

SEPTEMBER 2019 AUDIT COMMITTEE INFORMATION SECURITY UPDATE

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KEY POINTS

- Issues & risks continue to be tracked. Mitigation efforts are in progress but substantive risk remains.
- External assessment of overall security program is in progress - on-site interviews the week of November 4th and report in December.
- Information Security Council (ISC) is engaged to endorse external assessment targets, increasing governance maturity.
- Priority ITS security projects for FY19-20 are on track.
- Initial draft budget request for FY20-21 includes increases for security operations, risk assessment, and program support.
- Canadian Shared Security Operations Center (CanSSOC) proof-of-concept progressing.

ISSUES & RISKS – CISO HIGHLIGHTS

Item	Mitigation
Unknown data repositories	Publish data classification, train on risk self-assessment , create inventory project with units
Credit card security	Request funding , review overall program, secure & reduce payment channels
Network segmentation	Deploy border firewall , research access control tools, support network upgrades for modern routing,
Nation State threats	Create travel guidelines, escalate as a risk , improve attribution, focus on research
Compromised accounts & email security	Focus on anti-phishing, move to native O365 protection tools, launch multi-factor authentication service(s), create identity strategic plan
Unpatched devices & vulnerability management	Deploy enterprise scanning tool , increase scanner visibility, create device quarantine procedure, improve metrics
Incident response	Focus ISC workgroup on playbook development , tabletops for practical training with units, fill staff vacancies, CanSSOC , improve metrics
Security staffing	Make hiring an ITS priority, support unit staffing needs, increase opportunities for students

* **Bold** denotes in progress

PRIORITIES 2019-2020

Identify	Protect	Detect	Respond	Recover
<p data-bbox="86 511 496 664">Risk Assessment Program</p> <p data-bbox="86 711 512 815">Security Standards Baseline</p> <p data-bbox="86 882 504 929">Data Classification</p> <p data-bbox="86 996 435 1100">Awareness and Training</p>	<p data-bbox="563 539 988 586">Office 365 Security</p> <p data-bbox="563 654 952 701">Gateway Firewall</p> <p data-bbox="563 729 975 882">Multi-factor Authentication</p> <p data-bbox="563 939 682 986">VPN</p>	<p data-bbox="1039 525 1449 711">Vulnerability Management Program</p> <p data-bbox="1039 768 1460 872">Security Event Monitoring System</p>	<p data-bbox="1516 486 1956 672">Incident Response Playbooks</p> <p data-bbox="1516 711 1939 929">Establish retainers with incident response service provider(s)</p>	<p data-bbox="1992 539 2440 586">Table-top Exercises</p> <p data-bbox="1992 654 2364 758">Review Back-up Strategy</p>

EXTERNAL SECURITY ASSESSMENT

Summary

- Based on NIST Cyber Security Framework (CSF)
- “Hybrid” - EY & 3 U15/R1 CISOs
- Targets set with Information Security Council (ISC)
- Broad assessment – depth will be achieved with facilitated & self-assessment risk program
- CISO will respond with action plan and budget proposals

Update

- On-site interviews week of Nov 4

Timeline

July - August

Selection & negotiation

September - October

Scheduling, document review

November

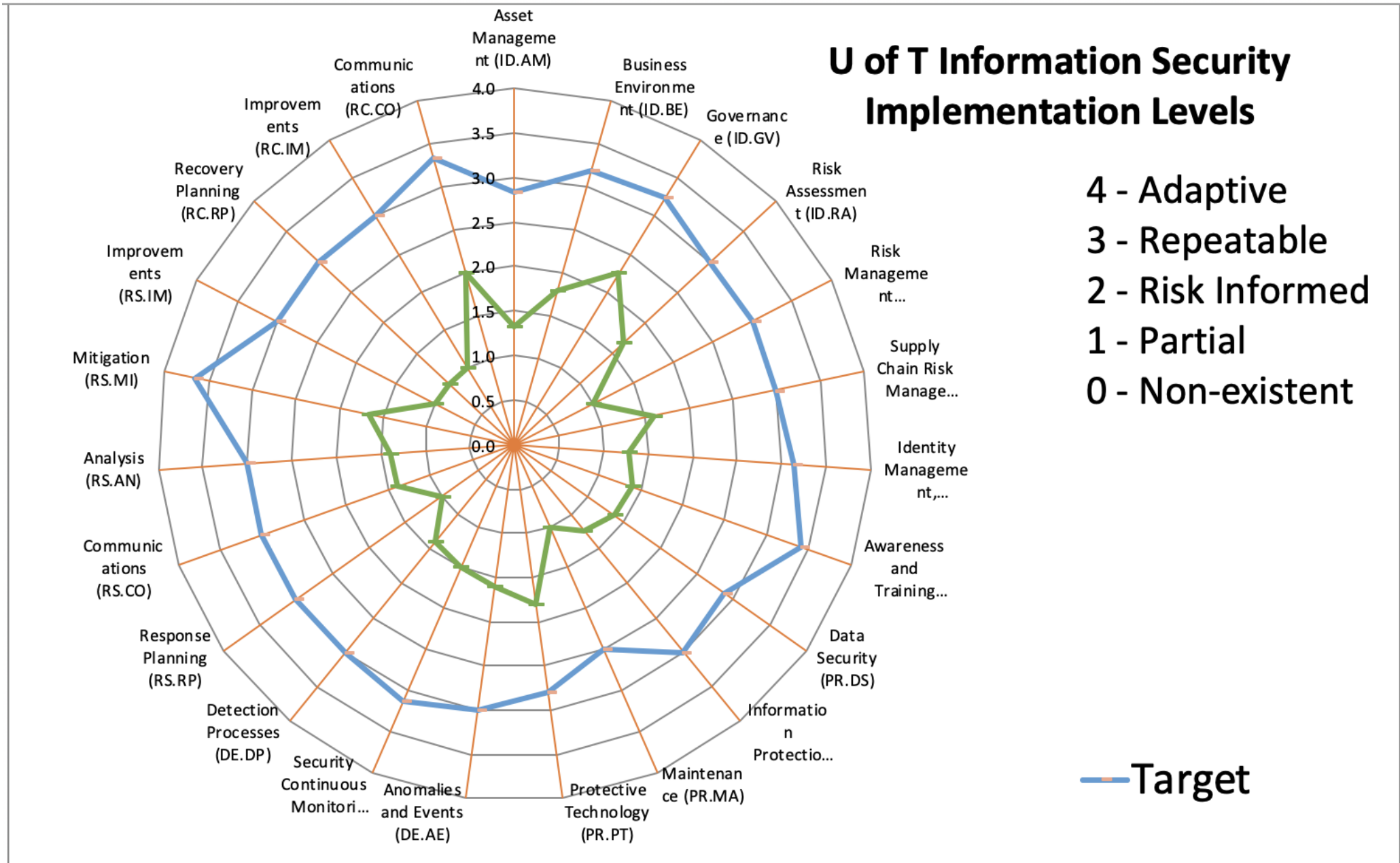
Interviews, report draft

December

Report

U of T Information Security Implementation Levels

- 4 - Adaptive
- 3 - Repeatable
- 2 - Risk Informed
- 1 - Partial
- 0 - Non-existent



— Target

INITIAL DRAFT BUDGET REQUEST

Proposals Carried Over From Last DAC

- Information Security Compliance and Risk Assessment

New Proposals

- Info Security Program Maturity and Enhancements
- Info Risk Program Maturity and Enhancements
- Identity & Access, Info Security Space, and CISO Support

In-negotiation Joint Proposals

- Research info security & risk analyst
- PCI compliance program