

PSCIOC Information-Sharing Template – October 2017

JURISDICTION: NOVA SCOTIA		Contact
<p>1. Accomplishments: Briefly highlight major IT/IM accomplishments, progress, and/or significant milestones achieved in your jurisdiction over the past 6 - 12 months.</p>	<p>Infrastructure Rationalization: CTS architected and moved to a shared back-up solution, load balancer, and infrastructure monitoring tool for Government and Health Sectors. These shared environments result in cost savings and cross-sector support models. The savings to date are over \$500k. They are initial steps in a larger rationalization effort to support our shared services goals.</p> <p>CTS Shared Services Team Consolidation: In May 2016, CTS aligned consolidated former Health and Government teams functionally. This change enabled cross-sector knowledge transfer and fostered a diverse and robust technical environment. Teams are actively working to gain a deep understanding of the existing technical environments and seeking opportunities to standardize and move to shared infrastructure.</p> <p>Network and Wireless Standardization: CTS is in Phase 1 of network standardization, both wired and wireless, in the former District Health Authorities. This will enable broader support, centralized monitoring and troubleshooting as well as increase buying power to leverage economies of scale.</p> <p>Innovation in DevOps: CTS Unix team working with our clients to help them automate the management, content and versioning of their applications. Their efforts were recognized in the industry and two team members were guest speakers for the webinar “<i>Breaking Down the DevOps Barrier at the Province of Nova Scotia</i>” http://get.gitlab.com/nova-scotia-devops/.</p> <p>BRM Program Launch: The Province of Nova Scotia officially launched the Business Relationship Management (BRM) program in October 2016. This division is led by a member of the ICTS executive and has the responsibility to partner with our clients and take a strategic and corporate view to business planning. The BRM team works to manage and improve the relationship with our clients as well as drive improvements in their</p>	<p>Glenn Bishop Glenn.Bishop@novascotia.ca</p>

experience. The team follows the best practices based on the Business Relationship Management Institute (BRMI) and the Business Relationship Directors have been certified as Business Relationship Management Professionals.

Identity Management / Digital Login Solution:

The Province of Nova Scotia officially launched a new program and service that addresses Identity, Access, and Credential Management (ICAM) needs of the province as we move toward addressing our digital government agenda. The new ICAM team provides services both internally to government as well as to the public, and provides secure access to government information and services. The architecture behind the external service has been built with the intent to align with the pan-Canadian direction regarding identity management.

Panorama Public Health Case Management and Surveillance System:

Nova Scotia Department of Health, Nova Scotia Health Authority, and Internal Services are championing the implementation of a new Managed Service called Panorama (IBM), which is intended to improve the management of immunization programs, communicable diseases, and major disease outbreaks. The two-phased initiative is well under way, with Phase 1 Vaccine Inventory module being implemented into production in November, and Immunization Management planned for production in February 2018. Phase 2, which is the implementation of Investigation & Outbreak Management is planned to run from December 2017 to November 2018.

Client Services Shared Services Team Consolidation:

In May 2016, Client Services aligned consolidated former Health and Government teams functionally. This change establishes the foundation to further enabled cross-sector knowledge transfer and fostered a service centric based culture. Work is to review key processes for standardization and efficiencies.

End User Services:

The Service Desk implemented Knowledge Management and a Client Self-Service channel. Client adoption of the self-service channel has continued to increase on a monthly basis.

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End User Compute:

The focus of the team over the past year has been around standardizing the end user compute environment of our largest client, the Nova Scotia healthcare system. We were successful in standardizing our hard disk encryption technologies and processes, our desktop base image, the password policies, access levels to desktops for technicians, and our remote-control toolset. Significant progress has been made in the standardization of Microsoft Office versions as well. The team has now has a standardized procurement vehicle and deployment process for Adobe products across health and government sector. The introduction of iPhone as the new mobile standard for both sectors was completed as well. Within the government end user footprint progress has been made on the Windows 10 migration with the image defined, application testing well underway and migration of all Windows 8 devices completed. Anticipate all new computers to be deployed with Windows 10 starting in November.

Service Management:

The Service Management transformation project has completed deployment of 5 common ITIL v3-based processes to the government and health sectors. This single build of the service management tool, along with implementation of a new contact centre solution, are enabling the realization of Internal Services' shared services goals. The introduction of an online tool for health clients has resulted in self-service adoption of approximately 20% of contacts.

Enterprise Service Management:

The Department of Transportation Infrastructure Renewal (TIR) implemented Axios Assyst to support a new province-wide contact centre that tracks and manages contacts from Citizens for problems/complaints/emergencies on the Provincial Highway system. In addition, Assyst was implemented in the Department of Community Services to enable the Department to log incidents and requests from department staff related to their integrated case management system. By onboarding to the Enterprise Service Management platform, Department of Community Services is now able to log incidents and requests and seamlessly move these requests through to fulfilment within ICT Services.

Change Management:

Over the past year, a common process was implemented across the government and health sectors to enable IT change management across

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the two sectors. Currently, two change boards are in place to manage changes to the Health and Provincial network.

Service Portfolio Design:

To enable ICT Services to better represent its services to clients, a preliminary service portfolio has been created that defines business services in a client centric manner. Work is currently underway to further define the portfolio with the inclusion of support services, professional services and technical services.

Full consolidation of IAP Services

The consolidation of FOIPOP resources into a central location has been completed. The majority of FOIPOP administrators and now reside in the IAP Services office. The centralized location for privacy and access services has improved service delivery to client departments and the public and enhanced the ability to collaborate and coordinate the workload of the division.

FOIPOP Disclosure Log

The disclosure log has been completed and implemented and the public can now view FOIPOP disclosures online 14 days after the completion of the request. The disclosures are vetted by a review team before being posted to ensure compliance with the Act. The log has improved the transparency of government and reduced the number of redundant requests received.

Requestor Portal

A website where FOIPOP applications can be submitted and paid for online has been completed and implemented. Applicants can now complete the entire FOIPOP process from application to payment to receiving the documents entirely online. The implementation of the portal has streamlined the FOIPOP process making it more accessible and reduced the time required for new requests to be processed by IAP Services.

Privacy Program Revision

To bring the Privacy Program in-line with the Access Program, a number of projects were completed. A new privacy policy has been completed and is awaiting approval. This policy better reflects the modern privacy environment and current best practices and strengthens government's commitment to ensuring privacy. In addition to the policy, a number of

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	<p>accompanying processes were revised to support it. These include new guidelines and processes for privacy breaches, privacy complaints and privacy impact assessments.</p> <p>Cybersecurity and Risk Management Program Nova Scotia's cybersecurity and risk management program was improved over the past year. Cybersecurity staff previously reporting to various divisions were re-aligned and consolidated under the cybersecurity division, the province adopted the NIST cybersecurity framework, have established an understanding of the current maturity of both government and health care sectors and implemented an enterprise vulnerability management program. A multi-year strategy, action plan and expected outcomes have been prepared and a risk-based approach to security was implemented, with a statement of acceptable risk (SOAR) process replacing the former ICTS waiver and exception process, ensuring business owners understand and plan to address their cyber risks, vice looking at cybersecurity as an "IT issue". Additional investments of ~ \$2M were made to procure modern hardware and software to increase our protection against cyber attacks and the cybersecurity team has collaborated with PSCIOC NCSIP to assist a variety of projects such as One Patient One Record (OPOR), SAP Hana Enterprise Cloud (HEC) and IBM Panorama to take a security-by-design approach.</p>	<p>Robert Samuel Robert.Samuel@novascotia.ca</p>
<p>2. <u>Priorities:</u> Briefly describe what your organization sees as its top IT/IM priorities/initiatives over the next 12 to 36 months.</p>	<p>End User Services: Define and implement a standard approach for the IT service desk for Health and Government that builds on the standard service desk management application (Avaya). The approach will include the definition of services and the establishment of standard processes (including self-serve and automated processes where possible) to support improved the delivery of ICTS services. Monitoring channel usage for optimum efficiency and focus on advancing current Knowledge Management. In addition, early investigation of artificial intelligence technologies is underway as an additional channel for our clients to request services. The focus continues to be shift from a technology-centric culture to client-centric.</p> <p>End User Compute: Continued our standardization work in our desktop environment which will include deployment infrastructure and procedures, Windows updates processes, application delivery methods, user access levels on desktops, further standardization of Microsoft Office versions,</p>	<p>Troy Woodworth Troy.A.Woodworth@novascotia.ca</p> <p>Rick Crowell Rick.Crowell@novascotia.ca</p>

standardization of Adobe Acrobat versions, antivirus standardization, standardization of desktop hardware across all client sectors. Other priorities include Office 365 readiness, EMM assessments and exploring Android support capabilities, starting Windows 10 deployments with Health Sector, and deploying a print management and accounting solution to the health sector. Review of HP Laptop/Desktop and Xerox Management Print Services contracts to inform business decision on contract extension.

IT Asset Management / Contracts:

Define and implement a standard approach to IT asset management across Health and Government that includes the establishment of standard processes (including self-serve and automated processes where possible) to support improved delivery of services within ICTS.

Partnering on Strategic Initiatives:

CTS will partner with colleagues across CTS to enable strategic initiatives including Second Operating Service (2OS), Office 365, Panorama, One Person One Record (OPOR), QEII Redevelopment and the Provincial Digital Strategy.

Shared Services Enablement:

CTS will continue to focus on infrastructure rationalization and a cross-sector support model. Larger initiatives associated with this include OneDomain (consolidation of former district health authority domains) and 2OS (second operating service).

Digital Government:

Internal Services, along with Service Nova Scotia and Communications Nova Scotia, are in the process of reviewing best practices, and consulting with other departments, industry, and stakeholders to begin the transition from a focus on in-person service delivery to a digital-by-default approach. Over time, digital technology will transform government service delivery by making it easier than ever for citizens to access government services, and for government to engage citizens in program and policy development.

Privacy Policy

The policy work has been finished, and pending approval, the major work in the near future will focus on implementation. Government entities will

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need to be educated on the new policy and processes with the goal being to enhance privacy management in the province. The timeframe for implementing the policy is within 6 months of the approval date.

Corporate Privacy and Access Training

Another component of the Privacy Program revision is the creation of a mandatory privacy and access training program for all government employees. The training will be refreshed every 2 years and provides employees with information about privacy and access processes and their responsibilities in these areas. The completion of the training modules and their implementation is scheduled to be completed before the end of the calendar year.

Cybersecurity and Risk Management Program

Key priorities for the cybersecurity program include evangelizing and raising stakeholder awareness about cybersecurity and risks, establishing an enterprise cyber risk register, implementing mandatory annual cybersecurity education and awareness training, procuring and deploying a continuous security monitoring solution, establishing a cyber fusion centre to consolidate all cybersecurity staff, improving our NIST cybersecurity framework baseline ratings and implementing the Center for Internet Security (CIS) Top 20 Critical Security Controls for Effective Cyber Defence.

NSBI - SAP Loans Management

The fundamental drivers for the project are to reduce risk, to automate manual processes, to tighten financial controls, to further consolidate the Province's lending portfolios into the corporate SAP system and to address repeat AG findings and recommendations. Replacing the end-of life, stand-alone system that DoB / NSBI currently use for financial administration of the Province's economic investment and business development lending portfolios which together currently serve nearly 200 Nova Scotia business accounts with outstanding balances valued at close to **\$750 million** (DoB's NS Jobs Fund / IEF - \$630M; NSBI's NS Business Fund - \$112M).

PNS / NSHA/IWK / NSSB – SAP SuccessFactors

The implementation of SAP's SuccessFactors represents the Province's first significant cross-sector Shared Services implementation. In April 1, 2017 the last of the sectors was successfully implemented. All 3 sectors: PNS; Health; and Nova Scotia School Boards (NSSB) now have a

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common technology and platform for their Recruitment, Marketing and Onboarding.

PNS/NSHA/IWK/NSSB SAP GRC – Access Control/Segregation of Duties

The Province of Nova Scotia wants to transform its Governance, Risk and Compliance (GRC) landscape by adopting new functionality and providing this functionality to stakeholders as a shared service. Over the years, a number of regulatory and public sector governance changes have increased the requirements to proactively manage access to corporate systems. Without adequate access controls, organizations risk costly and embarrassing losses of customer data accompanied by financial losses. To address these areas, many organizations are introducing additional controls broadly known as Governance, Risk and Compliance (GRC).

Visyons Server Upgrade – VISyONS is a mission critical application used by the Vital Statistics program to register the births, deaths, marriages, stillbirths, and domestic partnerships which occur in the province of Nova Scotia. It manages the processing and issuance of supporting documentation such as birth certificates, death certificates, marriage licenses, and marriage certificates. It also interfaces with several federal and provincial partners to provide vital event information and real-time birth certificate validation. VISyONS has been running on outdated, unsupported hardware and technology (for over 10 years). This project involved upgrading the hardware, web server, and related technologies used by the VISyONS system. The project began in November of 2014 and was successfully implemented into production on August 28, 2017.

Collision Data Management System (CDMS)

The purpose of this project was to develop a Collision Data Management System (CDMS) to automate the collection and distribution of collision data, including an electronic interface for the receipt of collision reports from police, in order to improve the timeliness and quality of collision data, reduce manual processing, and make collision data available for analysis and reporting purposes. This project was implemented using an agile approach with multiple releases starting in May 2016 with the final release summer 2017.

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<p>3. <u>Issues and Needs:</u> Briefly describe any issues you would like to share with the Council and what assistance you might be seeking from PSCIOC.</p>	<p>Enterprise Mobile Device Management – Successful adoption within public sector on management of androids.</p> <p>End User Compute – Success implementation of “Bring your Own XXXX” – sample policies, challenges/lessons learned, key business drivers etc.</p> <p>End User Compute – Windows 10 and how organizations are preparing for the Windows Servicing Model and application testing.</p> <p>End User Compute – End User Devices – Is anyone actively exploring the “Device as a Service” with their vendors?</p> <p>Legislation in the digital age Are jurisdictions contemplating specific legislation -outside of the traditional FOIPOP statutes- to specifically address issues related to protection of personal information in the digital environment including data localization, similar to the data protection regulations in the EU.</p> <p>Cybersecurity and/or Digital Safety Legislation How can we collaborate from an FPT perspective to pursue and implement cybersecurity / cyber safety / digital safety legislation? Has the federal government consultations on cybersecurity resulted in a findings document that can be shared and what can we collectively move forward with as a result?</p>	<p>Carolyn Mckenzie Carolyn.Mckenzie@novascotia.ca</p> <p>Maria Lasheras Maria.Lasheras@novascotia.ca</p> <p>Robert Samuel Robert.Samuel@novascotia.ca</p>
<p>4. <u>Planning for PSCIOC Meetings /Teleconferences:</u> Please identify topics of particular interest to your jurisdictions for future PSCIOC meetings /teleconferences. <i>(Please provide a brief description for each item.)</i></p>	<p>Developing information sharing practices and frameworks between and within governments for the purposes of decision making.</p> <p>What would PSCIOC like to know from the NCSIP group? Has the information provided over the past year met your needs? How can the FPT cybersecurity community better communicate the business risks and actions to take to prevent cyber attacks from impacting our programs and services?</p>	<p>Maria Lasheras Maria.Lasheras@novascotia.ca</p> <p>Robert Samuel Robert.Samuel@novascotia.ca</p>