Transport Canada – April 2026 Engagement Opportunities

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Civil Aviation

For Information: Discussion Paper on the Regulatory Frameworks for Space Launch and Re-entry

As part of a broader strategy to modernize regulatory frameworks for space, the Government of Canada decided, in January 2023, to enable commercial space launch activities to take place in Canada. As space launch and re-entry are entirely new activities that have never been conducted in Canada before – by commercial or government actors - new authorities, regulations, and corresponding policies and programs must be created to ensure they are conducted safely, securely, and sustainably. Transport Canada has been tasked with the oversight and development of the comprehensive framework necessary to regulate space launch and re-entry operations, ensuring they remain in the public interest and are not likely to affect aviation safety.

Transport Canada recognizes that such operations may impose unique impacts on Indigenous Peoples and their communities. Indigenous governments, organizations, and Rights Holders will have the opportunity to influence future approaches to the regulation of space launch and re-entry activities in Canada. Future Indigenous consultation activities will allow Transport Canada to better integrate Indigenous perspectives and values into the comprehensive regulatory framework being developed, while addressing questions and concerns communities may have.

Transport Canada has drafted a discussion paper (Annex A) for Indigenous communities that highlights the various opportunities and challenges that enabling space launch and re-entry activities in Canada presents. It also provides information on key concepts, shares elements of Transport Canada's proposed approach to consultations and regulating the sector and seeks input on questions that may help better protect and promote Indigenous rights, values, and perspectives in future regulations.

Once released in Spring 2026, Transport Canada will be looking for feedback on its discussion paper, TC.CommercialSpaceLaunch-LancementSpatialCommercial.TC@tc.gc.ca. If you wish to be notified when the discussion paper is published, please contact us at the same address.

Transportation Infrastructure Programs

For Information: Trade Diversification Corridors Fund and the Arctic Infrastructure Fund

Transport Canada is pleased to inform you of the launch of the Trade Diversification Corridors Fund and the Arctic Infrastructure Fund.

Trade Diversification Corridors Fund

The $5 billion Trade Diversification Corridors Fund (2026-27 to 2031-32) provides funding to transportation infrastructure projects that help diversify Canada's trade partners, create good jobs, and drive economic growth. The Trade Diversification Corridors Fund is a federal funding program that helps catalyze investments, develop Canada's core trade corridors and address transportation connectivity and capacity gaps in areas where growth is constrained. The core trade corridors are the Pacific, Prairies, Central, and Atlantic corridors.

Arctic Infrastructure Fund

The $1 billion Arctic Infrastructure Fund program (2025-26 to 2028-29) will fund projects that build and expand dual-use (community and defence) transportation infrastructure in Arctic regions across Canada. Investments will reflect the priorities of Northerners and the Canadian Armed Forces. These investments represent strategic commitments to Canada's long-term economic growth, and will help build prosperity, independence, and opportunities for Northerners. To be eligible, projects must be located in the Yukon, Northwest Territories, Nunavut, Nunavik region of Quebec, or the Nunatsiavut region of Northern Labrador.

For more information, please contact tc.diversificationfund-fondsdiversification.tc@tc.gc.ca or tc.arcticinfrastructurefund-fondsinfrastructurearctique.tc@tc.gc.ca.

Marine

Marine Safety and Security Policy and Regulatory Updates

Upcoming Engagement Opportunity: Small Vessel Regulations – Safety Amendments

Proposed amendments to the *Small Vessel Regulations* are being considered as a result of feedback received from Indigenous Peoples, industry participants, government partners, and members of the public regarding issues with existing requirements in the Regulations. These include:

- Amend the definition of “personal watercraft” to include those that are electric powered;
- Repeal the prohibition on propeller-driven surfboard-type vessels;
- Establish construction, equipment and operational requirements for all power-driven surfboard-type vessels, including those equipped with a propeller;
- Introduce requirements for engine noise emission levels on pleasure craft;
- Introduce requirements for the installation and use of engine cut-off switches on new vessels less than 8 metres in length;
- Introduce requirements related to fitting power-driven surfboard-type vessels with construction standard conformity labels; and
- Introduce requirements for the mandatory wear of personal flotation devices or life jackets for persons onboard certain small vessels.

To help address consistently high fatality rates among recreational boaters, Transport Canada is introducing regulatory requirements related to the mandatory wearing of personal flotation devices or lifejackets in certain circumstances. This proposal could impact Indigenous operators and guests on board recreational boats by requiring a personal flotation device or lifejacket to be worn in certain circumstances. A "What We Heard" report summarizing feedback received from a 2024 consultation on mandatory wear will be published on Transport Canada’s website in early 2026. A draft survey aiming to capture Inuit communities’ feedback on the impacts of mandatory wear requirements in a northern context was developed and shared with Inuit Tapiriit Kanatami in fall 2025.

Presentations related to the advancement of work on Small Vessel Regulations – Safety Amendments, as well as mandatory wear, were provided at the Canadian Marine Advisory Council meetings on November 4 – 6, 2025, in Ottawa. The proposed regulations are targeting pre-publication in the *Canada Gazette*, Part I in Spring 2027. Pre-publication will be followed by a comment period.

Transport Canada welcomes hearing your views. To provide feedback or request additional information, please contact us at MSSRegulations-ReglementsSSM@tc.gc.ca.

Upcoming Engagement Opportunity: Fishing Vessel Safety Regulations (Phase 2)

As the second phase of its three-phase approach to modernizing regulations for small and large commercial fishing vessels, Transport Canada is updating requirements for the design and construction of small commercial fishing vessels (24.4 metres in length and below, and less than 150 gross tonnage). These updates are intended to align Canadian requirements with contemporary standards and best practices, enhancing the safety of small fishing vessels. These proposed regulations would impact Indigenous builders of small commercial fishing vessels who would need to meet the new construction requirements. Also, Indigenous operators of small commercial fishing vessels would need to ensure their vessels meet key safety provisions in the new regulations and, should their vessel undergo major modifications, they would need to ensure the modification aligns with the new construction requirements.

An industry and Fishing Associations survey was sent out in Fall 2025 to determine current industry practices to help confirm our cost estimates. The survey responses received will help to better understand the potential impact of upcoming changes to small fishing vessel construction requirements.

Transport Canada will continue discussing Phase 2 of the *Fishing Vessel Safety Regulations* at national and regional meetings of the Canadian Marine Advisory Council. Engagement opportunities will also be extended to Indigenous communities through Indigenous Regulatory Roundtables. Additional engagement activities will also be scheduled in 2026 as work on this project continues to develop.

The proposed regulations are targeting pre-publication in the *Canada Gazette*, Part I in 2026. Pre-publication will be followed by a 90-day comment period.

Transport Canada welcomes feedback on Phase 2 of the *Fishing Vessel Safety Regulations*. To provide your views on how this project may impact you or your communities, please contact us at MSSRegulations-ReglementsSSM@tc.gc.ca.

Upcoming Engagement Opportunity: Small Vessel Construction and Equipment Regulations

Transport Canada is undertaking a comprehensive review of regulatory requirements for the construction of, and equipment for, all types of commercial vessels (excluding fishing vessels). The scope of application of the proposed regulations would be vessels that are more than 15 gross tonnage and less than 24 metres in length, or not more than 15 gross tonnage and carrying more than 12 passengers, as well as tugs equal to or greater than five gross tonnage and less than 24 metres in length.

The objective is to consolidate requirements that are currently found across several regulations and standards. The intent is to produce a single set of streamlined and modern regulations that provide clear and coherent requirements for the construction and equipment of small vessels, helping to achieve safety for their intended purpose.

Updates on the regulatory initiative were provided at the 2024 and 2025 National Canadian Marine Advisory Council meetings, and public consultations have taken place on the proposed regulations through a Canadian Marine Advisory Council Working Group.

Transport Canada plans to launch targeted consultation sessions in Spring/Summer 2026 with those involved in the marine sector, including industry, other government departments, and interested members of the general public, as well as with Indigenous communities. Additional engagement opportunities will also be extended to Indigenous communities through Indigenous Regulatory Roundtables.

A discussion document outlining the regulatory proposal will be shared with all relevant marine parties previously mentioned, as part of these sessions. Engagement prior to pre-publication in *Canada Gazette,* Part I is considered an important step to gather input and supports the consideration of public perspectives in the regulatory proposal.

Transport Canada welcomes feedback on the proposed regulations. To provide your views on how this project may have an impact on you or your communities, or to proactively signal your interest in participating in the targeted consultations, please contact us at MSSRegulations-ReglementsSSM@tc.gc.ca.

Upcoming Engagement Opportunity: Regulations Amending the Competency of Operators of Pleasure Craft Regulations

The regulatory proposal aims to amend the *Competency of Operators of Pleasure Craft Regulations* to address gaps and inconsistencies, ensuring they remain effective in promoting boating safety.

The proposed regulations seek to enhance safety by ensuring operators have the necessary skills and knowledge, thereby reducing incidents and improving public safety. They also aim to promote compliance with safety standards and establish accountability by maintaining records of Pleasure Craft Operator Card suspensions or cancellations for enforcement purposes.

A title change to “Operators of Pleasure Craft Regulations” is proposed to simplify references and reduce confusion. The introduction of open-book testing (excluding challenge tests) aligns the regulations with current practices, removing ambiguity about allowed resources during the Transport Canada boating safety test. This change allows the use of course manuals and other materials for both online and in-person courses, except for challenge tests.

The proposed regulations would grant the Minister clear authority to suspend or cancel a Pleasure Craft Operator Card if it is obtained fraudulently, if the holder is incompetent, or if public safety is at risk. Administrative updates will improve the clarity, consistency, and readability of the regulations, making them more user-friendly. These updates include new definitions (e.g., “boating safety course;” “personal watercraft”) and amendments to existing ones (e.g., “operate”; “proof of competency”) to align more closely with the *Canada Shipping Act*, 2001.

Age restrictions for pleasure craft operators will be consolidated within the *Competency of Operations of Pleasure Craft Regulations*, incorporating relevant sections from the *Vessel Operation Restriction Regulations* to make the regulations more comprehensive.

These amendments align with broader governmental policies to enhance public safety, environmental protection, and societal well-being, supporting the Government of Canada’s commitment to reducing preventable accidents and promoting safe recreational activities.

Transport Canada is aiming for pre-publication of the proposed regulations in Part I of the *Canada Gazette* in 2026, followed by a 60-day comment period.

Transport Canada welcomes any feedback on the proposed regulations. For more information or to provide feedback on how this project may impact you or your communities, please contact us at MSSRegulations-ReglementsSSM@tc.gc.ca.

Upcoming Engagement Opportunity: Regulations Amending the Arctic Shipping Safety and Pollution Prevention Regulations and the Administrative Monetary Penalties and Notices (CSA 2001) Regulations

Canada is introducing amendments to the *Arctic Shipping Safety and Pollution Prevention Regulations* to reflect the introduction of some new international standards for vessels operating in polar regions recently adopted by the International Maritime Organization. Some minor amendments will also be made to the *Administrative Monetary Penalties and Notices* (CSA 2001) *Regulations*, in order to ensure alignment with the new vessel categories being introduced into the *Arctic Shipping Safety and Pollution Prevention Regulations.*

The objectives of the proposed Regulations are to improve the safety of navigation and voyage planning of a broader range of vessels operating in Canada's Arctic waters, which will in turn help prevent pollution from marine shipping activities. These objectives are in line with the Polar Code's assertion that any safety measure taken to reduce the probability of an accident will largely benefit the environment. The proposal would also fulfill Canada's international commitments and obligations under the International Convention for the Safety of Life at Sea and the Polar Code and further demonstrate Canada's international leadership in supporting safe shipping in polar waters.

The proposed Regulations will increase the requirements for what cargo vessels between 300 and 500 gross tonnage, fishing vessels of 24 metres or more, and pleasure craft of 300 gross tonnage or more not engaged in trade need to carry onboard, and prepare for, in advance of travelling in Canadian Arctic waters. These amendments would apply to both Canadian and foreign vessels.

Under the proposed Regulations, these new vessel types would be required to:

- Have a way to receive and display current information on ice conditions in the area;
- Have a clear view through at least two of the navigation bridge windows regardless of weather conditions, as well as a clear view astern or another arrangement accepted by the country where the vessel is registered;
- Have a way to keep ice from building-up on navigation and communication antennas in areas where ice build-up is likely;
- Be equipped with two means of illumination to help the crew see ice;
- Be fitted with at least one Global Navigation Satellite System compass or equivalent that's connected to the ship's main and emergency power;
- Have two independent echo-sounding devices or one echo-sounding device with two separate independent transducers if ice strengthened; and
- Have two non-magnetic means to determine and display their heading.

- The proposed Regulations would also introduce new voyage preparation requirements for these vessels, which would specify that route planning through Canadian Arctic waters needs to take into account the following:
    - Procedures required by the safety management system on board the vessel and, if no safety management system is implemented, a documented procedure for operation in polar waters;
    - Any limitations of the hydrographic information and aids to navigation available;
    - Current information on the extent and type of ice and icebergs in the vicinity of the intended route;
    - Statistical information on ice and temperatures from former years;
    - Places of refuge;
    - Current information and measures to be taken when marine mammals are encountered relating to known areas with densities of marine mammals, including seasonal migration areas;
    - Current information on relevant ships' routing systems, speed recommendations and vessel traffic services relating to known areas with densities of marine mammals, including seasonal migration areas; and
    - National and international designated protected areas along the route; and operation in areas remote from search and rescue capabilities.

Transport Canada published the proposed Regulations in Part I of the *Canada Gazette* on March 21, 2026, followed by a 60-day public comment period.

Additional opportunities for discussing the proposed amendments to these regulations continue to be available through Canadian Marine Advisory Council meetings, held annually both nationally and regionally.

Transport Canada welcomes any feedback on the proposed regulations. For more information or to provide feedback on how this initiative may impact you or your community, please contact us at MSSRegulations-ReglementsSSM@tc.gc.ca.

Upcoming Engagement Opportunity: Canadian Marine Pilotage Regulations

In this proposal, the *General Pilotage Regulations* would be updated and retitled as the *Canadian Marine Pilotage Regulations*. The *Canadian Marine Pilotage Regulations* would maintain the original structure of the existing regulations, which has separate divisions for each pilotage region that outline requirements respecting compulsory pilotage areas, ships subject to compulsory pilotage, and classes of licenses and certificates. However, updates would be made to pilotage requirements that would:

- Increase the overall efficiency of the regulatory regime and reduce compliance burden by ensuring requirements are clear and reflective of existing operational practices;
- Harmonize, to the extent possible, pilotage requirements across Canada’s four pilotage regions, namely the Atlantic, Laurentian, Great Lakes and Pacific regions;
- Strengthen enforcement and compliance of pilotage requirements by implementing an administrative monetary penalty regime; and

- Advance a culture of safety in the marine industry by requiring pilotage authorities to implement quality management systems.

Transport Canada expects the proposed regulations to strengthen Canada's national pilotage regime while simultaneously taking into account differences throughout each of the four pilotage regions. Having a predictable and modern regulatory framework for marine pilotage will enhance the safety of navigation, while also supporting a well-functioning transportation system that is critical to commerce and trade.

The proposed regulations are targeting pre-publication in Part I of the *Canada Gazette* in late 2026 with a 60-day public comment period.

Transport Canada will continue to consult with the individual pilotage authorities on an as-needed basis. Transport Canada provided updates on the proposed regulations at the National Canadian Marine Advisory Council meeting on November 4-6, 2025.

Transport Canada welcomes feedback on the proposed regulations. For more information or to provide feedback on how this project may impact you or your community, please contact us at MSSRegulations-ReglementsSSM@tc.gc.ca.

Upcoming Engagement Opportunity: Marine Personnel Regulations, 2025

With this regulatory initiative, Transport Canada aims to:

- Promote safe, efficient, and environmentally responsible marine transportation;
- Ensure consistency and best practices in the marine industry;
- Harmonize, to the greatest extent possible and with international requirements and standards, to increase efficiency and service delivery; and
- Modernize the delivery of the marine medical program to increase efficiency and service delivery, which would involve the elimination of duplicate reviews of medical certificate applications, while enhancing the audit capabilities of the Department of those issuing medical certificates on behalf of the Minister.

This initiative also addresses the Transportation Safety Board recommendations.

Transport Canada is aiming for pre-publication of the proposed regulations in the *Canada Gazette*, Part I, in 2026, followed by a 60-day comment period.

Transport Canada provided updates on the proposed regulations at the National Canadian Marine Advisory Council meeting on November 4-6, 2025.

Transport Canada welcomes any feedback on the proposed regulations. For more information or to provide feedback on how this project may impact you or your communities, please contact us at MSSRegulations-ReglementsSSM@tc.gc.ca.

For Information: Amendments to the Vessel Pollution and Dangerous Chemicals Regulations

Planned amendments to the *Vessel Pollution and Dangerous Chemicals Regulations* are managed by initiating separate regulatory projects to include:

Part 2 - Division 1 (Oil).

The proposed amendments cover the prohibition of Heavy Fuel Oil use and carriage on vessels transiting Antarctic and Arctic waters. This ban came into force internationally on August 1, 2011, and July 1, 2024, respectively. The proposed amendments to the *Vessel Pollution and Dangerous Chemicals Regulations* are anticipated for pre-publication in the *Canada Gazette,* Part I, in late Spring 2026, providing an opportunity for further public consultation with a 60-day comment period.

Divisions 3 (Marine Pollutants) 6 (Air Pollution) 8 (Anti-Fouling Systems).

These proposed amendments will update domestic requirements based on international standards set by the International Convention for the Prevention of Pollution from Ships, the International Convention on the Control of Harmful Anti-fouling Systems on Ships, and the International Maritime Dangerous Goods Code. These amendments are planned for a pre-publication in *Canada Gazette,* Part I, late Spring 2027, followed by a 60-day comment period.

Divisions 4 (Sewage) and Division 9 (Greywater).

The proposed amendments seek to make permanent the enhanced provisions currently in force through Interim Order No.3 Respecting the Discharge of Sewage and the Release of Greywater by Cruise Ships in Canadian Waters. Targeted pre-publication in the *Canada Gazette,* Part I in Fall 2027 and followed by a 60-day comment period.

Scrubbers and on-going consultation

Transport Canada is currently reviewing the environmental impacts of exhaust gas cleaning systems and working closely with the maritime industry, Indigenous groups, and other partners to shape a long-term approach for managing scrubber use on vessels in Canadian waters. This includes examining concerns related to washwater discharges and exploring measures that better protect sensitive ecosystems. As part of Canada's ongoing commitment to safeguarding Southern Resident Killer Whales, the department has proposed phased in restrictions on scrubber discharges within Southern Resident Killer Whales critical habitat, informed by scientific work to better understand the risks these discharges pose. Engagement with Indigenous communities and industry began in late fall 2025 and will continue through spring 2026, alongside work to assess implementation options and clarify timelines.

Transport Canada welcomes feedback or requests for additional information. Please contact us at: MSSRegulations-ReglementsSSM@tc.gc.ca.

For Information: Expanding Transportation Security Clearance Requirement to Additional Port and Marine Facility Employees

To address risks of criminal activity at Canadian ports, and to further enhance border security, Transport Canada is assessing options to extend requirements to undergo a criminal background check and obtain a Transportation Security Clearance to additional employees at additional Canadian ports and marine facilities.

An online Let's Talk Transportation consultation took place from January 31, 2025, to March 31, 2025. A "What We Heard" report is in development and will be published on Transport Canada's website in

2026. Feedback received from this consultation has been analyzed, and the next steps are under consideration. Should it be decided to continue exploring options to expand these requirements, additional engagement opportunities, both virtual and in-person, will be held to solicit further feedback from Indigenous Peoples, stakeholders, and members of the public on this issue. Additional details around work completed to date and results from the consultation were provided at the 2025 National Canadian Marine Advisory Council. Should additional engagement be undertaken, further information will be shared in a future iteration of the Indigenous Engagement Opportunities bulletin.

Transport Canada welcomes any feedback on the possible expansion of Transportation Security Clearance requirements at TC.MarineSecurity-SecuriteMaritime.TC@tc.gc.ca.

Rail

Rail Safety and Security

For Information: Modernization of the Railway Employees Qualifications Standards Regulations

Transport Canada is proposing to modernize the Railway Employee Qualification Standards Regulations to strengthen railway training and certification standards to ensure that workers acquire knowledge, skills, and on-the-job training, and that they are adequately supervised. These measures are intended to mitigate the risk of workplace injuries, improve the safety of railway operations, and ultimately reduce rail incidents and accidents.

The proposed regulations were published in the *Canada Gazette*, Part I, on December 14, 2024. Transport Canada plans to publish the final regulations in 2026 in the Canada Gazette Part II. For further information please contact TC.RailSafety-Securiteferroviaire.TC@tc.gc.ca.

For Information: Implementation of Enhanced Train Control

Transport Canada intends to mandate Enhanced Train Control in Canada. Implementation of Enhanced Train Control technologies would reduce the potential for human error by alerting the train crew to potential danger, and at the most advanced level, stop a train's movements to prevent a collision or derailment.

Transport Canada will share further information about Enhanced Train Control with local and First Nation, Inuit, and Métis communities, organizations, and governments in 2026. This information will include safety benefits, identify regions where Enhanced Train Control related infrastructure upgrades may be required, and demonstrate how these upgrades could be used to benefit local communities as well as their potential broader impacts.

We have published a What We Heard Report based on the Notice of Intent.

If you would like to discuss this important work, please send us an email at TC.RailSafety-Securiteferroviaire.TC@tc.gc.ca.

For Information: Review of the Railway Safety Management Systems Regulations, 2015

Transport Canada is reviewing the *2015 Railway Safety Management System Regulations* to strengthen sections such as severe weather and emergency management, bolster their effectiveness, address the

issue of fatigue management, and clarify frequently misunderstood terms and provisions with the goal of improving rail safety.

Transport Canada published a What We Heard Report based-on comments received on a discussion paper and questions and shared sixty regulatory proposals with interested parties for comment.

For further information please contact TC.RailSafety-Securiteferroviaire.TC@tc.gc.ca

Annexes

Annex A: Regulating Space Launch and Re-entry in Canada: A Discussion with Indigenous Communities

Introduction

In accordance with its announcement made in January 2023, the Government of Canada has decided to enable commercial space launch (or more generally, space launch) and re-entry activities to take place in Canada, which is a part of a broader strategy to modernize Canada's regulatory frameworks for space. In November 2025, Cabinet also ratified a decision for Transport Canada to make legislative changes and start developing the frameworks necessary to regulate such activities long-term. Transport Canada has been tasked to ensure that these new types of rocket launches and re-entries are conducted safely, securely and sustainably, while remaining in the public interest without affecting aviation safety. Initially, Transport Canada will only utilize existing authorities and requirements to evaluate launch applications and authorize launches on a case-by-case basis until a more comprehensive regulatory framework is established. In the interim – that is until comprehensive regulations are established - Transport Canada requirements will not provide approval for re-entry activities or other types of complex operations not included in existing authorities, such as human space flight or space tourism.

The main purpose of this paper is to start a national conversation with Indigenous Peoples around what the enabling of space launches and re-entries in Canada may mean for them and their communities. It is also to introduce the Government's proposed approach to regulating space launch and re-entry in Canda and find the best way to incorporate Indigenous needs, rights and perspectives into future regulations and programming.

What is a space launch?

A space launch involves launching a rocket into space, by a private company or government/military, commonly with the goal of placing some type of object(s) or "payload(s)", such as satellites, into specific locations in outer space, or conducting a certain mission, like sending humans and cargo to the International Space Station. Although hundreds of amateur and high-powered rockets have successfully launched from Canada every year for decades, the launching of rockets capable of reaching and placing a payload into space, particularly by a private rocket company, is a new type of activity that has never been done in Canada before.

Space launches involve significantly larger, more complex rockets built and operated by governments or, more often, the case today, by private companies. These rockets can travel at incredible speeds capable of reaching orbit around Earth. They can range in size, capability, complexity, and cost, and can be

custom built for specific space missions. Although space launches can take place virtually anywhere it is safe to do so, spaceports – facilities where these types of rockets are launched – are often strategically located near coastlines or large bodies of water, in locations remote enough to minimize safety risks while still accessible enough to bring in the equipment, personnel and services they need to operate. Launch vehicles are generally classified as small, medium, or heavy lift rockets which depends on the amount of weight they can carry to space and the distance from Earth they can travel. New launch vehicle designs and technologies are constantly being developed by different countries and companies around the world, including Canada, with the number of launches and countries developing launch capabilities increasing annually.

What is a re-entry?

The types of activities and missions that can take place in space are growing. This includes new activities, such as in-space servicing and manufacturing, where it is necessary to return an object in space back to Earth in a controlled manner and intact so it may be retrieved. For example, when a capsule returns to Earth with astronauts from the International Space Station or rock samples from the Moon. This is considered a re-entry, which happens separate in time from a launch and may not necessarily return to the spaceport where the object was launched.

Why is Canada pursuing space launch capabilities?

There are several reasons why Canada and many other nations around the world are developing space launch capabilities with accompanying regulatory regimes. There are a number of benefits to consider:

- **Socioeconomic**:

  Driven by modern society's increasing reliance on space technologies (e.g., internet, GPS, telecommunications) and the rapidly increasing demand for launch services, the global space launch services market was valued at CAD$ 17.7 billion in 2023, and is estimated to reach CAD$64.49 billion by 2033. Currently, there is a substantial excess of demand for launch services around the world with only a few countries reliably able to provide such services. This results in increasingly higher costs for launch slots and years-long delays for deploying critical space infrastructure – as well as considerable economic opportunities for those able to supply launch services. In many ways, acquiring space launch capabilities is becoming essential for a modern country to advance in the 21st century and a crucial element of its future economic development. This provides Canada with a tremendous opportunity to build a launch and re-entry industry that not only supports the growth of the wider Canadian space sector and contributes new streams of revenue to local economies and the national GDP but also creates thousands of high-paying and highly skilled jobs. Many of these jobs would be concentrated in remote locations where traditional or year-round employment opportunities may be limited.

  A strong launch and re-entry industry within Canada is expected to also produce additional social benefits. It would incentivize and reduce barriers for Canadians to develop and launch new technologies that can, for example, provide reliable phone and internet coverage in the most remote locations. Space technologies, such as satellites that can monitor methane leaks or changes in the Earth's weather systems, are routinely used to help address complex issues that directly affect

Canadians like climate change, the melting of ice sheets, and illegal fishing. Increased demand for expertise in the industry often inspires the supplement or creation of new academic/training programs and fields of employment – which are often targeted to the local and Indigenous communities located near launch sites. Space launches are also known to attract tourists and media attention; this can spark demand for the local businesses in the regions hosting these activities while drawing higher visibility to and support for the unique issues local communities may be facing. Importantly, while a thriving launch and re-entry industry can provide many benefits, its success is highly dependent on maintaining good, reciprocal relationships with the public as well as strong, diversified and capable communities that are supportive of their activities.

- **Scientific Advancement**:

  Canada is one of the oldest and most renown spacefaring countries in the world that is well respected in the fields of Earth observation, robotics and telecommunications, to name a few. Many of the things the world relies on today – from GPS, heart monitors, and solar panels to camera phones, lithium-ion batteries, and baby formula – are born from the world's collective scientific exploration in outer space. Furthermore, people are continually discovering new uses or advancements for these types of technologies which can even help support or protect more traditional human practices, like hunting, farming, and astronomy. For example, advanced Earth observation satellites are being used to monitor and track the migration routes of endangered caribou and other wildlife in the Canadian Arctic, which can be used to more effectively hunt for or protect specific species. International initiatives that Canada is a part of are also finding new ways to make satellites "darker", so they are less visible in the night sky and less disruptive to astronomy or cultural practices that place importance on stargazing. The development of space launch and re-entry capabilities is an essential step for Canada to be able to cost effectively continue research in these vital areas, further develop important technologies, and keep advancing in new scientific fields without having to rely on other countries. It also opens the door for new opportunities for knowledge sharing and Indigenous lead research that can focus on issues or benefits unique to their communities.

- **National Security and Defence / Strategic Foreign Policy**:

  The development of space launch capabilities will provide vital national security and defense advantages for Canada and its allies, as well as new opportunities for cooperation and strategic partnerships. This directly impacts the safety and security of all Canadians. Assets in space are increasingly vulnerable to a host of threats, from debris and space weather to the extreme environments of outer space and hostile or irresponsible acts from other state actors. As more countries and companies operate in outer space and rely on such technologies, the need to safeguard these highly valuable assets, maintain or replace their capabilities, and ensure our nation's ability to access space grows in importance. Simply put, having space launch capabilities helps to protect and rapidly replace space assets all Canadians rely on, making us and our allies safer, more secure and more prepared to address threats in and from outer space.

What are the risks and how are they mitigated?

Although developing space launch capabilities has many potential benefits to Canadians, the launching of rockets is an inherently risky activity. Furthermore, each launch has its own unique set of hazards that depend on a range of variables such as the size of the rocket, type of fuel, or trajectory, to name a few. The flight and potential failure of a rocket can present safety risks to people and property on the ground near the launch site, airplanes flying close to the rocket's trajectory, or ships and other marine infrastructure located within the hazard area. There are certain environmental hazards, such as the burning of fossil fuels or combustion of rocket parts, the potential use of toxic propellants, loud noises that can disturb local wildlife, or debris from a launch failure. There are also risks in space that Canada and Canadian operators must account for when deciding to launch a rocket, such as the impact on space debris, congestion of favourable orbits around the Earth, and the impact satellites may have on the night sky.

That said, space launch and re-entry activities can be conducted safely and securely – and have been for decades. The risks described above can be prevented or minimized to an acceptable level with well-designed regulations and technical requirements, diligent oversight, and transparent communication. For example, the risks to aviation can be mitigated by projecting where hazards are likely to occur over the course of a launch and then issuing pre-emptive warnings, called notices to air missions. These warnings instruct airplanes to temporarily stay away from the hazard area until the launch has concluded – a similar process is done for ships in the marine environment. Much of the short-term and cumulative environmental hazards derived from a launch can be mitigated in several ways depending on the hazard. This could include parameters like limiting the number of launches per year, specifying certain kinds of fuels that can be used, and/or requiring operators to have plans in place to respond to any environmental emergency that may arise. Having a strong regulatory regime in place, and the expertise capable of overseeing these activities, is crucial for the safety of space launch and re-entry activities and the viability of this industry in Canada.

How will space launch and re-entry be regulated in Canada?

Transport Canada is the authority that regulates and oversees the launch of rockets in Canada. Currently, the *Aeronautics Act* and *Canadian Aviation Regulations*, specifically Sections 602.43 and 602.44, grants the Minister of Transport the authority to authorize a rocket launch, on a case-by-case basis, if it is in the public interest and is not likely to affect aviation safety.

As directed in the 2023 announcement, Transport Canada has been tasked to complete this work in a phased approach that consists of an interim period which enables commercial space launch activities under the existing regulatory regime, on a case-by-case basis, while Transport Canada develops a modern comprehensive long-term regulatory regime. In future regulations, Transport Canada will need to clearly establish the criteria, conditions and approaches that will be used to determine when it is appropriate to approve a launch or re-entry; for example, elements to consider when determining if an activity is in the public interest. Transport Canada will consult with Indigenous communities and the broader public to help inform what those criteria and approaches should look like. The comprehensive framework is expected to include, among other things, the ability to issue authorizations for new types of operators and activities, such as new launch sites, re-entry operations, and human spaceflight missions.

How will Indigenous Peoples be consulted and have their perspectives incorporated into regulations for launch and re-entry?

As mentioned above, the Minister of Transport has the authority to authorize rocket launches in Canada on a case-by-case basis and uses that authority regularly for smaller rockets. Transport Canada intends to develop comprehensive regulations that would set out how it will approach approving larger rockets and re-entry activities to provide more transparency and stability. As such, Transport Canada will look to engage with Indigenous Peoples and rights holders across Canada as regulations are being developed, in addition to ongoing consultations that will take place with specific Indigenous communities located near launch sites when Transport Canada considers the authorization of launch and re-entry activities.

Currently there are no regulations or standardized methods for pursuing consultations with Indigenous Peoples ahead of a launch – and there is no one-size-fits-all approach. So far, consultations are being conducted on an ad-hoc basis to satisfy the Government of Canada's duty to consult and fulfill its obligations under the *UN Declaration on the Rights of Indigenous Peoples*. In short, the way in which Indigenous communities will be consulted (or not) largely depends on how, if, and when various communities want to be consulted, acknowledging that some communities may want to be more involved than others. Transport Canada is looking to be as flexible and responsive as possible to the unique needs and circumstances of Indigenous Peoples across Canada so it can properly reflect their priorities and values. Therefore, Transport Canada will need guidance from Indigenous communities to understand how to constructively incorporate their perspectives and effective consultation practices into regulations and the launch and re-entry authorization process.

Currently, the process to which Indigenous communities are consulted, notifications are delivered, and accommodations can be made but are determined on a case-by-case basis and depend on certain variables (e.g., the launch site location, the type of rocket being launched, and/or the frequency of launches). One thing Transport Canada is looking to develop in future regulations is a type of standardized framework for consultations that can be used when considering new launch and re-entry activities. Standardizing the consultation process - as much as possible - will make it easier and more predictable for both operators and Indigenous communities to work through. The Government also acquires a clearer means to meet its duty to consult and obligations under *UN Declaration on the Rights of Indigenous Peoples.* However, that does not mean all consultations will be the same; different communities may have greater or lesser needs to consider than others, and not all communities may want to be consulted in the same way (or at all). Transport Canada will work directly with operators and potentially impacted Indigenous Peoples to consider the details of their situation, find reasonable solutions that fit their circumstances and ensure the Government's duty to consult is being met. Consultations, for example, *could* include elements like signed agreements between operators and local Indigenous communities, or establishing specific operational guidelines and limits on launch sites (e.g., a limit on the number of launches per year).

As Transport Canada develops its regulatory framework for space launch and re-entry, it is seeking to determine a regulatory process that respects and protects Indigenous rights. It would therefore be beneficial to receive feedback directly from Indigenous groups on Transport Canada's proposed approach to incorporating consultation requirements into its future regulatory framework. It would be useful to know, based on their experience, more about how they think consultations should take place,

what sort of common elements or practices should be required (e.g., communication methods, timing/occurrence, language), and how Transport Canada should integrate these requirements into the overall launch authorization process.

Transport Canada's proposed approach could include a few key elements or requirements outlined below; each can be adapted for different launches/launch locations and tailored for various Indigenous communities.

- **Agreements with any local Indigenous communities found adversely impacted by CSL activities:** As part of the future approval process for new launch sites, Transport Canada may propose implementing a requirement or process (when necessary) for Transport Canada, proponents, and impacted Indigenous communities to establish signed agreements that address any impacts or concerns identified during the consultation process. Signed agreements between operators and Indigenous communities, although may not be necessary in all cases, can be effective for detailing how Indigenous communities want to be consulted on individual launches, specifying concerns with launch operations, and defining ways in which such concerns may be addressed. Agreements could include features like sharing of information about the launch, notification protocols, developing community complaint mechanisms, confidentiality agreements, or providing certain benefits to the community (e.g., jobs/services for Indigenous Peoples, revenue sharing). As part of the approval for a launch site, Transport Canada could require that operators enter into agreements with any impacted Indigenous communities and provide a copy of such agreements. Or conversely, consultations may reveal that no agreement is desired by or needed with Indigenous communities, in which case proponents would provide formal confirmation of this outcome to Transport Canada.

- **Establish operational parameters and limits for launch/re-entry sites**:

  This could include operators and impacted communities agreeing to certain parameters and terms that operators would need to operate within (e.g., number of launches per year, size of rocket, fuel types) for communities to feel comfortable with activities taking place. The main advantage of setting operational parameters, on the launch site in particular, is that it can reduce the time needed for and overall burden of consultations – especially when the details may remain mostly the same from one launch to the next (i.e., a company may launch the same rocket with the same or similar payload multiple times a year). In this case, operators would still need to follow set notification procedures, but they and the Government may not need to consult communities on the details of every launch that takes place at that site. If a particular launch falls within such agreed upon parameters, the community may agree that notification alone is sufficient. But when a launch falls outside of those parameters, additional consultation may be required. For example, communities may request operators refrain from launching during specific times of the year so not to disturb hunting or cultural practices. In this scenario, consent (barring other considerations) would be implied for launches conducted outside those sensitive times, otherwise additional consultation and stated public support would be required. Prior to issuing an authorization, operators would also need to provide proof to Transport Canada that their activities respect the conditions set out in any agreement made with Indigenous and other local communities.

- **Develop consultation requirements for launch sites and/or operators:**

Part of the future regulatory framework could place requirements on operators to directly consult with any Indigenous communities that have been identified as potentially impacted by launch or re-entry activities. Having consultation requirements, particularly on the launch site, appears to be a logical way to assist the Government in meeting its duty to consult. This could, as a condition of their authorization, include requirements for companies operating or planning to develop a spaceport to engage directly with Indigenous communities, identify specific concerns and find ways to reasonably resolve them, such as through the establishment of operational parameters. Transport Canada will evaluate what consultations have been conducted and assess whether they sufficiently meet the Government's duty to consult or if further consultations are required. When operators lead or are directly involved in consultations, they are often able to consider a wider range of detailed operational factors and information, such as the cumulative effects related to the use of launch/re-entry vehicles or the types of payloads expected to be launched. Operators, as they are more familiar with and maintain certain control over the information, can answer more specific questions about their operations/technologies and may be able to provide greater transparency than Governments can alone, making them beneficial to be part of the consultation process.

- **Formalized notification processes for Indigenous/local communities:**

  It will be important to create a standard process for launch operators to effectively notify Indigenous groups when a launch will be taking place and if there are any safety concerns to be aware of – a similar process is also being developed for notifying other local communities, as well as aviation and marine traffic controllers. The notification process would specify details like how far in advance communities are to be notified of a launch and how the notification is to be sent out (i.e., who the main points of contact are, messages sent to local radio/TV stations etc.). Transport Canada would recommend that notification of a launch window be given at least 7 days prior to the launch and can set this as a requirement or condition for receiving a launch authorization. The details of the notification process could also be developed or expanded as part of a signed agreement with the launch site.

- **Requirements of operators maintaining consultation logs and demonstrating proof of consultation**:

  Transport Canada suggests launch operators, if conducting private consultations, must provide proof that any adversely impacted Indigenous communities have been identified, adequate consultations have been conducted, and accommodations have been made where appropriate. One method for completing this is for launch and/or launch site operators to provide a copy of any signed agreements and maintain consultation logs that detail meetings that have taken place with Indigenous communities, along with the outcome of those discussions. This information will supplement and support any Transport Canada-led evaluation of whether the Government's duty to consult has been met. If and when Transport Canada engages directly with Indigenous groups, either in addition to or on behalf of the launch operator, it will also maintain records and consultation logs of its own.

Questions for Consideration

Transport Canada values the unique viewpoints Indigenous Peoples may have about space launch and re-entry taking place in Canada. It is looking to better understand how to integrate respect for Indigenous rights within its regulatory framework for space launch and re-entry – and in Canada's priorities in space more generally. In that effort, Transport Canada would greatly appreciate any feedback on our proposed approach to regulation and consultations and how we are planning to incorporate Indigenous perspectives. Below are a few questions for Indigenous communities across Canada to consider. The answers and input provided will help guide and formulate Transport Canada's approach to consultation and Canada's general approach to space launch and re-entry:

- What are your thoughts about Canada's overall approach to space launch and re-entry? Do you have any concerns about this approach or the overall impact of the industry? Are there ways to mitigate these concerns?
- Do you agree with the proposal to emphasize launch site approvals and developing protocols / consultation agreements early in the process? Do you have any concerns or thoughts about how this can be best implemented?
- Are there other approaches or considerations that could be implemented?
- What information would your community want to know or find most valuable about launch or re-entry (e.g., environmental impact, expected noise levels, economic benefits)? What factors would you care about most?
- Does your community have the knowledge or expertise to understand the general operations and impacts of a commercial rocket launch? If not, are there ways Transport Canada can help build this capacity?
- Has your community previously been consulted or involved in rocket launches? If so, are there any lessons learned or case studies you could share?
- Does your community have any goals or objectives that could be positively or negatively impacted by space launch activities (e.g., job growth, public health, wildlife conservation) and if so, how?
- Is there anything about Canada's approach to space launch and re-entry in general that you would like more information or have questions about?