

## **PSCIOC Information-Sharing Template – February 2020**

*Information Sharing is collected for the purpose of the PSCIOC Meeting of February 2020.*

*Information contained in this document cannot be shared without the approval of the member jurisdiction (author).*

Administration : Treasury Board of Canada Secretariat, Government of Canada		Contact
<b>1. <u>Accomplishments:</u></b> Briefly highlight <b>major IT/IM accomplishments, progress, and/or significant milestones</b> achieved in your <b>jurisdiction over the past 6 - 12 months.</b>	<b>Open Government</b> <ul style="list-style-type: none"> <li>• Successfully hosted the 2019 Open Government Partnership (OGP) Global Summit in May 2019 with over 2,600 participants from 115 countries in attendance. The Summit featured approximately 14 sessions related to the topics of digital and service delivery. The scope of these ranged from AI to the application of blockchain in the public service. Side events such as the Innovation Solutions Showcase, Hackathon on Open Data and Open Source Software and Civic Tech Salon were largely focused on govtech solutions.</li> <li>• Increased the number of datasets on the open.canada.ca portal to over 80,000 and updated the portal's landing page (including updating the open data and information search catalogue) to improve the look and feel of searches, as well as the "discoverability" of data and information on the <a href="https://open.canada.ca">open.canada.ca</a> website.</li> <li>• The Open Government team has drafted a new set of data quality rating criteria. The new criteria are more closely aligned with international best practices/standards and will not only vastly improve data quality on the portal, but positively impact data collection at source.</li> <li>• In partnership with PSPC, TBS implemented the Open by Default pilot project which evaluated interoperability between TBS' internal document management system (GCdocs) and an external web platform (open.canada.ca). Key security and privacy issues and risks relative to the automatic release of draft documents were evaluated and captured.</li> <li>• The <a href="#">Access to Information and Privacy (ATIP) Online Request Service</a> was launched on October 2018 after four rounds of user testing with Canadians. This testing allowed Canadians to provide input into the design of the service. Artificial Intelligence search and recommendation engines were added before the launch following feedback received from Canadians, which make it easier for Canadians to find what they are looking for while encouraging them to first search for existing</li> </ul>	Melanie Robert <a href="mailto:Melanie.Robert@tbs-sct.gc.ca">Melanie.Robert@tbs-sct.gc.ca</a>

requests before putting in a new request. The service was launched with 8 small institutions and over 150 institutions have now been on boarded.

#### Access to Information

- Bill C-58, an Act to amend the Access to Information Act and the Privacy Act and to make consequential amendments to other Acts received royal assent on June 21, 2019. The updated Act puts into practice the principle of “open by default” by making key information available on [open.canada.ca](https://open.canada.ca) and departmental websites without the need to make a request.
- To date, the public can search on open.canada.ca through almost 11,000 titles of [briefing notes for Ministers and deputy ministers](#) and over 700 Question Period notes for Ministers, in addition to information about travel and hospitality expenses incurred by senior officials and ministers. [Mandate letters](#) of cabinet ministers are posted on the Prime Minister’s website. This work will continue as we onboard new proactive publication requirements.
- Additionally, since the [Access to Information and Privacy \(ATIP\) Online Request Service](#) was launched in 2018, 180 institutions out of over 269 are able to receive Access to Information requests through the Portal. A voluntary survey indicates 66% of requesters are find the portal easy or very easy to use.

#### Policy on Service and Digital

- Following the open and collaborative development on the policy language with various stakeholders, the new [TBS Policy on Service and Digital](#) was approved by Treasury Board in July 2019 and will take effect April 1, 2020. It will replace the Policy Framework on Information and Technology, the Policy on Management of Information Technology, the Policy on Information Management, the Policy on Service, and the Policy on Acceptable Network and Device Use. The Directive on Service and Digital will also take effect on April 1, 2020. It will replace the Directive on Management of Information Technology, the Directive on Information Management Roles and Responsibilities, and the Directive on Recordkeeping. This new set of rules seeks to:
  - enhance integrated governance, planning and reporting for an enterprise approach,
  - increase the focus on the client and digital enablement across all services and channels,

Ruth Naylor  
[Ruth.Naylor@tbs-sct.gc.ca](mailto:Ruth.Naylor@tbs-sct.gc.ca)

Robert Trottier  
[Robert.Trottier@tbs-sct.gc.ca](mailto:Robert.Trottier@tbs-sct.gc.ca)



- strengthen management of information
- better manage and protect systems and information and improve interoperability
- support the workforce capacity and capability
- On December 3, 2019 TBS published the [Guideline on Making Information Technology Usable by All](#). This guideline supports the Government of Canada's direction to ensure that departments, agencies and organizations consider accessibility in the acquisition or development of information technology (IT) solutions and equipment to make IT usable by all.

### Digital Enablement

- Launched the beta version of the API Store (allows for easy discoverability of GC Application Programming Interfaces) and awarded a contract for an Event Broker (publish/subscribe style messaging) as part of the Canadian Digital Exchange Platform (CDXP). This will allow for simple, real-time information sharing between federal, provincial, territorial, and municipal jurisdictions.
- Digital Exchange Community of Practice going strong with over 300 members across jurisdictions. Began including international partners as guest speakers.
- Initiated various Tell Us Once Prototype experiments to explore citizen's preferences (user experience) and integration best practices (interoperability between departments) for a common, OneGC client hub (portal). The outputs will include data and recommendations on how best to serve citizens through an integrated portal platform where they only need to share their information once.

### Cyber Security

- Completed assessment of BC Services Card against Public Sector profile of Pan-Canadian Trust Framework
- Launched GCPass pilot, a single sign-on solution for all GC employees
- Completed pilot for Cyber Security Maturity Self-Assessment program (9 departments)
- Finalized Security Playbook for Information Systems Solutions (to be published on Canada.ca before end of January 2020)

### Enterprise Strategic Planning

- SSC has qualified 3 vendors (AWS, Microsoft and Thinkon) leveraging the protected B cloud services framework agreement. The new contract is now open to all levels of government within Canada.

Owen Teo

[Owen.Teo@tbs-sct.gc.ca](mailto:Owen.Teo@tbs-sct.gc.ca)

Imraan Bashir

[Imraan.Bashir@tbs-sct.gc.ca](mailto:Imraan.Bashir@tbs-sct.gc.ca)

Natalie McGee

[Natalie.McGee@tbs-sct.gc.ca](mailto:Natalie.McGee@tbs-sct.gc.ca)



- Funding was allocated in Budget 2018 SSC partner Departments to modernize the Government's digital services, as part of the Workload Migration and Cloud Enablement Program. TBS is the trailblazer department, and has successfully migrated 100% of their workload to the cloud as of February 2020.
- The Government of Canada has committed to publically releasing all GC developed code for new projects presented to the GC Enterprise Architecture Review Board (EARB) within 6 months of launch, or a justification is published.
- TBS has just published guidance and a business case to assist GC Departments in applying guard rails and removing barriers to developers when publishing their source code under open licenses. The guidance can be used by all Canadian Crown Institutions.
- TBS has relaunched the Government of Canada "Artificial Intelligence Community of Practice". This community of practice aims to support employees in the federal government working in the AI policy space by providing a forum for discussion, information sharing and collaboration.
- A review of 36 departmental data strategies was undertaken by TBS, Statistics Canada, and the Privy Council Office. The intent of the review was to identify areas of commonality, assess alignment with the Data Strategy Roadmap for the Federal Public Service, and assess alignment to Policy and Directive on Service and Digital.

#### Digital Standards

- Since the launch of the [Government of Canada Digital Standards](#), TBS has given over 40 presentations to departments, functional communities and other public service groups socializing and reinforcing the importance of digital government. TBS has also supported the work of the Digital Academy at the Canada School of Public Service in piloting a new foundational course for public servants on the Digital Standards (Discover Digital).

#### Digital Recruitment

- [Talent Cloud](#) is an experimental new staffing model for the Government of Canada, focused on bringing in high performing external talent for term positions. Over the past 12 months Talent Cloud has seen rapid and substantial progress in a number of priority areas for government, including reducing time to staff, securing hard to attract talent, pioneering new approaches to skill and credential recognition, increasing diversity, and understanding more about the emerging gig economy and its potential future impact on Canadians.

Olivia Neal

[Olivia.Neal@tbs-sct.gc.ca](mailto:Olivia.Neal@tbs-sct.gc.ca)

Lauren Hunter

[Lauren.Hunter@tbs-sct.gc.ca](mailto:Lauren.Hunter@tbs-sct.gc.ca)



- Key accomplishments over the last 6-12 months include:
  - Developed and released manager portal where they can: craft posters behaviourally designed to attract strong-fit talent, build a draft assessment plan, and review and screen applicants on the Applicant Tracking System
  - Developed and released HR Advisor portal where HR Advisors can view draft posters and assessment plans, share comments and questions with managers, automatically track time to staff.
  - Prototyped upgrades to Applicant Portal.

#### **Talent Management and Development**

- Historically, annual talent management discussions focused exclusively on limited CIO positions (43 CIOC member organizations). In 2018-19, TBS expanded the scope of talent management to look beyond CIO positions to include subordinate and peer-level IM/IT executives (EX-01/03s). In 2019-20, TBS expanded further into IM/IT EX-equivalent and Manager roles. Part of the increased scope goes beyond looking merely at performance ratings (e.g., candidates with ratings of 4 or 5 out of 5) for promotional opportunities to include candidates that could benefit from at-level career mobility.
- Draft Digital Competencies were developed to complement and operationalize the [Government of Canada Digital Standards](#) to help instill the required competencies (e.g., knowledge, skills, abilities and other (KSAO) attributes like traits) to foster a more digital government.

#### **Next Generation (NextGen) HR & Pay**

- The NextGen team continues to work with stakeholders in an open and transparent manner towards identifying a new HR and pay solution to replace the Phoenix pay system. To this end, the government announced an investment of \$117 million to co-design and deliver pilot projects for the NextGen HR and Pay system.

#### **Digital Nations**

- A Government of Canada delegation comprised of TBS officials successfully concluded the 2019 Digital Nations (DN) Ministerial Summit hosted by the Government of Uruguay in Montevideo from November 4-7, 2019. The delegation was headed by Olivia Neal, Executive Director, Digital Change, assisted by Canada's Ambassador to Uruguay, Joanne Frappier.

David Cramm  
[david.cramm@tbs-sct.gc.ca](mailto:david.cramm@tbs-sct.gc.ca)

Jacque Manchevsky  
[Jacque.Manchevsky@tbs-sct.gc.ca](mailto:Jacque.Manchevsky@tbs-sct.gc.ca)

Mark Levene  
[Mark.Levene@tbs-sct.gc.ca](mailto:Mark.Levene@tbs-sct.gc.ca)





- At the 2019 DN Ministerial Summit, members signed onto a slightly charter to welcome the official addition of the Government of Denmark as a member, marking the transition of the forum's name from Digital 9 to DN. Members also endorsed a Data 360° Declaration, which lays a common data vision for a holistic approach onto how governments collect, manage, govern and use data.
- Canada has assumed the role of 2020 Chair of the DN, which includes guiding the strategic direction of the forum for a one-year term and hosting the next DN Ministerial Summit, which is scheduled for the first week of November 2020 in the National Capital Region (NCR). The timing of the Summit will align with FWD50, the annual world-leading technology conference in the NCR bringing together experts from private and public sector.
- On January 17, 2020, TBS hosted a meeting for Ambassadors to Canada, embassy officials, and Global Affairs Canada geographical desk officers from DN member countries in Ottawa. The purpose of the meeting was to share initial information about Canada's plans as the 2020 Chair of the DN, engage participants on potential leadership priorities, and highlight opportunities for involvement in Canada's DN Ministerial Summit.

## Other International Engagements

- The Acting CIO of the Government of Canada, Francis Bilodeau, was part of an official delegation led by the Governor General, the Right Hon. Julie Payette, to visit Lithuania and Estonia from November 24 to 28, 2019. As part of this visit, Mr. Bilodeau met bilaterally with the CIO of both the Government of Lithuania and Estonia to share experiences and best practices in areas of digital strategy, cyber security, artificial intelligence and secure data exchange.
- In September 2019, TBS hosted a delegation from the Ministry of Foreign Affairs within the Government of Norway to discuss the Canadian Digital Service agency as well as the Talent Cloud model as approaches to harmonizing digital government across departments.
- In November 2019, TBS hosted a delegation from the Swedish Authority for Digital Administration to discuss application of artificial intelligence in the public sector and other digital government approaches.

Mark Levene  
[Mark.Levene@tbs-  
sct.gc.ca](mailto:Mark.Levene@tbs-sct.gc.ca)

## 2. **Priorities:**

Briefly describe what your organization sees as its **top IT/IM priorities/initiatives over the next 12 to 36 months.**

*The PSCIOC is particularly interested in jurisdictional information in the following areas:*

- **Digital Government**
- **Cyber Security**
- **Talent Management**

### **Open Government**

- Finalize implementation of the commitments in Canada's 4th National Action Plan on Open Government (including those on user-friendly open government, digital government and services).
- Improve the [Suggest a Dataset](#) page on open.canada.ca to highlight actions taken by organizations around requested datasets.
- Improve data quality for assets published to the open.canada.ca portal.
- Expand the current federated open data service to include two provinces and two municipalities.
- Continue to add visualization to high-value datasets such as building the service inventory, open maps viewer and further showcasing visualization tools such as the [GC InfoBase](#), and those tools created by the Canadian Energy Regulator and Public Service Commission.
- Continue to ensure Canada's position as a leader in the international open government community through ongoing collaboration with the Open Government Partnership and the Organization for Economic Co-operation and Development.

### **Access to Information**

- In the coming months, institutions will proactively publish the packages of materials prepared for incoming ministers and deputy heads to open.canada.ca, as well as the materials prepared for appearances before Parliamentary committees.

### **Policy on Service and Digital**

- Implement the TB Policy on Service and Digital which includes:
  - Publication of the Guideline on Service and Digital and continued work with Government of Canada departments and agencies to support the enrichment of the guideline.
  - Review of the underlying policies of the Policy on Service and Digital.
  - Pilot the Digital Performance Measurement Framework (DPMF) that will enable the achievement of the policy outcomes through an integrated view of IM, IT and Service across Government of Canada departments.
- Continue work on the legislative framework for service including in respect of personal information and delivery of services online.

### **Digital Enablement**

Melanie Robert

[Melanie.Robert@tbs-sct.gc.ca](mailto:Melanie.Robert@tbs-sct.gc.ca)

Ruth Naylor

[Ruth.Naylor@tbs-sct.gc.ca](mailto:Ruth.Naylor@tbs-sct.gc.ca)

Robert Trottier

[Robert.Trottier@tbs-sct.gc.ca](mailto:Robert.Trottier@tbs-sct.gc.ca)



- The Government of Canada supports an omni-channel service vision, OneGC, where citizens can access any government service digitally, on any platform, using any device, and through any partner. Efforts are being made to advance the enabling technologies within government to achieve this vision as well as secure partnerships with industry that demonstrate this vision in practice, in particular, authentication by leveraging digital IDs, system interoperability via an API ecosystem, Tell Us Once initiatives, and adaptable content management systems.

## Cyber Security

- Continue development of Sign Canada platform, with launch of beta pilot in Spring 2020, including integration with two provincial digital IDs (Alberta and BC) and existing credential providers (GCKey and banking credential)
- Continue iterating Public Sector Profile of Pan Canadian Trust Framework (PCTF), in collaboration with other jurisdictions and private sector, and onboard additional provinces and territories using PCTF assessment process
- Launch initiative to mandate email authentication (DMARC) and implement tracking dashboard (similar to HTTPS dashboard)
- Expand Cyber Maturity Self-Assessment Program to all GC departments
- Publish additional guidance material (e.g. GC Event Logging guidance, Patch management guidance, renewed GC Cyber Security Event Management Plan, etc.)

## Enterprise Strategic Planning

- TBS will document and publish a GC Legacy Migration Strategy in spring 2020 to address aging and 'at risk' IT systems in support of the TB Policy and Directive on Service and Digital and the recently published SSC 3.0 vision.
- TBS will engage with the Open Resource Exchange (joint municipal, provincial and federal government levels) to actively promote its use within the GC to provide consolidated access to all government open source resources.
- Development of a modern Enterprise Portfolio Management (EPM) capability connecting departmental IT planning with inter-departmental delivery and execution, and enabling business intelligence and analytics to improve management of core and at-risk systems. The EPM will have a focus on benefits management to provide a shared view by leadership at the enterprise and department levels.
- As per TBS' commitment in the National Action Plan on Open Government, TBS is planning the third annual "AI Day" for spring 2020 in Ottawa. AI Day is an annual event that showcases the growing use of AI and automation innovation across the

Owen Teo

[Owen.Teo@tbs-sct.gc.ca](mailto:Owen.Teo@tbs-sct.gc.ca)

Imraan Bashir

[Imraan.Bashir@tbs-sct.gc.ca](mailto:Imraan.Bashir@tbs-sct.gc.ca)

Natalie McGee

[Natalie.McGee@tbs-sct.gc.ca](mailto:Natalie.McGee@tbs-sct.gc.ca)





GC, and the tools and resources available to Departments to support their adoption of this technology.

- The TB Policy and Directive on Service and Digital identifies enterprise data standards a priority for the Government of Canada. Standards will be developed for the application of a consistent set of rules and guidelines to improve data quality, ensure accessibility, enable increased interoperability between organizations, and allow for greater transparency with the public. The initial focus will be common data used in the delivery of services including (at a high level) Name, Date of birth, Contact information (address, phone number etc), Sex & gender, Place of birth, Citizenship & immigration status.

### Digital Change

- Pilot assessments of digital projects against the Digital Standards, working with the Canadian Digital Service and EARB.

### Talent Management and Development

- Continue to leverage enterprise data on executives to identify potential candidates for succession planning and career mobility opportunities, based on a number of factors such as Talent Map placement, performance management ratings, and potential and readiness for movement.
- Work is ongoing in partnership with the Canada School of Public Service Digital Academy and others (e.g., [uOttawa CIO Institute](#)) to try and ensure a Competency-Based Learning (CBL) lens is applied in learning and development initiatives and materials.

### Digital Nations

- TBS will work with Global Affairs Canada on protocol and logistics of the 2020 DN Ministerial Summit. TBS is also partnering with the organizers of FWD50 to identify options for collaboration as the conference will occur on the margins of Canada's DN Ministerial Summit.
- Canada is leading a study on options for establishing a more robust DN Secretariat, which all members agreed to contribute funding towards at the 2019 DN Ministerial Summit. Funding models are currently being explored and options will be presented to DN members in early March 2020.

Olivia Neal

[Olivia.Neal@tbs-sct.gc.ca](mailto:Olivia.Neal@tbs-sct.gc.ca)

David Cramm

[david.cramm@tbs-sct.gc.ca](mailto:david.cramm@tbs-sct.gc.ca)

Mark Levene

[Mark.Levene@tbs-sct.gc.ca](mailto:Mark.Levene@tbs-sct.gc.ca)

	<ul style="list-style-type: none"> <li>TBS will work with colleagues in member DN countries to identify an appropriate theme for the 2020 DN Ministerial Summit. Ambassadors and embassy officials will continue to be engaged as the program becomes developed.</li> <li>In June 2020, a TBS delegation will travel to Copenhagen, Denmark for the next in-person working-level meeting of the DN. This meeting will serve as an important moment for consulting members on the proposed outcomes of Canada's DN Ministerial Summit.</li> </ul> <p><b>Other International Engagements</b></p> <ul style="list-style-type: none"> <li>From March 25 to 26, 2020, TBS will host a delegation from the Danish Business Authority and Danish Agency for Digitisation. Meetings are arranged with TBS and ISED subject matter experts in areas of artificial intelligence, cybersecurity, data governance, digital and cloud policy, and digital service delivery.</li> </ul>	<p>Mark Levene  <a href="mailto:Mark.Levene@tbs-sct.gc.ca">Mark.Levene@tbs-sct.gc.ca</a></p>
<p><b>3. Issues and Needs:</b>          Briefly describe any issues you would like to share with the Council and what assistance you might be seeking from PSCIOC.</p>	<p><b>Digital Enablement</b></p> <ul style="list-style-type: none"> <li>TBS is looking for guest speakers from the provinces, territories, and municipalities to provide stories and real-life examples of modern interoperability projects as part of the Digital Exchange Community of Practice. We would love to hear about the challenges and successes others have faced with data exchange, APIs etc. to help share ideas and strategies across Canada.</li> </ul> <p><b>Cyber Security</b></p> <ul style="list-style-type: none"> <li>Looking for jurisdictions that are ready to have their digital ID process evaluated under the PCTF assessment program, followed by integration into Sign In Canada</li> </ul> <p><b>Enterprise Strategic Planning</b></p> <ul style="list-style-type: none"> <li>TBS is seeking the assistance of the PSCIOC to identify external subject matter experts who may be interested in establishing the decision framework and terms of reference and/or participating in a "Data and Automation Advisory Board". As per Appendix C of the Directive on Automated Decision-Making, TBS is seeking to establish this Advisory Board by April 1, 2020.</li> <li>TBS would like to learn how other jurisdictions manage and implement reference data standards. Particularly, TBS is interested in knowing what challenges and best practices other jurisdictions have experienced and identified in the development of reference data standards.</li> </ul>	<p>Owen Teo  <a href="mailto:Owen.Teo@tbs-sct.gc.ca">Owen.Teo@tbs-sct.gc.ca</a></p> <p>Imraan Bashir  <a href="mailto:Imraan.Bashir@tbs-sct.gc.ca">Imraan.Bashir@tbs-sct.gc.ca</a></p> <p>Natalie McGee  <a href="mailto:Natalie.McGee@tbs-sct.gc.ca">Natalie.McGee@tbs-sct.gc.ca</a></p>

	<ul style="list-style-type: none"> <li>GC leadership has set the digital vision target to be at Level 4 (fully digital). TBS would like to hear from other Provincial (including but not limited to: Ontario ODS, Quebec Digital, BC digital) and Municipal jurisdictions related to their experience on their transformational journey. TBS intends to use digital targets to drive change to GC IT spending behaviour and ensure that it is aligned with the level of IT spend seen in more digitally mature public organizations.</li> <li>TBS would like to learn more from other jurisdictions about their cloud and application modernization strategies. TBS is particularly interested the challenges and best practices other jurisdictions have experienced and identified in migrating to the Cloud, implementing a DevOps organization, and the processes and/or experience moving towards a micro-services architecture.</li> </ul> <p><b>Digital Change</b></p> <ul style="list-style-type: none"> <li>TBS would like to learn how other jurisdictions have worked with departments and other stakeholders to implement their digital principles or standards. Particularly, TBS is interested in knowing what challenges to implementation other jurisdictions have faced, and strategies to address these. As well, TBS is interested in hearing the experiences of other jurisdictions that have conducted digital assessments of projects.</li> </ul> <p><b>Talent Management and Development</b></p> <ul style="list-style-type: none"> <li>TBS would like to share challenges and issues and obtain best practices in recruiting and retaining specific, in-demand or niche work streams and functions (e.g. Cybersecurity, Enterprise Architecture, Artificial Intelligence (AI), and Product Management).</li> <li>TBS is interested in learning what are other jurisdictions doing in terms of Digital Talent Development. For instance, what Competency Models exist and how they are being leveraged – for learning and development initially, followed by recruiting and performance management</li> </ul>	<p>Olivia Neal  <a href="mailto:Olivia.Neal@tbs-sct.gc.ca">Olivia.Neal@tbs-sct.gc.ca</a></p> <p>David Cramm  <a href="mailto:david.cramm@tbs-sct.gc.ca">david.cramm@tbs-sct.gc.ca</a></p>
<p><b>4. Topics of Interest:</b>        Please <b>identify topics of interest</b> to your jurisdiction for future PSCIOC meetings /teleconferences.</p>	<p><b>Open Government</b></p> <ul style="list-style-type: none"> <li>Maintaining open government at all levels of Government.</li> </ul> <p><b>Enterprise Strategic Planning</b></p> <ul style="list-style-type: none"> <li>Enterprise data management and governance</li> </ul>	<p>Melanie Robert  <a href="mailto:Melanie.Robert@tbs-sct.gc.ca">Melanie.Robert@tbs-sct.gc.ca</a></p> <p>Natalie McGee  <a href="mailto:Natalie.McGee@tbs-sct.gc.ca">Natalie.McGee@tbs-sct.gc.ca</a></p>

**Citizen  
FIRST**

POWERED BY



Institute for  
Citizen-Centred  
Service

**CITOYENS  
en tête**

OPTIMISÉ PAR



L'Institut des  
services axés sur  
les citoyens

**Talent Management and Development**

- TBS is interested in exploring the use of data analytics in terms of Strategic HR Management (SHRM) for recruitment and other purposes.

David Cramm

[david.cramm@tbs-  
sct.gc.ca](mailto:david.cramm@tbs-sct.gc.ca)