PSCIOC Information-Sharing – February 2017

JURISDICTION: British Columbia		**Contact**
1. Accomplishments: Briefly highlight **major IT/IM accomplishments, progress, and/or significant milestones** achieved in your **jurisdiction over the past 6 - 12 months**.	**CloudBC** • Issued the CloudBC Invitation to Submit Offers (ITSO) for IaaS and PaaS on July 15, 2016 on BC Bid, the B.C. public sector procurement platform (Refer to: Solicitation File ON-002797). • The first intake process has completed as of November 14, 2016 and respondent proposals are in the evaluation phase. • Continued engagement with vendors and other jurisdictions to inform delivery model, procurement strategy, and best practice terms and conditions. • In-depth discussions with Microsoft and supporting readiness analysis on an ongoing-basis, working towards a common contract framework for Office 365 for government and broader public sector. • CloudBC Technical Working Group has been established and has prepared guidance and recommendations for network connectivity solutions for B.C. public sector to cloud providers and is now scheduling future topics related to cloud adoption.	**Pierre Vorster**
	BC Government Cloud Services • Continued line of business service activations across all ministry sectors of Canadian data resident and privacy compliant IaaS cloud services; first IaaS workloads are now provisioned (HPE Canadian public sector community cloud). • Continued as co-chair of the PSCIOC Cloud Working Group with Treasury Board of Canada Secretariat. • Conducted enterprise assessment of demand for cloud platforms and services, within core government and broader public sector with CloudBC. • Implementation of Incident Management and Problem Management using a new data sovereign SaaS IT service management solution (HPE Service Anywhere). • Increased use of the DevOps OpenShift platform by ministries.	**Stephen Gordon** **Terry Whitney** **Peter Watkins**

	Microsoft O365 • Completed 8 high level security threat risk assessments (STRA's) for O365 services and Azure Cloud infrastructure. • Converted Microsoft Office licensing to O365 subscription based contract. • Implemented identity federation services to enable staff to access Microsoft Office in the Microsoft Cloud. • Assessed overall readiness to adopt O365 and Azure Cloud. • Presented conceptual privacy impact assessment and security threat and risk assessment for O365 services and Azure Cloud infrastructure summary to the Office of the Information and Privacy Commissioner for B.C. • Moved government production tenancy from North America to MS Canadian data centre October 2016. • Completed privacy impact assessment and security threat risk assessment for Exchange Online Protection service	**Derek Rutherford**
	Network Communication and Collaboration Services • Implemented two new diverse Internet accesses to the HPAS data centres in Kamloops and Calgary providing enhanced security and availability to government applications and services. • Into year four of five-year of the network modernization initiative, transitioned 1,200+ government sites to new network to-date. • Voice Modernization – transitioned over 3,000 voice users to the Microsoft Lync/SkypeforBusiness Enterprise Voice technology in 2016. • Upgraded all Telepresence Rooms and supporting technology infrastructure October 2016. • 2016- Provincial Learning Next Generation Network transition, approx. 98 % of 1,622 schools transitioned to Next Generation Network. • Completed phase 1 of GPS Business Extranet to Crown and Health Authorities Nov. 2016. • Implemented Secure Mobile Gateway to TELUS cellular network providing private and secure access for government users and sites. • Completed STRA and Privacy Impact Assessments (PIA's) in preparation for	**Chris Hauff**

	leveraging Microsoft Exchange Online Protection (Email Filtering) and Skype Meeting Broadcast (webinar functionality). • In design and planning phase for Microsoft Express Route to O365 and Azure Services in Microsoft Data Centres.	

	BC Developers' Exchange
	• Work on the BC Developers' Exchange continues:
	  ○ Created a micro-procurement transaction called "Code With Us" that is being used to simply and quick acquire software development services using specifications posted in GitHub.com/BCGov transactions have ranged from $1k-$10k
	  ○ Completed the design, and classification of a fleet of government job profiles to support the recruitment of government employees into roles for government agile teams
	  ○ Initiated a set of early adopter/catalyst projects that are undertaking an experimental model for continuous service improvement using an open/open source development model
	  ○ Modernized the government data centre with a DevOps container platform service based on RedHat OpenShift to enable rapid prototyping and modernized continuous deployment/integration; current in use by a small set of catalyst projects from a cross-section of government departments
	  ○ Working to initialize a Continuous Service Improvement Lab intended to accelerate the adoption of agile/DevOps/Open Development/Service Design etc.
	  ○ Launched the roadmap for the BC Developers' Exchange:
	http://roadmap.bcdevexchange.org
		Peter Watkins

	BC Services Card Program
	• The Program is into year four of a five-year card roll-out with 4.1M BC Services Cards issued as of November 30, 2016.
	• The Card is currently being used by citizens as a CareCard replacement and identity credential.
	• The previously reported onboarding opportunity with the Provincial Health Services Authority is now in production. This service enables Canadian Blood Services workers to access blood related data using their Card to login to the CareConnect application.
	• Other active onboarding opportunities underway are:
	  ○ Ministry of Finance - Biller Direct
	  ○ Ministry of Finance - PayBC
	  ○ Ministry of Education - Student Transcripts Service
	  ○ Ministry of Technology, Innovation and Citizens' Services – BC Biometrics Service, to be used by Ministry of Public Safety and Solicitor General for the Okanagan Correctional Centre
	  ○ Ministry of Advanced Education – Student Financial Aid
	• The Program worked in partnership with Service BC to design the processes for issuing passcodes and all Service BC offices have received the appropriate training.
	• Based on findings of the usability testing conducted early in 2016, help site content changes and better instructions with applications have been implemented with more recommendations being assessed for implementation in 2017.
	• The prototype solution for in-person authentication was developed into a production solution to be used by the BC Biometrics Service to support staff and contractor enrolment process at the Ministry of Public Safety and Solicitor General's new Okanagan Correctional Center (OCC) in Oliver, BC. This scenario involves a government worker using their card to prove their identity when enrolling their biometric into OCC's building access system.
		Sophia Howse

	BCeID and Common Logon Page (CLP) – Usability Enhancements
	• The look and feel, and content of BCeID and CLP applications were updated and are in production:
	  ○ To align with BC's Government Communication and Public Engagement web standards and to be mobile-friendly.
	  ○ To support ministries launching new systems that require a more streamlined user experience for CLP and BCeID.
	  ○ To move towards a common look and feel for the BC Government main authentication services, e.g., BCeID, BC Services Card, CLP.	

	OCIO Strategy 2016 • Launched the OCIO Strategy 2016, which sets the 3-year strategic direction for Information Technology (IT) for government. The strategy is about enabling digital services, maximizing value from our IT investments, operating a secure IT infrastructure and enabling our workforce to accomplish our shared goals. **Industry Intelligence Program** Launched the OCIO's Industry Intelligence Program. The program is used to create a broad picture of existing markets, customers, problems, competition, and growth potential for new products and services. The Province currently has agreements with 3 intelligence providers; Gartner, Forrester and IDC. We work with these companies to gain answers to critical business questions. The program has helped us improve decision making and gain knowledge, while saving time and reducing associated costs.	**Niki Sedmak**
	Information Security • Completed first significant outsourcing of security capability through Secure Internet Service (SiS) project providing 24x7 support • Matured vulnerability management program and mitigated significant risk to government by remediating substantial number of vulnerabilities • Completed onboarding anchor tenant to Digital Certificate Service • Held very successful awareness events including 2017 Privacy and Security	**Gary Perkins**

	Conference, semi-annual Security Days (focused on Risk), and others attracting delegates from around the world • Continued testing reach and effectiveness of security awareness leveraging phishing campaigns • Launched new Corporate Information Security Risk Register to identify key risks and prioritize allocation of resources • Completed framework and standards for mobile, cloud, and database security along with data security roadmap • Completed key data classification proof-of-concepts aimed at educating and informing next steps in protection of data • Maintained PCI Compliance for government infrastructure supporting credit card payments. • Onboarded remaining team members onto Enterprise Mobility Management (EMM) solution • Completed new, updated version of Information Security Policy • Partnered with other jurisdictions to complete security threat and risk assessment for O365	
	Connecting BC • Launched the $10 million Connecting British Columbia program, a multi-year, province-wide program designed to help expand and enhance rural high-speed Internet connectivity in B.C. The program is administered by the Northern Development Initiative Trust. To date, over 200 B.C. communities will benefit from this program with nearly $8.5 million in Connecting British Columbia projects approved to date. The program has leveraged nearly $16.5M from various funding sources, including the former federal Digital Canada 150: Connecting Canadians program. • Expanded cellular coverage along unconnected segments of provincial highways to enhance public safety as a result of the Province's strategic relationship with TELUS As of December 2016, over 1,700 kilometers have been completed and the program is substantially complete. The cellular builds were paid for by TELUS. • Engaged with the federal department of Innovation, Science and Economic	**Susan Stanford**

	Development on the new Connect to Innovate program launched in December 2016. • Participated as an intervener in the CRTC Universal Service Objective that has resulted in a new benchmark for Internet speeds at 50Mbps download and 10Mbps upload.	
	Strategic Partnerships Office (SPO) The Strategic Partnerships Office (SPO) has continued to focus on developing its internal skills and expertise and extending strategic deal management knowledge across core government over the last year. SPO has directly supported approximately 7 deals/initiatives through key deal lifecycle stages in the past six months, including work in support of the Workplace Technology Services, Facilities Management and Service BC Contact Centre procurement projects. SPO extended its critical readiness strategy to develop internal staff skills, knowledge and expertise in critical deal management areas. In support of capacity building, at the deal level, SPO provided a total of 1,184 training hours by the Centre for Outsourcing Research and Education (CORE) for approximately 74 individuals. Nine executives from across core-government and the BPS attended a one-day ADM-level course on outsourcing best practices and trends. Additionally, SPO provided two 2-day courses on Advanced Negotiations. Thirty-six individuals attended these two courses. Across the portfolio, SPO conducted a skills assessment on eleven contract offices to capture the level of experience against a catalogue of forty-two key skill areas.	**David Morel**
	Device Services Procurement • Confirmed the Province is to proceed with separate Negotiated Request for Services procurement through Treasury Board. • Completed 3rd party review of outcomes based approach including proposed outcomes statements and draft performance measurements. • Business review and final edits of draft procurement documents (NRFP, business requirements, steady state, etc) in final stages.	**Nadine Criddle**

	IM/IT Capital Investment • Implemented Copperleaf's C55 Asset Investment and Portfolio Management system to strengthen and standardize the process for prioritizing and funding new applications and maintaining existing applications. This new tool will provide government with a resource to identify the optimal blend of capital maintenance and new investment funding, align investment decisions to strategic priorities and to model different investment options depending on strategic priorities and budget availability. The application also provides a robust application inventory and health check component to help better manage applications across government. • Developed additional planning guidelines including updated and enhanced planning templates to improve capital and operating analysis of IM/IT capital projects. • Further refined the new two-step planning process and integrated the initiation of requests into C55. The process starts with a Concept Case, a three page summary entered into C55, outlining the business problem to be solved and high-level options, timing, costs, risks and benefits. The projects are then prioritized and consolidated down to the top priorities, and projects then move to the Business Case planning phase. The new approach saves time, cost, and effort, and allows government to more quickly focus on the projects most likely to receive funding approval. • Completed pilot IM/IT project leadership mentoring program for senior leaders within large IT-enabled business transformation projects. Project was highly successful. • With the BC Public Service Agency, designed organizational structure and staffing approach for large IT-enabled projects (+$20M) and applied it to existing large IT-enabled projects. • Completed project across ministries to move funding from contractual services into staffing resulting in the ability to hire additional IM/IT project staff to augment and improve government's management of projects • Piloted training in COBIT5 and Prince 2 to help increase corporate knowledge base, establish a common language, and broaden understanding of industry standards across government. Received positive feedback and currently pursuing	**Kalyn Sherk**

	customized training to further enhance the maturity of both IM/IT asset management and project management. • Engaged with an external third party to develop an IM/IT project governance, management, and assurance (audit) framework. Consulted with the Office of the Comptroller General, the Office of the Auditor General, and ministries on current challenges and opportunities for improvement and incorporated feedback to help encourage use of the framework.	

2. <u>Priorities:</u> Briefly describe what your organization sees as its **top IT/IM priorities/initiatives over the next 12 to 36 months**.	**CloudBC** *Next 6 months:* • Prepare terms and conditions for cloud vendors related to data residency and privacy in line with guidance from Office of the Information and Privacy Commissioner of B.C. • Conclude negotiations for the Contract Framework Agreement with at least one vendor resulting from the ITSO procurement to pre-qualify IaaS and PaaS services. • Release online portal to provide open access to IaaS and PaaS service descriptions. • Renew CloudBC operational plan and update implementation plan accordingly. • Conduct entity demand and readiness assessments to inform development of the business plan for CloudBC for this next year. *6 to 36 months:* • Complete negotiations with Microsoft for Office 365 to establish master agreement(s) available to BC Government and broader public sector. • Roll out future CloudBC procurements for cloud and related services. • Establish platform to facilitate collaboration and knowledge sharing across CloudBC entities.	**Pierre Vorster**
	BC Government Cloud Services • Initiating the shift from *enabling* cloud to *adoption* of IaaS, PaaS, and SaaS cloud platforms and services; ministry engagements continue with early development of a 'playbook' for cloud. • Complete the design, production and online publication of the cloud strategy for B.C. core government. • As PSCIOC Cloud Working Group co-chair, continue to introduce and facilitate topics of interest related to cloud adoption for participating members. • Development of the strategy for enterprise utilization of Salesforce and access to the Canadian Data Centres with establishment of the corresponding Master Service Agreement.	**Stephen Gordon**

	Microsoft O365 • Implement findings of the Office365 readiness assessment. • Complete privacy impact assessment – currently with the Information and Privacy Commissioner for review. • Complete pilot of Office365 in government, focusing on Email Filtering, SharePoint and One-Drive. • Plan to transition to the Microsoft Exchange Online Protection (EOP) Office 365 service. • Planning underway to implement Microsoft Skype Meeting Broadcast for conferencing services. • Complete contract negotiations with Microsoft by April 2017.	**Derek Rutherford**

	Connecting BC • The current Connecting British Columbia program will be fully allocated by March 31, 2017. The Province is in the process of identifying a new funding allocation to expand the program and complement the new federal Connect to Innovate program. • Multiple large and regional B.C. Internet service providers have advised Network BC of their intent to submit proposals to the federal Connect to Innovate program. Network BC will continue to engage with federal program staff to encourage projects of significant benefit to B.C. • The Province will be undertake work to establish a new evidence-based connectivity goal for broadband Internet in 2017 that will align to the new CRTC 50Mbps download and 10Mbps upload speeds. • The provincial Network BC Connectivity Map shows where and what type of connectivity is available throughout B.C. A new version of the map was launched in July 2016 to show both high-speed Internet and cellular mobility coverage areas (link to: **Network BC Connectivity Map**). Network BC will continue to develop the map to show increasingly granular and accurate information. The map can help identify gaps in coverage and where further investment may be needed in order to reach our connectivity targets. • The Province is currently exploring the feasibility of a new Northern Connectivity Initiative, and is in the conceptual planning stage. Funding options are being explored and the initiative has been identified as a potential candidate project under Infrastructure Canada's New Building Canada Fund.	**Susan Stanford**

	Telecommunication Coordination and Service Delivery
	• Implementation of the OCIO's mandate to align and coordinate telecommunications policy, investment and activities across core government and the broader public sector in support of government's priorities and objectives (e.g., connectivity, job creation, investment):
	  ○ Co-chair the Public Safety Communications Working Group which is tasked to develop a framework that provincial ministries, local authorities and critical agencies in order to establish communication networks for use in public safety events. The current focus is providing input at the federal/regional level for the development of the Public Safety Broadband Network.
	  ○ Initiate the development of a Provincial Telecom Strategy—first stage in conducting a current state outsourcing analysis, and macro broadband demand study.
	• Complete the Network Modernization of all 2,200 government and BPS locations s to the next generation network by 2018 through the strategic telecommunications deal with TELUS.
	• Voice Modernization – transition of approx. 1,000+ voice users to Microsoft Unified Communications planned for 2017/18.
	
	Other modernization initiatives will include:
	• Upgrades to Contact Centre Service to include additional CRM (Oracle) functionality.
	• Upgrades to the VPN and Wireless infrastructure to provide additional capacity.
	• Service improvements to Web and Video conferencing bridging services
	• Continued expansion of Wi-Fi services to all government offices and upgrade of network switches.
	• Revamp Provincial Government Blue Pages (Gov't Listings) for 2017.
	• Upgrade planning for Microsoft Exchange and SharePoint services.
		Susan Stanford/Chris Hauff

	BC Developers' Exchange
	Continuous updates to the roadmap for the BC Developers' Exchange
	http://roadmap.bcdevexchange.org
	
	The team is working using agile/scrum and is using a set of Kanban boards to track and manage the sprint activity and backlogs: https://trello.com/devex2
	
	The themes are:
	• **Kick start your first release:** The idea is a bootcamp for project teams to discover new methodologies, including:
	  ○ Design Thinking,
	  ○ Customer-centered Service Design
	  ○ Lean Start-up and minimum viable product development (e.g. rapid prototyping)
	  ○ Agile Methodology and Scrum
	  ○ DevOps
	• **Sprint With Us:** a concept to make it easier and faster for the tech community to work with government.
	• **Code for Government Ready Products:** to enable tech entrepreneurs and software developers to build products that can be easily accepted by government and rapidly deployed from the development environment to the production environment. Visit: https://github.com/bcgov
	• **Code with Us – Paid:** a foundational tool for collaboration on the BCDevExchange between government projects and the tech community.
	• **Code with Us – Volunteer:** will make space for the developers motivated by pubic spirit to make a difference where they live.
		Peter Watkins

	BC Services Card – Onboarding Services
	• Continue working with BC Services Card Program partners – the Ministry of Health and ICBC – to complete card issuance to all eligible BC residents by 2018.
	• Continue to work with government and broader public sector clients regarding potential opportunities to expand use of the BC Services Card, such as:
	  ○ Ministry of Advanced Education/Government Communications & Public Engagement – MyGovBC portal
	  ○ Ministry of Education - MyEducation BC
	  ○ Ministry of Justice - Court Services Digital Program
	  ○ Ministry of Social Development and Social Innovation – My Self-Serve portal
	• Continue to work on expanding mobile authentication options to help offset cost of card reader/passcode issuance and making it easier to use the card.
	• Explore how to integrate with evolving digital ID solutions in the marketplace.
	• Continue to support a consistent and quality user experience by providing the underlying tools for citizens and businesses to access government services on a digital platform. For example, a corporate service where a business owner would have a single point of access for its major business transactions with government.
		Sophia Howse

	Information Security • Continued focus on key security imperatives enabling us to mitigate risk from increasing cybersecurity threats. The strategic imperatives are achieving cybersecurity resilience, context-aware protection of data, and asset and incident management • Mature relationship with vendors and supply chain security including seeking opportunities to complement capabilities delivered with outsourcing project Secure Internet Service (SiS) • Continued focus on data security and protecting sensitive information assets including completion of Secure File Transfer service, onboarding clients, demonstrating value • Mature recently developed Corporate Information Security Risk Register and Vulnerability Management Programs • Focus on 'securing the human' through additional information security awareness, education, training and evaluation of effectiveness through phishing campaigns. • Develop Annual Security Course and begin public awareness. • Focus on utilizing risk register and compliance to validate we have taken necessary steps to protect government systems and data for inclusion in our information security program • Initiatives include border hardening, modernization of infrastructure, maturing security operations, proactive identification of threats, and ensuring security by design.	**Gary Perkins**

	Digital Services • MyGovBC aims to allow British Columbians to securely access and manage their interactions with relevant government services through a consistent digital interface with government, and, over time, the BC public sector. It helps citizens learn about services that are relevant to them, get notified about the status of applications, and manage their personal information in a way that is secure, consent based and privacy enhancing. • The vision is a modern, convenient, personalized digital service option for British Columbians who want to access public sector services online. • Currently working with two early adopters to digitize and integrate their services into the MyGovBC service delivery vision with the intention of testing these services and the MyGovBC concept with citizens and government service providers, to help inform future features and functionality. • Ministry of Health/Ministry of Technology, Innovation and Citizens' Services - FOODSAFE certificates and exam results. • Ministry of Health - Medical Services Plan enrolment forms and Premium Assistance Enrollment. • Developing ways for service providers to easily adapt their services into the MyGovBC service delivery vision. • Continuing to adopt service providers and digitize services to inform the development and implementation of the Personalized Service Delivery Strategy based on the needs of citizens and government.	**David Hume**

	Strategic Partnerships Office (SPO) Between 2016-2021, ten SPO contracts will reach end of term and require re-procurement or repatriation. SPO provides oversight and direct support across an increasingly demanding project portfolio for the following deals: a. Microsoft Licensing, expires 2017 b. Oracle Master Agreement, expires 2018 c. Workplace Technology Services, expires 2018 d. Facilities Management Contract, expires 2019 e. Human Resource Management System (payroll), expires 2019 f. Health Insurance British Columbia, expires 2020 g. Integrated Case Management, expires 2020 h. Revenue Management Services, expires 2020 i. Telecommunications expires 2021 j. Hosting Services, expires 2021	**David Morel**
	Device Services Procurement • The Province is anticipating proceeding to procurement within the next 90 days.	**Nadine Criddle**
	Architecture and Standards • Complete business case and obtain treasury board mandate to negotiate a contract with Microsoft to enable the next generation of office for the province based on the Office 365 cloud services • Increase the adoption of Enterprise Business Architecture for IT investment planning • Continue to improve relationships with Key Business leaders to develop an improved engagement process to increase value of IT in enabling service delivery • Establish Mobile Application Development Framework	**Derek Rutherford**

	IM/IT Capital Investment • Complete the first full intake cycle following the implementation of Copperleaf's C55 Asset Investment and Portfolio Management system. Existing planning process and templates have been moved into C55 so ministries only need to enter information once. This change will help to better capture decisions and information to support the management of the IT capital portfolio across the application/investment lifecycle and over multiple years • Refresh the application information within C55 to help better understand the condition of and maintain existing applications. • Strengthen data analytics to assess the application inventory and attributes associated with government's current applications across government. • Begin engagement and planning for application rationalization as part of next IT capital planning process based on updated data in C55. • Under the guidance of an executive steering committee, working with ministries and the BC Public Service Agency, socialize the new standardized job profiles for senior IT leaders, including ministry CIOs, and establish talent management and succession management strategies. • Enhance talent management and support corporate succession management, while improving project management in ministries, by piloting an IT portfolio project management office approach to group smaller IT-enabled business projects together and manage them as one portfolio. • Standardize IT-enabled project leadership development and mentoring approach across government building on the recent successful pilot. • Pilot and socialize the completed IM/IT project governance, management, and assurance (audit) framework across inflight projects. Work with ministries to incorporate framework into their standard practices, supported through training on industry recognized methodologies, to improve project governance and audit preparation. Implement the use of the framework for new projects.	**Kailyn Sherk**

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.	**BC Government Cloud Services** • We are interested in learning what other jurisdictions are doing and exploring ways to collaborate on objectives and priorities with our next specific focus on Software as a Service (SaaS) and development of a plan to address this opportunity. **CloudBC** • Communities of practice covering both technical and business domains, with representation from CloudBC entities, are being established to share knowledge and collaborate on issues. We would welcome representatives from PSCIOC to join as observers.	**Stephen Gordon** **Pierre Vorster**
	Information Security • Continued support for attendance and participation levels at NCSIP • Need to provide regular and consistent updates on threats facing government systems and data to government executive across jurisdictions. • Need for common assessment and capability maturity model for to understand risk posture across FPT jurisdictions and effort to increase security capability across Canada. • Need for common Information Security Classification Standard across Canada to promote ease of cloud adoption. • Need for consistent sharing of information relating to threats and incidents. • Increased collaboration, information sharing, and sharing capabilities between Federal Provincial Territories to reduce duplication of effort. • Achieve further efficiencies through shared procurement vehicles	**Gary Perkins**

	Connecting BC • On December 21, 2016, the CRTC established a new universal service objective that Canadians no matter where they live should have access to broadband Internet and mobile cellular technology. In its decision, the CRTC established a new $750M fund over five years to improve both broadband Internet and cellular service in underserved communities. The details of how this fund will be administered have yet to be determined. The Province is very keen to provide input to the CRTC ensure that the new fund will be helpful to small Internet services providers operating in rural and remote B.C. and work complementary to the carriers.	**Susan Stanford**
4. <u>Planning for Council Meetings:</u> Please **identify topics of particular interest** to your jurisdictions for future Council Meetings. *(Please provide a brief description for each item.)*	• BC's priorities will continue to be identity management, cloud services adoption, cybersecurity and developing a process to build a BC Digital Strategy.	