchers working with such items need to be aware of their control status and comply with US export control regulations, which are extraterritorial, They are advised to consult the University's US Export Control guidance page for further advice in advance of re-exporting overseas or sharing technology, goods or software from the US with certain foreign nationals based in the UK, including within your research team.

Appendix 1: Case Studies

Below are a set of indicative case studies of informal or unfunded research and collaboration scenarios, the reasons they may trigger export control licencing requirements, and what to consider in each case. This is not an exhaustive list, and not all these scenarios will apply to you, but are illustrative of ways in which the requirement for export control consideration and potential licencing may manifest where you may not expect them to.

Example 1 – Student/graduate funding opportunity

You are an Engineering researcher supervising a PhD student whose research has significant commercial potential. The student is approached by a regional representative of an arms embargoed government to enter a competition for their research to be commercialised in their region. The outcome of the competition will be funding for their proposed research if selected.

As a PI and supervisor, you should consider the following:

- This is a good opportunity for your student, but they should be advised to consider intellectual property, export controls, and trade secrets.
- If the student enters this competition, or gives details of the project to check eligibility, they risk sharing intellectual property (IP) that is not their own. As PI, you will need to consider and define who owns the IP of which part of the project, and if there are any parts of the project that the student owns themselves.
- Does the work contain anything that would be considered a trade secret[1] or that has commercial sensitivity?
- Does the research, item (e.g. prototype), technology (including data, knowledge, blueprints, etc), or software, as applicable, have any dual-use, military, or WMD applications (this is not solely in relation to the intended end-use of your research, but any potential use or contribution to the creation, use, or control of dual-use, military, or WMD end-use items, [tools for suppression/subjugation/surveillance], or subject to any controls listed in the UK Control List)? If so, it is likely that an export control licence may be required and an export control enquiry form should be completed and submitted to the Research Governance Team.
- Undertake due diligence on the competition and those involved, if you identify any red flags (in particular military connections) approach the Research Governance Team for advice. If you are unsure seek advice.

Example 2: A graduate or postdoc becomes an international collaborator.

A PhD student that you supervised has graduated and accepted a position in an institution in their home country. Their research was in an area relevant to export controls, although these did not apply to everything they did. They have been recruited by a group working on a topic similar to that of their PhD, undertaken in your team. You are happy for the work to continue and

[1] Any information, document, or other article that is not generally known or readily available to experts in the relevant field. It must possess actual or potential industrial, economic, or commercial value that would be negatively impacted if it became public. Furthermore, the information must be the type that would reasonably be expected to be protected to maintain its secrecy, regardless of whether protective measures are actually in place.
https://www.legislation.gov.uk/ukpga/2023/32/section/2/enacted/data.xht?view=snippet&wrap=true#:~:text=(2)A%20%E2%80%9Ctrade%20secret,available%20to%2C%20such%20persons%2C%20and

would like to continue your collaboration with your former student. They will need access to some of the data held by your team.

Key steps to undertake would be:

- Consider whether the data is controlled. A licence may be required to cover the exchange of controlled data between your team and the overseas individual. Providing access to UK-based shared or cloud servers and/or files is considered an electronic (intangible) export where access is being made by an overseas entity.
- Perform a search of the Consolidated List of Military and Dual-Use Items to determine whether the data is controlled. The data would be considered an intangible export and would fall under 'technology' and potentially 'software' depending upon the access (e.g. if your former student is accessing a specific software package to enable them to analyse the data). You should consider both the type of data as well as potential uses and perform keyword searches of the lists to determine if any controls apply. You will need to complete and Export Control Enquiry form (available here)and submit it to the Research Governance team (researchgovernance@admin.cam.ac.uk) for guidance and assessment.
- Determine whether there are any entities (e.g., institutions, companies or organisations) who will be accessing and/or in receipt of the data who are in countries subject to sanctions or embargoes. Even if the data is not controlled, contact the Research Governance Team for advice so that initial screenings can be conducted on the end-user. No data should be exported until end-user checks are conducted and there are no outstanding WMD or military end-use concerns.
- Consider whether the material being shared is subject to US Export Controls. Items imported from the US may be subject to such controls even after the item is no longer in the US.

Example 3: AI data training/transfer

A colleague outside of the UK has developed an AI model that requires data to train it. A Cambridge researcher has relevant data that has been anonymised, but the model requires more information to work better. As such, the Cambridge researcher is considering providing pseudonymised data from their dataset. Before offering the data, they should consider the following:

- Review the Export Control lists – does the type of research or type of model fall on the lists? If so, supporting its development could be controlled.
- Is the partner in an arms embargoed country? If so, consider what the AI model could be used for (both its immediate application and potential other applications) – could it be used for military or repression purposes?
- Consider data protection laws – can this data be sent without being fully anonymised?
- Did the participants of the original study consent for this type of use of their data? Does a renewed consent need to be undertaken?
- Consider any potential IP issues: Who holds the IP for the model? Will the model be commercialised? What happens with the data once the model is trained (is it retained anywhere? Is there a third-party operator or owner of the model; where are they based,

what is the ownership model, and what access and retention rights do they have to the data used to train it? What rights do they hold or claim for selling the data on?)

- Are there any potential reputational risks? For example, does your colleague use a 'digital sweatshop' to assess and correct the AI model? This would not be an export control issue necessarily but should be considered.

Example 4: An informal project collaboration or request for data or materials from a colleague

A colleague who now works outside the UK makes an informal request for materials or data from your lab. They previously worked with you and worked with the material or generated the data they are requesting. You work in an area where export control can be relevant.

Before you agree to send anything, you should consider:

- Is the material or data subject to Export Controls, either UK or US?
- Is it of US origin or are any components of US origin?
- Could the data or materials have dual-use, military, or WMD relevance or applications?
- An export control enquiry form may need to be completed before sending anything or providing access to the data.

Example 5: Exporting after exhibition/demonstration

You work in an area that is sometime subject to export control. You have temporarily imported a physical item from an overseas institution for an exhibition in the UK. The exhibition has now ended, and you are returning the item to the institution of origin.

- Returning an item to its country of origin constitutes an export under UK export control legislation and may require a licence. This is applicable even if the item was imported to the UK temporarily, and/or if the item is being exported back to the original exporter.
- Check whether the institution of origin required an export licence before sending the item to the UK and confirm the controls under the exporting country's own export control legislation with the exporter. If an export control licence was required for the original exporter, it is likely that you will require a licence to re-export.
- Check the item against the Export Control lists – is it subject to a UK export classification?
- Consider whether the item has been modified, adapted or enhanced while in the UK. Any adaptation may change the item's technical specification and new considerations should be made as to whether the item is controlled.
- There may be tax liabilities or additional instructions around customs clearance associated with the international movement of physical goods. Contact the University's Import Export Hub for further advice.