



Government
of Canada

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du Canada

Canada

CRI

Centre for Regulatory Innovation

Regulatory Innovation Tools



Objectives for this Webinar

By the end of this webinar, participants will know more about regulatory innovation tools and how the CRI can help them use these tools.

Specifically, the webinar will discuss:

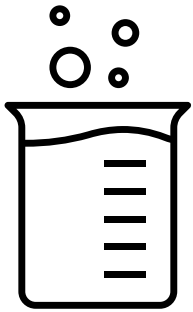
- Regulatory Experimentation
- Regulatory Sandboxes
- Collaboration on regulatory innovation

Why should regulators think about innovation?



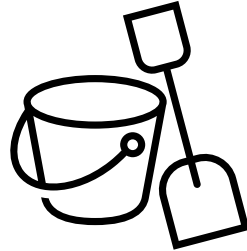
- **Regulators face various challenges** including paper-based systems, rigid and outdated regulations, complex or unclear processes leading to regulatory burden, barriers to trade and Canadian losing trust in public institutions. **Adopting innovative solutions can help improve the situation.**
- Industry innovation can both help **improve the lives of Canadians** as well as **support a strong Canadian economy**. However, businesses often face regulatory barriers or uncertainty, preventing or delaying innovative products and services reaching the market.

What Regulatory Innovation Tools are Available to Regulators?



Experimentation

to find out what works and inform innovation implementation



Sandboxes

To find out whether, when and how to regulate innovations in the marketplace and support marketplace innovation



Collaboration

To share information on regulatory innovation learning and best practices

What is a Regulatory Experiment?

A regulatory experiment is a **trial or test** of a **new** product, service, approach, or process, designed to generate **evidence or information** that can **inform the design or administration of a regulatory regime**.



Trial or test - where something is tried out under time-limited conditions - with a clear beginning and end



The product, service, approach or process that is tried has an angle that is **new**

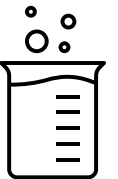


The primary goal is to generate evidence or information - to **learn something**

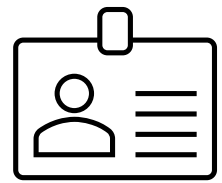


The purpose for seeking to learn is to **inform the design or administration of a regulatory regime**

Regulatory experiment is a tool that can help regulators find out what works and decide whether and how to implement a regulatory innovation.



Example of a Regulatory Experiment (Standards Council of Canada)



AI standard accreditation – Pilot Project

The experiment:

- SCC is testing a prototype accreditation framework for an upcoming AI standard with one certification body and one AI company.

Learning Objectives:

- The test will allow SCC to identify issues with its guidance and processes specific to accreditation to the AI standard.
- The company's AI product risk level will be measured pre and post certification to obtain information on whether and how the standard can impact AI product risk level.

How learnings will be used:

- Inform the development of the accreditation scheme.
- Inform whether and how regulators could use the new AI standard to regulate AI.

Why should Regulators think about Regulatory Experimentation?

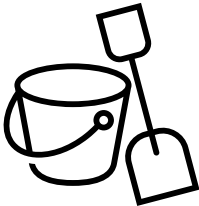
- A constant challenge for regulators is the need to make decisions in contexts of **uncertainty**. This includes uncertainty about the environment within which the regulator is operating, and about the impact that its decisions will have on the environment
- The effects of changes to regulatory frameworks, policies, or mechanisms can be deeply uncertain
- It may be impossible to know which approach is best if none of the options under consideration have been tried in a similar context before, or if the context is genuinely new and precedents offer little guidance. In other words, **uncertainty is often more acute in the context of innovation**
- **Experimentation provides a way for regulators to reduce uncertainty to inform the implementation of innovation**



What is a Regulatory Sandbox?

A regulatory sandbox is a facility, created and controlled by a regulator, designed to **allow the conduct of tests or experiments with novel products or processes prior to their fully entry into the marketplace.**

- In simpler terms a sandbox is a testing environment.
- Key to CRI's definition is the **role played by industry** in testing products **before they have fully entered the marketplace.**
 - Regulatory experiments always occur within a facility (e.g., a test environment) that is created and controlled by a regulator. However, a sandbox refers to a testing environment intended to allow experiments where industry will be allowed to sell/provide/test innovative products or services with real customers or in real life conditions.
- Both the regulator and industry may conduct experiments within a sandbox.



Example of a Regulatory Sandbox (Transport Canada)



Can Light Sport Aircraft be safely used for flight training?

The Problem

Canadian flight schools have communicated their interest in using aircrafts for training purposes that are not currently authorized for that purpose. The existing regulatory pathway to seek authorization has been identified as a barrier.

The sandbox

Transport Canada will be conducting experiments with partnership with interested Canadian flight schools to test the capabilities and limitations of the proposed aircrafts in a training environment.

To allow the testing, Transport Canada will be establishing a sandbox where TC will issue a regulatory exemption with conditions to maintain an acceptable level of safety.

How learnings will be used:

Transport Canada will use the learnings from the sandbox to inform whether regulatory to inform whether the regulations should be changed to allow the use of these aircrafts for training purposes.

Why should Regulators think about Regulatory Sandboxes?

Regulatory sandboxes allow regulators and industry to generate evidence and information about how an innovation will work in a **'real world' context**

The primary motivations for establishing a regulatory sandbox are:

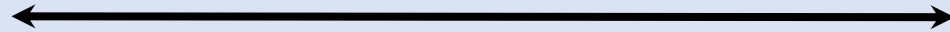
- **Supporting marketplace innovation** by reducing regulatory barriers to market entry
- **Contributing to regulatory learning** by providing opportunities to investigate the public value, risks, and regulatory implications associated with innovations
 - Regulators can better understand if and how regulation might need to adapt or develop
 - Innovators can better understand whether their innovation can meet existing regulations



Regulation and innovation - a Trade-off?

Regulate **too early**
or too much and
innovation could be
stifled

Regulate **too little** or
too late and innovation
could lead to lasting
harms to the public



Sweet spot?

What is Regulatory Cooperation?

Regulatory collaboration is a process where regulators work together to:

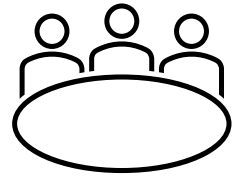
- share information and experiences
- reduce unnecessary regulatory differences
- adopt international standards
- harmonize or align regulations
- eliminate duplicative requirements and processes

This process applies to a range of regulatory activities, including:

- inspections
- certification
- policy development
- product and testing approvals
- adoption and development of standards



Example of Collaboration



Agile Nations

- In November 2020, seven countries signed on to the [Agile Nations Charter](#), establishing Agile Nations as a forum for countries to **collaborate on creating a global regulatory environment in which innovation can thrive.**
- Member countries include; Canada, Denmark, Italy, Japan, Singapore, the United Arab Emirates, and the United Kingdom
- In October 2021, member nations approved [the first Agile Nations work programme](#) **of 10 projects.**
- Under this workplan, Canada will work with Agile Nations partners to address issues ranging from cyber security and digital technologies to the use of regulatory experimentation. These projects involve **sharing ideas, testing new solutions** and **identifying opportunities** for regulators to better **support innovative industries** in introducing and scaling **new technologies.**

Coordinating National Standards Bodies of the Agile Nations

This is a multilateral project between Canada, the UK and Denmark.

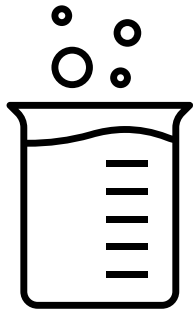
- The goal of this project is to **promote coordination between the national standards bodies** (NSBs) of the participating members of working group.
- Under this goal, there are 3 objectives:
 - **Objective 1: Awareness:** promote awareness for the Agile Nations Charter and Workplan amongst NSBs
 - **Objective 2: Inventory:** create an inventory of initiatives under the Agile Nations Charter Workplan that can be supported by standardization resources
 - **Objective 3: Linkages:** broker interaction between NSBs and Agile Nations Charter participants to **share best practices** at a national level and **identify collaborative opportunities** in support of international standards development where mutual support is feasible
- The project will deliver an inventory of initiatives under the Agile Nations Workplan that can be supported by standardization resources. This inventory will be used to **promote coordination and mutual support between regulators and standards bodies.**

Why should Regulators think about Collaborating on Innovation?

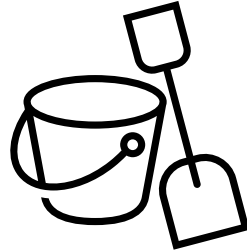
- Collaboration plays an increasingly important role in meeting the **challenges of emerging technologies** and the demands of a **globalised economy**. Such efforts can help spread the global benefits and impacts of emerging innovations.
- Collaboration can **reduce regulatory barriers or burdens to innovation**
- Collaboration supports **information sharing, regulatory learning and adaptation** in response to innovation
- **Data and knowledge sharing** among regulators, can play an important role in improving the quality of products. Relying on a larger pool of data gathered from multiple jurisdictions has the potential to reveal more flaws, mistakes and inefficiencies, which can then be corrected and improved
- Collaborations may aim to **reduce barriers** to market entry and promote the scale up of companies beyond their borders, which can both enable and stimulate innovation development



How does the CRI support Regulators in using these Innovation Tools?



Experimentation



Sandboxes

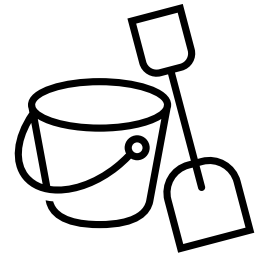
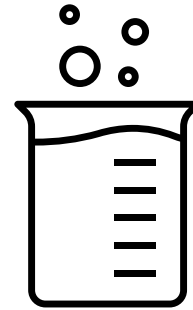


Collaboration

Regulatory Experimentation and Sandboxes

The CRI and the Regulatory Affairs Sector of TBS offers the following services to support the use of regulatory experimentation and sandboxes

- Advisory services
- Funding
- Toolkit
- Regulatory Authorities



Advisory Services

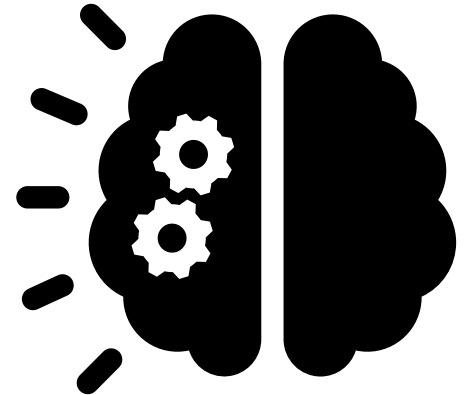
The CRI provides advisory services to support all stages of regulatory experiments and sandboxes

- **Regulatory experiments**

- Whether and when to experiment (is it the right approach?)
- Defining a research question
- Confirming the type of experiment
- Identifying metrics
- Establishing the evaluation plan

- **Regulatory Sandboxes**

- Identifying stakeholders
- Determining if regulatory flexibility is possible
- Clarifying roles
- Designing the testing environment



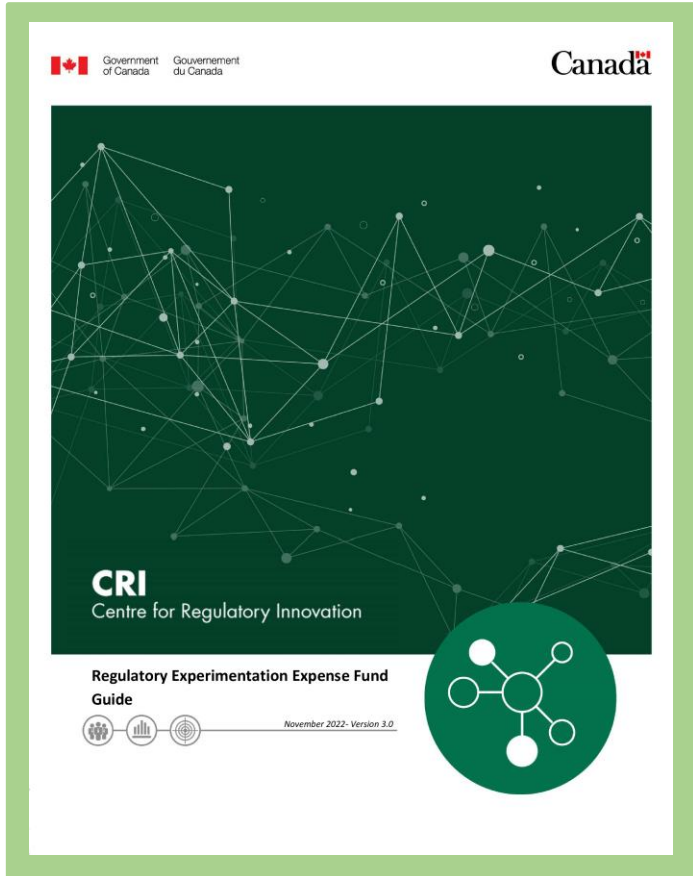
CRI Regulatory Experimentation Expense Fund (REEF)

The [REEF](#) seeks to **create opportunities for regulatory experimentation** and help federal regulators embed experimental learnings into the design and administration of their regulations. This includes supporting departments in:

- Developing a regulatory experiment (**NEW**)
 - Determining whether a certain problem could benefit from using experimentation (**NEW**)
 - Conducting regulatory experiments
-
- The REEF serves to **offset expenses** incurred by federal organizations in the course of undertaking approved regulatory experiments or pre-experiments.
 - The CRI provides **advice** and **support** to applicants throughout the project.

The **total funding envelope available** for REEF projects to begin in fiscal year 2023-2024 and ongoing is **\$1.4M** per fiscal year.

How to Apply to the REEF



The CRI uses a two-step process to make funding decisions. The first step is a high-level [Expression of Interest \(EOI\)](#) to allow for an initial assessment of the alignment of a proposed experiment with the Fund before moving on to step two, the Proposal, where the proposed experiment or pre-experiment is described in more details to allow the CRI Steering Committee to make a funding decision.

Further information on how to complete the EOI and the Proposal can be found in the [REEF Guide](#)



Toolkit

- [The Regulator's Experimentation Toolkit](#) is a practical guide designed to help regulators identify, design, and carry out regulatory experiments and sandboxes.

Regulatory Sandbox Authorities

The Problem

Regulators may need explicit legal authority to establish a sandbox (for example, if it involves testing an innovation that is not permitted under the existing regulatory framework).

- While certain regulators have this authority, those without it are limited in their ability to experiment. Across sectors, inconsistencies can prevent regulators working together, make it difficult to identify and incorporate best practices, create competitive disadvantages, compromise public trust.

The Proposed Solution

TBS is exploring creating an **enterprise-wide legislative authority** that would enable all regulators to establish sandboxes.

- This would also involve setting consistent **guardrails** to ensure regulators remain accountable and transparent, while continuing to uphold protections for Canadians (e.g. prescribing criteria to consider before approving a sandbox and requiring reporting on outcomes of sandboxes).

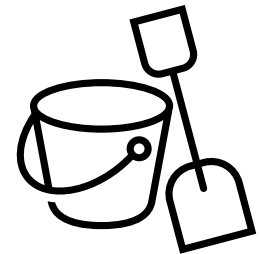
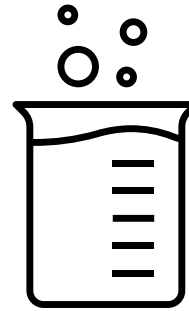


Policy development is underway. TBS is seeking feedback and lessons learned from regulators to help inform the design of an enterprise-wide authority and guardrails. A public consultation is also planned launch in early 2023.

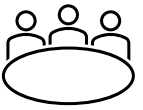
Regulatory Cooperation

The CRI and the Regulatory Affairs Sector of TBS offers the following services to support the use of regulatory collaboration in the context of innovation:

- Regulatory Cooperation forums
- Sharing lessons learned and best practices



Regulatory Cooperation forums



- TBS facilitates Canada's participation to many regulatory cooperation efforts such as [the Regulatory Reconciliation and Cooperation Table](#), [Canada-U.S. Regulatory Cooperation Council](#), [Canada-EU Regulatory Cooperation Forum](#), and the [Organization for Economic Cooperation and Development](#) (OECD), the [World Trade Organization](#) and [Agile Nations](#).

Agile Nations

- Agile Nations is a forum for countries to **collaborate on creating a global regulatory environment in which innovation can thrive**.
- As a member, Canada can propose collaboration projects and participate to projects proposed by other members.
- TBS coordinates the Government of Canada's involvement in Agile Nations. This includes working with regulators to identify collaborations projects to put forward as well as sharing projects proposed by other members with the relevant regulators to verify their interest in collaborating on these projects.

If you are interested in participating in Agile Nations or if you would like more information on regulatory cooperation tables, you can reach out to the CRI.

Sharing lessons learned and best practices

- The CRI works to gather lessons learned and best practices on regulatory innovation and share them with regulators.
- Best practices are obtained from international collaboration as well as from innovation projects led by Canadian regulators.
- The CRI shares those lessons learned using various medium including reports, guidance, webinars and events, and advisory services.





Questions?

Contact us

For more information about the Centre and how to apply, please reach out!

Email: cri-cir@tbs-sct.gc.ca

Visit: [CRI GCWiki page](#)

