



Government
of Canada

Gouvernement
du Canada

Canada's Digital Interchange (CDI): Progress Update

Joint Councils – PSSDC/PSCIOC

February, 2016

Toronto, ON

A renewed push for digital services

- The Prime Minister requested that the President of the Treasury Board develop, in collaboration with the Minister of Employment, Workforce Development and Labour, a new service strategy that aims to create a single online window for all government services with new performance standards, as well as rigorous assessments of the performance of key government services
- This has reinvigorated federal needs for real-time identity information sharing
- The recently-issued ministerial mandate letters clearly outline the government's service improvement priorities including:
 - Developing new service strategies
 - Improving and expanding existing services
 - Implementing new service standards
 - Performance measurement and reporting
- This would also support the proposed Pan-Canadian Digital Government Vision of the Joint Councils, including:
 - "Providing best in class, client-centric public services," and
 - "Creating digital government for Canadians"

CDI: An Enabler for Better Digital Services

- The starting point for government services is *identity information*; it is at the core of the relationship between the client and government.
- An ecosystem of processes, policies, credentials, and verification and notification services help to manage identity information (identity management), and these must be underscored by trust and confidence.
- There are a number of initiatives that are key enablers to improve and streamline the service experience for clients - these include enhanced infrastructure, standards and processes to improve identity management practices and allow departments to simplify interactions with clients.
- Treasury Board Secretariat of Canada (TBS) and Employment and Social Development Canada (ESDC) are developing a business case for **Canada's Digital Interchange (CDI)**; an identity validation service that will assist federal departments and other levels of government in streamlining client interactions.

CDI: An Enabler for Digital Services

- A real-time, scalable, cost-effective service that will enable all levels of government to securely confirm an individual's identity information, to support online services to clients across Canada

- **3 primary CDI functionalities:**

The electronic confirmation or **VALIDATION** of personal identity information (e.g., birth, death, immigration status) across all levels of government. Validations are true or false responses, and are based on a pan-Canadian standard:

E.g.: "This person is applying for a driver's licence. Please confirm the name, date of birth and citizenship of this individual is correct."

The **NOTIFICATION** of a change in personal identity information based on life events:

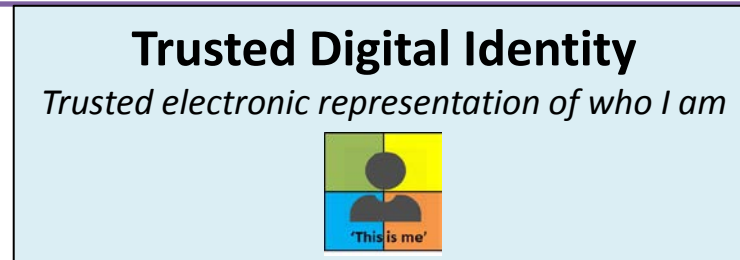
E.g.: "This person has died; please update your databases." This may trigger a review of continued eligibility/entitlement.

The **RETRIEVAL** of personal identity information, which is a validation plus a request for some additional related information. Departments must show that they have the authority to collect this additional information:

E.g.: "This person is applying for a driver's licence. Please confirm the name, date of birth and citizenship of this individual is correct, and tell me any additional aliases that you have on file."

**CDI is not a replacement for in-person service channel
nor a national ID Card or national ID database**

A core component of the Pan-Canadian Trust Framework



Is it the same person?

Is it a real person?

Has the user given consent ?

User Sign-In Services

The set of services that ensures that the user of a credential is the same person to whom it was issued.

- ☐ Credential Issuance ✓
- ☐ Credential Authentication ✓
- ☐ Credential Recovery ✓
- ☐ Credential Revocation ✓

Verified Person Services

The set of services that uniquely identifies a real person; ensures that identity information is accurate and up-to-date; and, that claims and actions can be associated with this person.

- ☐ Identity Resolution
- ☐ Identity Establishment
- ☐ Identity Validation CDI
- ☐ Identity Verification
- ☐ Identity Maintenance CDI

Linking and Authorization Services

The set of services that links together a credential to the identity of verified person and/or authorizations as granted by the person.

- ☐ Credential Determination
- ☐ Identity Linking
- ☐ Owner Authorization

Pan-Canadian Approach

Standards, Specifications, Certifications
Privacy, Security, Service Delivery, Organizational

Trusted Partners

Public and Private Sector Service Providers

Evolution towards CDI:

VITAL EVENTS

CRA, Statistics Canada and ESDC consume vital event data from Provincial bodies.

Point-to-point connections exist separately with each Province.

ESDC's has Vital Events Linkages agreements in place with Provinces. Statistics Canada and the Canada Revenue Agency have their own agreements with each Province.

PROVINCIAL VSO / SM

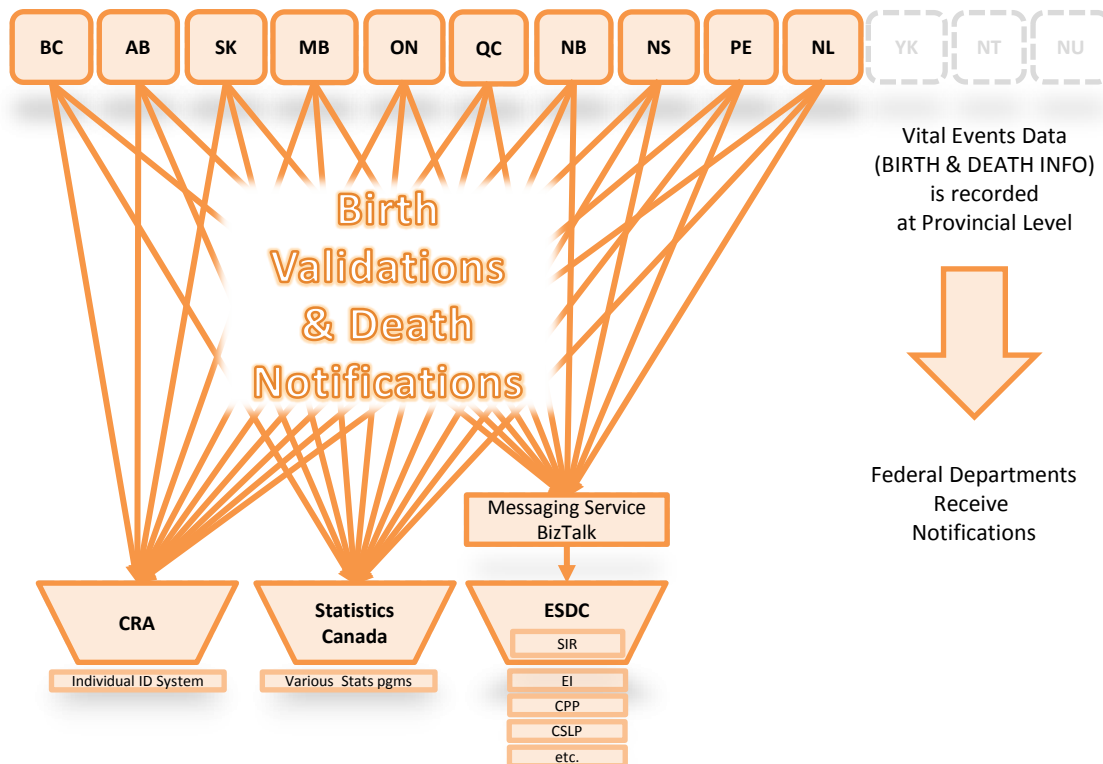
Authoritative Parties

- Issues Birth Certificates
- Registers Death

FEDERAL DEPARTMENTS

- Birth Certificate and Death notifications are received by all 3 Federal Departments.
- Birth Certificate validations for ESDC

Provincial Vital Statistics Offices & Service Ministries



ILP created to support passport modernization as well as other IRCC business needs by March 2017 launch. ILP is a pathfinder for the CDI.

Provincial VSO or SM

Authoritative Party

- Issues Birth Certificates
- Registers Death

Relying Party

- Validation of Citizenship & Immigration Data against IRCC.

ESDC/IRCC

Relying Party

ESDC:

- Reception of SIN@Birth Data from SMs.
- Validation of Birth Certificate Data against VSOs.
- Reception of Death Notifications from VSOs.
- Validation of Citizenship & Immigration Data against IRCC (CGMS).

IRCC:

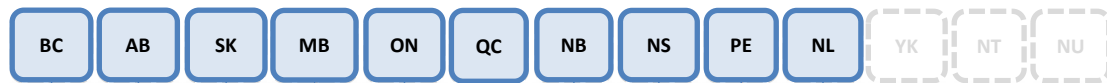
- Validation of Birth Certificates Data.
- Reception of Death Notifications.

Authoritative Party

IRCC:

- Citizenship and Immigration Documents issued

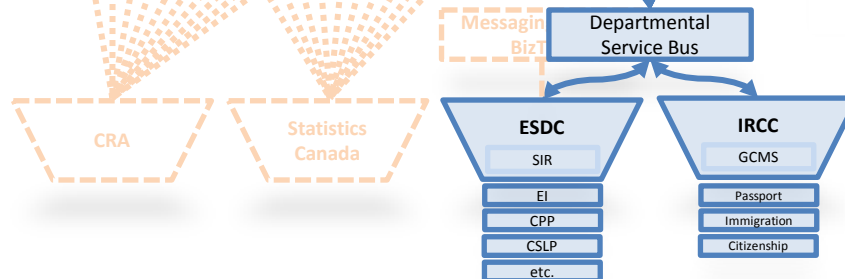
Provincial Vital Statistics Offices & Service Ministries



Birth
Validations
& Death
Notifications

Validation of
Citizenship &
Immigration Data

Birth data
Validation



Data Exchange Standard: NRS

Evolution towards CDI:

CANADA'S DIGITAL INTERCHANGE (CDI)

CDI will be a *real-time, scalable, cost-effective service* that will enable all levels of government to securely confirm identity information to support enhanced digital service delivery.

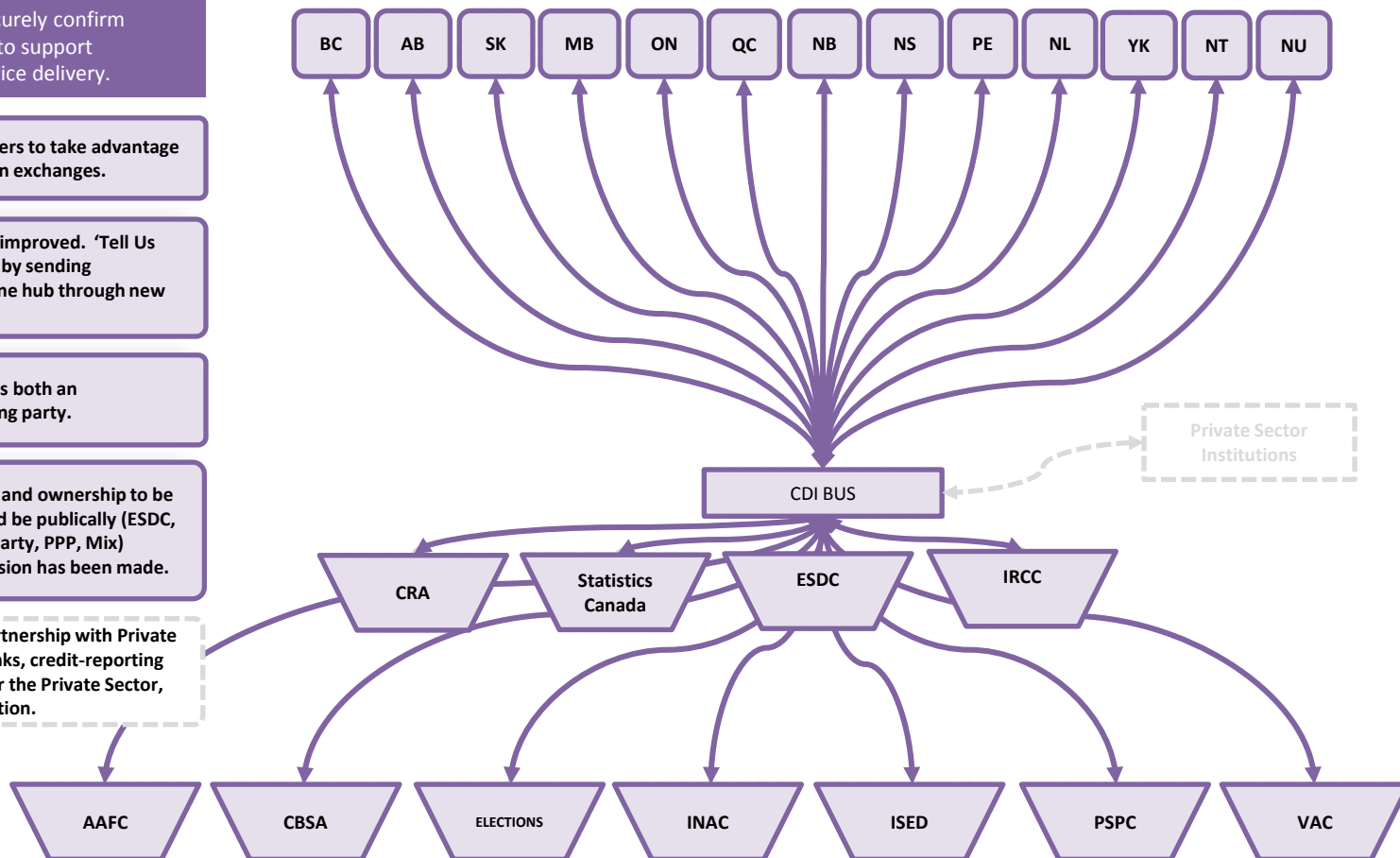
CDI Allows more partners to take advantage of common information exchanges.

Digital services can be improved. 'Tell Us Once' can be achieved by sending information through one hub through new authorities.

CDI members can act as both an authoritative and relying party.

CDI governance model and ownership to be decided. CDI Hub could be publicly (ESDC, SSC) or privately (3rd Party, PPP, Mix) administered. No decision has been made.

Potential for future partnership with Private Sector Institutions (banks, credit-reporting agencies, Validation for the Private Sector, etc.) for Identity validation.



Please note – this diagram is for illustrative purposes only to depict information flows between governments organizations. No decisions have been made on the architecture for CDI.

Business Case Development: Recent progress

ESDC and TBS are on-track to complete a business case by Spring 2016

Key activities completed include:

Assessing federal business needs

- ✓ Business needs questionnaire was distributed in October to participating federal departments to determine key business uses for CDI
- ✓ Responses received and common scope requirements being finalised

Determining gaps in authorities

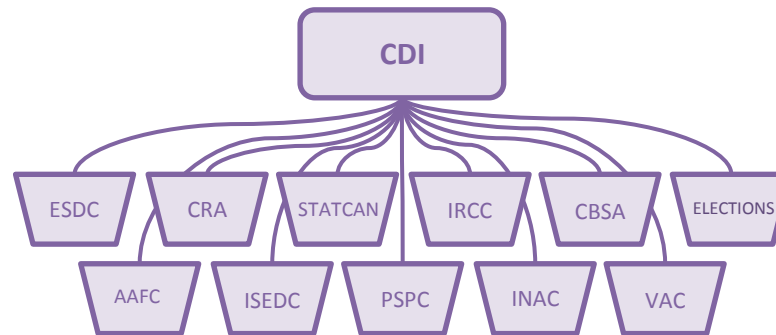
- ✓ TBS leading bilateral consultations with legal services and business experts to determine whether authorities exist for information sharing
- ✓ ESDC has received legal opinion and options related to authorities to provide information exchange services to provinces and territories



PT Engagement

- ✓ Ongoing engagement with provinces and territories through multilateral meetings (e.g., 3rd annual Pan-Canadian ID Summit in Ottawa, November 25-27, 2015) and bilateral meetings (e.g., targeted business and technical work underway with leaders BC, AB and NS) to understand their priorities and establish readiness to move forward with CDI
- ✓ Business needs questionnaire distributed in December – 3 responses received, more responses expected in February

Update: Assessing Business Needs – Federal Partners

- All 11 Federal Departments/Agencies that were contacted have responded to the request to identify their business needs



- Preliminary analysis of business need questionnaires highlight  and  functionalities that will cover most of line department business needs
- Identity validation through a secondary source (e.g. SIR, Driver's license) is also a common element through the input
- Some federal partners have identified the ability to identify Business Numbers as a potential need for CDI
- Federal partner sessions to refine questionnaire input are complete

Update: Key Legal Authorities

- The federal government is reviewing **authorities related to the exchange of personal information** within CDI
 - Initial legal analysis has identified that the majority of federal departments have sufficient legislative authority to validate identity - most departments will still need to complete information sharing agreements
 - Assessing approaches and timelines to close remaining gaps
- Also leading efforts to determine **authorities required to create/host federal CDI infrastructure**
 - Investigating the complexity of hosting infrastructure to support PT to PT messaging should this be desired
- The Office of the Privacy Commissioner will be briefed on progress and key privacy considerations in March 2016

CDI is only one step towards digital service delivery

- Many other changes to program and service integrity processes and design in federal departments, as well provincial ministries, are required to create a more streamlined user experience
- These include strengthening the integrity and/or streamlining business processes for applications, enrollment or to determine eligibility/ entitlement
- Through a client-first Pan-Canadian Digital Government vision, and our collective leadership role in various governance bodies, we can support departments in delivering services to clients that are convenient, simple, and secure

Next Steps

CDI Development Activities

- Finalize analysis of federal business needs and legal authorities – February 2016
- Finalize analysis of provincial/territorial business needs – February 2016
- Finalize options for operating model – March 2016
- Develop draft FPT Financing model – February 2016
- Identify options for solutions (both public and private) – March/April 2016

Engagement

- Office of the *Privacy Commissioner* Engagement – March 2016
- Bilateral P-T engagement continues through a variety of forums, as well as bilaterally on all aspects of both CDI and ILP – January to March 2016

Next DM SFI Meeting

- Return to federal DMs with draft business case – April 2016
 - PTs will have a chance to review a draft in March

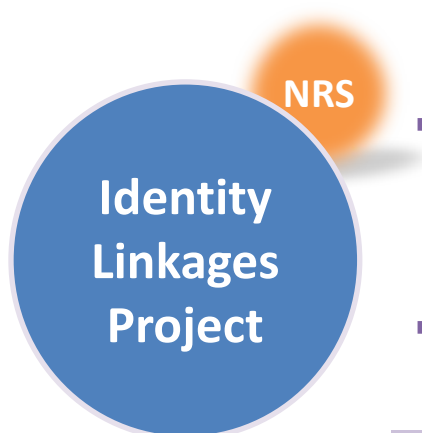
Considerations

- As we develop the business case for CDI, we need Joint Council members' support and assistance to solicit and coordinate efforts to provide input on business needs from each jurisdiction
 - We are working through the FPT Project Oversight and Coordination Committee to solicit input and have received 3 responses from PTs to date
- Several federal departments have identified a potential use for CDI outside of identity information sharing, such as service entitlement information. Given the gradual pace of implementation, do you feel that this should be a business requirement of the final state?
- What are top-of-mind considerations that should be reflected in the business case?

Annexes

Annex A: Pathfinder for CDI - Identity Linkages Project

- **CDI** was envisioned to support **passport modernization** through the electronic validation of identity information, but work was not advanced enough to support IRCC timelines
- ESDC and IRCC have established the **Identity Linkages Project (ILP)** to support passport modernization as well as other CIC business needs and move forward to meet IRCC timelines for March 2017



- **ILP** will be a pathfinder for **CDI** – to test key principles of information exchange, and will inform longer-term solutions
- **ILP** will allow IRCC to have electronic connections to either provincial Vital Statistics Organizations (VSOs) or provincial service ministries by leveraging ESDC's existing infrastructure with the provinces
- Goal to connect one province by March 2017, three provinces by the end of 2017, and the remaining provinces by the end of 2018

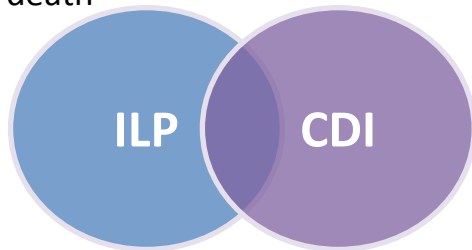
National Routing System (NRS) currently allows for point-to-point connections for the **Vital Exchange Linkages** project

Annex B: Key Linkages and Differences – ILP vs. CDI

ILP is a smaller scaled version of **CDI** – with fewer partners for very specific purposes

Key similarities:

- ❑ **CDI** and **ILP** both use a common information exchange model – using a “hub” or service bus that will allow for the flow of information between parties
- ❑ **ILP** and **CDI** will both be used for the electronic exchange of personal information elements to: validate the identity information of an individual (e.g., birth information) and provide notification of death



CDI will be a broader, longer-term solution that will go beyond the scope of **ILP**

Key differences:

- ❑ **ILP** limits connections between IRCC to provincial Vital Statistics Organizations (VSOs) and/or Service Ministries (SM) for specific purposes **vs.** **CDI** will allow partners to connect to each other for an expanded set of purposes
- ❑ **ILP** is designed to support IRCC business needs by 2017 **vs.** **CDI** will lead to multi-jurisdictional service bundles and improved digital services
- ❑ **CDI** will improve integrity of digital services by allowing multiple sources of authoritative information (e.g., validation of identity against Social Insurance Register and P-T issued drivers' licence)