Information Privacy and Security Council (IPSC)
Meeting Minutes
August 15, 2018

Videoconference Centers (VCC)
Kalanimoku Bldg., 1151 Punchbowl St., Rm. 410, Honolulu, HI 96813
Hilo State Office Bldg., 75 Aupuni St., Basement, Hilo, HI 96720
Wailuku State Office Bldg., 54 S. High St., 3rd Flr., Wailuku, HI 96793
Lihue State Office Bldg., 3060 Eiwa St., Basement, Lihue, HI 96766

Members Present

Vince Hoang, Acting Chair	Office of Enterprise Technology Services (ETS)
Lisa Tong, Designee	Department of Commerce and Consumer Affairs (DCCA)
Jonathan Chee	Department of Education (DOE)
Wilfredo Tungol, Designee	Department of Health (DOH)
David Keane	Department of Human Resources Development (DHRD)
Jodi Ito, Designee	University of Hawaii (UH)
Matthew Iaukea, Designee	County of Hawaii
Nyree Norman	County of Kauai
Karen Sherman	County of Maui

Members Absent

Lim Yong	Department of Human Services (DHS)
Kevin Thornton	Judiciary
Carol Taniguchi	Legislature
Mark Wong	City & County of Honolulu

Other Attendees

Valri Kunimoto	Deputy Attorney General
Susan Bannister	ETS

I. Call to Order

 Acting Chair Hoang called this meeting to order at 1:08 p.m. Quorum was established with seven members/designees present.

II. Review and Approval of June 20, 2018 Meeting Minutes

 Member Designee Ito made a motion for the IPSC to approve the June 20, 2018 meeting minutes, which was seconded by Member Designee Tong. Vote was taken and the motion passed by unanimous consent.

 Member Chee entered the meeting.

III.   Public Testimony on Agenda Items

        None.

IV.   Permitted Interaction Group to Update Guidelines and Best Practices of the Information
        Privacy and Security Council; Report

        Acting Chair Hoang reported that the PIG met and identified that the IPSC website has
        not been updated for a while. Actions would be to review for any broken links and
        remove them. For externally facing guidelines, the PIG decided to have the website refer
        to the content rather than duplicate the content. The goal is to minimize the effort to
        upkeep the content.

        Member Designee Tungol entered the meeting.

V.   Domain Name System Security

        Acting Chair Hoang reported that technologies such as Domain Name System (DNS) for
        security has enabled ETS to further protect the state's infrastructure. Global Cyber
        Alliance, an MS-ISAC partner, heavily promotes DNS security. One of the programs
        called Quad9 points DNS servers to 9.9.9.9 that will provide security-related screening.
        If the service identifies malicious behavior for certain websites or an IP address, it will
        block that from resolving to protect the infrastructure that's being used. To maintain
        some level of privacy, the requester's IP address is not recorded.

        This is a low-cost way to provide additional security for an enterprise or organizational
        structure. In contrast, there is a solution available by Cloudfare. Cloudfare's 1.1.1.1
        approach is to promote privacy. ETS elected to go with a commercial service that
        provides the reporting capabilities to better understand what the state is up against and
        can provide added protection.

VI.   Department of Homeland Security Binding Operational Directive 18-01,
        https://cyber.dhs.gov/bod/18-01/

        Acting Chair Hoang reported that the guidance from the Department of Homeland
        Security, Binding Operation Directive 18-01, Enhance Email and Web Security, provides
        provisions to improve email and web-based security for state and local government.
        With respect to email security, guidance using DMARC (Domain-based Message
        Authentication, Reporting & Conformance) prevents domains from being spoofed from
        its organizations. Hoang reported that Hawaii.gov has published DMARC records and is
        moving from the reporting process, to a quarantine process very soon, then ultimately a
        reject process. This means that only the State of Hawaii email infrastructure will be
        allowed or permitted to send mail originating from Hawaii.gov.

        Hoang stated that there are some issues related to mail services or subscription services.
        One example is Salesforce, which can be configured to send mail originating from
        Hawaii.gov. The mail is sent "On behalf of" which may or may not be from a
        Hawaii.gov address. ETS has not fully enforced DMARC yet because there are many

services being used by various departments that are out-source services that are sending mail originating as Hawaii.gov. Once those services are identified, ETS will be able to work with the departments and agencies so that services are no longer sending mail as Hawaii.gov but more as "On behalf of Hawaii.gov". This will help reduce the issues related to business email compromise where people mail as Hawaii.gov and potentially have a fraudulent activity. With having DMARC turned on, it will be very difficult for frauds to spoof Hawaii.gov.

The Directive regarding web security promotes running TLS (Transport Layer Security) version 1.2 and HTTP (Hypertext Transfer Protocol) HSTS (HTTP Strict Transport Security). It forces encryption and help promote privacy. The negative impact to the enterprise is that it would be more difficult to screen encrypted traffic to provide security enforcement. In the past, you might have been able screen encrypted traffic and look for sensitive or malicious activity. Once sites turn on HSTS and later versions of TLS then your users would see broken links. The TLS 1.3 specification was ratified last week, so transitions and support will be occurring for that. Operationally, no one should be using TLS / SSL versions less than 1.2. These have been used in attacks in the past.

Hoang mentioned that the Legislature's capitol.hawaii.gov is using DMARC so the Legislature is the only organization that can send mail from capitol.hawaii.gov. If mail originates from somewhere else, it will be marked SPAM or rejected.

Hoang asked if IPSC should prepare a formal document recognizing this as guidance promoting this type of control or just state it in the meeting minutes. During discussion, Member Designee Ito mentioned that the University of Hawaii (UH) would have difficulty implementing DMARC due to is numerous services and not knowing how the servers are configured to send mail out. Member Chee stated that the DOE has SPF enabled (a component of DMARC). Member Designee Iaukea stated that County of Hawaii is currently using DMARC.

It was determined that no formal guidance is necessary from the IPSC regarding the Department of Homeland Security Binding Operational Directive 18-01.

VII. Good of the Order

    A. Announcements

Acting Chair Hoang announced that Senate Bill 2738 was signed into law on June 29, 2018 and became Act 82 effective upon approval. It is posted on the Legislature website. Hoang will follow up with a memo on behalf of the IPSC to local government, including law enforcement agencies and the Department of Transportation. A draft guidance referring to NIST 800-88 will be put on next month's meeting agenda for review and approval by the council.

Hoang also asked members to submit potential legislation for the upcoming legislative cycle so it can be placed on the agenda for discussion.

Member Norman asked if the annual IPSC survey forms were updated. Hoang instructed members to use their last year's pdf documents and update it for this year.

B. Next meeting: September 19, 2018, 1:00 p.m.

VIII. Adjournment

At 1:40 p.m., Member Designee Tong made a motion to adjourn, which was seconded by Member Designee Ito. Vote was taken and the motion passed unanimously.

Recorded by: *Susan Bannister*   *9/19/18*
              Susan Bannister   Date
              Office of Enterprise Technology Services