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29 September 2012

To: Canadian Space Agency.

Open letter.

The purpose of this letter is to advocate in favour of changes to Canadian regulation, in order to encourage investment in, and expansion of, private space sector activity.

Adobri Solutions Ltd. is a privately funded Canadian company specializing in technology and software. We are the Canadian team vetted to participate in the Google Lunar X Prize international competition. After nearly 2 years into our project we are running into considerable obstacles to our progress, which are not of a technical nature, but of a financial and regulatory one. We propose the following additions to the Canadian business regulatory environment to increase incentives for the development of a Space Industry[1] in Canada:

1. Create incentives and tax credit program on Federal as well as Provincial levels for the Space Industry, to at least level of film and video industry[2].
2. Setup a Space Tax Credit program for companies involved or investing in space projects, where tax credits can be claimed for hardware and operational expenses following attempted launch[3].
3. Create a government space fund that can insure loans and provide orbit grants taken by SMEs involved in space industry[4].
4. Support for the development of a Canadian micro satellite launcher, to address the current lack of commercially available launch capacity for business seeking scientific, mining or exploration objectives[5].

We strongly believe that the proposed reforms in the Canadian grant and tax system will work with competitive market forces to produce not only, efficient advances in technology, but also high-quality job opportunities in Canada. We are confident that the above recommendations are harmonious with the government's science and technology strategy to promote R&D, incentivize innovation, create high-quality jobs and ensure the strength of Canada's economy. We look forward to discussing the details of these proposals with you and working together in the near future.

We are forwarding this letter to various business and industry leaders whose signatures are included on the second page.

Best Regards,

Alex Dobrianski,

Team Lead, Adobri Solutions Ltd.

List of Signatures

From Adobri Solutions

Alex Dobrianski

29 September 2012

Description of companies that signed this letter

Adobri Solutions Ltd. is a privately funded Canadian company established in 2001, specializing in computer and software engineering. We are participants of the Google Lunar X Prize international competition to land a rover on the surface of the Moon. We have entered competition formally on December 2010.

Company 2 information

Company 3 information

company 4 information

Additional Information and References.

[1] Canada has the 5th largest aerospace sector in the world, by both manufacturing revenue and employment. The aerospace industry plays a critical role in the Canadian economy, with over 500 firms. The Canadian space sub-sector reached an all-time high of \$3.4 billion in revenues in 2010. The sector demonstrated robust growth in 2010, with export and domestic revenues rising by 14% and 13%, respectively, while the Canadian space sub-sector workforce increased by 9%, for a total of 8,256 space-related employees. Canada is well positioned to benefit from an expansion of the space sector, which currently comprises just 3.6% of annual aerospace revenue .

[2] Canadian film and Video Production Tax Credit (CPTC) is a refundable corporate tax credit designed to encourage Canadian programming and to develop an active domestic production sector. Tax credit available at rate of 25 percent of the qualified labor expenditure of an eligible production. The film/video production company must be a qualified Canadian Corporation and non less then 75% of the total of all costs for services provided toward producing the production must be payable for service provided to or by individuals who are Canadian. The video/film/program production can not be distributed in Canada by an entity that is not Canadian within the two-year period that begins when the production first becomes commercially exploitable (see all details in http://www.pch.gc.ca/DAMAssetPub/DAM-flmVid-flmVid/STAGING/texte-text/cptc_guide_1272631234182_eng.pdf?WT.contentAuthority=12.3).

[3] The basic Corporation rate for Canadian-controlled private corporations varies from 11% to 38%. In tax declaration T2 it is possible to claim operation expenses via GIF1 8520-9270. Operational expenses is reported in financial statement. That expenses includes office expenses, rental, professional fees, computer related expenses, use of Internet, shipping, delivery, freight, insurance, supplies, travel, motor vehicle use, gas, and etc. All of those expenses related to a time frame of corporation taxes.

For a purpose to boost space industry will be encourage to allow “Operation expenses on Space Flying Hardware”. That expenses can be claimed two year prior launch date exact, and all time of exploitation of flying in the earth orbit or to/into celestial body satellites, space crafts, equipment operational on the Moon and on another planets/satellites of a solar system. Association “Operational expenses on Space Flying Hardware” with date of the launch gives advantage to compare with existing Research and Development Tax Credit. Date of a launch will force business/corporations to be precise on a schedule of rocket launcher, and properly maintain schedule is a key part in space technology advance. From another hand stating launch’s date will allow business and corporations to choose proper teams of inventors/researchers with visible and achievable development of technologies. Make SFH tax credit available for post launch period of a time can encourage business/corporation for a long term missions especially with possibility to reach the moon and start mining operation on nears celestial body.

[4] Historically Space industry all over the world was developed by a business model when government collects taxes, then budget for a Space Programs assigns funds for a development, and then Space agency spend a money, it is long, sometime outdated, politically motivated process . It will be beneficiary to make money flow direct to a business and as a result directly to a Canadian Space Agency. In that case role for Canadian Space

Agency become a central part in (a) Regulation of a Space development, (b) Expertise as most capable Science and Research organization. To expand CSA by involving more just born (and will be born) ambitious business in Space industry it will be essential to establish small/medium business supporting funds. The same way as students currently can get education with support from a government via loans and grants, CSA by controlling such fund and insuring borrowed loans can help itself and new business for a qualified space programs, but again grants and insurance needs to be tied to a cases when hardware is on the orbit or reached celestial body.

[5] What kind of rockets technology is available after years of space exploration. The half century old engines developed by von Braun's team are repeated by different countries. Yes, the original von Braun engine was improved and the first step on the moon, as well as the first man in space and the first satellite, was done by rocket utilizing that second world war technology. Everything done in a past by big and heavy satellites can be done today by small, efficient, and compact devices, with no need for big boosters. Big rockets have a tendency to fly less regularly, with big price for each launch, and that gigantic "lifts-to-the-orbits" actually stopped technology advance. Making schedulable inexpensive launch vehicle by Canada and in Canada can create next step in Space exploration.

Additional words about Canadian Micro Satellite Launcher (CMSL) – the most efficient way to develop technology is a competition with least rules but with protection by the government in the event of a failure. It's interesting to compare how space programs in US versus former Soviet Union was setup. While in Soviet program was encouraged competition in 1950-1970, creating excessive internal conflicts between different designer teams, actually dubbed by its participants as a "small civil war", in US all civil space development was concentrated in one hands of NASA. Therefore an efficient space program must take in account such historic experience in development with CMSL. We propose that main role for CSA, its expertise, and in settlement of arbitrage cases. Also to go needs to have clear, visible and accepted by everybody goal. Team Plan B wants to propose a goal to establish remote controlled, self sustained base on the Moon, and for such base as the goal CMSL must be developed. To support main goal, all operations for build and develop CMSL from concept to production should be done via a remote control on the earth surface. Experience and knowledge learned after first launch of CMSL can be utilized for the operations on Moon's base, and as a result future exploration including mining natural resources on the Moon, remote production of any space and scientific hardware, will be viable.

On the day of the anniversary of the first Canadian satellite, needs to go back to the roots of how the space exploration was started - first satellites was done in a time frame of 30 and 84 days, same quick design approach should be in CMSL also.