

# Part Two - Building upon the Canadian Digital Data Mosaic

## Creating a National Student Data Exchange Network

ARUCC Groningen and Student Mobility Steering Group  
2018

June ARUCC and PCCAT Conferences



Groningen  
Declaration

# Agenda

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Introductions

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Business Problems to Solve

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Creating a National Node

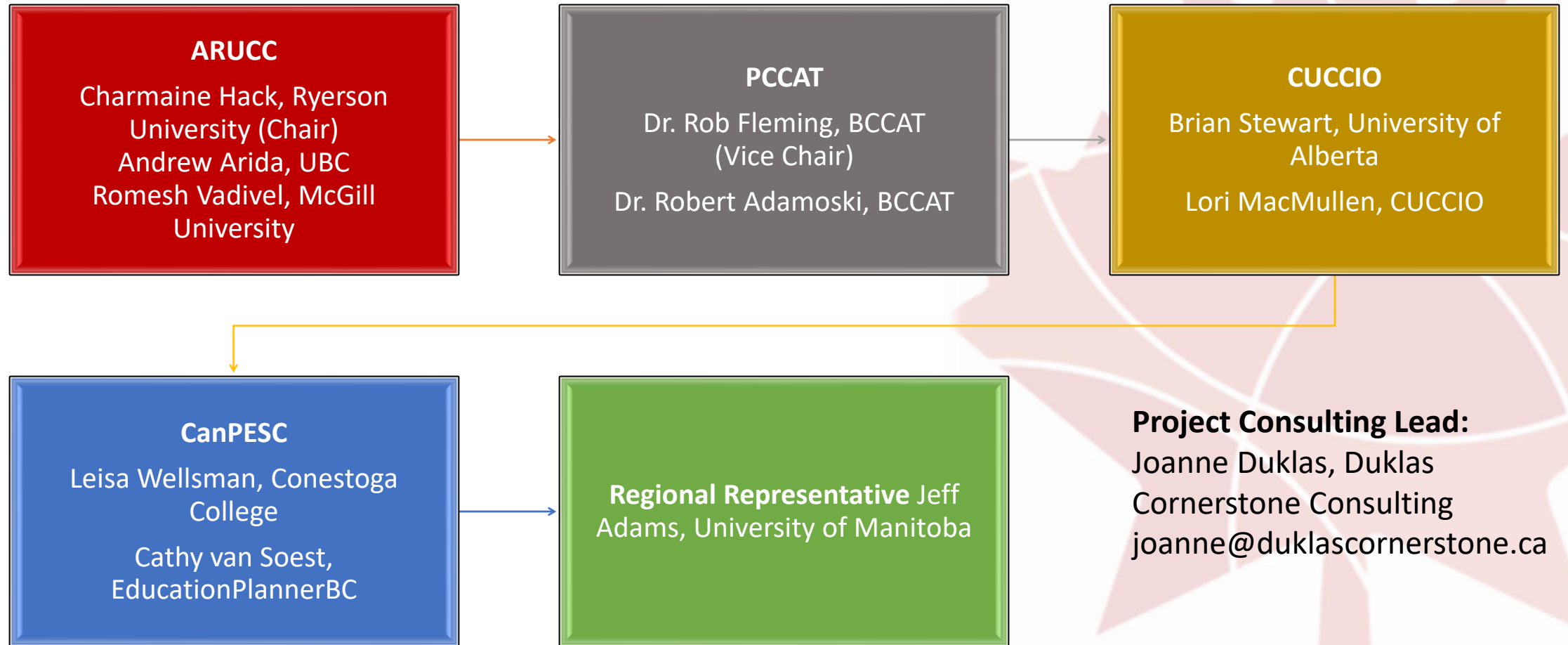
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Discussion/Questions

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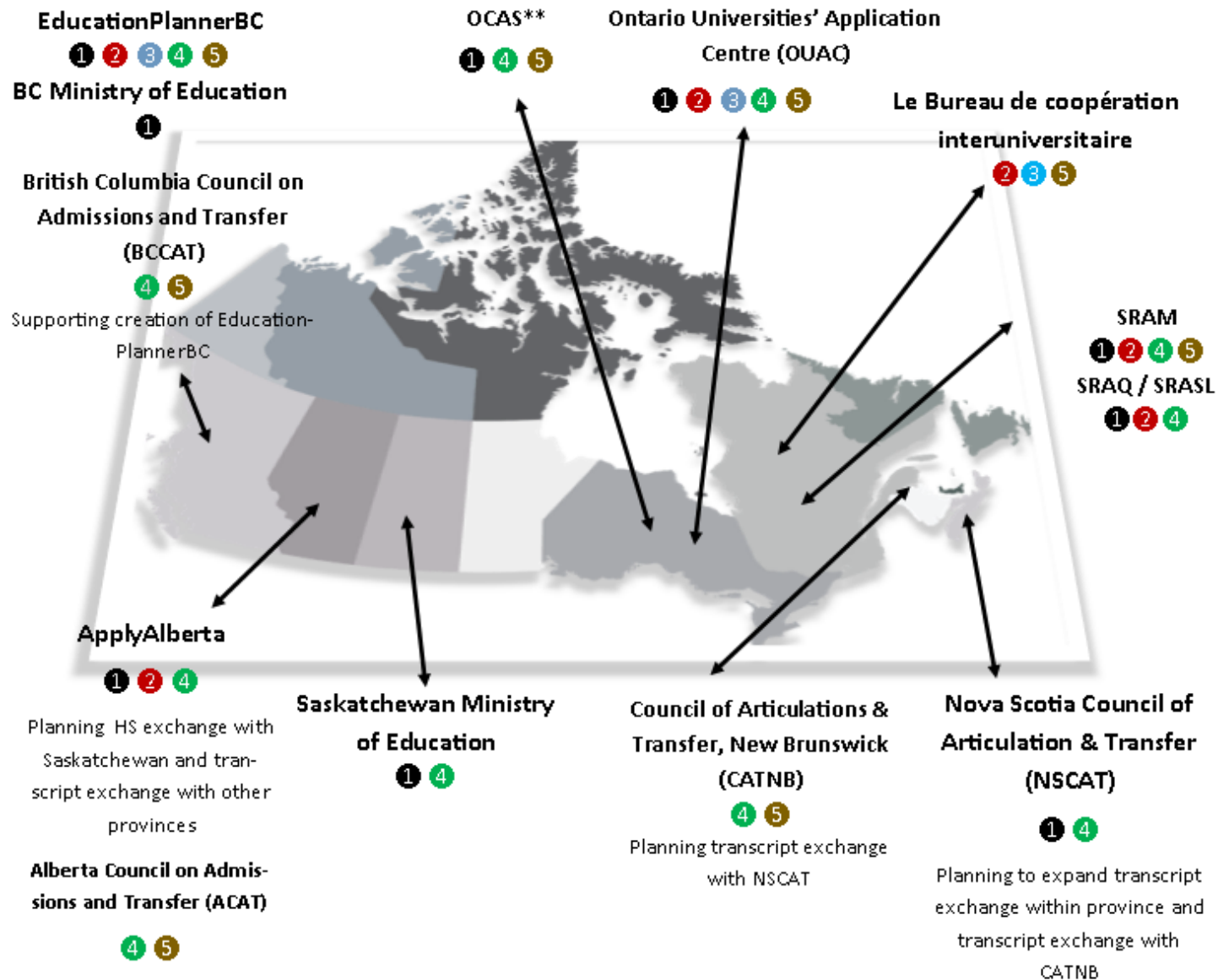
Next Steps

# Steering Committee



# Possibilities & Problems to Solve

# Internal Provincial Strengths



① Data exchange of high school data with post-secondary institutions to support admissions within province

② Data exchange between post-secondary institutions to support intra-provincial exchange

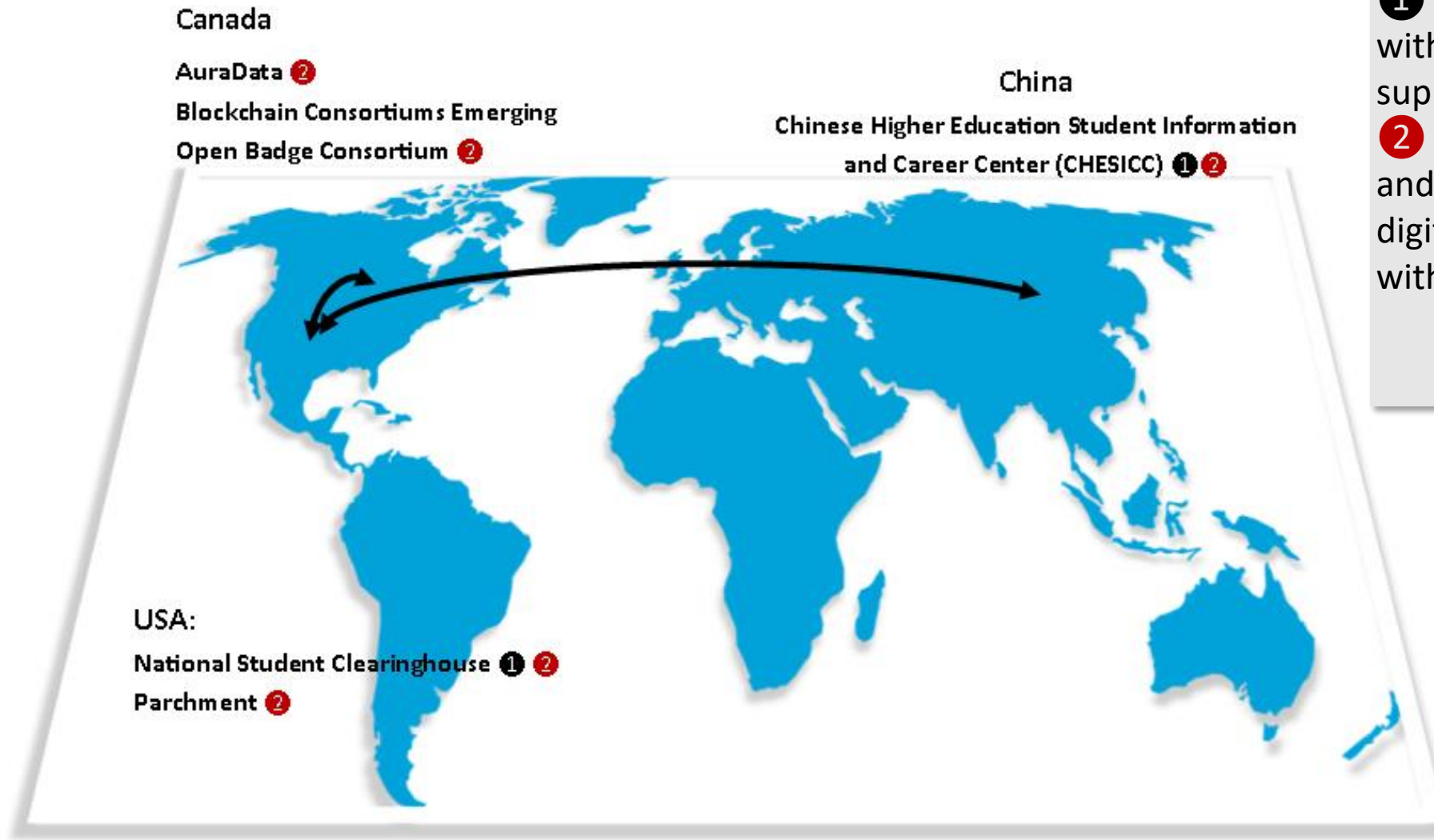
③ Data exchange with data hub or post-secondary institution located in another province (in any capacity)

④ Information resources on higher education pathways, transfer agreements, etc.

⑤ Other support services (e.g., research, transfer policy guidelines, link various government bodies, etc.)

\*\* Full information not available

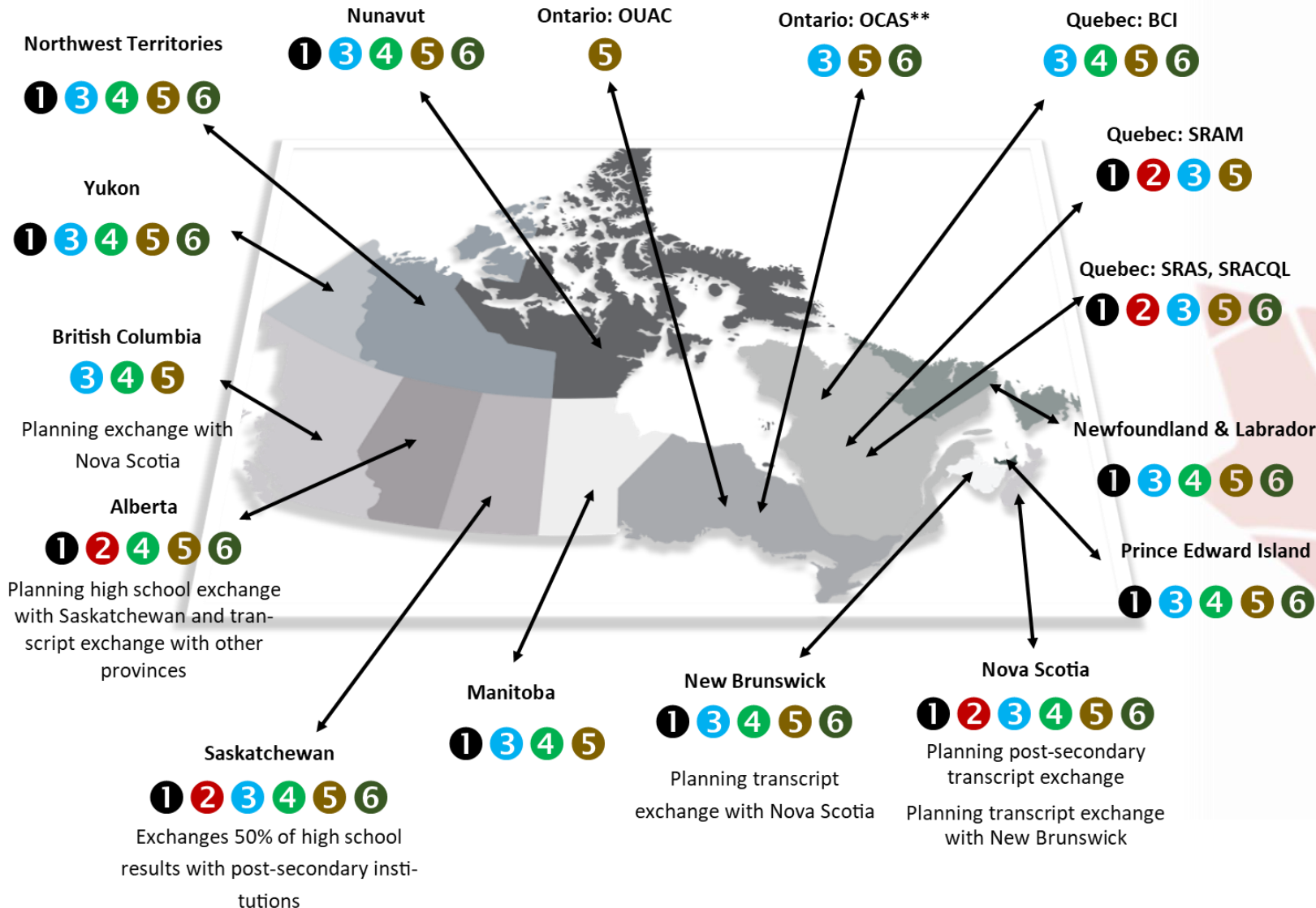
# International Exchange



- ① Data Exchange with institutions to support admissions
- ② Verification and/or sharing of digital credentials with 3rd parties



# Post-Secondary Gaps



- 1 No inter-provincial data exchange
- 2 Provides exchange of high school or CEGEP data only
- 3 No graduate student data exchange
- 4 No connection to trusted third parties other than government (e.g., WES, regulatory bodies, etc.)
- 5 No pan-sector, provincial or national exchange/service for **outbound** post-secondary **credential** verification (not incl. apps/transcripts)
- 6 No pan-sector, provincial or national exchange/service for **inbound** post-secondary **credential** verification (e.g., WES)

\*\* Full information not available

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Sources: consultation with organizations, institutional experts, and/or review of organization's publicly available material

# Examples of Other Gaps to Close

- Very Limited online credential verification capacities — Existing options are either at the institutional level or through a few 3rd party vendors partnering with institutions (e.g., Parchment, AuraData, National Student Clearinghouse, etc.)
- No international connectivity to global nodes (except McGill exchange with CHESICC via NSC; OUAC capturing LSAT and MCAT scores; as above)
- No member owned provincial or Canada-wide exchange of micro-credentials/badges, co-curricular records, etc. Select vendor options available including the Cdn Open Badge Consortium.
- Initial research into blockchain options (although Cdn govt recently launched a supply chain initiative)



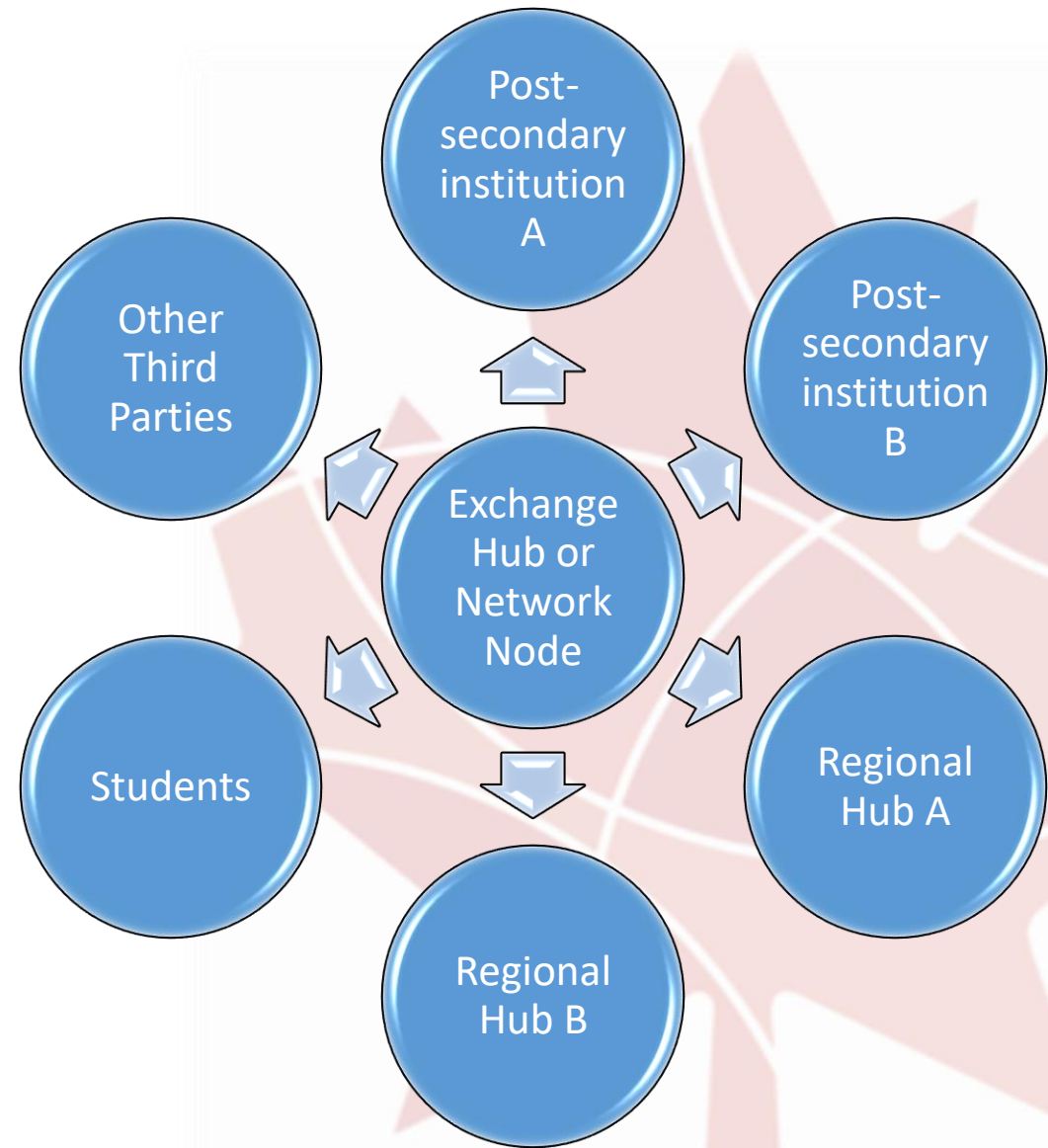
# Short Project Overview

# SC Mandate Endorsed by Members (2016)

- Continue the **exploration and development** of a Canadian data-exchange model
- Guide the **development** of a Canadian data-exchange model
- **Embed core benefits** into the model - improve student service; improve student mobility through efficient data-sharing; encourage national dialogue around student mobility and success; align with the national and international goals of other Canadian postsecondary and pathway organizations
- With ARUCC leading, **create a governance model** - a national Steering Committee to provide project oversight

# National Model

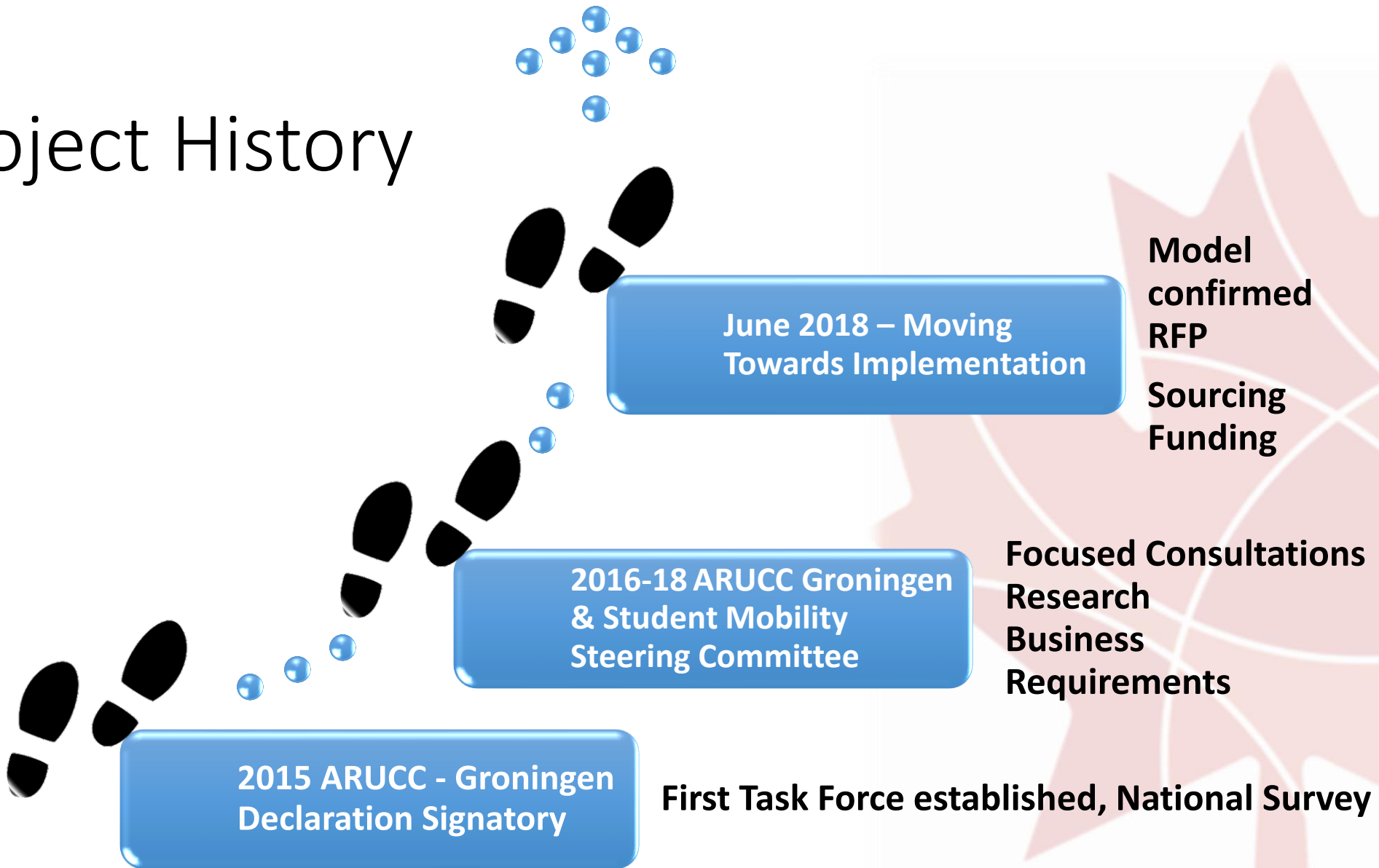
- Facilitates trusted connections
- Enables data exchange between two parties
- Provides connection points for trusted international nodes
- Facilitates secure, permission-based sharing of data
- Supports Canada's diversity
- Does not imply creation of an online wallet or portal for students although that could represent a value-added service when sharing student data or credentials with other third parties.



# Project Principles

- Improve student service
- Preserve and support institutional and provincial/territorial diversity, autonomy, and authority
- Advance improvements and enhancements that support student mobility and data portability
- Build on and complement existing student application and data exchange hubs supporting postsecondary
- Ensure national, evidence-based solution
- Close gaps

# Project History





# Model

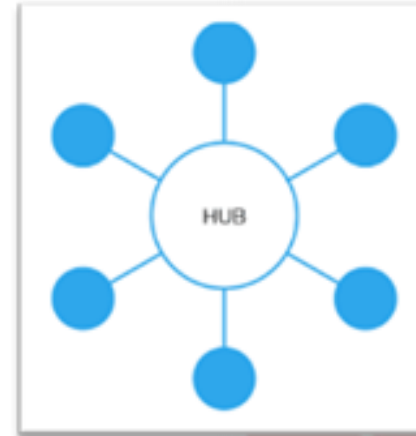




National Data  
Repository



Peer-to-Peer  
Network Service  
Model



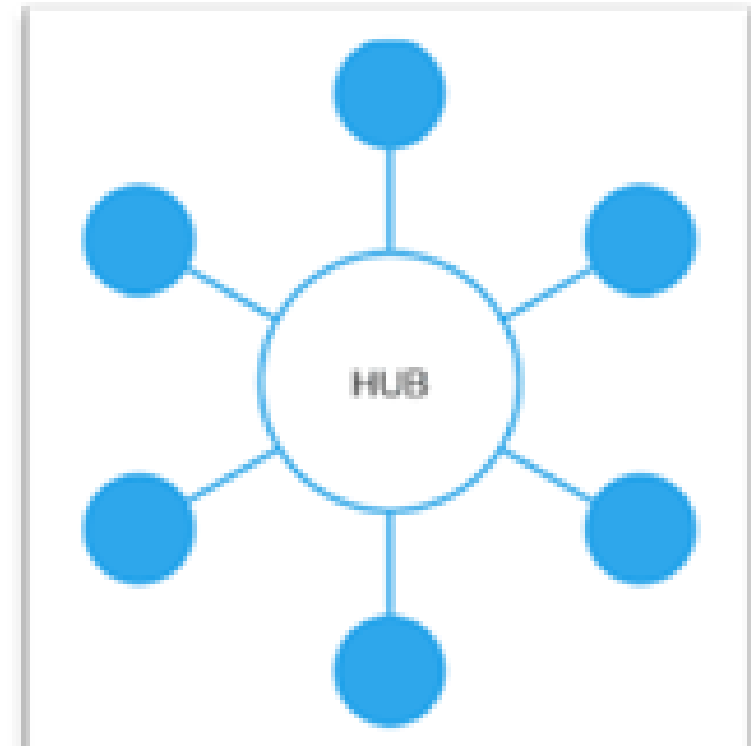
Hub-and-Spoke  
Model



Blockchain  
Model

## Typology of Models

- ❑ Allows connectivity to existing Canadian hubs and post-secondary institutions without hubs
- ❑ Facilitates interoperability
- ❑ Allows institutions to maintain control over their student data repositories
- ❑ Does not require data to be stored in a central repository
- ❑ Facilitates needed infrastructure and environment to connect to trusted international partners
- ❑ Provides the opportunity to create unique service layers to support hubs, institutions, and, potentially students
- ❑ Allows exploration and adoption of other forms of distributed access to student data (into the future e.g., blockchain)



# Chosen Model

# Sample Overall Business Requirements

- Ensuring the platform meets provincial, federal, and GDPR privacy regulations
- Ensuring the vendor's bone fides are appropriate
  - Financially able to implement and maintain the platform
  - Demonstrates the appropriate expertise
  - Has prior experience and appropriate competencies to handle Canada's complexities
  - Capable of supporting a complex governance structure
  - Provides a solution that meets the mandatory business requirements
  - Demonstrates partnerships with industry participants that supports mandatory requirements

# Sample Financial and Reporting Business Requirements

- Vendor can deliver
  - A cost recovery solution supported by financial allocation capacities
  - Reporting capacity for financial needs
  - Reporting capacity for strategic and policy decision making
  - Reporting capacity for operational needs



# Discussion, Advice & Questions

## **Exploring Business Requirements**

# Overall

What challenges exist in your institution, or within your province or territory that would be enhanced by a national data exchange solution?

# In-Bound Data Sharing

What is the biggest data exchange challenge impacting admission, transfer or study abroad when dealing with internationally educated students?

# Out-Bound Data Sharing

What data exchange supports does your institution or organization need to allow more efficient sharing of student data with other institutions or third parties (e.g., employers, regulatory bodies, etc.)?

# Anything Else?

Are there any other use cases or particular business challenges you believe must be solved through a national data exchange solution?



# For more information

**ARUCC Groningen Website** <http://arucc.ca/en/resources/task-force-groningen.html>