



Security Awareness: Anatomy of a Change Management and Communications Campaign



Shannon Cartier Security Awareness Program



PNNL is operated by Battelle for the U.S. Department of Energy







The not-so-secret sauce of success

SECURITY AWARENESS:

IT'S EVERYONE'S RESPONSIBILITY

A report by Ernst & Young (2020) finds that "security awareness programs at many organizations are weak, half-hearted, and ineffectual.

Keeping a security awareness program alive and healthy is an ongoing corporate training and communication effort.

Successful programs are a lot like marketing campaigns: Organizations should distribute little bits of information to employees on an ongoing basis. The company's internal communications team should be leveraged to ensure that the messaging is fresh and consistent with the corporate culture and the current security landscape.

Without **strong management support**, efforts are futile."



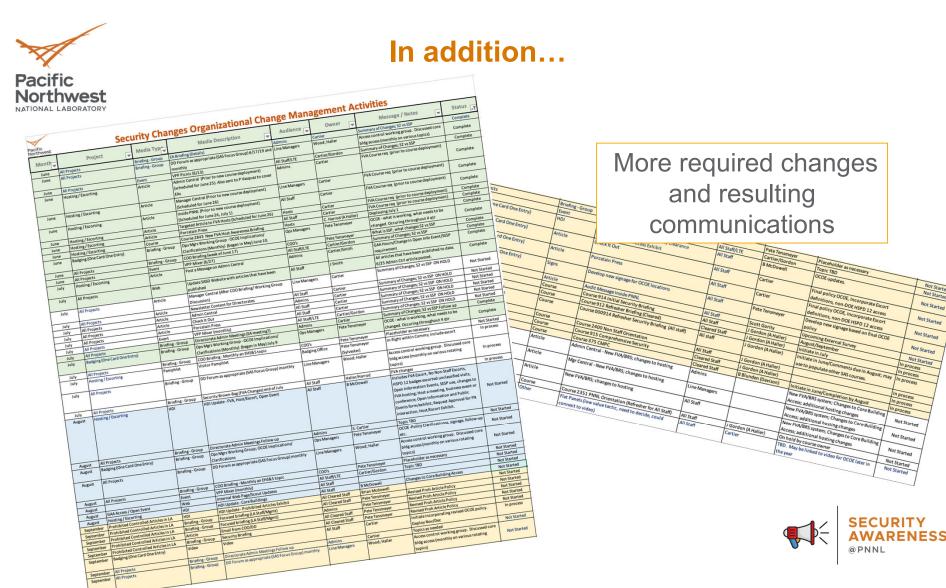
Security Awareness: Compliance at its Best

In 2019 at PNNL, Security Awareness meant compliance: staff were trained per requirements and varied announcements were published for staff by a .5 FTE, then this happened...



Safeguards & Security was tasked with an extensive set of changes around the protection of sensitive technologies and export control with the potential to touch all staff (~5,000).







Security Awareness @ PNNL: A New Dawn

Changes in how security awareness was focused were critical.

90% compliancebased activities

with once-per-year content of ~80 pages, .5 FTE



90% awareness

while remaining fully compliant, 1.5 FTE

Why? Staff respond more positively and have improved retention with varied, creative messaging and mediums, with a healthy dose of visual elements.





Where to start? Change management: Identifying the elephant

Export Control Technology Protection OCM Blueprint



Why are we changing?	Measures	What actions or key milestones?
Support closure of Notable 4 Improve the identification and protection of technical information To gain the ability to screen for export control information To be able to identify and control high-risk personal property To be able to identify people associated with activities related to export-controlled projects Reduce compliance risks for deemed exports Improve document and data security Increase the ability to capture EC risk in identified systems	1. Closure of Notable 4 2. Staff is aware of sensitive technology and export control technology (Survey • Staff uses the templates to mark the content of EC (System Check) 4. Captured risk information is used for evaluation/reporting (Audit) 5. Audits of the system (racks to records and records to racks) are successfully passed 6. Incidence of staff with inappropriate access to highrisk personal property is reduced 7. Successfully pass external compliance audits 8. ??? 9. Number of items caught that were not already flagged	 Deliver administrative controls to improve technology protection. Office-based templates that clearly identify export controlled technical documents. Create policies around updating Data Sensitivity Categorizations for Software Items in the Tech Directory Create policies for managing the Global Admins and highly privileged users that have access to all One Drive documentation Investigate and identify options for automating information marking, including products other than Office. Deliver Risk Engine integrations for the following systems: Information Release Foreign National Visits and Assignments Electronic Prep and Risk Accounts Payable Contracts Deliver a tool that provides identification and control of high-risk personal property contained in spaces and integrates with Lab Assist to identify people associated with activities related to export-controlle projects. (TPIM)
Problem being solved		Outcomes
 Lack of integrated, institute-wide IT controls to identify and safeguard releases of controlled technical information/data A digital, real-time solution is not available to assist Laboratory staff for marking controlled technical data such as documents, email, data classification of papers, reports, drawings, etc. Unlawful export of controlled technical information (a deemed export) can bring significant financial penalties 		FY20 Administrative controls (via document templates) which clearly identify export controlled technical documents Data sources (information release, foreign national visits and assignments, electronic prep and risk, accounts payable, contracts integrated with the new export control risk engine High-risk personal property is contained in spaces are identified and controlled People associated with activities related to export-controlled projects are identified Compliance risks of deemed exports are reduced

How do you eat an elephant?



One bite at a time!

Change management architects are vital to identifying the beast!



Security Awareness: One Bite at a Time How to approach large-scale changes



- New program name
 - "Export Control Office" to "Technology Protection & Export Control (TPEC)"
- ✓ New branding
- ✓ New website
- ✓ New staff resources
 - Two new online tools for knowing when TPEC support is warranted, and for requesting TPEC support
 - New all-staff awareness training



Rebranding: Meet TPEC!

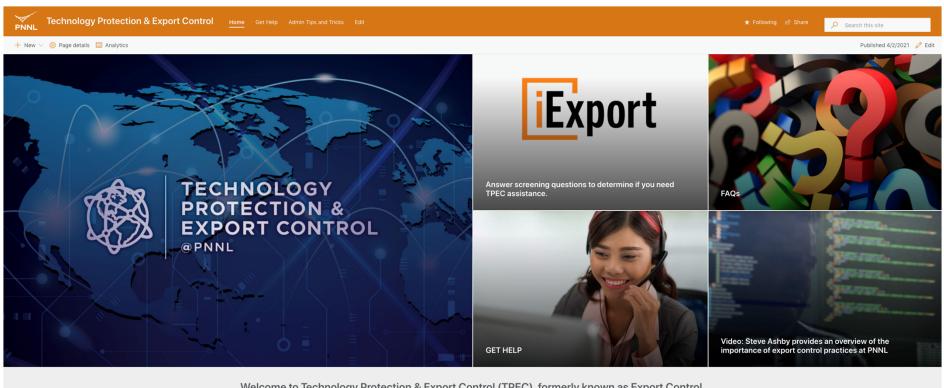


It's not just a program...a consistent, impactful brand that is used in every communication, presentation, poster, email address is vital.





Rebranding and website



Welcome to Technology Protection & Export Control (TPEC), formerly known as Export Control.

We're here to help!



Website and resources

Reference Documents

Click the link(s) below to access some of our most-requested documents.

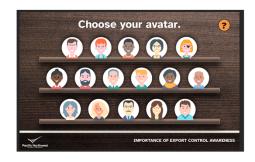
- Article: Princeton Export Control Violations Highlight Importance of Export Control, March 2021
- TPEC Terminology & Definitions
- Reference: Identifying Export Controls
- TPEC Directorate Assignments
- PowerPoint: Export Control 101 presentation, January 2021
- Avoiding Export Control Violations During Online Meetings
- Does Your Information Release Request Need an Export Control Review?
- Export Controls Management & Compliance Plan, July 2019
- Export Control 101: Brown Bag presentation recording, September 2020
- Export Control Quick Tips for Travel Professionals, September 2020
- Export Control Quick Tips for Shipping Professionals, September 2020
- Export Control Quick Tips for Human Resources Professionals, September 2020
- Export Control Quick Tips for Contracts Professionals, September 2020
- Export Control Quick Tips for Acquisition & Procurement Professionals, September 2020
- Export Control Quick Tips for Administrators, November 2020

Vanity URL tpec.pnl.gov





Website and resources



Technology Protection

& Export Control

A general awareness briefing.



Answer screening questions to determine if you need TPEC assistance.





- In-person sessions with branded giveaways, then virtual (recorded)
- Monthly for ~12 months, then quarterly; follow up with email materials
- Targeted presentations for workgroups around the Laboratory
- Invite guest speakers with a nexus: FVA, CI, OPSEC





New Resources for All Staff

Export Control 101

Join Us for a Lunch and Learn

Tuesday, April 27, 2021

Noon - 1:00 PM Teams Meeting

Add to Outlook (.vcs)

Are you up to speed on the changing world of export control regulations? It's a complex topic, and the Technology Protection & Export Control (TPEC) group is here to help.

Join TPEC for Export Control 101 and learn about the following topics tailored for all staff:



- What is an export?
- How might I come across potentially export-controlled information or items in my work?
- When might I need to ask TPEC staff for guidance?
- Where is the nexus between export controls, Information Release, and Foreign Visits and Assignments?
- Learn about new resources like iExport and the soon-to-be-launched all-staff export control training.

Bring your questions and curiosity, and see you on Teams Tuesday, April 27 at noon.

Click here to join the meeting.

Contact: Technology Protection & Export Control



Display table branding















Flat panel display



TECHNOLOGY PROTECTION & EXPORT CONTROL

@ PNNL

Learn more about export control requirements and the protection of sensitive technologies.

- Feb. 6, 12:30-1:30 p.m., ETB Columbia River
- Feb. 26, 12:00-1:00 p.m., CSF Mural
- March 9, 12:00-1:00 p.m., ETB Columbia River

Skype available by request, ^PNNL TPEC, tpec.pnl.gov.

Workplace/Yammer Posts



Shannon Cartier is with Tyler Brett and Somer Goulet.

September 14, 2020 · 🕏

Join the Technology Protection & Export Control experts Wednesday at noon for "Export Control 101".

You'll learn how your work may be affected by export controls requirements (hint: it's not just research-related work that the requirements may touch!)

You'll also have a chance to hear how program requirements interface with Information Release and Foreign Visits & Assignments, and see a demo of the new-ish tool for sending the TPEC staff a request. (Want to check it out for you... See More



TEAMS.MICROSOFT.COM

Join conversation



Tutorial video



- Every available Lab communications medium with an emphasis on heavy users
- In-person forums with large groups of stakeholders

New group email address tpec@pnnl.gov

Internal search answer

The Export Control Office is now known as Technology Protection & Export Control (TPEC). Sharing information and sensitive technologies appropriately is important to protecting our information and assets.

LEARN

- Technology Protection & Export Control website
- Manage Information Procedure
- Requesting approval for Foreign National Interaction

ACT



TPEC is here to help

You can now get support or have general questions answered by the TPEC staff through the Service Catalog. Click on Export Control then Technology Protection and Export Control Service Request.

Service Catalog

Not sure if you need a TPEC review? Answer a few short questions in iExport to find out.

Get Started with iExport

CONNECT

Here's the Lead for Technology Protection and Export Control:

Technology Protection & Export Control POC

Aaron Melville

For your questions about interaction with a Foreign National, reach out to this person:

Christine Harrod



TECHNOLOGY

PROTECTION & EXPORT CONTROL

@PNNL

Awareness articles

Inside PNNL Story

Lab News

Princeton Export Control Violations Highlight Importance of Compliance $\triangleq \triangleq \triangleq \triangleq \triangleq$

University Fined \$54,000 for Sending Chemical and Biological Materials to 15 Countries

Princeton University learned the hard way what happens when an organization and its staff lose sight of export control responsibilities.

The university recently agreed to a \$54,000 settlement with the U.S. Commerce Department over 37 export violations. Between 2013 and 2018, the university sent items controlled

for chemical and biological weapons to foreign research facilities in 15 countries without the required export licenses.

Princeton self-reported the violations to the Bureau of Industry and Security, which helped mitigate the penalties of their failures to follow the laws.

It's not only the physical shipment of items that carry export control considerations. Technology and technical data associated with controlled items may be considered exports; having a detailed conversation with international collaborators may be subject to requirements, too. So, how do you know if your work is subject to these requirements?

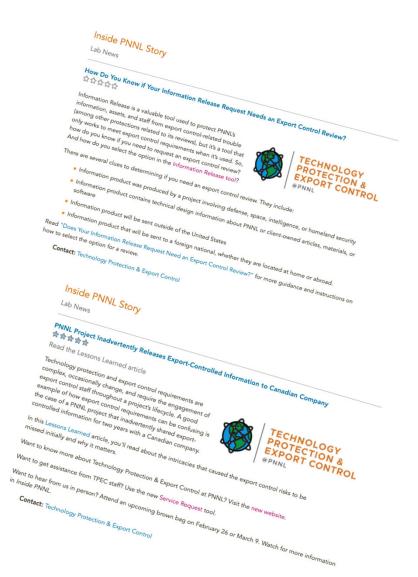
Significant strides have been made over the past two years to educate staff at PNNL and develop tools and resources to provide quick guidance and support.

For example, the Technology Protection and Export Control (TPEC) group, in partnership with Hazardous Material and Waste Management and Worker Safety and Health, have made updates to Biological Hazard Management (BioMS) and the Chemical Management System (CMS) to flag topics for staff that may have export control considerations.

TPEC professionals are available at no cost to projects via request through the Service Catalog to answer any questions or concerns on projects, associated technologies, or potential collaborators, in addition to assisting with potential license or exemption determinations.

A new tool is coming soon to help you determine if you need export control guidance, along with a new all-staff general export control awareness training. Watch for more information over the next few months.

Contact: Technology Protection and Export Control



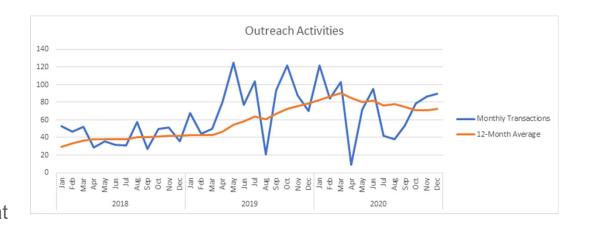


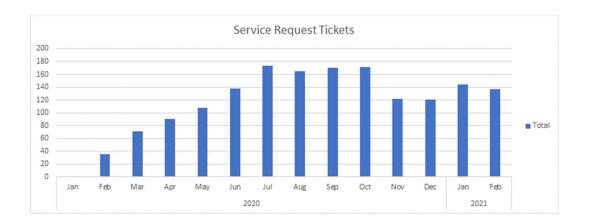
The results

- ▼ TPEC Program: "Many of these efforts are the first of its kind within the DOE complex and are setting the standard for technology protection at DOE."
- ✓ Benchmark survey initial completed at beginning of efforts; follow up survey pending rollout of all-staff training



DOE Security Professional of the Year (Contractor)







Benefits of flipping the compliance model

Security Awareness is no longer just about staff taking rote training once a year. It's a continual buffet of security-related messaging for top-of-mind awareness.

Upcoming changes:

- Foreign Visits & Assignments
 - Controlled Unclassified Information
 - Physical Security
 - U-PIV
 - Personnel Security





How to implement large changes at your site

Required:

- Management support
- SME support
- Change management
- Communications
- Graphics
- Benchmark other sites



Staff: WIIFM?



Thank you for engaging with my presentation!

Shannon Cartier shannon.cartier@pnnl.gov







Thank you

