Discussion Document: Options for for the New National Data Exchange Network

Overview

This brief provides an overview and discussion questions focused on exploring potential options for the long-term operating structure and governance needs for the national student data exchange network. These require careful consideration given the federated nature of Canadian post-secondary education across 13 provinces and territories. As an ARUCC member or partner, your advice is needed as the project continues to move ahead.

ARUCC members represent registrarial leadership from recognized universities and colleges across Canada. These members formally endorsed the ARUCC Groningen Project in 2016 and in 2018 where a unanimous vote was tabled at the biennial meeting to continue the *exploration* and *development* of the Network. ARUCC is providing the current leadership in partnership with three other associations (PCCAT, CUCCIO, and CanPESC).

The scope of the national network is to create capacity that enables trusted exchange of official academic documents and data for domestic and international students applying to, enrolled in (either currently or previously), and graduated from Canadian post-secondary institutions.

The background information following this section outlines the current Project governance and the core priorities, operating goals, assumptions, and data exchange functionality needed for the national network.

Exhibit A provides a typology of options for the operating structure of the future entity given Canadian regulations. Pending further consultation, legal advice will inform the most appropriate next steps with respect to operating structure.

More information about the Project is available online.

Discussion Questions

1. What principles should inform the network's ultimate governance model?
2. What principles should inform the network's operating structure?
3. What other related considerations should the Project leadership be contemplating when establishing the national Network?

The steering committee members will be conducting webinar discussions in May to capture feedback on this discussion topic.

Please send your recommendations to any of the steering members or to the Project's executive lead, Joanne Duklas (joanne@duklascornerstone.ca).

Next steps:

The ARUCC Project Steering Committee intends to conduct webinars and sessions in May and June to capture additional input from the community on considerations to inform governance and operating structure models for the long-term sustainability of the national network. Once your collective input is received, the Steering Committee will make a recommendation to the ARUCC Executive and its partners regarding models for their consideration and approval. Legal advice will also be sought regarding the formal operating structure. Updates will be published on the ARUCC Project website in our continuing efforts to engage and keep the registrarial and higher education community updated.

Background

Current Governance and Operating Support

In 2017, ARUCC formed a national steering committee to lead the Project and established governing partnerships with the Pan-Canadian Council on Admissions and Transfer (PCCAT), the Canadian University Council of Chief Information Officers (CUCCIO), and the Canadian Post-Secondary Electronic Standards Council User Group (CanPESC). Two representatives from each of these organizations sit on the Project steering committee in addition to a member from a region that currently has no provincial application centre or student data hub. This committee has delegated authority from ARUCC to lead the Project with budget decision making resting with the ARUCC Executive. Its actions are governed by a formally approved terms of reference. The chair and vice-chair of the committee are Charmaine Hack, registrar, Ryerson University, and Dr. Rob Fleming, director, PCCAT and executive director and co-chair, British Columbia Council of Admissions and Transfer (BCCAT).

ARUCC is the lead organization for the Project responsible for all contracts, operational needs, and financial matters. It is federally incorporated with its head office located in Alberta. It maintains appropriate insurance to support the work of the Project committees and participants.

The Project is supported both strategically and operationally by an Executive Lead, Joanne Duklas, Duklas Cornerstone Consulting (former registrar and ARUCC past-president, 2012).

Financial reporting is managed by MacPherson Management, the financial and operational firm supporting ARUCC. This firm has been supporting ARUCC for eight years.

ARUCC

ARUCC Groningen & Student Mobility Project Steering Committee

ARUCC Executive Committee

Strategic and Operational Supports
- Executive Lead
- Operational staff
- MacPherson Management
- Privacy, legal expertise (as needed)
- Technical Advisory Committee
- Other working groups as needed

A national Technical Advisory Committee (TAC) with systems, security, and architect specialists from post-secondary institutions and application centres across Canada has been formed to investigate the requirements needed for the RFP process. TAC reports to the Project Steering Committee.

Additional expertise (legal, privacy, technical) is being hired and various subcommittees are being established from time to time to support the Project. More specific information regarding the current project governance and details regarding its committees and members are available online.
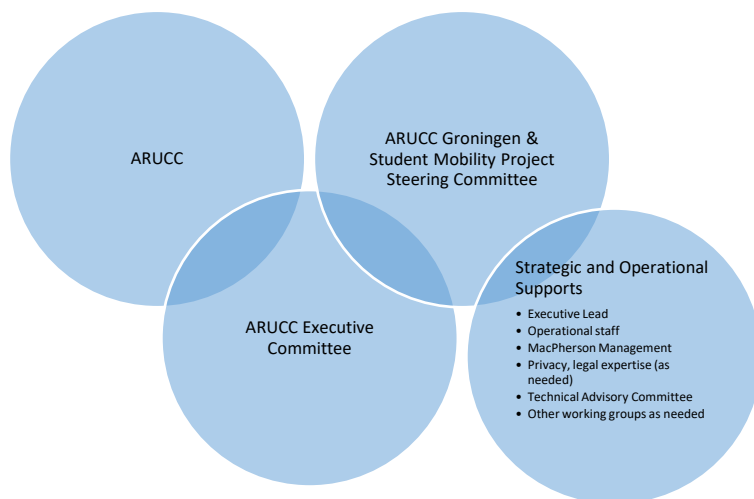
Looking Forward

High Level Outcomes Required of the National Network:

Priority #1   **Advances student mobility through post-secondary student data portability**
- o Closes inter-provincial student data exchange gaps for post-secondary across the provinces and territories.
- o Provides a national level solution to address post-secondary exchange needs for post-secondary institutions in Canadian provinces and territories lacking capacity.
- o Supports student transfer and mobile learners.

Priority #2   **Improves student services.**
- o Enables trusted, scalable, permission-based data exchange of academic documents.
- o Enables efficiencies for students and post-secondary institutions
- o Addresses post-secondary credential recognition and verification gaps.
- o Addresses post-secondary status confirmation gaps.
- o Addresses post-secondary transcript exchange gaps.
- o Supports best practices for credential assessment by supporting official academic document exchange.
- o Enables potential for additional services (e.g., access to a national course equivalency system, blockchain opportunities).
- o Ensures original data content and translation of academic documents are preserved and unaltered.

Priority #3   **Supports the diversity of post-secondary institutions that exist in Canada**
- o Respects institutional and provincial/territorial autonomy and authority.
- o Facilitates participation from institutions and hubs in each province/territory.

Priority #4   **Ensures flexibility and interoperability and enhances institutional efficiency**
- o Enables interoperability and flexibility for Canadian institutions and data hubs
- o Enables digitized document exchange and exchange of machine-readable data
- o Enables automation opportunities for Canadian institutions, application centres, and data hubs by providing access to machine-readable data and automated download capacity
- o Provides a standards-agnostic data exchange solution and remains flexible and accommodates the array of data standards in Canada.
- o Enables PDF exchange for Canadian institutions, application centres, and data hubs that require it as an interim measure.

Priority #5   **Adheres to provincial, federal and international privacy and consent of use regulations including, if applicable, the GDPR.**
- o Enables secure, permission-based data exchange between parties.
- o Is compliant with the GDPR, Canadian, and provincial/territorial privacy and consent of use regulations and provides evidence of same.
- o Note: All privacy regulations in Canada require students to provide permission for confidential data. See summary of privacy regulations: https://www.priv.gc.ca/en/

Priority #6   **Addresses document fraud.**
- o Ensures document and data exchanges adhere to diligent, quality assured practices.
- o Ensures connections are established with only approved and trusted institutions and data hubs in Canada and internationally.
- o Ensures students cannot modify data provided by institutions or data hubs.

Priority #7   **Establishes trusted connections nationally and internationally.**

o Ensures interoperability for data exchange between Canadian institutions, data exchange hubs and trusted international parties.

o Provides connection points for trusted international nodes by creating the necessary infrastructure to accomplish student data exchange.

Priority #8   **Is financially sustainable, accountable, secure, and built to ensure long term sustainability**

o Meets mandatory data security expectations in RFP.

o Ensures appropriate security protocols and disaster recovery mechanisms are in place to mitigate any data security issues.

o Enables cost recovery revenue models and the ability to add new service layers that facilitate payment processing.

o Provides evidence of vendor's financial viability and capacity to implement and support the national solution.

o Facilitates institutions and Canadian data exchange hubs to make local decisions for charging fees (or not)

o Supports potential revenue-generating options (credential verification services, document validation services, e-portfolio services).

o Future proofs Canadian institutions' IT infrastructure.

Potential Canadian Participants in the Network

Category	Total Potential Cdn Participants	Details
Canadian post-secondary institutions (public and private)	225	Located across 13 provinces and territories Includes a small number of private institutions in select provinces due to the locally determined quality assurance protocols. Not included: affiliates, 48 CEGEPs as these are supported centrally by three CEGEP application centres.
Canadian application centres and data exchange hubs involved in supporting Canadian post-secondary exchange -	9	In 6 regions – BC=2; AB=1; ON=2; Quebec=3; Nova Scotia=1 All focus on exchange of application information and transcripts to support admission into Canadian post-secondary institutions within their regions.
High School government credential repositories	2	BC and Saskatchewan Ministries of Education
Canadian post-secondary institutions and application centres/data exchange hubs	236	Total potential Canadian organizations (post-secondary institutions, application centres, data hubs) involved in national network at this time.

Operational Goals

- Position the Network with the capacity and accountability to ensure a prioritized focus on national student data exchange in a context shaped by provincial, territorial, national, and international privacy laws and legislation for post-secondary education.

   o Maintain a national focus for the network.
   o Develop models and practices that encourage collaboration and that preserve institutional and provincial/territorial autonomy and authority.

- o Ensure only trusted organizations are part of the core network membership. This is not intended to suggest that sending documents outside the network will not happen (e.g., to employers).
- Maximize inter-provincial transcript exchange for hubs that are focused intra-provincially
- Build inter-provincial PSI transcript exchange capacity where none exists currently
- Build inter-provincial high school transcript exchange as a support to post-secondary admissions where none exists currently (if a provincial high school transcript repository is already in place)
- Advance student access to funding, study permits, or mobility into regulatory professions and the workforce
- Support international recruitment and study abroad
- Support Cdn PSI students and graduates who wish to study or work outside of Canada

Baseline assumptions
- Provincial and institutional autonomy and authority are preserved.
- All provincial and federal privacy legislation are supported.
- Student permission is provided before sending their documents.
- Data sharing agreements are in place.
- Individual PSIs in provinces with existing application centres are free to work directly with the national network or through the centre/hub in their home province. If the latter, the centres will send documents to the national hub.
- Provincial hubs (e.g., OUAC) may have capacity to send high school results directly to receiving Cdn PSIs rather than through the network.

Functions Expected of the National Network

Note: *Academic document* includes both the document and the underlying electronic data. This material is intended to provide basic level information for the ARUCC members and results from the research and consultation. If changes are needed, please contact Joanne Duklas at joanne@duklascornerstone.ca

Function	Document Exchange Flow	Received by Network	Sent by Network	Total organizations involved (as of 2019-04-05)	Additional comments
Establish inter-provincial PSI transcript exchange	Cdn PSI ▸ Provincial hub ▸ national network ▸ Cdn PSIs	PSI transcripts	PSI transcripts	9 – EducationPlannerBC, Apply Alberta, OUAC, OCAS, three CEGEP centres, Quebec's Bureau de coopération interuniversitaire, Nova Scotia Council on Articulation and Transfer (NSCAT)	Listing existing application centres and data hubs is not intended to imply desire or capacity to participate. Provinces planning exchange: Nova Scotia (NSCAT), New Brunswick (CATNB), Alberta, Saskatchewan OUAC sending Ontario secondary school grades to 11 PSIs located in other provinces.
Establish transcript exchange for provinces without hub	Cdn PSI ▸ national network ▸ Cdn PSI	PSI transcripts	PSI transcripts	34 PSIs	Impacts Saskatchewan, Manitoba, New Brunswick, PEI, Newfoundland, Yukon, Northwest Territories, Nunavut
Establish high school transcript exchange	Provincial government high school credential repository ▸ national network ▸ Cdn PSI	High school transcripts	High school transcripts	2 - Saskatchewan Ministry of Education, BC Ministry of Education	Other provincial government high school credential repositories may also exist.
Establish high school transcript exchange	High school/ or high school board ▸ Provincial hub ▸ national network ▸ Cdn PSI	High school transcripts (if available)	High school transcripts (if available)	4 –Apply Alberta, OUAC, OCAS, Nova Scotia Council on Articulation and Transfer (NSCAT)	Listing existing application centres and data hubs is not intended to imply desire or capacity to participate. Provinces planning inter-provincial transcript exchange: Nova Scotia (NSCAT) with New Brunswick (CATNB); Alberta with Saskatchewan OUAC sending Ontario secondary school grades to 11 PSIs located in other provinces.

Function	Document Exchange Flow	Received by Network	Sent by Network	Total organizations involved (as of 2019-04-05)	Additional comments
Establish outgoing document sharing	Cdn PSI ▸ national network ▸ external third-parties	Other PDF documents (e.g., offers, enrolment confirmations, fees paid, pending graduation, graduation)	Other PDF documents (e.g., offers, enrolment confirmations, fees paid, pending graduation, graduation)	225 PSIs	Listing PSIs is not intended to imply desire or capacity to participate. Approximately 30 to 40% of Cdn PSIs partner with external vendors to satisfy some of these document requirements. Third parties may include government, funding bodies, regulatory bodies, employers
Establish international exchange - incoming	International trusted partners ▸ national network ▸ Cdn PSI	International academic documents	International academic documents	225 PSIs (as above)	Priorities: China, India, France, US, South Korea, Vietnam[1]
Outgoing documents - Establish international validation for Cdn PSI students and graduates	Cdn PSI ▸ national network ▸ international third parties	Cdn PSI transcripts Other PDF documents including offers and confirmations of enrolment. fees paid, pending graduation, and graduation	Cdn PSI transcripts Other PDF documents including offers and confirmations of enrolment. fees paid, pending graduation, and graduation	225 PSIs (as above)	Listing PSIs is not intended to imply desire or capacity to participate. Approximately 30 to 40% of Cdn PSIs partner with external vendors to satisfy some of these document requirements. Third parties may include government, funding bodies, regulatory bodies, employers, other post-secondary institutions outside of Canada.

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[1] https://cbie.ca/infographic/

Exhibit A: Background Material: Governance Options

Table 1: Typology of Governance Options for the National Network[2]

Type	Overview	Pros	Cons	Comments
Corporation	•Incorporation can be done at the federal or provincial/territorial level •Considered to be a legal entity that is separate from its shareholders •Shareholders will not be personally liable for the debts, obligations or acts of the corporation	•Limited liability •Ownership is transferrable •Continuous existence •Separate legal entity	•Corporations are closely regulated •More expensive to set up •Extensive corporate records required, including documentation filed annually with the government •Residency or citizenship of directors may be required	•Depending on whether federal incorporation is chosen, separate registration in individual provinces will be required
Sole Proprietor	•Owned by one person who is responsible for all debts and obligations	•Easy and inexpensive to register •Regulatory burden is generally light •Direct control of decision making •Minimal working capital required for start-up	•Unlimited liability (claims can be made against personal assets) •Income is taxable at personal rate which could put a person in a higher tax bracket •Lack of continuity if owner is not available	•Would need to be operated by one person/institution therefore does not fit our needs
Partnership	•A non-incorporated business between two or more people whereby participants financial resources are combined into the business •Each partner is jointly liable for debts in a general partnership •In a limited partnership, a person can contribute to the business without being involved in the operations. •A limited liability partnership is usually only available to a group of professionals such as lawyers, doctors or accountants	•Fairly easy and inexpensive to form •Start-up costs are shared equally amongst partners •Equal share in the management, profits and assets •Tax advantage if income is low or loses money partners can include their shares of the partnership on their individual tax return	•No legal difference between an individual and the business •Personal assets can be used to pay of business debts in unlimited liability •Can be difficult to find suitable partners •All partners are held financially responsible for business decisions that may be made by other partners	•Would require partnership agreements between each partner at the institutional, provincial, and international level thereby creating multiple agreements potentially creating inconsistencies

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[2] Information Sources:
https://canadabusiness.ca/starting/before-starting-your-business/corporation-partnership-or-sole-proprietorship/
https://www.alberta.ca/incorporate-business-organization.aspx

Type	Overview	Pros	Cons	Comments
Co-operative	•Owned and controlled by an association of members •Can be set up as a for-profit or a not-for-profit organization •Least common form of business, but can be appropriate in situations where a group of individuals or businesses decide to pool their resources and provide access to common needs, such as the delivery of products or services, the sale of products or services, employment, and more	•Owned and controlled by its members •Democratic control (one member, one vote) •Limited liability	•Longer decision-making process •Participation of all members is required in order to succeed •Extensive record keeping	•Owned and controlled by an association of members which can be set up as non-profit

Table 2: Types of Corporations

Type	Overview	Pros	Cons	Comments
Non-profit	•An independent legal entity, a corporate 'person' that exists separate and apart from its members or owners (shareholders)	•Able to buy, sell and own assets, including land •Can enter into contracts •Can sue	•Can be sued	•Pros/cons apply to all types of corporations as well as any additional listed
Private non-profit	•At least 2 people are needed to form		•Limited to 50 members •Cannot sell shares to public •Restricts or forbids transfer of shares	•Not applicable due to limited membership
Public non-profit	•At least 3 people are needed to form	•Does not have restrictions of private non-profit		
Society	•An independent legal entity, a corporate 'person' that exists separate and apart from its members •Similar to non-profit companies, and must direct any profits back into fulfilling the objectives of the organization •5 or more people can form a society for purposes such as social activities, recreation, culture, charity	•Members not held personally responsible for debts	•Cannot form a society to carry out trade or business •Cannot distribute property among the members during the lifetime of the society	•Some acceptable legal elements include society, association, club, foundation, council