

SPRINGBOARD ATLANTIC INC.

RESPONSE

Intellectual Property and Technology Transfer Study

The House of Commons Standing Committee on Industry, Science and Technology

July 25, 2017

Springboard Atlantic is pleased to be able to respond to the Standing Committee’s call for submissions for its study on Intellectual Property (IP) and Tech Transfers in Canada.

Springboard Atlantic Inc. was created to enhance the efficiency and effectiveness of technology and knowledge transfer in Atlantic Canada, and to promote and accelerate the competitiveness of Atlantic Canadian companies. Springboard Atlantic Inc. is the regional commercialization network of 14 universities and 5 community colleges (institutions) in Atlantic Canada that work to drive academic and industry collaboration for the economic development of the region. Springboard is supported by the Atlantic Canada Opportunities Agency and its member institutions.

This submission is from the President and CEO of Springboard and does not represent the opinion of all our member institutions.

**Issues we face**

Early submissions to this Sub-Committee like that from [AUTM](https://www.ourcommons.ca/Content/Committee/421/INDU/Brief/BR8996592/br-external/AssociationOfUniversityTechnologyManagers-e.pdf) and [IPIC](https://www.ourcommons.ca/Content/Committee/421/INDU/Brief/BR8996512/br-external/IntellectualPropertyInstituteOfCanada-e.pdf) have done an excellent job of outlining several of the issues and have already provided an excellent context to the effort required in IP commercialization within our institutions.

Our experiences and review of the issues in the Atlantic region (studied most recently in 2013), and in consideration of past reviews across Canada regarding agreements and policies, may provide further information for consideration.

The reliance on faculty agreement clauses covering IP creation, ownership, and commercialization support, is no longer representative when so many other ‘actors’ in the education eco-system often contribute to new creative discovery. Students working with industry (as occurs with MITACS funded positions) are only one example. This is complicated further with in-coming IP from industry partners as a legitimate part of a research collaboration.

Institution advancement processes don’t seem to recognize commercialization activity. The result contributes to the lack of incentive to disclose commercialize discoveries, versus the clear personal advancement benefits of publishing research (often before considering the commercial potential, thereby limiting benefits to Canada and/or society thereafter).

Federal policy influences many conditions that challenge institution administrations in engaging resources effectively engage in commercialization activity. Such conditions include:

1. Federal funding agencies not assuming a more prescriptive stance on the expectation for IP to be (at least) considered for its commercial and social benefits before being published;
2. Federal programs not providing guiding template agreements that help the institution facilitate and direct the expectations to industry when doing federally-sponsored industry agreements (result is often that institutions are blamed by industry for interpreting the Federal expectations);
3. Institutions not being allowed to charge overhead when industry sponsored work is partially supported by certain Provincial or Federal programs. These programs rarely acknowledge the costs of doing the research. The costs of R&D delivery are sufficiently high that overhead policies need to be consistently applied at institutions, and allowed to be charged in partnerships with industry.
4. The Tri-Council research support expense categories are so broad that the expenses are rarely used to properly support R&D admin personnel (e.g. industry liaison and technology transfer officers); ironically these are critical resources required to help faculty bring in new collaborations.

The result of these conditions is that significant potential benefit from new discoveries are abandoned, and costs of research reduce the financial capability to incubate ideas for proper development and market validation.

Industry challenges are just as persistent in driving a lack of competitiveness due to IP inexperience, mismanagement, and poor IP transfer understanding commonly represented by:

1. Misunderstanding that IP is more than patents,
2. Misunderstanding that patent searching has tremendous value in market and technology assessment (not just to see if you have a protectable idea),
3. Misunderstanding the costs of filing and defending – often portrayed as a barrier,
4. Misunderstanding what constitutes disclosure,
5. Misunderstanding the value of IP internationally as part of one’s business strategy
6. A common lack of corporate incentive for disclosing ideas to administration

Recommendations to address the preceding issues:

1. ***Increase IP education efforts for public, private sectors***: This is a significant national issue, where:
   1. We are pushing IP into corporate hands now more than ever (NSERC Engage program has had a great impact for early stage partnerships) but companies often don’t know how to protect and manage the resulting IP.

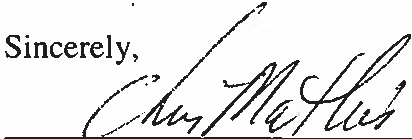
Note: CIPO has an educational mandate and is working to improve delivering it, but trustworthy face to face meetings still have the most value to entrepreneurs. In Atlantic Canada, we have a single CIPO officer for a massive geographic region with diffuse industry, and a 3-month travel approval process. This is inconsistent with other Federal agency travel practices (e.g. IRAP ITAs, NSERC officers etc.) and does not support the degree of activity we have in the region.

* 1. IP education should be incorporated into faculty training, undergrad and graduate programs. These people are key to corporate practice and cultural change regarding the value of IP and competitiveness. Education includes aligned policies that are institution-wide. Institutions should offer an IP commercialization guide and where possible eventually drawing a unified IP policy. As part of this effort:
* IP policies and guides should use clear language that limits ambiguity and interpretation,
* Organizations like IPIC, CIPO, AUTM Canada should work together to create a generic guide that is able to then be used by institutions, with final tailoring to each institution context completed by the institution.

1. ***Incentivize a shift our cultural IP context:***
   1. Encouraging research discovery disclosures needs to be considered. Institutions should be encouraged to consider monetary and advancement incentives that encourage more disclosure to research administrators prior to publication. Resulting outcomes will demonstrate that research commercialization results in direct social and economic benefit to Canada.
   2. Federal policy does not need to go so far as the US Baye-Dohl act: However, we do need stronger direction from Federal funding sources if expectations for research benefit are to be realized. Examples include requiring funding applications to outline the commercial potential and cite the potential issues addressed by curiosity driven R&D, with guiding criteria for reviewers.
2. ***Resources to address the increased demand from cultural shift and policy changes*** 
   1. Corporate encouragement to file IP protection – Few provinces or agencies recognize the importance and need for IP protection in program offerings. As such we recommend that the Regional Development Agencies have the responsibility (preferably within an existing program) to specifically promote and support at least one Patent filing per company, with a contribution reimbursement of at least $2500 (as example). This incentive over a 5-year period would help raise IP awareness and encourage a subsequent change in perceived value of IP in their business competitiveness and strategy.
   2. It is further recommended that all Federal agencies with industry engagement as part of their mandate have their field officers properly trained in the basics of IP and understanding IP strategy as an integral part of business. Basic IP advisement and support needs to be an inherent part of how our agencies in the field are supporting our SMEs.
3. ***Institution Metrics fully representing all pathways for commercialization***: Nationally we don’t report all the commercial pathways used at institutions for transferring IP from research discovery. There is significant work (time, effort, expense) in this activity and patent filings and licenses are not a sufficient representation. Other forms of knowledge and technology transfer need to be measured, and IP transfers are often implied in the upfront collaboration agreements (this is not a great practice but is sometimes all that exists to recognize IP transfer). A better measure of the baseline activities will make it even more apparent the significant body of work our institutions undertake, and the data should inform national policy.
   1. When comparing metrics, we should stop comparing R&D revenues in the same annual charts as the license revenues, as if this corresponds.
   2. When reporting licenses, license revenues should be represented properly for their impacts: the contribution to corporate sales is rarely explained and the lifetime potential value of a license at deal close should be a common-place part of license reporting.

To sum up we recommend:

* Educate people (faculty and private sector) better on IP
* Train the above people better on managing/handling IP
* Improve clarity on expectations for IP outcomes from R&D funding, *noting this should not be to the detriment of early stage research funding*.
* Incentivize faculty to disclose discoveries
* Increase resource capacity to institutions to manage the resulting increase in disclosures, assessments and commercialization activities.
* Measure better what is getting transferred out of the institutions for socioeconomic benefit.



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Springboard Atlantic Inc.