

# **TCP Security Control Measures**

Project or Activit	ty			
Project or Activity	Title:			_
PI or Activity Dire	ctor:_			
Associated NDA	NO	YES		
eGC1:				

#### Scope

**Sensitive Unclassified Information (SUI)** is defined as unclassified information that does not meet the standards for national security classification, but is pertinent to the national interests of the United States, and requires, under law or policy, protection from unauthorized disclosure, special handling safeguards, or prescribed limits on exchange or dissemination.

Projects and activities which use, create or share SUI need to protect the SUI from unauthorized disclosure.

These measures apply to SUI provided by outside parties and sponsors to the University. These measures also apply to information, technology and material items created at the University and controlled under U.S. export control regulations. Such material may be created during the course of a project or activity lifecycle.

The PI or Activity director of the associated project must complete the information required on this form. If additional assistance is required please contact <a href="mailto:exports@uw.edu">exports@uw.edu</a>.

### **Project Information**

Please provide a short explanation of the project to be performed and where it will be performed. Please indicate if any of the controlled items listed below will be used in foreign locations.



#### **Controlled Items**

All SUI must be properly identified, listed below, and marked with the appropriate control. If receiving SUI from an outside party or sponsor, request that the providing party identify material provided with the correct control.

Ultimately, it is the responsibility of the PI to identify the control if any technology, software or other information before sharing or disseminating, regardless of whether the providing party has identified the control.

All SUI has associated prescribed security measures based on federal policy or University policy, depending on the level and type of SUI. At UW, all SUI is considered either <a href="UW Confidential"><u>UW Confidential</u></a> or <a href="UW Restricted"><u>UW Restricted</u></a>, with UW Confidential imposing a higher threshold of security measures due to the increased sensitivity of the SUI.

### **Export-Controlled Hardware**

This includes articles, materials, supplies and other tangible items. The Commerce Control List (CCL) and the United States Munitions List (USML) make hardware fairly easy to identify and is generally much easier to control.

You do not need to list general consumer goods controlled by the Export Administration Regulations (EAR) that can be purchased by anyone while in the US such as laptops, computers, mobile devices, medical equipment, or "off-the-shelf" supplies. If your tangible item is not easily found on the CCL and is a cutting edge innovation, a review by the Department of Commerce may be necessary before deciding whether it should be listed and security measures implemented for that item. Please consult with <a href="mailto:exports@uw.edu">exports@uw.edu</a> if this is the case.

**Example**: An off the shelf laptop that can be purchased by anyone while in the US can be used and does not need to be listed. However, providing the technology on how to engineer and manufacture the laptop *may* be export controlled to specific end-users.

See <u>Supplement No. 2</u> to Part 774—General Technology and Software Notes.

All ITAR controlled defense articles must be listed below.

#### **Export-Controlled Technology**

Defined as specific information necessary for the "development", "production", or "use" of a product. May take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

General Technology Note (Supplement No. 2 to Part 774).

The export of "technology" that is "required" for the "development", "production", or "use" of items on the Commerce Control List is controlled according to the provisions in each Category.

Technology can be exported in the following ways:

1. Electronic: Sending or transmitting technical data and software Outside of the United States, or In the United States to a Foreign National.

- 2. Visual: Showing of technical details of export-controlled items to a foreign national
- 3. Oral: Talking about the technical details of export-controlled items to a foreign national
- 4. Shipment: Shipping items outside of the United States OR taking items while traveling to a foreign destination.

Most export-controlled SUI will fall into this category and must be protected from unauthorized access or dissemination. Please list all export-controlled technology that will be handled or developed for this project.

## **Export-Controlled Software**

Defied as a collection of one or more "programs" or "microprograms". The software could be something that is used to test or manufacture an end item and its control will be related to the hardware category.

Commercial off-the-shelf software does not need to be listed below. Please list any new software that will be developed on this project.

For all items listed, include the item name, description, identifiers (i.e. document control number, manual title, etc.) and specific Export Control Classification Number (ECCN) or United States Munitions List (USML) ITAR Category number. If you need assistance in product classification please contact <a href="mailto:exports@uw.edu">exports@uw.edu</a> or use the <a href="mailto:online catalyst tool">online catalyst tool</a> to self-determine. If export controls are <a href="mailto:unknown">unknown</a> at this time and will be determined throughout the project please indicate by using TBD.

EXAMPLE:	ITEM DESCRIPTION	SOFTWARE Software for general	EXPORT CONTROL ting graphs of Underwater acoustic	5E991 wave propagation
ITEM: DESCRIPTION	ON:		EXPORT CONTROL:	
ITEM: DESCRIPTION	ON:		EXPORT CONTROL:	
ITEM: DESCRIPTION	ON:		EXPORT CONTROL:	
ITEM: DESCRIPTI	ON:		EXPORT CONTROL:	

UW Information Classification	UW Confidential Security Measures Export Controlled – EAR, ITAR					
	·					
Access Eligibility	Limit access to export-controlled material to UW employees and students who are U.S. persons.  Export-controlled material may be made available to foreign persons by a case-by-case evaluation,	APS 2.10.4.c#4				
	and in accordance with any required data sharing agreement, export license, and documented	APS 2.10.4.c#4 APS 2.10.4.d				
	license exception.	Al 3 2.10.4.0				
	Certain computing personnel, as identified by UW Human Resources, must complete a criminal	APS 2.10.4.d				
	background check.	APS 2.1.7.g.1				
Security of	Storage	DSS recommendation.				
Physical	Store export-controlled information and material items under lock. Only parties who are eligible to					
nformation and	access the information or items may possess the key or combination to the lock.					
	Marking	DSS recommendation;				
Material Items	To the extent feasible, mark information and material items with a conspicuous marking	common FOUO control.				
	identifying it as subject to export regulations and identifying the export classification. Tags,					
	marked envelopes, or other containers may be used for items that cannot be easily labeled.					
	Transmission	DSS recommendation;				
	Ship export-controlled information and material items via first class or fourth class mail, parcel	common FOUO control.				
	post, or common carrier such as UPS or FedEx only to parties who are eligible to access the					
	information or item.					
	Disposal	DSS recommendation;				
	Return export-controlled information and material items to the source of the information or item,	common FOUO control.				
	or dispose of documents by shredding or destroying (burning, pulping, etc.).					
Security of	Storage	APS 2.10.3.d#9				
Computers and	Store computers, media, etc. that process or store export-controlled information in same manner	MCSS 2.1				
Electronic	as physical information when the resource is not in use to prevent unauthorized access, theft,	APS 2.1.7.e.1				
	tampering or destruction.					
nformation	Marking	DSS recommendation;				
	To the extent feasible, mark electronic export-controlled information by placing conspicuous labels	common FOUO control.				
	in file data or in file names that identify the data by its export classification. See Security of					
	Physical Information for marking computers and media.					
	General Computing					
	Limit login access to systems that process or store export-controlled information to	MCSS 2.1				
	authorized users.					
	The system must provide an access control mechanism that prevents unauthorized users	APS 2.10 3.d#5				
	from running programs or accessing export-controlled information, allowing the allocation of	APS 2.1.7.e.1				
	system and data resources to individual users.					
	Export-controlled information should be encrypted at rest, including such information in	APS 2.10.4.d				
	system backups.					
	Restrict the loading of export-controlled information onto laptops, or other portable	APS 2.10 4.c#3				
	computing or data storage devices to unusual operational circumstances that require such					
	action.					
	Export-controlled information stored on laptops or other portable computing or data storage	APS 2.10.4.c#3				
	devices must be password protected and should be encrypted, or equivalent access					
	protection measures must be taken.					
	Operating systems and application software must be supported, patched and maintained at	APS 2.10.3.d#3				
	the most current level provided by the manufacturer. If secure versions of essential software	MCSS 2.1				
	are not available, restrict access to vulnerable services to trusted computers via host-based	APS 2.1.7.e.1				
	firewalls, network access restrictions, or secure network protocols.					
	Application software must not allow unauthorized access to export-controlled information.	APS 2.10.3.e				
		MCSS 2.1				
	Define and implement procedures to prevent and detect malicious software, such as the use	APS 2.10.3.d#8				
	of auto-updating antivirus software or system performance monitoring.	MCSS 2.1 APS 2.1.7.e.1				
	Implement backup procedures to ensure data integrity, system availability, and business	APS 2.10.3.c#10				
	continuity as required, with consideration to business and discovery purposes. Test the ability	APS 2.1.7.e.1				
	to recover information from backups regularly.					
	The system must maintain a functioning and accurate system clock.	APS 2.1.7.e.1				
	Clear export-controlled information stored in memory and on media using a one-time	DSS recommendation.				
	overwrite prior to release from secure control for maintenance, travel outside the U.S., reuse					

System Management	APS 2.10.3.d#2
Well-trained personnel who are knowledgeable in data security practices manage the system to	
professional standards.	
User Accounts	
Access control measures must be documented, and implemented and maintained in	APS 2.10.3.c
compliance with the principle of least privilege and the principle of separation of duties.	APS 2.10.4.d
Documented procedures should be in place for issuing, altering, and revoking access	APS 2.1.7.d
privileges on shared systems. Access control measures must be audited for compliance at	APS 2.1.7.g
least every three years.	
User accounts for system access must be based on a unique identifier.	APS 2.1.7.d
User accounts should be limited to the minimum necessary.	APS 2.10 3.d#5
Provide user accounts only to authorized users.	MCSS 2.1
No guest, shared or general-purpose accounts should exist on the system. Shared accounts	APS 2.10 3.d#5
are allowed only as authorized by the system owner or operator, and only where appropriate	APS 2.1.7.d
accountability can be maintained.	
Configure user accounts with the least privilege necessary.	APS 2.10 3.d#5 (implicit)
Maintain the number of administrator accounts at the minimum required.	APS 2.10 3.d#5
Do not use administrator accounts when an account with less privilege can meet the need.	APS 2.10 3.d#5
Do not grant accounts with substantial system-administration privileges to individuals who do	APS 2.10 3.d#5
not have UW faculty or staff appointments.	
Authentication	
Implement two-layer authentication.	APS 2.10 4.d
Provide secure user authentication processes that protect passwords from interception.	APS 2.10 3.d#6,
	MCSS 2.1
	APS 2.1.7.e.2
Login controls are provided through the use of good passwords.	MCSS 2.1
User passwords associated with administrative access meet complexity guidelines.	APS 2.10 3.d#7
	MCSS 2.1
Networking	
Block or disable all unnecessary network services.	APS 2.10.3.d#8
The system is protected by a firewall, or other protection or other port-blocking mechanism,	APS 2.10.3.d#8
especially during system installation, updating, or restoration.	MCSS 2.1
Servers: Limit inbound and outbound traffic to the essential service(s).	
Desktop/laptop: Limit unsolicited inbound connections.	
Data must be encrypted during transmission. Information must be encrypted and then	APS 2.10.3.d#8
transmitted, or transmitted via secure tunneling protocols, such as secure sockets layer (SSL),	APS 2.10.4.d
transmission layer security (TLS), secure copy (SCP), or secure shell (SSH) protocols. Use of the	
latest version of each secure tunneling protocol is recommended.	
Web application code, including applications that are linked to data bases or files that contain	APS 2.10.3.e
sensitive information, must meet the Open Web Application Security Project standards for	APS 2.10.4.c#2
secure coding.	
Network-aware client software, such as web browsers and email readers, should block the	APS 2.10.3.d#4
automatic execution of attachments, graphical files, or other common carriers of malicious	
software.	
Remote access must be restricted to sources within the campus network and/or two-factor	APS 2.10.3.d#6
authentication for secure remote access.	
The system should display a security warning banner prior to initiation of the logon process.	APS 2.1.7.e.2
The warning banner must inform all users that the system or application being accessed is	
proprietary, that it should be accessed only by authorized users, and that system use is	
monitored for enforcement purposes.	
ogging and Monitoring	MCSS 2.1
Security relevant events, such as authentication failures, account lockouts, and modifications of	APS 2.10.4.d
security software or settings, must be logged and periodically reviewed.	APS 2.1.7.d
Disposal	DSS recommendation.
Return export-controlled information to its source; or clear the device by performing a one-time	
overwrite of all addressable storage prior to release; or physically alter media to prevent recovery	
of export-controlled information.	
Reporting	APS 2.5
Immediately report incidents that potentially impact the confidentiality of EAR- or ITAR-controlled	
information, such as theft, loss, seizure, compromise, suspected compromise, hacking, etc., to the	



## **Project or Activity Specific Security Measures**

The following security requirements are applicable to this project and/or activity and must be implemented through the duration of the project or use of the export-controlled information, technology and material items

## **Approved Security Measures**

The security measures described in this document, minimum and specific, only pertain to the aforenamed project or activity. Such measures will be monitored and implemented by the Principal Investigator or Activity Director for the duration of the project.

NAME and TITLE	
Principal Investigator or Activity Director	
Signature	Date:
APPROVED	
Facility Security Officer, University of Washington	
	_
Signature	Date:
APPROVED	
Export Control Specialist, University of Washington	
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SIGNATURE	Date: