

Guidance for the TCP Security Checklist

Use this guidance to complete the Technology Control Plan (TCP) Security Checklist.

The U-M Office of Research Ethics and Compliance and ITS Information Assurance (IA) have developed this guidance for safeguarding U-M IT systems and materials that maintain export controlled information.

All U-M institutional and research data are classified into one of four [classifications](#) or sensitivity levels. **Export controlled information is classified by U-M as High and should be protected by following the applicable [minimum information security requirements](#) for High data.** Detailed information security guidance, documentation, tools, and how-to instructions are available on [Safe Computing](#). U-M Information Assurance staff are available for consultation on properly securing export controlled digital environments. Request help or submit questions to IA through the [ITS Service Center](#).

The Principal Investigator (PI) of a research project should account for the following IT security requirements when developing a TCP. The security portion of the TCP should be completed collaboratively by the PI and the department IT manager or administrator, or other IT and/or IT security support staff.

In addition, all authorized research project participants with access to export controlled information must complete appropriate security awareness training covering the following topics.

Technology Control Plan IT Security Questions: Guidance

Receipt and Transmission Security

If you are sending or receiving export controlled technology, materials, equipment, information, data, or software, describe how will it be delivered (physically) or transmitted (electronically) and the security controls that will be used?

Guidance:

- **Avoid using U-M Gmail for transmitting data.** U-M Gmail is not approved for sending or receiving export controlled information. The [ITS Exchange Email](#) is approved for export controlled research and may be used to share research data and information with authorized persons.

Information Security

Describe your plan for:

- (a) How your electronic export controlled information will be stored?
- (b) What IT security controls will be used to prevent unauthorized access to export controlled information?
- (c) What IT security controls will be used to secure devices and configure systems that will process, maintain, transmit, or store project export controlled information (in addition to storage controls above)?

Guidance:

- **Do not use personal devices when accessing export-controlled information.** The U-M Vice President for Research has determined that, under provisions of [Security of](#)

[Personally Owned Devices That Access or Maintain Sensitive Institutional Data \(SPG 601.33\)](#), use of any [personally owned device](#) (e.g., smartphone, tablet) is prohibited for accessing export-controlled information. Only U-M managed devices are permitted for such access.

- **Avoid the use of portable or removable storage devices (e.g., USB drives, CDs) whenever possible.** If these are used for data backup, they must be encrypted, properly marked, and stored in a designated secure location with access only by authorized individuals.

Conversational Security

If you will be discussing any export controlled technology within or external to U-M, describe how will you ensure only authorized persons hear conversations?

Guidance:

- **Limit project-related discussions to authorized individuals and only in areas where there is no possibility of non-authorized individuals being inadvertently included.** Project related discussions include:
 - Discussions amongst research team members of the export controlled project,
 - Conducting tours with foreign nationals or other unauthorized individuals through research areas, and
 - Discussions with third-party vendors or subcontractors.
- **Conversations with vendors should be conducted under signed agreements** that ensure that only U.S. persons (US Citizens or US permanent residents/green card holders) are included in any conversation involving export-controlled information.

Physical Security

Describe the physical security controls that you will use to prevent unauthorized access to export controlled equipment, materials, or information?

Guidance:

- At U-M, many physical security controls are handled at the departmental, unit, or institutional level. Work with your department, unit or institutional officials to implement physical security controls for export-controlled projects.
- For those projects requiring additional physical security controls specific to a lab or other research environment, follow [Physical Security \(DS-17\)](#); see specifically Table 1: Access and Authorization Controls and Table 2: Facility Security Controls.

Marking or Labels for Export Controlled Materials or Information

Describe the markings or warnings that will be placed on export controlled equipment, materials, software, and information (both paper and electronic) or explain why they are not practical or possible.

Guidance:

- You must mark or label export controlled items with appropriately export control language in order to give notice to users.
- The requirement to mark or label export controlled items applies to items that are kept in U-M facilities and those items that are shipped or transmitted to another location. When physical space is limited, an abbreviated marking or warning may be used.
- See [Markings for Export Controlled Materials and Information](#)

Secure Return or Disposal of Export Controlled Technology

After you have completed your research, you must take one or more of the below actions (a-d) with respect to each export controlled item covered by your TCP.

Describe your plan of action for each export-controlled item:

- (a) Returning export controlled equipment, materials, software, and information to grantor, sponsor or contracting agency at the completion or termination of the project,
- (b) Securely deleting or destroying export controlled items (paper or electronic) at the completion or termination of the project,
- (c) Using up the export controlled items in the research activities or incorporating the export controlled items into your research results to send to the sponsor,
- (d) Maintaining a TCP for any export controlled items you are keeping after the research is finished.

Closing TCP

The U-M Export Control Program may close the TCP once it has determined that all export controlled items covered by that TCP are no longer on campus or in possession of any UM employee or student.

Modifying or Extending TCP

The U-M Export Control Program will modify or extend the current TCP for any export-controlled items that you will keep after the project is closed. A TCP must remain in place with appropriate security controls until you no longer have the export control items.

Guidance:

- Contact the U-M Export Control Program for advice on closing or modifying a TCP at the end of your research activities.
- Ensure all directives in research grants and contracts regarding return or disposal of export-controlled information are followed.
- For some projects, [NIST Guidelines for Media Sanitization](#) may apply.
- For most projects responsible for handling secure deletion, follow [Electronic Data Disposal and Media Sanitization \(DS-11\)](#); specific how-to instructions are at [Securely Dispose of U-M Data and Devices](#).

Reporting IT Security Incidents

Report suspected security incidents immediately. Suspected or actual compromises, breaches, or unauthorized disclosures of export controlled data or materials should be immediately reported by following the instructions at [Report a Security Incident](#). If it is determined that an export control violation occurred, the university must promptly report the violation to the contracting agency and the appropriate federal department.

Guidance

Examples of serious IT security incidents involving export-controlled data include:

- Unauthorized or inappropriate disclosure
- Suspected or actual breaches, compromises, or other unauthorized access to U-M systems, data, applications, or accounts
- Unauthorized changes to computers or software
- Lost or stolen desktop, laptop, mobile, or other data storage devices and media

Traveling Internationally with Export Controlled Information

Take precautions when traveling internationally with Export Controlled Information

Traveling out of the United States with computers or other electronics containing encryption hardware or software or other export-controlled information may require an export license when traveling to certain destinations. Applying for an export license can be a very time-consuming process; consult the Export Control Officer (exportcontrols@umich.edu) well in advance of any travel that may require a license.

Guidance:

Specific guidance for travel to high-risk international locations as well as safe computing practices when traveling internationally is available at [IT Security Guidelines for Domestic and International Travelers](#). See especially *Before You Travel*, bullets 6 and 7, for travel that falls under export control regulations.