



**SUBMISSION TO THE HOUSE OF COMMONS
STANDING COMMITTEE ON FINANCE PRE-BUDGET
CONSULTATIONS IN ADVANCE OF THE 2022 BUDGET**

~ Positioning Canada to lead in the new space race ~

www.mda.space

February 2022

Thank you for this opportunity to contribute information and ideas as part of the House of Commons Finance Committee's pre-budget consultations in advance of the 2022 Budget. In these extraordinary times, we need extraordinary measures, including an ambitious agenda to help propel Canada forward and position this country for continued economic and social success. The space sector can play a pivotal role in helping Canada achieve its national ambitions.

Canada can't afford to not be in space. Our critical space infrastructure provides benefits to Canadians every single day and is poised to solve some of this country's – and the world's – most pressing economic and social challenges, including monitoring climate change, sensitive land and coastal ecosystems, deforestation and illegal fishing; managing and mitigating natural disasters; safeguarding the country and our sovereignty; and connecting remote and rural populations across our country and the world.

Today, leadership in space is more strategically important than ever. The global space economy is now worth \$560 billion a year, and by the 2030s is forecast to reach more than \$2 trillion – about the size of Canada's current GDP. Invested capital in space has doubled every year for the last three – even through the pandemic – breaking records and leading to the creation of more and more space companies, and space jobs, globally. And recent achievements in human commercial spaceflight reflect more than the power of imagination. They are the outcome of the dizzying pace of innovation and investment driving the rapidly growing space economy. There is a new space race on and the prize is enormous.

Fortunately, we are not new to this game. Canada understood the strategic importance and enormous opportunities of space earlier than most, becoming the third country in space, after the Soviet Union and the US, and a leader in key areas of space technology – satellite communications, Earth observation and space robotics. Our leadership in these areas, which continues to this day, is the result of deliberate, focused, and effective decisions by government to build a strategic domestic industry while addressing national needs – there is no better way to monitor, manage and communicate across Canada's vast and rugged terrain than space-based technology.

Canada is well-positioned to lead in the new space economy. We have the capability in Canada to build space systems from end to end with hundreds of Canadian companies involved. We have the domain expertise. We have world-class research institutions and a highly-skilled STEM workforce. And Canada's involvement in space has the additional benefit of inspiring the next generation to pursue STEM studies.

However, our competitors are not standing still. Other countries are moving swiftly and decisively to participate in the new space race. In the first few decades that Canada was in space, there were just over a handful of participants. Today, there are close to 90 countries with space agencies or space programs, and thousands of commercial companies vying for first mover advantages. In the US alone, since the first FAA-

licensed commercial launch took place 33 years ago, a total of 420 commercial launches have taken place. Over 20% of those have taken place since January 2020. Industry and governments are moving strategically and in partnership to gain a foothold in the new space economy.

MDA and the entire Canadian space community are ready to step up and play our part. We need to have the Government of Canada as a partner. In space, government's role is paramount – as an investor and funder (every dollar invested in space by the Canadian government has a strong multiplier effect producing roughly twice the impact), developer, owner, operator, regulator and, importantly, as an anchor customer. Our competitor countries certainly do not shy away from using their buying power to support their domestic industries. Indeed, in a recent speech, French Economics Minister Bruno Le Maire said Europe needs to 'massively' subsidize its private-sector space companies in order to compete with the US and China. Perhaps Canada should follow suit and stop trying to level the playing field for foreign competitors.

Anchor customer does not mean only customer. Far from it. Given the smaller scale of space budgets in Canada in relation to our primary competitor countries, Canadian industry's focus is out of necessity on export markets. Indeed, the Canadian space industry has been very successful at leveraging its strategic relationship with the Government of Canada as an anchor customer, building innovative solutions here at home, employing an extensive Canadian supply chain (space and non-space), and then exporting these solutions globally, with reinvestment in Canadian innovation and intellectual property (IP).

For the continued success of Canada's space sector and to position Canadian companies for the rapidly expanding global space economy, we urge the Government of Canada to commit to the following actions:

- **Modernize space governance**

Countries around the world are recognizing the strategic importance of space, and are establishing Cabinet-level committees to guide their space policies, programs and investments. We call on the Government of Canada to launch a National Space Council, similar to that of the [United States](#) that is chaired by the Vice President, or that of the [United Kingdom](#) that is chaired by the Prime Minister. This Council would serve to ensure cross-departmental coordination of and direction for the national space program, covering civil, commercial, defence and national security, and international space policy matters.

- **Double-down on investments in Canada's space program**

To keep pace with our competitors, Canada needs to *properly fund* a robust space program that includes:

- High-profile, globally-recognized flagship programs
- Increased funding for smaller space missions that allow for more frequent flight opportunities for companies with leading-edge technologies; and
- Increased R&D funding and technology demonstration programs to seed this innovation and expansion.

- **Serve as an anchor customer to innovative space companies**

Canada's IP-intensive space sector will succeed when its government has a stake in its success, as the projects are inherently risky, often involving breakthrough innovations. Growth of commercial space businesses flows out of anchor customer contracts with government users. Governments can assist by way of project financing, pre-purchasing of data or capacity, or through the smart use of the government's procurement powers.

MDA would be pleased to elaborate on this submission and brief the committee on the rapidly-growing global space sector, and why we are so excited about what lies ahead.

We wish you well in your deliberations.