



WHISTLER

MINUTES

REGULAR MEETING OF TECHNOLOGY ADVISORY COMMITTEE
WEDNESDAY, DECEMBER 22, 2021, STARTING AT 3:30 P.M.

Remote Meeting

Held via Zoom – Link available at www.whistler.ca/technology-advisory-committee

| PRESENT | Mtgs. YTD (#) |
|---|------------------|
| Chair, Councillor R. Forsyth | 2 |
| RMOW Information Technology Representative, P. Cartwright | 2 |
| Tourism Whistler Representative, T. Bonnell | 2 |
| Whistler Blackcomb Representative, M. Forster | 2 |
| Whistler Chamber of Commerce Representative, C. Conley | 1 |
| Whistler Sports Legacies Representative, R. Melvin | 2 |
| Community Member-at-Large, K. Hulse | 2 |
| Recording Secretary, B. Sullivan | 1 |

| REGRETS | |
|--|---|
| RMOW Communications Officer, K. Panneton | 1 |
| Arts Whistler Representative, D. Feser | 1 |

| GUESTS | |
|---|---|
| RMOW Chief Administrative Officer, V. Cullen | 1 |
| RMOW GM, Corporate and Community Services, T. Battiston | 1 |
| RMOW Mgr. of Legislative Services/Corporate Officer, P. Lysaght | 1 |
| RMOW Manager of Communications, G. Robinson | 1 |
| Pique News Reporter, B. Dupuis | 1 |
| Former CTO/CPO for Galvanize and Security Expert, K. Cerny | 1 |

CALL TO ORDER

Chair, Councillor R. Forsyth recognized The Resort Municipality of Whistler is grateful to be on the shared, unceded territory of the Lil'wat People, known in their language as Liłwat7úl, and the Squamish People, known in their language as Skwxwú7mesh. We respect and commit to a deep consideration of their history, culture, stewardship and voice.

ADOPTION OF AGENDA

Moved by P. Cartwright
Seconded by K. Hulse

That the Technology Advisory Committee adopt the Technology Advisory Committee Agenda of December 22, 2021 as circulated.

CARRIED

ADOPTION OF MINUTES

Moved by P. Cartwright
Seconded by T. Bonnell

That the Technology Advisory Committee adopt the Closed Technology Advisory Committee Minutes of January 27, 2021 as circulated.

CARRIED

PRESENTATIONS/DELEGATIONS

Cyber Security
Update

A presentation by RMOW Manager of Information Technology, P. Cartwright regarding the 2021 Cyber Security incident.

Initial Steps

Presentation covered important initial steps when encountering a possible cyber breach; password maintenance; cyber insurance; engaging forensics team; ensuring critical municipal systems were secure with a focus on community systems like the WWTP. Established daily check-ins at beginning and end of day; coordinating action between municipal recovery groups; business continuity groups.

What Happened?

Two stages; initial collection of intel and review of logs for indicators of compromise, suspicious files and similar markers. Threat actor attempted to cover their tracks. Recovery was and is the biggest body of work for the RMOW IT team. Worked with business continuity team on legislative requirements and essential processes. This resulted in a tiered recovery approach: Tiers 1 to 3. Happened in parallel with supporting communications and creating a temporary Office 365 environment. Also, IT developed a plan to rebuild and remediate the servers. Wanted to avoid any chance of compromising the servers by missing any backdoors the threat actor had access to.

Established a red/yellow/blue/green zone system for safety on RMOW networks and services and devices. Battery of tests for any system to go from red through yellow to green. Rules and constant monitoring were essential to moving through these stages. Involved a redesign of infrastructure. Rebuilt a core amount of IT services. Reimaging all devices before allowing them to connect to the RMOW network.

Recovery

Considered now to be out of recovery; some older systems not back online because they are not compatible with new operating environment. Factoring delayed projects into 2022; some backlog on previously planned projects. Managing burnout as staff was working 24/7 initially, and long hours since the

incident. Implemented improvements in network architecture and design to improve the security posture. Reimaged over 350 workstations over 4 days.

Who Helped?

Incident response and recovery teams; support of another municipality's resources to assist. Cyber insurance team. RCMP assisted on criminal elements. CCSS team helped advise and provided guidance on recovery plan. Deloitte helped with dark web monitoring. Office of Privacy Commissioner on PII and reporting obligations.

Key Challenges

COVID pandemic and work-from-home posed its own challenges. Communications with outside groups and RMOW staff. Communication without email. Stress and anxiety for staff. Threat actors; becoming increasingly sophisticated at covering their tracks and employing anti-forensic tactics.

Key Learnings

Having an adequate level of cyber insurance. Experienced teams with forensics, information preservation. Preserving evidence; make sure logs are backed up and secure to avoid threat actor interference, including an offline copy unavailable to threat actors. Having infrastructure that can be relied upon in an incident. Rely on experienced parties; third party contacts and vendors that can assist.

Cyber Security Presentation

A presentation by K. Cerny on Cyber Security: Bigger Picture and Key Trends.

Presentation Notes

About 65,500 cybercrime incidents in 2021. Threat actors are becoming more organized and working in conjunction with each other. By 2025 approximately 40% of corporate boards will have a dedicated cybersecurity committee overseen by a qualified director.

Defense Strategy

Measuring your risk as an organization and implementing controls. How to measure risk? Loss event frequency and loss magnitude. FAIR Institute and creating a quantitative risk analysis. CIS 18 critical controls.

Resources:

www.cisecurity.org/controls
www.nist.gov/cyberframework
www.fairinstitute.org

Q&A Period

A question and answer period for members and guests.

Topics covered recovery, cloud issues and successes, multiple avenues for recovering critical infrastructures and data. Recovery strategies including cloud based solutions. Raising awareness of cyber security across the organization; onboarding new employees and workplace security policies.

Key Member Updates

Updates by members on significant technical issues and updates.

Tourism Whistler: IT technical staffing issues in Whistler, likely affecting businesses across the spectrum.

OTHER BUSINESS

There were no items of Other Business.

MOTION TO TERMINATE

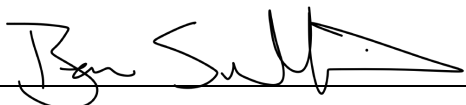
Moved by P. Cartwright
Seconded by T. Bonnell

That the Technology Advisory Committee meeting of Wednesday, December 22, 2021 be terminated at 4:43 p.m.

CARRIED



Chair, Councillor R. Forsyth



Recording Secretary, B. Sullivan