

**Toronto**

**2020** February  
Février

**PSCI OC**

*Public Sector Chief Information Officer  
Council*

**CDPISP**

*Conseil des DPI du secteur public*

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## **PUBLIC SECTOR CHIEF INFORMATION OFFICER COUNCIL (PSCI OC) MEETING**

**February 26, 2020**

**Toronto, Ontario**

### **RECORD OF DECISION v2**

#### **Attendance**

##### **PSCI OC CO-CHAIRS**

Olivia Neal	Treasury Board of Canada Secretariat
Tracy Wood	Prince Edward Island

##### **PSCI OC MEMBERS**

Kathryn Bulko	MISA Canada (City of Toronto)
Dafna Carr	Ontario
Natasha Clarke	Nova Scotia
Catherine Desgagnés-Belzil	Québec
Rob Entwistle	MISA West (City of Kelowna)
Stuart Hendrie	MISA East (Niagara Region)
Ted Hickey	Nunavut (for Dean Wells)
CJ Ritchie	British Columbia
Bonnie Schmidt	Saskatchewan
Rick Wind	Northwest Territories
Munna Zaman	Manitoba

##### **OBSERVERS / SUB-COMMITTEE CO-CHAIRS**

Imraan Bashir	Treasury Board of Canada Secretariat
Marc Brouillard	Treasury Board of Canada Secretariat
Robert Devries	Ontario
Denise Gomes	Shared Services Canada

Mark Levene  
Sherry McCourt  
Peter Watkins

Treasury Board of Canada Secretariat  
Prince Edward Island  
British Columbia

## INSTITUTE FOR CITIZEN-CENTRED SERVICE

Dan Batista  
Maria Luisa Willan  
Linda Robins

Item	Topic / Discussion	Decision / Action
1.	<p><b>Administrative Matters</b></p> <p><b>A) Approval of Record of Decision from September 26, 2019 in-person meeting in Winnipeg.</b></p> <p>Record of Decision of PSCIOC meeting of September 26<sup>th</sup>, 2019 adopted without changes.</p> <p><b>B) Approval of the February 26, 2020 PSCIOC meeting agenda.</b></p> <p>PSCIOC meeting agenda of February 26, 2020 approved.</p>	<p><b><u>Decision #1:</u></b></p> <p>Record of Decision of September 26, 2019, PSCIOC meeting in Winnipeg approved without changes.</p> <p><b><u>Decision #2:</u></b></p> <p>Agenda of February 26<sup>th</sup>, 2020 PSCIOC meeting approved.</p>
2.	<p><b>Forrester: Top Trends in IT &amp; Digital (TAB 2)</b></p> <p>Forrester Research was invited to present the top trends in IT &amp; Digital. Bobby Cameron, Forrester's subject matter expert in IT &amp; Digital led the presentation, Matt O'Connor and Tim Wallace of Forrester attended the meeting as well. In his presentation, he outlined the changing business and IT perspectives and the family of work that gets done as public sector IT organizations move forward.</p> <p>Forrester has been tracking trends since 2015. They have tried to understand what leading organizations do to be successful. Forrester surveyed 35 top enterprises on what they were doing to be successful; they arrived at 4 principles. You have to determine what you do that impacts the journey of your employees, the agencies you provide service to, and the businesses you operate with. It does not change your mission. The second one is insights driven. Big data is useful, but we need targeted information to help make smarter decisions. Feedback is key and turning insights to match the customers view of what is to be accomplished.</p> <p><b><u>Discussion:</u></b></p> <ul style="list-style-type: none"> <li>Tracy Wood asked Bobby Cameron to speak about environmental issues and impacts. He noted that he did not have a specific environmental slide. There are two sides to environmental impacts: 1) structure of how you manage resources against sustainability and 2) managing resources against living services. One of the key issues with sustainability is that it is difficult to handle electricity consumption. Computers are running about 60% of total electricity consumption globally. The issue around the consumption side and deployment against environmental impact is huge.</li> </ul>	<p><i>No action item was identified from this agenda item.</i></p>

	<ul style="list-style-type: none"> <li>Tracy Wood commented that the major skill challenges are around cyber security and the shortage of IT staff to work within the public sector. Bobby Cameron responded that the Singapore example is a good example what is being done to address this shortage. Security is at the top of the priority list from an IT perspective and that will accelerate. The security problem is not authentication or boundary but the concept of zero trust where you put into place micro defences, micro boundaries (micro domains) so you're protecting at low level of granularity and managing at that level is key. A lot of that will be automated. When you look into Cloud for instance, two thirds of companies have a multi-Cloud reality and managing in that context security can't be an isolated application. Organizations such as IBM have introduced a multi-Cloud approach that uses containers; puts metadata off a single source and propagates that to another container on other Cloud stacks and those containers monitor the apps and their environment using the metadata to pay attention to what they track. An automated structure looking for events and managing what events to track in a distributive manner. That is the concept of zero trust and how it holds together. The staffing for this is a huge challenge. Vendors such as Cisco and AT&amp;T are offering more capabilities.</li> <li>Olivia Neal commented that she was interested in the two examples provided: the US where they are increasing central oversight of IT spend and the New Zealand: the one where they had been able to do a small procurement in a 12-hour turnaround. It seems like there is a tension between centralization, oversight and the advantages that can bring versus empowering teams to make quick distributive decisions. She asked Bobby Brown if he can talk about the trends in terms of centralization or more targeted approaches and which tend to be more effective.</li> </ul> <p>Bobby provided the example of the US Federal Reserve and their culture. Theoretically, there is one national organization but in reality, there is a national IT organization and 12 districts, and each district has their own IT agenda even though they buy a lot of services including infrastructure through national. Treasury provides a lot of services to the Federal reserve to do on behalf of fiscal services. If the Federal Reserve wants to move forward with a program, they have to work it so other agencies move along as well. Collaboration is necessary. Their focus on collaboration was that you guys do it locally but when you are working on these agendas they are using a family of solutions to attack the problem and that problem is clarity of spend, who has what skills set available and time available to work. He commented that their organizations have a challenge in that, and this type of group conversation is great but then you go back to your departments and other agendas get in the way. If you had some way to do what the Federal Reserve did and share content and services, resources on common pieces then you can move forward. He also gave the example of NASA who is going through radical change and they are moving forward creating group relationship management tools, portfolios, processes that have milestones; the mechanism that allows for local entities with their own budget and spend, having the same planning structure allows them to share where they sit. They have moved security in an agency level control.</p> <p>Tracy Wood thanked Bobby Cameron for his participation at the meeting.</p>	
3	<p><b>Cloud Services (TAB 3)</b></p> <p>Olivia Neal introduced Mohammad Qureshi from the Government of Ontario to talk about Ontario's journey to the Cloud.</p> <p>Mohammad provided the context for the Ontario government's journey to the Cloud. The Government of Ontario has an I and IT Organization. They have eight CIO's supporting all of the 22-25 Ministries, 2 sector portfolios supporting the Ministries and then there is the Enterprise function that is cyber security, infrastructure, shared services and investment planning. Dafna Carr is the Corporate CIO where all of the CIO's have a dotted reporting relationship to Dafna and have a direct reporting relationship to their Deputy Ministers.</p>	<p><b><u>Action Item #1</u></b> Members agreed to a discussion on software as a service at a future PSCIOC meeting.</p>

	<p>Ontario is still working on the best way to leverage the Cloud. Ontario has a roadmap that is sustainable. The whole move to Office 365 ramped up the learning curve for the organization. It helped drive a few things including how do you protect data in the Cloud and helped them define a new way of working in a digital workplace. They are not leveraging all of the technologies that exist in Microsoft Office 365 but by having new data protection innovation\technology brought into the organization they are able to give the tools to the users to protect data, do their collaboration in a different manner. They did a bit of change management on 365. Part of the learning and change management is showing people a new way of working.</p> <p>Mohammad highlighted the Cloud platform risk assessment work where they define the patterns, all of the things you need to have in place before you go to the Cloud and this is where the Cloud development and how IT organizations can leverage work that has happened, reusing work over and over.</p> <p><b><u>Discussion:</u></b></p> <ul style="list-style-type: none"> <li>Mark Healey asked from a budgeting perspective, how does the ON approach the difference between a capital asset versus operating in the current funding model.</li> </ul> <p>Mohammad Qureshi responded that Ontario is going through that transition; how do they move their capital programs investments over to an OPX budget as they start leveraging Cloud. Capital investments happen one time and a lot of the time when you have the capital investment (this is where the technical debt occurs), it has not been happening the way it should be happening. A lot of the day-to-day work is already in the OPX budget. The question now becomes what the initial investment for re-platforming is and rehosting these systems when it goes over to a Cloud environment where an OPX expense is already built in. As part of the planning investment discussions we need to determine how do we take existing systems that had a capital plan and transition them into an OPX.</p> <ul style="list-style-type: none"> <li>Dafna Carr commented that the financial model is not easy. Anything enterprise related needs a different business case than one linked to a business outcome. Because of the model where IT sits in the Ministries, they have to look at each case and figure out the best approach. In the meantime, they are attempting to go ahead of this through a technology roadmap which is involving all of IT and Deputy Ministers so they can look at some of the decisions and come forward with a business case and be proactive rather than reactive.</li> <li>CJ Ritchie asked about the Cloud first principle. How did the ON ramp down on some of the contract commitments to data centres and how did they move forward with the Cloud initiative?</li> </ul> <p>Mohammad Qureshi explained that the data centres are ones that Ontario owns (one in Guelph and one in Kingston). All applications run out of the two data centres. By 2023, one of the data centre leases is coming up so they are having conversations about aligning the timing with migrating the applications as they look at if they want to invest in that data centre or migrate out. Ontario will have one data centre. How do we leverage the timing of the data centre lease expiry and the investments needed in 5 years in the data centre, to expand capacity, electricity, etc. and how do you look at the applications and come up with a technology roadmap that allows you to shift them into a Cloud environment. They are trying to align it around timing on contracts and commitments.</p> <ul style="list-style-type: none"> <li>CJ Ritchie commented that they have a data centre with contractual commitments to how much data centre they are using based on KBA's. If you have contractual commitments and when rationalizing the applications and your consumption is coming down was there contractual commitments that you had to consider and what did you do about it.</li> </ul>	
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	<p>Mohammad Qureshi responded that they did not have that issue because Ontario owned the data centres and the capital investment of the data centres had been made. Ontario's issue is around future expansion requirements as data and applications grow and some will be moved into the Cloud. It will depend on the terms and conditions you have around commitment to capacity and whether you can negotiate something outside of that.</p> <ul style="list-style-type: none"> <li>• Dafna Carr commented that they are looking at different ways of operating data centres in the future and what does that mean in terms of Cloud adoption; they will be getting some advice on this. While Ontario needs a physical footprint, they are aware of other financial models for operating.</li> </ul> <p>Mohammad Qureshi added that for Ontario it's more about the data centres that they own, shrinking the footprint and what do they do with that asset and that is part of the commissioning work they are doing now.</p> <ul style="list-style-type: none"> <li>• Peter Watkins asked about the 3 vendors of record. He asked who the VORs were and would Ontario be willing to share the terms modified with us as we face similar challenges. On the procurement side there are 3 streams running. On the Cloud provider stream: Google, Microsoft and AWS. The other stream they have is the Cloud native application platform. Typical providers for this stream are: Pivotal, Foundry, Open Shift, IBM. The last stream is professional services and organizations responding would be small to medium size organizations including Pivotal, Foundry, IBM. In terms of terms and conditions, he will check with Supply Services Ontario regarding sharing the information and would be willing to share what he can.</li> </ul> <p>Mohammad Qureshi stated that he would be willing to share terms for professional services.</p> <ul style="list-style-type: none"> <li>• Dafna Carr commented that in terms of procurement, it is quite innovative. They have worked with Supply Services Ontario and they are in the middle of it. It was quite intensive in terms of the team required to participate in it. At first, they didn't have application users to participate because they are out there doing the work they need to do. They only had infrastructure individuals on the team and that didn't work well so they had to figure out how to get both the digital and the solution teams on board, so they understand. They did some amazing workshops across the province to determine what people require. There will be announcements coming up in next couple of months with the Cloud VOR and the other two. They are happy to share whatever they can share.</li> </ul> <p>Mohammad Qureshi commented that they have been having a lot of discovery and framing sessions with all of the clusters and digital teams to outline the services roadmap for the broker model. These sessions also help inform the onboarding priorities for that procurement.</p> <ul style="list-style-type: none"> <li>• Olivia Neal reminded members that there is a Cloud Services Community of Practice which sits under the PSCIOC so if there are areas of technical interest or sharing more information on terms and conditions that would be a good place to go. She also commented that Denise Gomes works for Shared Service Canada and at previous meetings there have been conversations around more that can be done to leverage the work that the Federal Government has done on Cloud procurement for the benefit of provinces and territories.</li> <li>• Denise Gomes commented that the workforce and training is a big area of interest for them and she is interested in the program that Ontario developed and how it's being delivered. It is something that Shared Services Canada needs to look at as well as across the Federal government. The unions are very interested in what they are going to equip their current employees to move forward into that space.</li> </ul>	
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	<ul style="list-style-type: none"> <li>Ted Hickey noted that they are just going into cloud services, so he wanted to know if Ontario was focusing on Microsoft Azure platforms or diversifying into AWS platforms.</li> </ul> <p>Mohammad Qureshi responded they are diversifying in AWS web services (Ontario.ca is hosted on AWS now) but the question becomes how many is too many. That is the conversation they are having. They built this into their Cloud First proposal, so they have a broker model. As they line up their services off of their broker model, they will be asking clusters if there is something else required and why it's not available on the two or three providers because there is a certain amount of administrative overhead that gets built on. The more tools, the more complexity in terms of learning and development. As of today, they have Azure, IBM Blue Mix, AWS and some POC's in Oracle Cloud.</p> <ul style="list-style-type: none"> <li>Rick Wind asked if they had done work around software as a service and how they support adoption of software which is challenging for the CIOs to keep ahead of. From an enterprise perspective, Ontario has not looked at software as a service and how to enable it for all of the clusters. There is a lot of software as a service that is being used today and they are treated as applications and as the requirement comes up it goes through the same assessment process as an application, a risk profile is defined and that is given back. What they have not done is how to leverage that software (e.g. Work Force and Sales Force) across multiple clusters.</li> <li>Dafna Carr suggested that this would be a good conversation to have at a future PSCIOC meeting.</li> <li>Olivia Neal thanked Mohammad Qureshi for his presentation. She commented that reflecting on the conversation this morning, they have a huge amount of knowledge and experience in the room and from her perspective some of the most value is where they have presentations like the Ontario one where they can learn from one another. As they go through the information session, this is an opportunity to think about things that they would like to bring back for a deeper dive conversation because they will get a lot of information during the information sharing and is there something they would like one of the members to come back and present on in detail at future sessions.</li> </ul>	
4.	<p><b>Jurisdictional Information Sharing (TAB 4A to 4P)</b></p> <p>During the roundtable, Jurisdictions shared their experiences on cyber security. Tim Hickey asked for members to share any training materials that they may have for staff about cyber security.</p> <p>Members agreed that this should be a bring forward topic for a future agenda. Tracy Wood asked if the members would like an external presentation (Canadian Cyber establishment) or an internal presentation on this is where we would like to get to and have a discussion?</p> <ul style="list-style-type: none"> <li>CJ Ritchie commented that there is a lot of learnings that come out of sharing life experiences and so having a jurisdiction with a Chief Security Officer share some of their experiences and go through what they walked through would be good for a teleconference.</li> <li>Natasha Clarke commented for the next in-person meeting that they may want to schedule a working session and bring in the NCSIP members and discuss what kinds of supports they want for themselves. There are several core use cases that they talk through and knowing the questions they need to ask would be helpful; knowing where to start to provide guidance to decision makers when you are in these situations.</li> </ul>	<p><b>Action Item #2</b> Members will share any training materials they may have for staff re cyber security.</p> <p><b>Action Item #3</b> Members agreed that cyber security be a topic for a future agenda with having one of the jurisdictions share their experiences.</p> <p><b>Action Item #4</b> Members would like to have a presentation by NCSIP at a future meeting, possibly an in-</p>

<ul style="list-style-type: none"> <li>• Tracy Wood commented that one of the things they had been discussing through a scenario and knowing how to react when it happens. They were starting to look at how they would do that with their upper level executives so they understand when you can give information and why. It's like a training that you live through.</li> <li>• Natasha Clarke commented that it is not dissimilar to table exercises on business continuity planning and disaster recovery exercises. The communications and the ministers and the political piece. How do they prepare their communications team on what can be said and what can't be said and key messages?</li> <li>• Catherine Desgagnés-Belzil would be interested in how they answer the key questions (e.g. question on ransomware). She wants to be proactive in answering the questions. One question is when there is an investigation when they are allowed to talk to the people involved and those involved in having their data stolen. When can they talk about it and not be in opposition to the investigation? What are their responsibilities?</li> <li>• CJ Ritchie commented that there are two themes 1. Incident response which are interested in and learning lessons from and the remediation plan; and 2. What is your defensible security practice? They are at different levels of maturity around security practices and there might be benefit in having a review of a jurisdiction's security practice around what defensible security looks like, and how robust is the training. BC just held a privacy and security conference, so this is top of mind for them. A corresponding theme is what is the practice and what is defensible security hygiene that they should all be practicing. In the event of a catastrophic event, what does your incident response look like and what does your remediation plan look like and how you do communications properly, etc.</li> <li>• Tracy Wood commented that one of the challenges they have is the legacy systems and the simplest things such as password resets and complex passwords on a legacy system that does even allow it.</li> </ul> <p>Jurisdictions provided a brief summary of their key priorities and activities in their respective jurisdictions. Members can refer to the jurisdictional information sharing documents provided in the meeting binder for information. (TABS 4A to 4P)</p> <p><i>Please note that due to the sensitive nature of this discussion only action items arising from jurisdictional information sharing roundtable are included in the Record of Decision.</i></p> <ul style="list-style-type: none"> <li>• Newfoundland and Labrador</li> <li>• MISA East</li> <li>• MISA West – Rob Entwistle noted that the topic of 5G, the volume of data and infrastructure may be a topic for discussion.</li> <li>• Saskatchewan</li> <li>• Nunavut – Rick Wind advised that they would be happy to share information on their security awareness programs.</li> <li>• British Columbia – CJ Ritchie encouraged members to identify a point person for digital identity.</li> <li>• Nova Scotia – Natasha Clarke would be interested in hearing more about procurement and HR.</li> <li>• Treasury Board of Canada Secretariat – Olivia Neal would like further conversation on greening IT and sustainability (carbon footprint).</li> <li>• Prince Edward Island</li> <li>• Ontario – Dafna Carr commented that members are welcome to join the monthly calls with Mohammad Qureshi's group and the broader public sector where issues that they have been talking about are constant. They also have a broader</li> </ul>	<p>person meeting with a working session.</p>
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	<p>public sector expert panel that is being developed (politically appointed) and they would be glad to share information about that panel.</p> <ul style="list-style-type: none"> <li>• Quebec</li> <li>• Manitoba – Munna Zaman would appreciate Ontario sharing their business case re the Cloud brokering model.</li> </ul>	
5.	<p><b>PSCIOC Treasurer’s Report (TAB 5A &amp; 5B)</b></p> <p>The PSCIOC Treasurer's report was presented for the members' information. No questions raised.</p>	
6.	<p><b>PSCIOC Action Items &amp; PSCIOC Bring Forward Agenda (TAB 5C &amp; 5D)</b></p> <p><b>A)</b> PSCIOC Action Items from previous meeting - No questions raised.</p> <p><b>B)</b> PSCIOC Bring Forward Agenda - No questions raised.</p> <p><b>C)</b> Update Reports from PSCIOC Working Groups - The working groups reports were included in the binder for information only. There was no discussion on the reports.</p> <p><b>D)</b> Next PSCIOC in-person meeting: September 23, 2020, Quebec City, Quebec.</p> <p><b>E)</b> Next PSCIOC Teleconference scheduled for Friday, April 17, 2020.</p>	
7.	<p><b>Update Reports from PSCIOC Working Groups:</b></p> <ul style="list-style-type: none"> <li>• ICT Policy Working Group (TAB 5Ei to 5Eiii) – for information</li> <li>• IT Procurements Working Group (TAB 5F) – for information</li> </ul>	
8.	<p><b>Other Business</b></p> <p>Tracy Wood introduced the two items for discussion regarding the Data Driven Intelligence Working Group and Service to Business Working Group and both moving to the Joint Councils.</p> <p>There were no concerns raised above moving the Data Driven Intelligence Working Group to the Joint Councils.</p> <p>There were no concerns raised above moving the Service to Business Working Group to the Joint Councils.</p> <p>Tracy Wood asked members to complete their evaluation form at the end of the meetings.</p> <p><i>The PSCIOC meeting adjourned at 12:00 p.m. EST.</i></p>	<p><b><u>Decision #3:</u></b> CJ Ritchie moved that the Data Driven Intelligence (DDI) Group be moved to the Joint Councils; seconded Natasha Clarke.</p> <p><b><u>Decision #4:</u></b> Catherine Desgagnés-Belzil moved that the Service to Business Working Group be moved to the Joint Councils; seconded Natasha Clarke.</p>