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Reaching the World of SME's: CIPO as an Innovation Catalyst

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Executive Summary: CIPO as an innovation catalyst for SME's

Background

In this report we identify the actions CIPO can take to reduce key barriers that seem to be inhibiting SME's¹ from using Canada's IP system effectively.

In a knowledge-based economy ideas are becoming important. Intellectual property (IP) is also becoming important: the use of the IP system for purposes that are both direct (e.g. checking whether a patent already exists) or for competitive intelligence (e.g. examining the trends in a sub sector or keeping abreast of technology). CIPO has recognized this and aims at "advancing an IP culture" as part of its strategy map².

For Canada to be effective today there needs to be: reasonable demand for IP system services from intermediaries, reasonable supply of these services, and a good enough match of supply and demand. Many (but not all) large companies are aware of their IP needs and can get the services that they need 'in-house' or from other IP professionals. SME's, on the other hand are lagging behind. While they are important sources of growth especially in regions outside the influence of cities, their productivity continues to grow at a slower rate than both their US counterparts and large firms due in part to the low-level of adoption of cutting edge technology (OECD 2002).

In 2002, CIPO's Information Branch designed an Outreach Program to support its broader goal of increasing awareness, knowledge and effective use of IP by Canadians. It is primarily targeted at SME's and emphasizes making good use of people already on the ground (i.e. strongly preferring partnerships as a delivery channel). In effect, it is trying to reach out, to build demand, help energize supply, and ensure that the market is working well.

Since then, the Branch has developed some partnerships, created a number of generic products (the web-based IP tool kit, the generic IP publication, the 'What's in a Name?' brochure, and the bank of speakers) and designed a variety of performance measures. It commissioned this study, which pays particular attention to regional presence in order to help it to understand how to choose and support the right partners so that it can properly launch the Outreach program's products as well as measure progress and success.

Considerations

In our study we talked to a variety of stakeholders across the country. We have concluded that to make more progress, CIPO's efforts will have to take a number of considerations into account. What it does will have to vary to some extent from one part of the country to another, and it will need to establish a significant regional presence.

If partners are the preferred delivery channel then in any particular geographic area, CIPO's Information Branch needs to be able to: determine the best ways for the desired results, identify partners who are willing and able to be effective in achieving what is

¹ For purposes of this report, we are using the term 'SME' to include individual inventors & creators, students, and researchers as well as small and medium-sized enterprises

² From "Strategy Map – An Integrated Strategic Framework" (current draft as of March 29, 2004)

expected in addition to their own work, establish mutually-satisfactory formal or informal agreements with them, monitor the results in mutually-agreed ways that are effective adjusting the work of both CIPO and the partners appropriately, and play its part to sustain these partnerships.

This approach will drive its product development and performance measurement.

To put a partnership approach into effect, the Information Branch (and by extension CIPO itself) must be seen as valuable, credible and trusted. This means that actions and approaches must build and sustain an image across the country for CIPO of putting Canada's interests first. Care needs to be taken so that its partnership choices do not undercut these efforts. Either by continuing current perceptions that it is small and relatively inconsequential but necessary (with its own vested interests as a regulator at heart) or, worse still, that it is the handmaiden of private sector IP professionals. It also needs to establish and maintain a reputation as a good potential partner: to demonstrate an appreciation that there needs to be 'quo' for the 'quid' in any partnership, and that it is both adaptable and flexible.

It is our sense, based on our research and interviews, that an optimal CIPO outreach strategy must be designed recognizing that: (1) there are high and low levels of density of business support (including particularly the degree of presence of IP professionals) in the country, (2) the stage of development of partnering markets in the different zones is crucial (from latent to growing to mature), (3) the adaptive and evolving nature of small user's regional/local support networks must be taken into account, and (4) there are two kinds of potential CIPO partnerships – those with intermediaries that act as de-facto 'hubs' for business community support, and those with intermediaries that are local support providers.

(1) Dense and light zones of business support

From CIPO's outreach perspective, Canada consists of two zones of partnering markets based importantly on the density of business support of IP needs. The first – the three large cities (Montreal, Toronto and Vancouver) & the NCR and the areas under their direct influence – includes a significant number of large and medium-sized firms, a wealth of IP professionals, a significant focus of the on-going attention of all levels of government, and some large universities. Each of the four areas in this zone is relatively constrained geographically. We call it the 'dense zone'.

The second – the rest of the country where there are significant numbers of SME's – has different characteristics. It consists of a number of regions and many different sub-regional / local areas – each with its own set of networks for SME's that grow and change. This zone spans the whole country and encompasses cities (like Calgary), towns and villages and rural areas where settlement is relatively contiguous (like parts of northern Ontario), to the very sparsely populated far north. There are significantly fewer IP professionals here, and we call this the 'light zone'.

(2) Latent, growing and mature partnering markets

There are also three stages of development of the partnering market. In Stage I, the market is latent and demand needs to be increased by SME's for services to meet their IP needs. Their awareness must be raised about the possible important connection

between their own success and their use of the IP system. Current generic CIPO tools are targeted here, and others can and should be added. At this stage, CIPO will have to go it mostly alone because likely partners are neither clearly identified nor ready.

Stage II means energizing the supply of service-providers to ensure that there is a good supply of them that are accessible to SME's. There are natural CIPO partners at this stage, but some of these intermediaries (especially the non-IP professionals) may need to learn how the IP system can serve their clients directly and indirectly and how important it can be for those clients to make use of it. This stage will require new CIPO activities and tools. It is a stage for partnering between CIPO and selected others.

At the final stage, the supply of services and SME's' demand for them match fairly well, and CIPO can step back to the role of providing active and continuing support to partners who should be able to deliver most of the Outreach Program results (especially the 'one-on-one' hand holding). CIPO will have to continue to keep an eye on the market match at this stage and manage the partnerships indefinitely. As a result, it will need to develop more new activities and tools.

In the dense zone today, CIPO can find natural partners by starting with IC's regional offices and the CBSC national secretariat. The zone is effectively at stage II. CIPO needs some periodic presence here. In the light zone however, the partnering market is at best latent (stage I). As a result, determining the best ways to achieve results and to identify the right partners is going to have to be approached differently. To be effective CIPO is going to have to operate regionally with much more presence for a while. An example of a strategy that has been reasonably successful in one region of this zone is the Halifax operation.

(3) Ecosystems of support networks

SME's are the focus of a good deal of attention by national, regional and local governments as well as universities and colleges. In fact every region of the country includes a set of informal networks that are vehicles for coordinating support efforts and act, in effect, as 'de-facto' steering groups.

The context and the environment in which these sets of networks operate changes continuously, in response to market conditions and to shifts in priorities on the part of governments and of the strategies and programs of key players. In effect, rather like an ecosystem, the sets of networks in each region or sub-region (and even more so at the local or community level), changes over time as new networks form and old ones die or change and new players enter or leave them.

Keeping abreast of these ecosystems will be an important part of CIPO ensuring that the IP needs of SME's are acknowledged and being effectively served (i.e. that there is a good market match between demand and supply).

(4) Hub and local partners

The regional variation in sets of formal and informal networks supporting SME's suggests that CIPO distinguish between two kinds of partners – those that act as hubs for business community support (mostly federal entities) and those that provide support locally. The hubs would be partners with whom to establish overall on-going

relationships across most of the range of CIPO's Outreach activities. The local ones are candidates for relationships within each region or sub-region and that may span only one or two activities, that may take place sporadically, and that may have a shorter life cycle.

The candidates for hub partnerships are federal entities like IC's regional offices, the regional development agencies (ACOA, MEDQ, FedNor, WED), and/or the national CBSC secretariat. These play a coordinating role for some players in the business support community and they are already integrated into regional networks.

The candidates for local partnerships on the other hand, will be different for different purposes. They may be national in scope (like IRAP or TPC) or strictly local (like OCRI in Ottawa). Educational institutions are an important variety of potential local partner. Universities and community colleges because of their interest in assisting with the transition of research and innovation to marketability, as well as for their interest in spreading understanding of the importance of IP to their participants. And high schools because of their connection to youth. IP professionals are a particular type of local partner (as well as an end user) in our lexicon, and IPIC is a professional association to which many belong. IPIC is not a hub.

Designing an optimal outreach strategy

We believe that there is a need for a differentiated outreach strategy for each zone. The generic tools that have been developed are necessary to achieve the aim of the Outreach Program, but they are not sufficient. It turns out that they are targeted mainly at the first stage and are primarily effective in the dense zone.

There are a number of points to bear in mind in devising an optimal strategy.

- there is a need to educate users about the importance of the IP system to their own effectiveness,
- the education must take into account regional / local sensitivities, and a basic distrust of provider-based information,
- the right hub and local partners will not be the same regionally.
- the tools employed may partly be different regionally,
- the stages will take time (probably five years all together),
- for the dense zone, there is a need to educate and provide tools, and build strong relationships that will require some CIPO presence and some investment at HQ,
- for the light zone there is a need to increase demand and help energize supply regionally/locally and this will require significant CIPO presence in order to grow the partnering market,
- the process of disengagement once the partnering market is mature enough will need to be managed carefully.

The strategy's specifics will have to take into account the key barriers that our study leads us to believe likely inhibit SME's from taking full advantage of the IP system:

1. Lack of awareness of the IP system on the part of SME's and/or lack of interest in finding out more about its relevance and usefulness to them.
2. Lack of ability (e.g. know how and tools) and/or unwillingness to use their day-to-day contact with SME's to meet the IP needs of these users. More broadly, an

- inability to think of themselves as CIPO partners because of a lack of awareness of the importance of the IP system to SME's.
3. High (direct and indirect) cost to SME's of protecting their IP in Canada and globally.
 4. Poor fit of CIPO's website with the key IP needs of sophisticated SME's, IP professionals, and the business support community.
 5. Absence of a systematic eye on Canada's IP system's competitiveness relative to other key players around the world (especially the US).

Recommendations*

Six recommendations have been developed and are listed below. They are aimed at enabling CIPO and its Information Branch to become more effective by paying attention to: visibility and pro-active relationship management, to systematic feedback, and to watching the competition.

The first recommendation is targeted at visibility and pro-active relationship management.

I Establish a more-visible, regionally sensitive, national outreach strategy that will be fully operational in three years in both dense and light zones

For the dense zone start at stage II and move gradually to stage III:

- provide some presence (i.e. periodic) in each large city (Montreal, Toronto, Vancouver, and the NCR), investing in a dedicated officer at HQ,
- identify likely hub partners for each, negotiating mutually satisfactory partnerships with them and nurturing and sustaining those partnerships, over time and with their help and advice identify likely local partners and negotiate and sustain sets of local partnerships in each city.

For the light zone start at stage I and move slowly and cautiously to stage II and then stage III:

- provide significant presence in five regions across the country: the Maritimes, Quebec (excluding Montreal and areas under its direct influence), northern Ontario and Nunavut, Manitoba & Saskatchewan & the NWT, and Alberta and BC (excluding Vancouver and the areas under its direct influence) plus the Yukon,
- for each region, focus where there are likely candidates for hub partnerships and explore, with them, the specific areas to target for CIPO presence taking into account the degree of interest of the provincial government,
- use the CIPO RA model based on Halifax's success to develop each regional centre.

For both zones, pro-actively manage relationships and play the role of IP champion in the government and the country. Choose partnership candidates carefully with an eye on sending the right signals about what CIPO stands for.

* Full recommendations are on pages 38 –43 of the Report

Focus on investigating one issue at a time (start with mining the patent data base).

The second through the fourth recommendations are intended to start the systematic collection and use of feedback from stakeholders, both at headquarters and across the country so that it can adjust and adapt its services and its support of partners appropriately.

II Propose instituting some quick fixes to the CEO

Start by:

- extending the current client service hours in CIPO to 9 am – 5 pm coast to coast (not just the NCR time zone in place at present),
- negotiating the CIPO logo onto main page of Business Gateway,
- consider others:
 - negotiating references to CIPO in IRAP's Contribution Agreements and supporting material (to raise its profile & create a link to CIPO),
 - negotiating references to CIPO in Service New Brunswick's annual business filings,
 - re-introducing CIPO courtesy letters to patent agents to help them with international filing deadlines (to be seen to be helping them/their clients).

III Examine cost to SME's

Cost seems to be an impediment to success for some SME's. The UK recently reduced the cost of the IP system for SME's because they felt it was a barrier that needed reducing in the public interest. Work needs to be undertaken to understand the policy options for tackling it (e.g. loosening the supply of IP professionals to levels where this demand can be met, or subsidizing the cost to SME's of seeking patent protection elsewhere, or of seeking it in Canada). The advantages and disadvantages of policy choices including that of inaction need to be weighed and then the appropriate actions to reduce the barriers to SME's need to be implemented. CIPO needs to push to have the policy work done. The feedback obtained as part of this report is a good starting point.

IV Ensure accessibility and usability of CIPO's website

This important delivery channel for the Outreach program must be and be seen to be accessible and usable by its main existing and potential users, including the business support community and IP professionals (for helping them with general messaging and referrals) as well as by SME's themselves.

Ensuring this means systematically collecting and using feedback about accessibility and usability to adjust both its look and what is on it to fit its main users. While they will have different wants and needs, to the greatest extent possible, CIPO needs to respond to them. This will require focused effort.

The fifth recommendation is to keep an eye on key patent offices around the world (especially the US and the EPO) to measure performance, get new ideas and bust myths about relative performance.

V Monitor the competition

There is a good deal of effort currently invested in comparing what is being done to the efforts elsewhere. Nevertheless, it is not always being used strategically for adjusting what is done, how it done, or for getting out messages about relative performance. It needs to become an explicit part of CIPO's 'learning'.

If monitoring is carried out systematically and with focused follow up, CIPO will be able to keep an eye on its competition and position itself accordingly. This is especially true of the US office given the continued integration of the North American market.

The final recommendation is to try some pilots to find out how to implement new ideas and whether they achieve what is expected of them.

VI Implement several pilots

For the dense zone:

1. See how to make stage II work in Toronto, close Windsor & establish a new full-time senior position at HQ (serving both zones).

For the light zone:

2. Start with the west. Aim for a hub partnerships with WED and CBSC national secretariat and establish one new regional centre (possibly Winnipeg).

For both zones:

3. Institute systematic two-way communication with stakeholders at senior levels at HQ and in the regions for both zones (e.g. establish an advisory committee to CIPO's CEO and regular roundtables in one major city (say Toronto) and two regions (say the Maritimes and the west).
4. Test a new local partnership with CFIB in Halifax.
5. Try a new awareness initiative in high schools in Halifax.

For CIPO's website:

6. Institute systematic feedback from key users about the accessibility and usability with non-IP professional intermediaries in Halifax, the western centre (say Winnipeg) and one major city (say Toronto).

Conclusions

These six recommendations (including the six proposed pilots) will start CIPO on the right track and should produce some noticeable improvements in the Outreach Program's effectiveness within the first year.

Perhaps the most important lesson learned is that the Outreach Program cannot be effective – and CIPO cannot be an innovation catalyst for SME's – without CIPO modelling the distributed governance that is implicit in its approach. In other words, without it enabling coordination when knowledge, power and resources are widely distributed.

This means governance of the IP system for SME's that is shared with other key players (e.g. intermediaries and SME's themselves), shared geographically (at international,

national and regional/local levels), and shared within CIPO itself. It requires building in and using the formal and informal feedback loops of all stakeholders, as well as stimulating the kind of environment that favours the social learning and collective intelligence that is the cornerstone of effective, distributed governance.

CIPO's Special Operating Agency (SOA) status may itself be an important impediment to the effectiveness of the Outreach Program since it is a public good that should be paid for out of general revenue, rather than forming part of CIPO's 'cost recovery' framework. In CIPO's monopoly environment, there will be a tendency to under invest in outreach to reduce costs but recognition of outreach as a 'public good' should stimulate more optimal levels of investment. However, this is not an issue for which CIPO's Information Branch has responsibility.

The key elements of the optimal strategy have been set out in Table 1 below.

	DENSE ZONE (Montreal, Toronto, Vancouver, NCR and areas under their direct influence)		LIGHT ZONE (rest of country with significant numbers of SME's)	
PARTNERSHIPS	<u>Hub candidates</u> IC regional offices and possibly CBSC national secretariat	<u>Local candidates</u> ▪ universities, colleges, high schools ▪ provincial government (METD) ▪ local dev't agencies (OCRI) ▪ IRAP and/or TPC regional offices ▪ CFIB reg'l offices ▪ IP prof (law firms, PATEX (formerly PATSCAN))	<u>Hub candidates</u> Regional development agencies (ACOA, MEDQ, FedNor, WED) & CBSC national secretariat	<u>Local candidates</u> ▪ universities, colleges, high schools ▪ provincial government agencies ▪ local development agencies ▪ IRAP or TPC local offices ▪ CFIB local offices ▪ local IP prof (if any)
STAGE I latent <i>Increase small user demand</i>			<u>CIPO mostly alone</u> ▪ significant presence ▪ 2 years	
STAGE II growing <i>Energize supply & ensure market match</i>	<u>CIPO & partners</u> ▪ some presence (periodic) ▪ 3 – 4 years		<u>CIPO & partners</u> ▪ significant presence ▪ 2 years	
STAGE III mature <i>Monitor market match</i>	<u>Partners with CIPO support</u> ▪ little presence, on going ▪ up to 1 year to achieve		<u>Partners with CIPO support</u> ▪ some presence, on-going ▪ 1 year to achieve	
CIPO TOOLS & ACTIVITIES <i>Existing tools (i.e. IP Tool kit, generic IP publication, 'What's in a Name?' brochure, bank of speakers) plus some new ones.</i> <i>Some different tools & activities for different stages.</i> <i>Some variability by region.</i>	Examples: • get message out (e.g. roundtables, advisory committee, website, inside IC portfolio & department) & target high schools • speak out as IP champion & 'brand' CIPO • <i>for STAGE I: engage in potential hub and local partnership apprenticeship about SME's' IP needs & watch for potential hub and local partners</i> ▪ get stakeholders together (e.g. roundtables, advisory committee) ▪ pay attention to key NCR relationships (e.g. IC portfolio & department) • define parameters & negotiate hub and local regional partnerships (e.g. MOU's) • build continuous learning loops with partners • design processes for mutually-agreed adjustment with partners ▪ provide incentives (reduce cost to SME's) • investigate key issues (mining patent data base) ▪ institute quick fixes • ensure accessible, useable website for partners, intermediaries & existing users • develop/adjust products, services to meet needs • monitor & adjust website for needs of partners, intermediaries & existing users ▪ build learning loops with all stakeholders			
MONITORING & ACCOUNTABILITY <i>Partners & CIPO</i>	• institute systematic monitoring & effective accountability ▪ design new performance measures for partnerships & outreach results			

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About Inveniré4

1. Introduction

The most important resource for small or large organizations these days is not capital, land or labour but knowledge. Organizations can get access to all those other resources with relative ease if they have the necessary knowledge capital and can use it effectively. This capital is constantly being reduced by obsolescence, increased by additional new knowledge, and restructured by changes in the portfolio of knowledge assets in use. Yet there is often little appreciation of the centrality of this “intellectual capital” of the organization, and little attention devoted to the protection and stewardship of this stock of knowledge.

Some of this knowledge is a common property resource that is and should be shared by all; and some of it is fundamentally tacit and cannot easily be codified. But much of it can be codified and lends itself to private property through patents, copyrights or trademarks.

The role of a national intellectual property office is to help citizens who are inventors or creators and the business community interested in this creative process to take full advantage of the existing laws and practices of the land that allow a certain degree of protection against poaching or unlicensed use of protected intellectual property (IP)³. This includes uses that have an IP focus (like searching for patent infringement) and increasingly those that do not (like keeping abreast of technology, or reflecting on the trends and characteristics of a sub sector more generally). CIPO has recognized this and aims at “advancing an IP culture” as part of its strategy map⁴.

The social question of what portion of the stock of knowledge should be propertized and of the consequences for the creative process of bringing more or less knowledge under property control raises important legal, societal and ethical issues. The legislator has to find the right balance between the protection of the old and the enabling of the new, if the creation and innovation process is to remain vibrant.

While this central question may preoccupy economists and lawyers as the ambit of controlled knowledge is expanded under the influence of large companies that wish to perpetuate their monopoly on such intellectual assets as Mickey Mouse (Lessig 2001), it remains a somewhat academic concern in the world of SME's⁵ where awareness and interest in intellectual property remain almost nonexistent. This dearth of awareness and interest has been reported by the Canadian Intellectual Property Office (CIPO) in its 2002 – 2006 Strategic Plan. As a result, intellectual assets are bound to be under-managed or mismanaged by neglect.

For Canada to be effective today there needs to be: reasonable demand for IP system services from intermediaries, reasonable supply of these services, and a good enough match of supply and demand. Many (but not all) large companies are aware of their IP needs and can get the services that they need ‘in-house’ or from other IP professionals. SME's, on the other hand are lagging behind. While they are important sources of growth especially in regions outside the influence of cities, their productivity continues to

³ IP is defined in CIPO's glossary as ‘a form of creative endeavour that can be protected through a trademark, patent, industrial design, or integrated circuit topography.’

⁴ From “Strategy Map – An Integrated Strategic Framework” (current draft as of March 29, 2004)

⁵ For purposes of this report, ‘SME's’ includes individual inventors and creators, students, and researchers

grow at a slower rate than both their US counterparts and large firms due in part to the low-level of adoption of cutting edge technology (OECD 2002).

CIPO has a key role to play in helping Canadians to make the highest and best use of intellectual property. As was borne out in our interviews and noted in other earlier reports, it needs to be the IP champion and to be seen as the IP champion within the federal government and in Canada generally.

CIPO launched an Outreach Program in the summer of 2002 designed to increase their degree of awareness and interest in such instruments, building on key recommendations in two reports that were developed for it. One of these reports (Paquet and Roy 2002) explored the governance challenges facing an agency like CIPO, and recommended consultations with the SME community to see how the agency might be able to improve the current knowledge management regime and therefore the informational commons.

It has made good efforts to be pro-active. It has surveyed the needs of intermediaries (Ekos 2000), assessed how CIPO stacks up in information dissemination compared to other national patent offices (CIPO 2001), examined usage profiles of patent information among current and potential users (EU 2003), and reflected on what is being done in patent offices around the world (IBM 2003, EU 2002). The objective has been not only to understand how well CIPO does its current job, but also to determine what it should do that it is not doing at the present time.

The Outreach Program is primarily targeted at SME's and emphasizes making good use of people already on the ground (i.e. strongly preferring partnerships as a delivery channel). In effect, it is trying to reach out, to build demand, help energize supply, and ensure that the market is working well.

Since then, the Branch has developed some partnerships, created a number of generic products (the web-based IP tool kit, the generic IP publication, the 'What's in a Name?' brochure, and the bank of speakers) and designed a variety of performance measures. It commissioned this study, which pays particular attention to regional presence in order to help it to understand how to choose and support the right partners so that it can properly launch the Outreach program's products as well as measure progress and success.

The methodology that was adopted for this work consisted of three stages:

(1) consultation with a number of CIPO senior managers as well as the CIPO RA's in Halifax, Montreal, and Windsor) to:

- determine what was realistic (i.e. the accomplishments CIPO expected and how far and how fast it was willing and able to go to meet the challenges) and
- start sketching out the terrain of CIPO's stakeholders,

(2) the drafting of a document, based on research and these conversations to be the foundation for a questionnaire to guide subsequent consultations with key stakeholders,

(3) extensive interviews to validate and correct the draft document (in other words to do more than just survey opinions).

This report includes 6 sections of which this is the first. It comprises a sketch of the lay of the land to be covered by the interview questions. The second and third sections report on the findings about users' needs and about the capacities and interest of intermediaries who are the existing and potential partners. The fourth deals with the framework for designing an optimal outreach strategy. Section 5 identifies the barriers

that seem to inhibit SME's from taking full advantage of the IP systems and their implications for CIPO's regional presence, and Section 6 makes recommendations including initiatives that could be piloted. These initiatives are aimed at allowing CIPO to learn more about the practicalities of implementation and at validating the wisdom of what is proposed.

The field of interest

CIPO is confronted with a variety of clientele ranging from the largest multinational companies and the most sophisticated intellectual property handlers to SME's that are ill informed even about the benefits of investing in IP. The concern of this study is the latter portion of this range.

On that terrain, CIPO is faced with three major challenges: (1) a variegated regional fabric, (2) a quite diverse clientele in terms of IP awareness and sophistication, and (3) a panoply of different regional and local potential IP related partners and different configurations of supporting networks of potential partners in the different regions, many of which do not even think of themselves in this fashion.

(1) SME's interested and involved in the creation and innovation process are widely spread over the Canadian territory. Canada is a small, open, dependant and balkanized socio-economy. Innovation systems are not really national but local. This is a reality that has been recognized by both Industry Canada and NRC when they developed strategies of regional/local presence with their Canada Services Business Centres (CBSC's) and the Industrial Research Assistance Program (IRAP). To connect effectively with individuals and SME's, CIPO will have to take into account the need for locally oriented relationship building to effectively reach this market segment.

(2) SME's are also quite varied in their degree of sophistication in dealing with IP. Most are simply unaware and uninformed. So, there is a need to segment CIPO's client market not only along industry sector lines, but also depending upon the regional and sophistication of IP systems uses.

An IBM study of the role of national patent offices in promoting the patent system (IBM, 2003) has been useful as a guide in mapping this field of interest. The four-phase AIDA model - **A**wareness, **I**nterest, **D**esire, **A**ction – maps the process through which users must proceed to use the intellectual property system (See Figure 1 below).

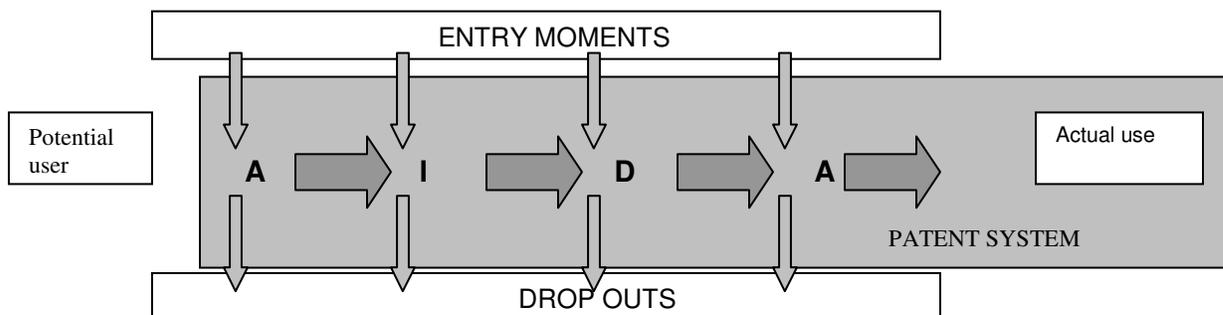


Figure 1

In the **A**wareness phase for example, the recipient knows the IP system exists and some of the basics about it. In the **I**nterest phase, general interest has been aroused and the recipient wants to know more about the benefits. In the **D**esire phase, the recipient wants more concrete evidence and the possibility of discussing the benefits with experts. And in the final **A**ction phase, the recipient has been convinced of the potential benefits of IP and wants tailored and personalized services to achieve these benefits. CIPO's 2002-2006 Outreach Strategic Plan has used the image of a pyramid for three IP learning levels (awareness, knowledge and effective use of tools) to segment its target audience.

(3) CIPO is faced with three layers (international, national, and regional/local) of potential collaborators in the operations of the Canadian intellectual property system per se:

(i) the international collaboration required of all IPOs in order to ensure that the information provided to the users in a particular country is as comprehensive, complete and accurate as possible,

(ii) the intellectual property community at the national level (major firms, IPIC and some intermediaries), and

(iii) a broad array of agencies of all sorts (e.g. CBSC's, IRAP, UTM's) that have taken root at the regional/local levels that one might broadly characterize as the business support community, and that come and go and/or change shape relatively frequently.

Each of these groups is composed of a variety of persons, groups and agencies that may have close or quite loose relationships one with the other. And the degree of partnering among these three layers of networking is also quite diverse. This explains the general conclusions of the IBM study that emphasized the need for greater efficiency and effectiveness through closer horizontal and vertical collaboration of IPOs and a greater integration of the IP community with the broader business support community and other communities. In Canada at the regional/local level furthermore, many intermediaries do not grasp the importance for the country's ability to innovate or create, of the effective use of the IP system by many SME's.

The lack of a fully integrated IP system and of the requisite amount of partnering among the different communities may be sources of concern, but they are not the only ones. There are very different sub-families of users in the IP system, and the frequent perceptions of its inefficiency and the ineffectiveness is ascribable to the fact that the IP system does not recognize their varying needs or the range of partnerships required to deliver to these differentiated markets.

IP and the world of SME's

The world of SME's is a capharnaum. It encompasses not only a wide range of degrees of expertise in IP matters but also a great variety of contexts in which they operate. So it is likely that any IP strategy will have to recognize both the differentiated nature of the clientele and the central importance of local milieux. This has been generally recognized in Europe and by the most innovative countries like Finland.

On the Awareness/Interest range, it is not clear that the same instruments will have the same impact everywhere in the country. This also means that collaboration and partnerships might be designed along certain basic principles but may have to be adjusted to local idiosyncrasies, and to different institutional landscapes.

This does not mean that there cannot be a network of national institutions ensuring some awareness and promotion of IP throughout Canada, but that it is most likely that the regional interfaces are bound to differ in such a significant way that there will be a need to adjust action plans and operations to fit regional/local circumstances. This has been the experience with CBSC where its principal delivery agent differs from region to region – ACOA in Atlantic Canada, MEDQ in Quebec, Industry Canada's Regional office in Ontario, WED in the west, and the BC Business Services Society in British Columbia.

The different public philosophy in Nova Scotia, Quebec and Alberta (i.e., the differential role assigned to government in each region) and the relative vibrancy of the business culture are bound to generate quite different forms of collaboration and significant differences in the nature of the networks of potential partners.

Partnering

CIPO's Outreach program has three delivery channels for reaching SME's: partners, the CIPO website, and direct delivery. Of these its preferred channel is partnering with intermediaries and using them to accomplish the 'one-on-few' and 'one-on-one work' of the **Desire** and **Action** phases that SME's must pass through to actually use the patent system. Much of this study therefore, focuses on how to make this channel as effective as possible.

This approach will drive its product development and performance measurement.

The second channel – CIPO's website – will be effective to the extent that it enables potential and existing partners to play their partnering role well. And the third – direct delivery – will be effective if its products (e.g. the IP tool kit and the generic IP publication) either fill SME's wants and needs directly or can be used by its partners to enable them to be effective (or both). In addition of course, the third must also provide high quality service for the residual number of SME's that it will continue to have to serve.

But while the effectiveness of these two channels is necessary for the preferred partnership channel to produce the desired results, it is not sufficient. In any particular geographic area, CIPO's Information Branch needs to be able to:

- determine the best ways for the desired results to be obtained (e.g. the balance between the three IP levels and the segmentation of the SME's market by type of small user or by sub sector),
- identify partners who are both willing and able to be effective in achieving what is expected in addition to their own work,
- establish mutually-satisfactory formal or informal agreements with them,
- monitor the results in mutually-agreed ways that work & are timely and adjusting the roles of both CIPO and the partners appropriately, and
- play its part to sustain these partnerships as long as they are mutually beneficial.

To accomplish this, it must become both credible and trusted. And, as a result its reputation becomes very important.

Jane Jacobs talks about two different ways of life commercial (or traders) and guardians (Jacobs 1994). To thrive, she notes that traders all over the world must give honest weight, find customers, and compete successfully with other traders. Guardians on the other hand include people like police, soldiers, and government regulators.

Different stakeholders in the IP system are likely to support the aims of the Outreach Program for different reasons: increasing Canada's productivity, raising demand for IP services from 'for-profit' IP professionals, or increasing the number of IP applications.

Canadians and government generally would be expected to focus on the first or 'guardian' outcome. Registered patent agents would be using a respected trader perspective if they actively helped the Outreach Program in the expectation that they would get more business down the road. In fact, this is the motive that most people would ascribe to their efforts. Some might see CIPO's perspective as being the same as government generally, especially if the image the agency conjured up in their minds was that of the country's IP champion. If however CIPO was seen more as small, inconsequential but necessary (i.e. 'just a regulator'), they might ascribe its motives more to increasing the number of patents (and thus its own workload).

More broadly, the extent to which CIPO's public image is synonymous with the public interest dictates degree of risk it can afford to accept in choosing partners for its outreach efforts. Given that CIPO's lack of visibility seems to be an issue today, and that its image of regulator has not yet broadened, it needs to take great care with respect to its collaboration with IP professionals. For example, it would be entering any partnership with IP professionals in increasing awareness from a position of significant risk to its reputation as honest broker.

Looked at this way, CIPO's speakers' bank may need to be a tool that should be used only sparingly. IP professionals are not seen as unbiased – for good reasons – and CIPO needs to be careful that it does not get pigeonholed as being biased by association. A second risk it runs is that its role as regulator may raise other questions about its objectivity – is it trying to raise productivity generally (i.e. play the guardian) or to increase patents (and thereby its workload)? Its current SOA status that covers the full range of its activities just underscores this possibility.

Besides paying attention to its overall reputation, CIPO will have to be seen as a good potential partner. One that is seen as reliable, collaborative, supportive, enabling, respectful, and with an on-going sense of the results it is aiming for and ways of measuring them. It will also have to demonstrate an appreciation that there needs to be 'quo' for the 'quid' in any partnership, as well as the fact that it is able to adapt and be flexible over time in response to the wants and needs of SME's and to those of existing and potential partners as well as its own. The degree that it can proactively manage relationships and systematically collect, use and feedback from/to stakeholders are clearly important.

And underpinning its efforts is the extent to which the Branch is able to genuinely share power with its partners, with the various sets of networks that interact with SME's across the country, and with the people who represent it in regional centres outside the NCR.

For these reasons:

(1) the questionnaire used in this consultation was designed to focus on the NEEDS of the different users, and on ALLIANCES with different families of partners in a manner that will remain quite GENERIC. It is our view, on the basis of the European experience, and supported by the CIPO Strategic Plan itself, that it would be a mistake to presume that uniform national programs delivered through standardized national alliances are likely to be effective.

(2) we believe that it is also important to pay attention to the whole range of services and not to restrict oneself only to the Awareness & Interest range. If it were to become evident that other end of the spectrum (especially the Action phase) is crucial for the effective functioning of the IP system, it would become important (i) to find the sort of partners capable of delivering such services if CIPO was not to deliver them, (ii) to design the sort of arrangements likely to work in a particular regional/local setting given the nature of the local/regional circumstances (iii) to ensure that the CIPO website enabled experienced SME's to pull what they need for these phases directly (e.g. links to other sites that they will need).

(3) the selection of stakeholders that were interviewed included BOTH users and partners (present and potential) with a particular view to ascertaining (i) their needs (ii) the best ways to satisfy those needs (iii) which partners were most likely to help CIPO and why, (iv) which sites (locations or websites) are likely to be most helpful, (v) the range of partners likely to be most useful at the different phases and the ways in which such collaboration might be built, and (vi) the degree of regional differentiation that might be required.

(4) finally, we think that there is no reason to believe that CIPO can become an innovation catalyst unless it models the distributed governance (coordination when knowledge, power, and resources are being widely dispersed) that is implicit in its approach to outreach.

Governance becomes distributed so that it balances local flexibility with national integration along several paths. Enough flexibility to adjust to quite different regional realities while maintaining a certain integrity to the intellectual property system as a whole, so as to be able to ensure that all activities are closely integrated. Enough flexibility to adjust to the different perspectives and priorities of several partners while maintaining an integrity to its efforts, so that the overall aim of its efforts is accomplished. As well as enough flexibility to allow those who represent CIPO 's presence across the country to act and take decisions that fit the regional reality, while maintaining an integrity to what is done in its name.

The guidelines for the interviews as well as those targeted for interviews are outlined in Appendix 1.

2. Users' needs & observations

The interviews – which lasted up to 60 minutes each - were conducted between the last week of January and the third week of February 2004. Interviewees were advised that the results of individual responses were confidential and the attribution would not be disclosed to CIPO.

Cooperation was very good almost without exception, and advice and suggestions were offered that were interesting and useful. They were glad to help. Interview results fell into 5 categories: visibility, partnerships, feedback, user suggestions, and CIPO's competition. While we were aiming primarily at CIPO's preferred partnership channel, we learned the importance of the effectiveness of its website as well. A detailed analysis of strengths, weaknesses, opportunities, and threats is contained in Appendix 2.

Visibility:

CIPO and its Outreach program are not very visible at the present time. One comment from our interviews summed it up this way. "Most people think of CIPO as small and relatively inconsequential, although a necessity." Virtually none of the people we spoke to had heard of the Outreach Program or knew of CIPO's activities in support of it. One observed that "CIPO is invisible to the non-IP professional". With respect to regional and local visibility, we heard comments like: "CIPO needs to be active with a regional partner" and "CIPO needs to respond better to local needs". And we were told over and over again that it needed to have more of what one could call an "on the ground" presence.

CIPO & its Outreach Program are not very visible

We were told by several people that CIPO should be the IP champion in the government and the country and that to do so it not only needed to raise its profile, but also needed to be and be seen to be speaking out on issues that were directly related to IP (not like the Harvard mouse experience). Interviewees who said this were aware that CIPO would need to be careful because it was part of the government, but interviewees felt it could have done so in ways that would have enhanced its trust and credibility with clients.

Partnerships:

Interviewees said loud and clear that pro-active relationship management by CIPO is very important (for support, feedback, and the 'quid pro quo'). Partners want to 'feel like' real partners. Some were surprised at being considered 'partners'. This related to existing partnerships: within each region, within Industry Canada (IC), and with partners having national reach. Nevertheless, there was a strong willingness to help amongst those who grasped the importance of the IP system (broadly focused) for SME's ability to innovate and create. Some of these volunteered to help with direct or 'in kind' support for awareness activities.

Pro-active relationship management is very important for CIPO

Potential and existing partners argued strongly, however, that partnering needed to be actively nurtured, supported, and that there needed to be a "quid pro quo" for them out of the relationship too. One comment was "we do not have a sense that we are part of the same team (even though we are)". One long time former partner observed that CIPO had withdrawn its support in one region leaving a less than adequate alternative, and that it would be seen as doing "too little too late" if it wanted to negotiate a new arrangement. It reported that it is currently working to fill the IP gap with another organization (CISTI).

On the other hand, the Halifax RA's office was reported as "working seamlessly" with the CBSC within which it is located. In fact all those who were in contact with that office

(including one person in central Canada) reported very positive experiences. One reported “(I would rate it) 9 out of 10 for focusing on the right things. In terms of the AIDA model, CIPO seems to focus on the first three (phases) ... but ... (the RA) was able to deliver on the fourth.”

Desire & Action are crucial phases for the effectiveness of the IP system

Feedback:

We got feedback that varied from one part of the country to another, from one kind of entity to another, and that covered core CIPO work and its website as well as on aspects of its Outreach Program. One said, for example, that “the granting councils are not the right vehicles for connecting to the universities”.

Unfortunately, there seem to be no established systematic way of collecting feedback from CIPO stakeholders and then ensuring that it gets analyzed, synthesized, acted upon and the results fed back. Similarly we heard from a variety of existing (and potential) partners as well as other intermediaries that they did not receive information about changes in Canada’s IP system in a timely manner (or in some cases ever). And it was clear that some suggestions that had been made before to CIPO HQ had not been followed up.

There are few established systematic feedback loops for the relationships or the website

User Suggestions:

Users suggested some ‘quick fixes’ (e.g. extending client service hours to 9 am – 5 pm coast to coast), and “mining the patent data base” and preparing other useful IP statistics and then making the results available in the Annual Report and/or through a partner who viewed this as a benefit for them too.

Users suggested some quick fixes

There was consistent and/or significant feedback on some issues: the importance to CIPO’s effectiveness of improving key aspects of core services (e.g. approval turn around times, in addition to the recent improvements in quality that have been noticed by some), and the cost to SME’s of using the IP system for IP purposes:

- some (most who raised it) said it was a barrier that needed overcoming, particularly for SMEs rather than individuals,
- some said it was a barrier that was useful to be left in place (to avoid perverting behaviour – biasing SME’s towards ‘patent parking’),
- some said it was not a barrier because federal development agencies would provide funding in some circumstances.

CIPO’s competition:

Many of those we interviewed brought up the US patent office – either in terms of comparisons of their regulatory system to the Canadian one (like turn around times, or the treatment of frivolous applications or prior art) or of outreach ideas (like increasing awareness in high schools as well as colleges and universities). Some of their

CIPO should keep an eye on its competition the US Patent Office

perceptions about relative performance may not be supported by the facts, but these myths seem to go mostly unchallenged.

3. Intermediaries

CIPO has been engaged in 'reaching out' for more than two decades, often working with intermediaries who are information providers to clients that incorporate most of CIPO's target audience (e.g. its former TIS service). These intermediaries include: Innovation Centres, University Technology Transfer Offices, Business Information Centres, Research Institutes, Libraries and Government industry technology advisors. But during that period, its activities were focused on assisting intermediaries with patent searches, and the work was carried out in an environment in which patent literature in Canada was largely dependent on proximity to paper files in the NCR, and in which substantial fees were charged for on-line subscription services. In other words, its efforts were focused directly on increasing **D**esire and **A**ction and was confined narrowly to an IP focus within the IP system.

The context has since changed. CIPO's on-line service is now free and includes access to its patent database. At the same time the IP system has become increasingly important to businesses for competitive intelligence purposes (like checking on the competition or keeping abreast of technology) as well. CIPO formally discontinued its TIS service a couple of years ago, to focus more on raising **A**wareness and **I**nterest, as well as viewing the IP system more broadly.

It carries out its Outreach program in the NCR and to some extent in the regions. At present, CIPO has three RA's (based in Windsor, Montreal, and Halifax). Of these, the Halifax office includes a full time backup and support to the CO 2-level RA position. In the other two offices, the RA position is the only full time one and is classified in the patent examiner group at a senior level.

There are the three kinds of key intermediaries that CIPO must deal with:

- (1) the business support community that focused mostly on one-on-one activities aimed at the business needs of those clients that overlap with CIPO's SME audience,
- (2) the coordinating intermediaries aimed mostly at coordinating the efforts of entities that are targeted at this same client population, and
- (3) the IP professionals those who provide expert IP advice 'one on one' to CIPO clients including SME's.

(1) The business support community intermediaries include those whose clients are SME's that are also a target of CIPO's Outreach Program, and whose involvement is not just IP but business focused. They are many and varied. Their missions range from providing business-pertinent information as well as referrals like the CBSC's (which are key multi-level government store fronts for SME's), to hand holding clients through various business stages or functions (e.g. start up, planning, marketing, exporting) like local economic development agencies, all the way to assistance with financing (particularly venture capital) like IRAP and TCP and can include or deliberately exclude acting as 'overall IP manager'. Educational institutions play an important role. Much of the front line work of these intermediaries is one-on-one with individual clients.

While IP is not their main focus, the IP system is of interest to them and they want and need some IP information in order to serve their clients well. This is increasingly true

because of the growing use of IP for 'competitive intelligence', which makes more strategic use of IP with somewhat broader (e.g. industry sub sector rather than individual firms) and longer time horizons (e.g. the kind of support that NSERC's IP Management Group is now providing).

This desire for more IP information has come through in earlier studies and was reiterated by our interviews. A few of them (like CRIQ or CIC) may, in fact, perform direct, non-exhaustive patent searches, but they do not offer the more knowledgeable broader IP-focused advice and support because they know that it is not their main aim, and/or because they are not expert enough. In fact some who do provide some IP information (like IRAP), told us that they do so only reluctantly. And others (like the CBSC's) said that their role is deliberately limited to providing a lot of information and then doing referrals, although they'd like more IP information.

These intermediaries are located across the country and may be part of local or regional networks or of a network at the national level with regional or local presence. Some have many local offices (like IRAP with over 200). Some have relatively few (like TPC or the CBSC's with 13 each). For these intermediaries, which offices in which networks should be CIPO partners for which activities will vary by region and through time.

(2) The coordinating intermediaries comprise three main examples. First is the Industry Canada regional office. From CIPO's perspective, these offices are mainly in the coordinating business for the department's wide range of activities and interests as well as for the whole Industry portfolio (including the development agencies such as ACOA, WED, MEDQ and FedNor). Their job is to find the best way to enable and support collaboration amongst the various industry players and programs so that efforts aimed at Canadian businesses are harmonized in different parts of the country (at least to the extent that is practical, and recognizing that provincial and local governments, as well as other sectors – not-for-profit and market – are important players who should be included). A recent example of this is the on-going co-location and collaboration that is envisaged for trade and investment activities that are now planned to move from IC to DFAIT. These regional offices are located in the major cities in each province as well as in each territory.

Second are the federal regional development agencies that play a similar coordinating role in their regions. They are part of the IC portfolio (or in the case of Fed Nor part of the department itself). As part of their work, they manage the CBSC's in their regions through a variety of vehicles (for example in British Columbia, the CBSC contracts all of its activities to the BC Services Society - a not-for-profit entity that enters into partnerships with other players) and help to direct federal resources to regional initiatives.

The third example of a coordinating intermediary is the CBSC national secretariat because its store- fronts are integrated across all levels of government and, in some cases, include the private sector too.

(3) The last type of intermediary is the registered individual IP professional who works for profit. These fall into two categories. The first is a relatively small number of university technology managers (UTM's) whose purpose is to assist researchers at the university where they are located to industrialize their work. Many are registered patent

agents who are an extension of a university but their focus is naturally broad because it is on the industrialization of research rather than the IP system.

The second includes registered patent agents whose business is finding and helping clients with CIPO's core business (and providing broader IP related advice to those interested in paying their fees). Most (but not all) are members of the professional association IPIC. They can belong to big and small law firms, or to independent firms (like PATEX) or work primarily in other countries (primarily the U.S.). They exist to provide expert advice about patenting and primarily serve the very large sized companies, although they also serve SME's who want Canadian patents. The biggest difference within this second category is that, unlike most agents who are focused on increasing client interest in patenting and related services, the independent ones (who are very few in number) aim to be overall IP managers for their clients. Those based outside the country act technically as associates in the Canadian process, but in many cases seem to conduct most of the IP-focused international work and pay a fee to use the address of a Canadian firm in order to meet the CIPO requirements.

These registered patent agents are a closed group with a high barrier to entry (only about 30% on average pass the registration exams that are set and marked jointly by IPIC and CIPO), and an ability to fix the prices for their services (IPIC sets prices for all members which is why some registered experts do not belong). Setting aside the UTM's, they are quite unevenly spread across the country, with the greatest concentration in large cities (Montreal, Toronto, Vancouver, and the NCR) where their business is located. In some parts of the country with fairly large cities (e.g. Winnipeg, Edmonton, Calgary, Halifax), there are either none or relatively few possibly because this is not where they see the majority of their business.

CIPO has a vested interest in this group. With respect to the Outreach Program, these intermediaries seem to be natural allies in some ways, but with the exception of the handful of independents, their focus is often narrower (i.e. the patenting process itself) and their bias is towards actual or potential paying customers. They are not seen as being objective. Nevertheless they play an important role in the regions in which they are present. Many assist in the **Awareness** phase, and most offer the first meeting free to prospective clients. Partnerships with them need to be approached carefully.

4. The framework

It is our sense, based on our research and interviews, that an optimal CIPO outreach strategy must be designed recognizing that: (1) there are high and low levels of density of business support (including particularly the degree of presence of IP professionals) in the country, (2) the stage of development of partnering markets in the different zones is crucial (from latent to growing to mature), (3) the adaptive and evolving nature of small user's regional/local support networks must be taken into account, and (4) there are two kinds of potential CIPO partnerships – those with intermediaries that act as de-facto 'hubs' for business community support, and those with intermediaries that are local support providers.

(1) Two zones

From CIPO's outreach perspective, Canada consists of two zones of

IP system needs & links are different in big cities from the rest of Canada

partnering markets based importantly on the density of business support of IP needs. The first – the three large cities (Montreal, Toronto and Vancouver) & the NCR and the areas under their direct influence – includes a significant number of large and medium-sized firms, a wealth of IP professionals, a significant focus of the on-going attention of all levels of government, and some large universities. Each of the four areas in this zone is relatively constrained geographically. We call it the ‘dense zone’.

The second – the rest of the country where there are significant numbers of SME’s – has different characteristics. This zone consists of a number of regions and many different sub-regional / local areas – each with its own evolving set of networks for SME’s. It spans the whole country and encompasses cities (like Calgary and Quebec City) as well as towns and villages and rural areas where settlement is relatively contiguous (like parts of north western Ontario) and the very sparsely populated far north. In addition, there are significantly fewer IP professionals in these areas (according to PATEX: only 3 out of 24 in BC, 3 all together in Manitoba and Saskatchewan and 2 in the Maritimes, all but 2-3 of the more than 25 in Quebec, and a small percentage of Ontario’s more than 50). We call this the ‘light zone’.

(2) Three stages

There are also three stages of development of the partnering market. In Stage I, the market is latent and demand needs to be increased by SME’s for

Partnering markets range from latent to mature

services to meet their IP needs. Their awareness must be raised about the possible important connection between their own success and their use of the IP system. Current generic CIPO tools are targeted here, and others can and should be added. At this stage, CIPO will have to go it mostly alone because likely partners are neither clearly identified nor ready.

Stage II means energizing the supply of service-providers to ensure that there is a good supply of them that are accessible to SME’s. There are natural CIPO partners at this stage, but some of these intermediaries (especially the non-IP professionals) may need to learn how the IP system can serve their clients directly and indirectly and how important it can be for those clients to make use of it. This stage will require new CIPO activities and tools. It is a stage for partnering between CIPO and selected others.

From CIPO’s point of view this is a ‘partner-ready’ stage. What is needed is to get to the bottom of why small user needs are not being met and find out whether the community of IP professionals is too small and closed for some to naturally emerge to serve these markets, or whether cost is as big a barrier to SME’s as it seems. Having examined issues like these, CIPO then needs to develop a policy response that fits. In effect this is what the UK has done recently with IP costs for SME’s.

At the final stage, the supply of services and SME’s’ demand for them match fairly well, and CIPO can step back to the role of providing active and continuing support to partners who should be able to deliver most of the Outreach Program results (especially the ‘one-on-one’ hand holding). CIPO will have to continue to keep an eye on the market match at this stage and manage the partnerships indefinitely. As a result, it will need to develop more new activities and tools.

In the dense zone today, CIPO can find natural partners by starting with IC's regional offices and the CBSC national secretariat. The zone is effectively at stage II. CIPO needs some periodic presence here. In the light zone however, the partnering market is at best latent (stage I). As a result, determining the best ways to achieve results and to identify the right partners is going to have to be approached differently. To be effective CIPO is going to have to operate regionally with much more presence for a while. An example of a strategy that has been reasonably successful in one region of this zone is the Halifax operation.

(3) Ecosystems of support networks

Canadian SME's are a large and important part of the economy. They are responsible for a significant part of the country's innovation and technological advancement, although only a surprisingly small amount (5%) is directly related to university research. Their IP needs are varied. We were told, for example, that as much as 80% of the results of university-industry research is the "tacit knowledge that gets embedded in the product or process and can rather quickly start generating revenue for the industry partner". And that "(it) is considered 'prior art' and so receives some protection even without taking out a patent". What is immediately relevant to a small firm is when to cash in on revenues from a prior art, and when to pursue more long-term patent protection

SME's are the focus of a good deal of attention by national, regional and local governments as well as universities and colleges. In fact every region of the country includes a set of informal networks that are vehicles for coordinating efforts to support SMEs and act, in effect, as 'de-facto' steering groups. These networks are different across the country both in terms of make up (i.e. who the key players are) and of what is needed (e.g. which sectors seem to be important and what is implied by that in terms of SME needs and wants). One example we were told about in Ontario includes the CBSC, SRED and the Ontario government (MEDT).

The context and the environment in which these sets of networks operate changes continuously, in response to market conditions and to shifts in priorities on the part of governments and of the strategies and programs of key players. In effect, rather like an ecosystem, the sets of networks in each region or sub-region (and even more so at the local or community level), changes over time as new networks form and old ones die or change and new players enter or leave them. And exactly what they do and how they do it changes as well.

It is well known that while SME's want and will use information and support that is offered from one central location, they also want to see people face to face or at least regionally and to get advice and support that is directly relevant. It is also true that to the extent they want to access the IP system, whether with an IP focus or for competitive intelligence, they want to do so when and how they want, as opposed to when others think that they should.

(4) Hub and local partners

The regional variation in sets of formal and informal networks supporting SME's suggests that CIPO distinguish between two kinds of partners – those that act as hubs for business community support (mostly

<p>CIPO needs a two-tier system for identifying partners</p>

federal entities) and those that provide support locally. The hubs would be partners with whom to establish overall on-going relationships across most of the range of CIPO's Outreach activities. The local ones are candidates for relationships within each region or sub-region and that may span only one or two activities, that may take place sporadically, and that may have a shorter life cycle.

The candidates for hub partnerships are federal entities like IC's regional offices, the regional development agencies (ACOA, MEDQ, FedNor, WED), and/or the national CBSC secretariat. These play a coordinating role for some players in the business support community and they are already integrated into regional networks. The candidates for local partnerships on the other hand, will be different for different purposes. They may be national in scope (like IRAP or TPC) or strictly local (like OCRI in Ottawa). IP professionals are a particular type of local partner (as well as an end user) in our lexicon, and IPIC is a professional association to which many belong. IPIC is not a hub.

A differentiated strategy

Today's reality for SME's is that in the dense zone they are at stage II, but that in the light zone they are at stage I (except for Halifax). In fact, we believe that there is a need for a differentiated outreach strategy that is built on the two zones and three stages of development, as depicted in Table 1.

Its current awareness-raising tools (i.e. the generic IP publication, the IP tool kit, and the speakers bank) are necessary to achieve the aim of the Outreach Program, but they are not sufficient. It turns out that they are targeted mainly at stage I in the dense zone.

	Dense zone (Montreal, Toronto, Vancouver, NCR and areas under their direct influence)	Light zone (rest of Canada – cities, town villages and far north)
I – latent market <i>Increase small user demand</i> ▪ <i>add activities & tools</i>	Current tools are mostly targeted here	CIPO mostly alone (start here) • significant presence • 2 years
II – growing <i>Energize supply & ensure market match</i> ▪ <i>new activities & tools</i>	CIPO & partners (start here) • some presence (periodic) • 3 – 4 years	CIPO & partners • significant presence • 2 years
III – mature market <i>Monitor market match</i> ▪ <i>new activities & tools</i>	<i>Partners with CIPO support</i> • little presence, on going • up to 1 year to achieve	<i>Partners with CIPO support</i> • some presence, on-going • 1 year to achieve

Table 1

As a result, there are a number of points that we think need to be borne in mind in devising an optimal strategy.

1. There is a need to educate the users about the importance of the IP system to their own effectiveness.
2. The education must take into account regional / local sensitivities, and the basic distrust of provider-based information.
3. The right hub and local partners will not be the same regionally.
4. The tools employed may partly be different regionally.
5. The stages will take time (probably five years).
6. For the dense zone, there is a need to educate and provide tools, and build strong relationships that will require some CIPO presence and some investment at HQ.
7. For the light zone, there is a need to increase demand and help energize supply regionally/locally and this requires CIPO's full presence to grow the partnering market and enable it to successfully reach maturity.
8. The process of disengagement once the partnering market is mature enough will need to be managed carefully.

CIPO's activities, tools, performance measures and accountabilities (see Table 2)

The CIPO activities and tools will be somewhat different in each stage. Performance measures and accountabilities will have the same aims throughout and use many of the same vehicles. The specifics of what is being measured and who is being held accountable for what will be different when they are focused on the tools and activities within each stage.

Stage I - latent

This stage focuses on increasing demand by SME's. The current tools (i.e. the generic IP publication, the web-based IP tool kit, and the speakers' bank) are targeted here. These efforts will work best today either in the dense zone (where natural partners are clear) or in Halifax in the light zone (which is a good model of an effective regional centre).

Generally speaking however in light zone, SME's in greater numbers are going to have to be aware of and come to believe in the usefulness of the IP system (directly or for competitive intelligence) for their own growth and success. Many of the tools in CIPO's current arsenal that are aimed at increasing awareness will be helpful here too. But more can be done. In particular, CIPO needs both to be visible and be seen as the IP champion within the government and the country, and also to begin to establish the right kind of reputation (i.e. trustworthy and useful) with potential partners regionally and locally while it learns enough about the terrain to identify candidates for hub and local partnerships. As a result it will need to develop 'partner-growing' activities and tools to be able to move to stage II.

There is also a real need to reinforce the credibility and objectivity of those working to increase the demand that this stage represents. For example, we heard that there is a

real market in both zones for paid seminars about the IP system and its usefulness. But some interviewees emphasized if the experts who spoke at them were seen to be unbiased. IP professionals who are in the market of providing these expert services are not seen as unbiased since their livelihood tied to the IP system, and so regardless of the objectivity of the material presented they are not likely to be as effective. Such partnerships may accidentally also do collateral damage to CIPO's own image.

The additional market-making activities/tools for this stage would probably include

- getting messages out broadly and in a high profile way about the usefulness of the IP system and CIPO both on the website and directly (e.g. expanding the Annual Report to include key messages and putting it on the website, negotiating CIPO's logo onto the business gateway)
- targeting youth in high schools as well as colleges and universities (e.g. starting by collaborating with science teachers)
- ensuring the website is accessible and useful to regional/local intermediaries in serving their clients (especially SME's)
- speaking out on key issues carefully (like the Harvard mouse) even while being mindful of its role in government
- investigating key issues (useful ones like mining the patent data base and making the results widely available, and the relative importance of 'prior art' to some SME's) and acting on the findings appropriately
- engaging in increasing awareness of intermediaries about the special IP needs of SME's (i.e. apprenticeship training for them)

Some tools could be generic, while others would need to be tailored to regional /local.

This is the learning stage for SME's about the importance of the IP system to them and to their capacity to thrive and gain good results. It can only be done face to face not through books and it moves from 'one-on-many' work (like trade fairs and seminars) to 'one-on-few' work to increase desire and then tailored services that are 'one-on-one' to move SME's to actual use of the IP system. It is also the time to begin to increase the awareness and knowledge of potential partners about the IP system's importance to some or all of their clients. To be effective, CIPO's needs to be present full time on the ground in at least a few regional centres.

This stage is likely to last for years not months.

Stage II – growing

CIPO must invest in some presence in today's stage II in order to build strong relationships, and it must develop and use partnership-making and intermediary-supporting tools to achieve its goals at this stage.

Because of the relatively concentrated geography, and the richness of the interconnected networks serving SME's for the dense zone, CIPO's presence can probably be felt well enough to be effective through systematic face-to-face meetings several times a year, and more frequent conference calls combined with a significant investment of knowledgeable and dedicated resources at HQ.

But in the light zone the geography is widely dispersed. There are many formal and informal ecosystems of networks of intermediaries that serve SME's in many pockets across the country (especially at the local level).

This means that CIPO's full time presence on the ground in a few regional centres is going to continue to be needed throughout this stage as well. Without this kind of attention, it will be difficult to move through stage II. Premature withdrawal is likely to leave this zone either stuck in stage 1 or with some of the wrong partners in key roles who can inadvertently damage CIPO's credibility and reputation, and work at cross purposes with the Outreach Programs goals.

The partnership-making and intermediary-supporting tools for this stage here would probably include:

- setting out the parameters of the hub and local partnerships (e.g. Memoranda of Agreement or Understanding)
- developing /adjusting products and services to meet the needs and wants of partners as partners (e.g. the look, feel and substance of the website, and mining the patent data base with dissemination by hub partners as well as by CIPO itself) and other intermediaries in meeting the IP needs of their clients (e.g. the look and feel of the website and its linkages, CIPO messages strategically 'pushed' on the website or directly)
- building loops for continuous learning that are mostly self sustaining (e.g. roundtables of all stakeholders 2 –3 times a year with follow up, weekly conference calls with hub partners to check in and discuss up-coming issues & events, periodic visits to hub and 2 partners to show the flag and assist with their apprenticeship, processes for monitoring/reporting of results and adjusting activities of partners and CIPO in mutually acceptable ways as a result)

Some tools could be generic while some would need to be tailored to partners and/or to individual cities or regions or local areas.

It is possible that some incentives will be required either or both for SME's (e.g. the UK's decision to make patent applications free for SME's) or for intermediaries (e.g. subsidizing the cost of providing services to SME's). And work will probably have to continue to help potential hub partners especially in dense zone (the coordinating intermediaries – like IC regional offices and the CBSC national secretariat as well as its CBSC's) to help them to understand the special needs of SME's with respect to the IP system.

Stage III - mature

Once strong hub partnerships are in place CIPO should be able to back away while maintaining some contact into the indefinite future. This backing away will have to be managed very carefully in both zones, but is likely to be particularly challenging in light zone. In both zones it will have to ensure that there is no significant damage to CIPO's reputation and credibility ways are found to ensure the visibility of the IP system and CIPO's as IP champion.

For dense zone, the on-going requirement would be a limited presence (some but fewer face to face meetings and systematic conference calls) with the continuation of regular roundtables and other continuous learning loops.

In light zone, the relative instability of the sets of networks regionally and locally here as well as the geographic dispersion suggests that a 'light hand' in this zone will not be the same (or quite as light) as in dense zone. Nevertheless the regional presence can be periodic and most investment can be made at HQ. Because there will have been a CIPO regional presence for a number of years in light zone furthermore, it will be tougher to withdraw. To be successful any strategy will have to be executed over a relatively long period (say a year) and have the support of key stakeholders and partners. They will have to be convinced that the results will be virtually as good.

The activities and tools are likely to include:

- ensuring continued monitoring and adjustment of the website to meet the needs of partners as partners and of intermediaries generally in meeting their clients IP needs
- enabling continuous, mostly self-sustaining, learning of hub and local partners and CIPO including processes for mutually-agreed adjustment
- instituting effective monitoring and accountability for Outreach Program results for both CIPO and its partners
- continuing refinement of tools as necessary
- continuing incentives as appropriate (perhaps indefinitely)

Performance measures and accountabilities are important throughout. Performance measures to determine operational efficiency and effectiveness and make necessary adjustments, and accountabilities to ensure that CIPO and its partners are playing their partnership roles as they should and negotiating any necessary adjustments over time.

Performance measures fall into four categories of increasing specificity:

- are the barriers (see next section) to SME's make more effective use of IP being tackled by CIPO and its partners efficiently? Effectively?
- are CIPO's aims (see next section: visibility, relationship-management, feedback, monitoring the competition) being met efficiently? Effectively?
- for each tool or activity: has it been implemented? Is it working? How does CIPO know? What, if anything, should be changed? By when?
- For each recommendation in this report that CIPO decides to implement, has it been implemented? Is it working? How does CIPO know? What adjustments or changes (if any) should be made? By when? By whom?

To be effective, the accountabilities of CIPO and its partners need to be: clear, monitored systematically, used to hold those accountable to account meaningfully. Periodically (say once a year), CIPO can ensure that reports are prepared and shared amongst stakeholders on the accountabilities for the upcoming year and results achieved for the previous year and actions that need to be taken (if any). The exercise should not become excessively bureaucratic and should not involve reports of many pages. The processes devised should be light by systematic and aim for transparency.

STAGE	CIPO activities, tools, performance measurement & accountability (dense & light zones)
I – increase demand (latent)	<u>CIPO mostly alone: grow partnering market</u> Activities/tools: existing plus <ul style="list-style-type: none"> • get message out (e.g. roundtables, advisory committee, website, inside IC portfolio and department) ▪ pay attention to NCR relationships • speak out as IP champion & ‘brand’ CIPO • target high schools ▪ institute quick fixes • engage in partnership apprenticeship (i.e. about SME’s’ IP needs) ▪ watch for potential hub & local partners • investigate key issues (e.g. mining patent data base) ▪ build learning loops with all stakeholders
II – energize supply & get market match (partner-ready)	<u>CIPO & partners: make partners & support intermediaries</u> Activities/tools: most of stage I plus <ul style="list-style-type: none"> • define parameters & negotiate hub & local partnerships (e.g. MOU’s) ▪ institute quick fixes • develop/adjust products & services for partners & intermediaries • build continuous learning loops with partners ▪ provide incentives (e.g. reduce cost to SME’s)
III – monitor (mature)	<u>Partners in support of CIPO</u> Activities/tools: most of stage I plus <ul style="list-style-type: none"> ▪ institute quick fixes • design processes for mutually-agreed adjustment • monitor & adjust website for needs of partners, intermediaries and existing users ▪ continue incentives
MONITORING & ACCOUNTABILITY <i>Partners & CIPO</i>	<ul style="list-style-type: none"> • institute systematic monitoring & effective accountability (CIPO & partners) ▪ design new performance measures for partnership and outreach results

Table 2

5. Barriers

The strategy’s specifics will have to take into account the key barrier that we think are likely to inhibit SME’s from taking full advantage of the IP system. The ones we have we have identified deal with the full range of **Awareness, Interest, Desire and Action** as well as with the actual use of the IP system.

Awareness & Interest

(1) The first barrier to SME’s is that related to awareness and interest. This impediment has been identified by the many reports around the world as well as in Canada and was reiterated by those we interviewed. Tackling it involves CIPO directly as well as potential partners in this work such as intermediaries where leverage is greatest (e.g. IC), or where users go (e.g. CBSC’s), as well as IP professionals.

It is here that lack of visibility both of CIPO (especially CIPO as IP champion) and of the Outreach Program become important impediments. Another difficulty is the perception that was reported to us that IC as a department and a portfolio “is working against the patent system” (e.g. consistently referring SME’s away from IP professionals).

To continue to reduce this barrier, we offer two kinds of advice. The first comes from those who suggested that CIPO place an emphasis on high schools as well as colleges and universities. For example, one observed that there is a market (e.g. Vancouver) where people would pay to learn more about the IP system, but there is no speaker who is both knowledgeable and not seen as having a vested interest. CIPO could work to fill this gap directly or in partnership (with other than IP professionals in this case). And it comes from potential partners for CIPO in its awareness efforts who have been unaware of its work but who have offered to help (like WED and CFIB). The second relates to investing in more pro-active and systematic relationship management within IC as a department and a portfolio on the part of CIPO.

Desire and Action

(2) The second important barrier to SME’s across the country arises when two situations arise. First, when those they go to are unwilling or unable to meet their IP information needs, and second when they cannot or will not either act as overall IP manager or to hand off to another who is able to fill the bill.

Potential providers of this work include IP professionals and a wide variety of entities in the business support community as well as CIPO itself. Our interviews highlighted several difficulties. They turned up existing and potential partners who were willing but not able to meet direct IP needs because they needed more support from CIPO. They also identified those who felt ‘let down’ or treated in an off-handed way by CIPO and did not know where to turn or were turning elsewhere as a result. But more basically, it revealed that outside the three big cities and the NCR, the market for partnering is latent.

This underscores the need for CIPO to invest in pro-active relationship management, active partnership work, and systematic feedback with all types of intermediaries at national and regional/local levels. It also highlighted the need to use a staged approach to grow the market for partnering beforehand over a period of years outside of the few areas where it already exists. In addition, it must ensure that it always is seen to have enough visibility, credibility and value across the country to sustain effective partnerships.

Actual Use

(3) The third barrier to SME’s may come from the direct and indirect cost to them of using the IP system. As we reported, the direct cost to SME’s from CIPO charges was frequently mentioned to us, although there was a difference of opinion as to whether costs should be lowered or raised (or left alone). In addition, some we talked to pointed to the fees charged by most of the closed IP professional community (e.g. IPIC’s fee schedule) and wondered if this was intended to discourage SME’s as opposed to large firms.

Indirect costs – especially the timeliness of CIPO’s core services relative to its competitors – were also a frequent subject. And there was mention of the crushing burden of translating material in order to apply for patent protection in other jurisdictions.

(4) The fourth barrier arises with the CIPO website and the extent to which it is as useable and useful as it could be for sophisticated users and for business community support entities generally. Ideas that we heard include things like mining the patent database and making some of the results available electronically on the site itself (or at least letting people know about them), improving links to other useful sites, including a description of the complete IP process, and preparing a lexicon of the terms used in the formal IP process (i.e. “a lexicon of jargon”).

(5) The fifth barrier is indirect but important. It comes from benchmarking, from learning about new ideas both for core services and for outreach that come from other national patent offices and busting myths about relative performance. Reducing this barrier would mean CIPO becoming a knowledge centre that linked interested patent offices. With continuing integration of the North American economy, there is an increasing awareness of things American and an inevitable comparison that arises. This was reflected in our interviews. And this is why we have put the U.S. office first on our list.

The key elements of an optimal strategy for both the dense and the light zones: partnerships, stages, tools & activities, and monitoring & accountability have been set out in Table 3.

	DENSE ZONE (Montreal, Toronto, Vancouver, NCR and areas under their direct influence)		LIGHT ZONE (rest of country with significant numbers of SME's)	
PARTNERSHIPS	<u>Hub candidates</u> IC regional offices and possibly CBSC national secretariat	<u>Local candidates</u> ▪ universities, colleges, high schools ▪ provincial government (METD) ▪ local dev't agencies (OCRI) ▪ IRAP and/or TPC regional offices ▪ CFIB reg'l offices ▪ IP prof (law firms, PATEX (formerly PATSCAN))	<u>Hub candidates</u> Regional development agencies (ACOA, MEDQ, FedNor, WED) & CBSC national secretariat	<u>Local candidates</u> ▪ universities, colleges, high schools ▪ provincial government agencies ▪ local development agencies ▪ IRAP or TPC local offices ▪ CFIB local offices ▪ local IP prof (if any)
STAGE I latent <i>Increase small user demand</i>			<u>CIPO mostly alone</u> ▪ significant presence ▪ 2 years	
STAGE II growing <i>Energize supply & ensure market match</i>	<u>CIPO & partners</u> ▪ some presence (periodic) ▪ 3 – 4 years		<u>CIPO & partners</u> ▪ significant presence ▪ 2 years	
STAGE III mature <i>Monitor market match</i>	<u>Partners with CIPO support</u> ▪ little presence, on going ▪ up to 1 year to achieve		<u>Partners with CIPO support</u> ▪ some presence, on-going ▪ 1 year to achieve	
CIPO TOOLS & ACTIVITIES <i>Existing tools (i.e. IP Tool kit, generic IP publication, 'What's in a Name?' brochure, bank of speakers) plus some new ones.</i> <i>Some different tools & activities for different stages.</i> <i>Some variability by region.</i>	<p>Examples:</p> <ul style="list-style-type: none"> • get message out (e.g. roundtables, advisory committee, website, inside IC portfolio & department) & target high schools • speak out as IP champion & 'brand' CIPO • <i>for STAGE I: engage in potential hub and local partnership apprenticeship about SME's' IP needs & watch for potential hub and local partners</i> ▪ get stakeholders together (e.g. roundtables, advisory committee) ▪ pay attention to key NCR relationships (e.g. IC portfolio & department) • define parameters & negotiate hub and local regional partnerships (e.g. MOU's) • build continuous learning loops with partners • design processes for mutually-agreed adjustment with partners ▪ provide incentives (reduce cost to SME's) • investigate key issues (mining patent data base) ▪ institute quick fixes • ensure accessible, useable website for partners, intermediaries & existing users • develop/adjust products, services to meet needs • monitor & adjust website for needs of partners, intermediaries & existing users ▪ build learning loops with all stakeholders 			
MONITORING & ACCOUNTABILITY <i>Partners & CIPO</i>	<ul style="list-style-type: none"> • institute systematic monitoring & effective accountability ▪ design new performance measures for partnerships & outreach results 			

Table 3

Implications for CIPO's regional presence:

There is no doubt that there is a real need for the one-on-few or one-on-one work involved in the **Desire & Action** phases. As one person commented "most people are trying to find out about the IP process before going to an IP professional (like researching a car on the internet before going to a dealership)".

Understanding and being seen to understand what works locally and regionally is an important for the effectiveness of the Outreach Program

To be successful therefore, CIPO's Outreach Program needs to be designed to fit with and become part of regional/local ecosystems as they change and evolve. In other words, it too needs to be a national program that is regionally sensitive and seen to be so, and one that changes and adapts naturally regionally and locally as it needs to. It can have, and should have relatively constant goals and clear objectives. It should operate within well-understood parameters, but within them it needs to be both flexible and imaginative and be perceived as such.

For the dense zone, this can be managed effectively from HQ with 'some' presence in these four areas (i.e. systematic but periodic). In the light zone, we believe that CIPO will need to ensure an on-going presence to grow the necessary partnering market for some years (probably five) to start in Stage I and move through Stages II and III. (We suggest four new ones keeping Halifax at least for now and using it as a model).

In the light zone, CIPO will need to ensure a sustained effort and visibility to grow and nurture the market. This will take some years. Given the breath of this zone (across the entire country), the advice is to consider significant regional presence in five parts of the country:

- the Maritime provinces,
- Quebec (excluding Montreal and the areas under its direct influence),
- northern Ontario and Nunavut,
- Manitoba, Saskatchewan and the NWT,
- Alberta, BC and the Yukon (excluding Vancouver and the areas under its direct influence).

It is our view that this is a minimum partitioning of the country. Within each of the five regions of the light zone, there needs to be a focal point for CIPO's presence. The location is something that should be worked out with the likeliest hub partners for each region (e.g. WED and the national CBSC secretariat for the west) and take into account the interest of the provincial government.

Our initial suggestions for these focal points would be:

- Halifax (because the present CIPO office is a good model)
- Quebec City (because the government of Quebec is actively interested in IP)
- Sudbury (because FedNor – the logical hub – is headquartered here)
- Winnipeg (because WED has an office here and there is already a good history of the three levels of government working well here)
- Edmonton (because WED is headquartered here)

There are three options for the nature of CIPO's regional presence that are listed in decreasing order of effectiveness. All assume the investment of new resources at HQ and a new pro-active and on-going approach to relationships, partnerships, and feedback. The third, which is the least effective, is not recommended because it will be insufficient to demonstrate CIPO's commitment to outreach to an audience that is already somewhat sceptical. (The full resource requirements for the recommendations that follow are not included in this material.)

Option 1:

Establish new offices in four regional locations (Quebec City, Sudbury, Winnipeg and Edmonton) modelled on Halifax. This is the preferred option. It would also establish a new position in the NCR accountable, inter alia, for Toronto, Montreal, Vancouver and the NCR as a region. Its advantage would be that this would send a clear signal across the country that CIPO was serious about managing relationships pro-actively with key players in the field and that it intended to use feedback to continue to improve its outreach as well as its core business. It would be seen as implementing a national outreach strategy that was truly regionally sensitive.

This option when fully implemented would require an investment of additional resources equal to four times the current cost of maintaining the Halifax office (including 8 FTE's) – offset by the reduction incurred if existing offices were moved to new locations - plus a portion of the cost of the new NCR position (probably ½ FTE). Its disadvantage would be the disruption caused and the resulting dislocation if offices were moved.

Option 2:

CIPO would close two existing offices (Windsor and Montreal) and pay the full cost⁶ of operating a set of new activities with CIPO's oversight and monitoring in four locations which are managed by the appropriate regional entity that was part of the Industry Canada portfolio (e.g. the CBSC managed by WED in Winnipeg or Fed Nor in Sudbury) with frequent (at least monthly) visits from CIPO HQ. The existing CIPO office in Halifax would be transferred to the Halifax CBSC (and its cost paid by CIPO on an on-going basis). In addition, the same new CIPO position would be established in the NCR for Toronto, Montreal and Vancouver. It is considered acceptable, if implemented along with and additional investment in visibility as outlined below.

Its advantage would be that: CIPO net FTE's would be reduced by 1½ rather than increased by 6 (although the costs would be the same as in option 1), and that there would be still be pro-active management of relationships in the field on CIPO's behalf and an intention to use feedback to continue to improve its outreach as well as its core business. CIPO could argue, furthermore, that it was only working through partners to deliver its Outreach Program on an on-going basis, and was focusing its direct efforts on **Awareness and Interest**.

The disadvantage would be that CIPO's on-going visibility in the field would be virtually non-existent, and that it would be harder for CIPO to convince people that it was implementing a national strategy that was regionally sensitive. To mitigate this to some

⁶ Paying anything less (say even one half) would render this option unworkable, because the link to CIPO HQ would not be strong enough.

extent, significant resources would be used to raise CIPO's profile (e.g. spending \$25K to create a profile perhaps through television). In addition even with frequent HQ visits, it would be somewhat harder to manage this kind of indirect relationship with the five locations, especially in the early years when what is required is to build CIPO's credibility and trust. An additional disadvantage would be disruption and dislocation of staff in existing offices that were affected.

This option is not as likely to be as effective as Option 1. If it worked relatively well, CIPO's SME clients in the regions might feel well served but they would not necessarily relate the service to CIPO's efforts but rather to the efforts of the host at each location. CIPO's visibility and that of the Outreach program would not be increased as much as with Option 1. It is not the preferred option.

Option 3:

This would see CIPO maintain its existing offices in Halifax, Montreal, and Windsor, establish no new offices or functions in other locations across the country, implement the new position in the NCR accountable, inter alia, for Vancouver and the NCR region.

One advantage would be a smaller requirement for additional resources (only part of the NCR position including ½ FTE). Another would be the lack of disruption to CIPO's current operations in Windsor and Montreal and the lack of dislocation of the two RA's who are based there. It would have the same advantage as Options 1 & 2 with respect to the establishment of the new NCR position.

Its disadvantage stems from the fact that it makes no additional on-going investment outside the NCR to support the Outreach Program. It would be harder to argue that what was being implemented was a national strategy and it certainly would not be seen as one that was regionally sensitive. In fact it would probably add to perceptions that CIPO is really focused only on the NCR and it would not increase the visibility of either CIPO or the Outreach program to a significant extent. It is not recommended.

6. Recommendations

Our action plan for CIPO is based on attacking the five key barriers, uses a differentiated outreach strategy that is built on two zones and three stages, and is made up of six recommendations. They are listed under four headings: visibility, relationship management, feedback, and monitoring the competition.

The barriers are:

1. Lack of awareness of the IP system on the part of SME's and/or lack of interest in finding out more about its relevance and usefulness to them.
2. Lack of ability (e.g. know how and tools) and/or unwillingness to use their day-to-day contact with SME's to meet the IP needs of these users. More broadly, an inability to think of themselves as CIPO partners because of a lack of awareness of the importance of the IP system to SME's.
3. High (direct and indirect) cost to SME's of protecting their IP in Canada and globally.
4. Poor fit of CIPO's website with the key IP needs of sophisticated SME's, IP professionals, and the business support community.

5. Absence of a systematic eye on Canada's IP system's competitiveness relative to other key players around the world (especially the US)

Visibility & pro-active relationship management

I Establish a more-visible national outreach strategy that will be fully operational in three years and that is demonstrably regionally sensitive

For the dense zone start at stage II and move gradually to stage III:

- provide some presence (i.e. periodic) in each large city (Montreal, Toronto, Vancouver, and the NCR), investing in a dedicated officer at HQ,
- identify likely hub partners for each, negotiating mutually satisfactory partnerships with them and nurturing and sustaining those partnerships, over time and with their help and advice identify likely local partners and negotiate and sustain sets of local partnerships in each city.

Do this by taking some specific actions:

- tailor make strategies for each market to identify hub⁷ and local partners using CIPO history there, the approach of other governments (provincial & local), and the existing networks of intermediaries serving SME's,
- institute one new senior CO level position at HQ, with necessary tools and support, to manage these markets and other duties
- consider whether maintaining an office in Windsor is either effective or affordable

For the light zone start at stage I and move slowly and cautiously to stage II and then stage III:

- provide significant presence in five regions across the country: the Maritimes, Quebec (excluding Montreal and areas under its direct influence), northern Ontario and Nunavut, Manitoba & Saskatchewan & the NWT, and Alberta and BC (excluding Vancouver and the areas under its direct influence) plus the Yukon,.
- for each region, focus where there are likely candidates for hub partnerships and explore, with them, the specific areas to target for CIPO presence taking into account the degree of interest of the provincial government,
- use the CIPO RA model based on Halifax's success to develop each regional centre.

Do this by taking some specific actions to grow the market in three stages over several years:

- aim for hub partnerships with⁸ federal coordinating entities that have regional reach (i.e. ACOA, MEDQ, FedBNor, WED) and the CBSC national secretariat,

⁷ Candidates for hub partnerships will likely come either from IC regional offices in Montreal, Toronto, and Vancouver or be identified with their help. IRAP would not be a good hub partner because it does not play a coordinating role, but it might make a good local partner in some areas.

⁸ Not IRAP, because it would not be a good hub partner (i.e. it does not play a coordinating role) but it would probably make a good local partner in some regions

- establish significant regional presence with tools and support in four new places across the country using the successful Halifax operation as a model (opening one new office the first year, two in the second and then one more),
- keeping the Halifax operation for the next few years.

Use the CIPO RA model (Option 1) for the greatest impact and effectiveness. Alternatively (Option 2) underwrite most (at least 75% and 100% if possible) of the cost having them as staff of likely hub partners, invest additional resources (\$25K) in profile-raising by creating a public profile, and making frequent visits (once a month) from HQ.

The five regional centres suggested as most likely to be effective are:

- Halifax (maintaining the position there now) to serve the Maritimes,
- Quebec City to serve the Francophone markets (consider moving the Montreal office as the most effective approach),
- Sudbury in partnership with Fed Nor to serve northern Ontario and Nunavut,
- Winnipeg in partnerships with CBSC (managed by WED) to serve Manitoba, Saskatchewan and the NWT,
- Edmonton in partnership with CBSC (managed by WED) to serve Alberta, BC except Vancouver and the Yukon.

For both dense and light zones:

Play the role of IP champion in the government and the country and starting building and modelling this image of acting in Canada's overall interest not only being a regulator. Choose partnership candidates carefully, with an eye on sending the right signals.

As well as increasing visibility, beginning to brand CIPO as the IP champion, begin to institute systematic learning loops with key stakeholders and potential partners through vehicles like:

- creating an advisory committee on IP to the CEO of CIPO of all stakeholders to: raise visibility, nurture & support more-effective delivery channels, and bust myths about CIPO's relative performance,
- establishing roundtables in the big cities plus the five regional centres to be held at least once a year with systematic follow through and feedback. This would be done by starting with two regional roundtables and one other in the first year, adding two more regions and two others in year two and the remainder in the third year,
- adding specific pro-active responsibility for relationship management to the duties of the CEO of CIPO, the Director Information Branch, and the Manager Outreach Program:
 - CEO: with the new Vice President at NRC responsible for links with business, the Executive Director of TPC, a new CIPO advisory committee, and inside IC as appropriate,
 - Director: with ACOA, WED, Fed Nor, IRAP HQ, TPC (re innovation trends), and the Industry Portfolio Office,
 - Manager: for primary and secondary partnerships (along with CIPO people in regional centres).

Focus on investigating one issue at a time. Start with the issue of mining the patent date base to get important facts into the hands of researchers and shed important light on ways the IP system could be used for competitive intelligence. It would amplify awareness and interest efforts of many service providers. The results could be out in the Annual Report and through CBSC's (i.e. it could be a 'quo' for the partnership with them). Work should be done to find answers to the following questions and the appropriate action taken:

- what would be involved in doing this?
- who is best placed to do it within CIPO?
- how can this be done while protecting confidentiality and avoiding any minimization of trust that might arise as a result of perceptions created?

Feedback

The second through fourth recommendations are intended to start the systematic collection and use of feedback from stakeholders both at headquarters and across the country so that it can adjust and adapt its services and its support of partners.

II Propose instituting some quick fixes to the CEO

This would start increasing visibility and demonstrate listening to key stakeholders. Start by:

- extending the current client service hours in CIPO to 9 am – 5 pm coast to coast (not just the NCR time zone in place at present),
- negotiating the CIPO logo onto main page of Business Gateway,
- consider others:
 - negotiating references to CIPO in IRAP's Contribution Agreements and supporting material (to raise its profile & create a link to CIPO),
 - negotiating references to CIPO in Service New Brunswick's annual business filings,
 - re-introducing CIPO courtesy letters to patent agents to help them with international filing deadlines (to be seen to be helping them/their clients).

III Examine cost to SME's

Cost seems to be an impediment to success for some SME's. The UK recently reduced the cost of the IP system for SME's because they felt it was a barrier that needed reducing in the public interest. Work needs to be undertaken to understand the policy options for tackling it (e.g. loosening the supply of IP professionals to levels where this demand can be met, or subsidizing the cost to SME's of seeking patent protection elsewhere, or of seeking it in Canada). The advantages and disadvantages of policy choices including that of inaction need to be weighed and then the appropriate actions to reduce the barriers to SME's need to be implemented. CIPO needs to push to have the policy work done. The feedback obtained as part of this report is a good starting point.

IV Ensure accessibility and usability of CIPO's website

This important delivery channel for the Outreach program must be and be seen to be accessible and usable by its main existing and potential users including the business

support community and IP professionals (for general messaging and referrals) – as well as SME's themselves.

Ensuring this means systematically collecting and using feedback about accessibility and usability to adjust both its look and what is on it to fit its main users. While they will have different wants and needs, to the greatest extent possible, CIPO needs to respond to them. This will require focused effort.

Keep an eye on the competition

V Monitor the competition

There is a good deal of effort currently invested in comparing what is being done to the efforts elsewhere. Nevertheless, it is not always being used strategically for adjusting what is done, how it done, or for getting out messages about relative performance. It needs to become an explicit part of CIPO's 'learning'.

If monitoring is carried out systematically and with focused follow up, CIPO will be able to keep an eye on its competition and position itself accordingly. This is especially true of the US office given the continued integration of the North American market. It should be monitoring with three objectives:

- benchmarking core and non-core performance
- gleaning new ideas and the results of experiences elsewhere
- 'myth busting' in Canada

Use pilots to learn what works

VI Pilot several ideas to see how to implement them across the country

For the dense zone, see how to make stage II work in Toronto.

1. Create a tailor-made strategy for Toronto by:
 - a. negotiating strengthened relationships (aiming for a hub partnership with the IC regional office in Toronto) within IC (at the regional office and HQ),
 - b. determining the best local partnerships for Toronto and proactively establishing and managing those and other key relationships,
 - c. establishing systematic feedback from hub and local partners as well as from IC, following up on it and being seen to do so by partners,
 - d. considering closing the Windsor office, managing the transition and dislocation for the CIPO RA located there sensitively and appropriately,
 - e. establishing a new full-time senior CO position at HQ with appropriate support and tools to develop and implement this strategy (except managing the transition and dislocation).

For the light zone start with the west.

2. Start implementing a three stage, multi-year, strategy to grow the partnership market across the country using significant regional presence by:
 - a. strengthening the relationship (aiming to develop hub partnerships) with WED and CBSC national secretariat (at both HQ and in the field). Negotiate new, non-legalistic agreements and manage the relationships pro-actively (at both HQ and regions).

- b. establishing one new location (e.g. Winnipeg) to see how to make this strategy effective. Build on WED's willingness to help with awareness.
- c. providing a new 'quo' for the 'quid' for both WED and CBSC (e.g. data mining and IP statistics results appear via CBSC's as well as CIPO's Annual Report).

For both zones institute systematic two-way communication with stakeholders at senior levels at HQ and in the regions for both zones:

- 3. Establish an advisory committee to CIPO's CEO that meets 1-2 times a year with support and follow through. Start roundtables with all key stakeholders in Toronto, Halifax and Winnipeg, helped by CIPO representatives at regional centres, meeting 1 –2 times a year with support and follow through.
- 4. Test a new local partnership with CFIB for awareness raising in Halifax with new guidance from CIPO HQ on priority segmentation of SME's for attention:
 - a. negotiate with CFIB district managers help to target the priority SME's,
 - b. identify CFIB's 'qou' for the 'quid' and negotiate something acceptable.
- 5. Try a new awareness initiative in high schools in Halifax, starting by working with science teachers.

For CIPO's website

- 6. Institute systematic feedback from key users about the accessibility and usability of the website to them that is followed up on:
 - a. starting with feedback from coordinating and business community support intermediaries in the latent markets (Halifax and Winnipeg), then add in Toronto,
 - b. moving later to IP professionals.

These six recommendations (including the six proposed pilots) will start CIPO on the right track and should produce some noticeable improvements in the Outreach Program's effectiveness within the first year.

Perhaps the most important lesson learned is that the Outreach Program cannot be effective – and CIPO cannot be an innovation catalyst for SME's – without CIPO modelling the distributed governance that is implicit in its approach. In other words, without it enabling coordination when knowledge, power and resources are widely distributed.

This means governance of the IP system for SME's that is shared with other key players (e.g. intermediaries and SME's themselves), shared geographically (at international, national and regional/local levels), and shared within CIPO itself. It requires building in and using the formal and informal feedback loops of all stakeholders, as well as stimulating the kind of environment that favours the social learning and collective intelligence that is the cornerstone of effective, distributed governance.

CIPO's Special Operating Agency (SOA) status may itself be an important impediment to the effectiveness of the Outreach Program since it is a public good that should be paid for out of general revenue, rather than forming part of CIPO's 'cost recovery' framework. This is not an issue for which CIPO's Information Branch has responsibility.

Background Documents

CIPO Survey of International Best Practices in Intellectual Property Information Dissemination April, 2001 (CIPO 2001)

EKOS Research Associates, Inc. Intellectual Property Information Consultation March, 2000 (EKOS 2000)

IBM Business Consulting Services B.V February Role of the National Patent Offices, the European Patent Office, as well as the Japanese and US Patent Offices in promoting the patent system 2003 (IBM 2003)

Jacobs, Jane Systems of Survival Vintage Books, Random House New York 1994 (Jacobs 1994)

Lessig, L The Future of Ideas – The Fate of the Alliance in a Connected World 2001 (Random House, New York) (Lessig 2001)

Motivation Research & Strategy Usage Profile Of Patent Information Among Current and Potential Users September, (EU 2003)

OECD OCED Territorial Reviews: Canada (OECD 2002)

OHIM Benchmarking Report 2002 Quality Management Department of the Office for the Harmonization of the Internal Market (EU 2002)

Paquet, G & Roy J CIPO as Innovation Catalyst 2002 Working Paper 02-23 ISSN 0701-3086 (Paquet & Roy 2002).

Appendix 1

The Interviews

To conform to privacy laws, they were informed of the purpose for obtaining their information and that any notes regarding the interviews would be destroyed once the final report had been accepted by CIPO. All interviewees agreed with these privacy considerations.

Guidelines for the interviews

The questions set out what was intended to be captured, and acted as guidelines for the conversation rather than being limitations on what is said. They covered five categories:

I ABOUT YOU

- a. personal characteristics (including names, coordinates, entity being surveyed)
 - what is this kind of entity? (i.e. small IP user, intermediary, IP professional, other)
 - does it have an IP focus or a non-IP focus to its work?

II WHAT CIPO (IB) / the Outreach program DOES

- b. from your entity's perspective, based on what you know or have been told, which elements/activities of the renewed Outreach program are:
 - important (why?)
 - less important(why?)
- c. what is the effectiveness of the current Outreach Program in your opinion?
 - is the job well done in general? why? why not?
 - are the activities well done? why? why not?

III WHAT CIPO (IB) /the Outreach Program DOES NOT DO, BUT NEEDS DOING TO OPTIMIZE THE USE OF THE IP SYSTEM (whether this is done by CIPO or by others, by themselves, or with CIPO's help)

- d. the unmet needs of existing and potential users of IP (SME's with 100 or fewer employees and individual innovators & creators) as you see them:
 - the fundamental needs for optimizing the use of the IP system to achieve business results (what are they? why are they fundamental?)
 - i. what are the biggest barriers to them being met?
 - ii. what % of SME's would 'pull' what they needed from the internet if it were easily available and accessible?
 - the less important needs (what are they? why are they less important?)
- e. the unmet fundamental needs that CIPO should meet directly
 - what needs should CIPO meet directly?
 - why should these needs be met by CIPO itself?
 - could these needs be met by another entity?
 - under what conditions?
- f. the unmet fundamental needs that others should meet directly (i.e. by this entity or another similar one)
 - what needs? (why should they be met by others?)
 - met by whom? (this entity? another similar entity – specify which and why)
 - would CIPO's help be needed to do this? (what help?)
- g. plausible fruitful partnerships for CIPO as perceived by you
 - which are the key ones (why? to do what?)

- which are less promising (why?)

h. which are the geographic sites for these needs to be met (one central location? regionally? locally?):

- those requiring CIPO ongoing presence (how many? 3? 5? where? why?)
- those requiring CIPO attention, but not its on-going presence (how many? 13? 90? where? why?)

IV POTENTIAL ROLES OF CIPO (IB)

i. what should CIPO (IB) / the Outreach Program's priorities be?

- in each locality? in each sector? in each region of the country?
- explain the value-added
- bearing in mind its current and renewed Outreach program, what kinds of activities do you think CIPO (IB) is likely to do best? why? what kinds of activities do you think it is likely to do least well? why?

j. missing mechanisms

- are there any mechanisms that are missing that would enable SME's to take better advantage of the IP system?
- if so, what are they?

V NEW PARTNERS & STAKEHOLDER RELATIONS (i.e. what's on the ground)

k. which are the logical partners for CIPO?

l. which are the logical sites?

m. what value added would this bring?

	EAST (all)	QUEBEC	CENTRE (Ont & Man)	WEST (Sask,Alta,BC)
SME's	NovaNeuron - founded by Dalhousie professors - filed patents worldwide -Neil Ritchie	Gilbert A. Blaise (MD) - U of M & Notre Dame Hospital - used CIPO	Tenxc Wireless* Unresponsive *Darin Graham, CITO substituted	Bycast Media Systems Inc. (Vancouver) non-responsive
INTERM (existing)	ACOA (Moncton) - runs CBSC's east - big player Ben Ferguson & Elaine Richardson	IRAP (Montreal regional) - key client - RA contact (C. Attendu)	IRAP – Ont (associate RDG) Dr. Peter Cashmore	WED (HO Edmonton) - runs CBSC's west Doug Chambers & David Prud'homme
INTERM (existing)	Dalhousie Business Development Office Dal medicine is key player - Neil Ritchie	Ministère du développement économique et des régions - prov gov't - RA contact (J. Boudreault) - unavailable	Ontario MEDT - Mark Garscadde, responsible for Centres of Excellence and Research Challenge Program	UST (University of Saskatchewan Technologies Inc.) U of S are big patent filers - Tom Roberts
INTERM (potential)	CFIB (NS) good reach - Stephane Robichaud	Centre de Recherche Industrielle du Québec (CRIQ) - key player - C. Boudreau	Industry Canada (Que) - key player - Claire Blake	UTI (Calgary) - S & T focus - IP services Don Moresby
INTERM (potential)	Acadia Centre for Small Business Entrepreneurship - good connections - Chris Pelham	BDC (HQ -Mtl) Business Develop't Bank of Canada - good reach (80 branches) Francois Rivest & Pat Coolen	NSERC - good leverage (finances university research) Anne-Marie Monteith & Anne Alper	Westlink - based in Calgary - links 25 western univ., coll. & research institutes -unavailable
IP PROF	Mario D. Theriault & Co - patent agents NB - sole NB agent	Ogilvy Renault - prestigious firm - does IP business - France Cote	Aikins, Macauley & Thorvaldson - important patent agents - Winnipeg	Gary Dunn (Vancouver) - computer & technology law - 25 yrs exp - unresponsive
OBS'VRS	CBSC (national) - Grace Moores (Dir. Planning & Partnerships)	CIC (national – Waterloo, Ont) - focus inventors & innovative co's - Linda Hendry	IRAP (national) - Director of Federal partnerships - Mona Paterson - unavailable	PATEX (Vanc) - patent research & consulting - UBC conn'n -Ron Simmer
			University of Toronto Technology Transfer Office / AUTM link Peter Munsche, Asst VP	

EAST

E1. NovaNeuron Inc. – a molecular neurobiology drug discovery company based in Nova Scotia

Contact: Neil Ritchie (902) 422-7513

www.novaneuron.com

- a privately held R & D company focused on diagnostic and therapeutic products for disease caused by CAG repeats in the genome and other diseases of the striatum (leading drug aims to develop therapeutic products for Huntington's disease).
- founded in 1999 by Drs. Harold Robertson, Eileen Denovan-Wright and Theo Hagg, professors at the Faculty of Medicine, Dalhousie University, Halifax, Canada.
- company is corporate multi-institutional collaboration involving over 100 research scientists at Dalhousie University and its affiliate hospitals and research institutions
- has filed patents applications throughout the world on its discoveries in this area
- Ian Anderson is the Chair of the Board of Directors

E2. Atlantic Canada Opportunities Agency (ACOA) – federal agency based in New Brunswick

Contact (may lead to another person – deals with RA)

Ben Ferguson & Elaine Richardson

CBSC's Nova Scotia, co-located with Halifax CIPO RA

Email: macdonald.stuart@acoa.gc.ca

- Minister effective Dec 12th, 2003 is Joseph McGuire, Egmont, PEI
- runs CBSC's in Eastern Canada
- advocates on behalf of Atlantic Canadians in the development of national policies and programs & assists this regions' entrepreneurs in the procurement of federal government contracts

(www.acoa.gc.ca)

E3. Medicine at Dalhousie University – lots of fruitful work and a CIPO contact

Contact:

Neil Ritchie

Director

Business Development Group

(902) 494-7034

1480 Carleton Street

Halifax, NS B3H 3B7

- supports the identification and selective commercialization of medical research and develops linkages among investors, industry, the Medical School and its affiliated hospitals

(www.business.medicine.dal.ca)

E4. CFIB (Canadian Federation of Independent Business) – national organization, potential partner

Contact (Vice-President, Atlantic Canada, New Brunswick & Prince Edward Island)

Stéphane Robichaud

204-814 Main Street

Moncton, New Brunswick E1C 1E6

(506) 855-2526

fax: (506) 855-0843

Email: msnb@cfibmail.com

- President and CEO Catherine Swift (Willowdale, Ontario)
- 9 regional representatives (BC & Yukon, Alberta & NWT, Saskatchewan, Manitoba, Ontario, Québec, NB & PEI, NS, Newfoundland & Labrador)

www.cfib.ca

E5. Acadia Centre for Small Business and Entrepreneurship (ACSBE), Acadia University
– ‘entrepreneurship Nova Scotia’

Contact (deals with RA)

Chris Pelham
Acadia University (HO of ACSBE)
38 Cromwell Drive
Willett House
Wolfville
Nova Scotia, B4P 2R6
(902) 585-1181
Email: acsbe@acadiau.ca

- one of the university business development centres

E6. Mario D. Theriault & Co.

Contact (deals with RA)

Mario Theriault
105 – 1133 Regent Street
Fredericton, NB E3B 3Z2
(506) 450-3788
Fax: (506) 450-3735

- one of two patent agents in east, sole one in New Brunswick
- IPIC does relatively little in the East, Mario Theriault & Co. does the most in all provinces

E7. Canada Business Service Centres (CBSC's) – National Secretariat

Contact (deals with CIPO)

Grace Moores
Director, Planning and Partnership Development
CBSC National Secretariat
(613) 957-1719
Fax: (613) 954-5463
Email: mores.grace@ic.gc.ca
www.CBSC.org

QUEBEC

Q1. Gilbert Blaise – inventor, benefited from CIPO

Contact:

Dr. Gilbert A. Blaise (back in office Jan 11, 2004)
Professeur Anaesthesia & Medecine Departments, University of Montreal
CHUM Notre Dame Hospital
(514) 890-8202

- re-defined his technology in light of an earlier & better patent

Q2. CNRC-PARI – Québec

Contact:

M. Claude Attendu
 Directeur régional adjoint du CNRC-PARI à Boucherville (Longueuil)
 (450) 641-5307
 Email: Claude.Attendu@cnrc-nrc.gc.ca

- IRAP is existing CIPO partner
- part of former 'protocol d'entente'
- contact knows CIPO's services well

Q3. Government of Quebec (Ministère du développement économique et des régions)

Contact:

Jean Boudreault
 (514) 873-5669

Email: Jean.Boudreault@mrs.gouv.qc.ca

- Quebec government very interested in IP

Q4. Centre de Recherche Industrielle du Québec (CRIQ)

Contact:

Jean-Claude Boudreau
 Patent agent (deals with RA)
 (514) 383-1550 ext 3532

Email: jean-claude.boudreau@criq.qc.ca

- CRIQ is a key player

Q5. Business Development Bank of Canada (BDC) – national organization, potential partner with good reach

Contact:

Francois Rivest Legal Counsel & Pat Coolen Toronto BDC

BDC Building

5 Place Ville Marie, Suite 400

Montréal, Québec H3B 5E7

1-877-232-2269 (toll free)

Fax: 1-877-329-9232

Email: info@bdc.ca

- federal agency, headquartered in Montréal
- assistance includes patent search
- 80 branches throughout the country including all provinces and territories
- RA tried to interest them (from Gatineau) in IP but failed (hard to break into their encapsulated thinking)

www.bdc.ca

Q6. Ogilvy Renault – IP professional

Contact: France Cote

(514) 847-4263

Prestigious law firm that deals with IP in Montreal

Q7. Canadian Innovation Centre (CIC) – a leading player

Contact:

Linda Hendry

General Manager

490 Dutton Dr., Unit A1

Waterloo, Ontario
N2L 6H7
1-800-265-4559

- assisted more than 70,000 Canadian inventors and entrepreneurs
- evaluated more than 13,000 new product ideas
- two key links on website: inventors and entrepreneurs (including CIPO)

CENTER

C1. TenXc Wireless Inc. – a leader in the development of intelligent antenna solutions for today's performance in mobile wireless networks

Contact

350 Terry Fox Drive, Suite 310
Ottawa, ON K2K 2W5
(613) 591-6696
Fax: (613) 591-6637

Substituted with:

Darin Graham, President CITO
Ottawa
613-592-9211, ext. 243

C2. IRAP – regional

Contact:

Dr. Peter Cashmore
Associate Regional Director
(416) 952-9618
Fax: (416) 954-9461
Email: Peter.Cashmore@nrc-cnrc.gc.ca

C3. Ontario Ministry of Economic Development and Trade

Contact:

Mark Garscadden & Kathy Lee
MEDT
(416) 314-8211/25-6963
Email: mark.garscaddemn@edt.gov.on.ca

- Responsible for Ont. Centres of Excellence
- runs research Challenge Programs
- helping to redefine IP relation between researchers institutions and Ont businesses

C4. Industry Canada (Regional Office – Quebec) – key player in Quebec

Contact:

Rose-Lise Arelle & Claire Blake
Planning, Analysis and Communication
Montreal Regional Office, Industry Canada
(514) 283-2785

- Arelle is the boss of Michel Hall who deals with the CIPO RA (Jean-Marie Paquette), and she reports to Lemay
- Claire runs the centres which provide CIPO info in Montreal

C5. NSERC

Contact: (Note: Ask her if someone else at NSERC should be interviewed too)

Anne-Marie Monteith & Anne Alper
Account Manager, Bio-industries Division
(613) 996-6346

- she coordinates granting Council's IP Management Program with universities

C6. Aikins, Macaulay & Thorvaldson – patent agents in Manitoba

(204) 947-0050
fax: (204) 957-0840
30th Floor
Commodity Exchange
360 Main Street
Winnipeg Man MB R3C 4G1

- one of two patent agents in Manitoba
- located in down town Winnipeg

C7. IRAP – national

Contact:

Ms. Mona Paterson
Director, Federal Partners, IRAP
(613) 998-5285

- 260 Industrial Technical Assistants (ITA's) in 90 communities across the country
- four components of service
 - technology expertise and advisory services (includes IP)
 - financial assistance for SME's (less than 500 employees)
 - networking
 - partnerships

www.nrc-cnrc.gc.ca

WEST**W1. Bycast Inc. – innovative company (grid computing for fixed content storage)**

Contact: Gord Forbes
Suite 401 – 2608 Granville Street
Vancouver, BC V6H 3V3
(604) 801-5300
Fax: (604) 801-5309
Email: corporate@bycast.com

- has filed several US patents covering various aspects of its technology
- develops software that enables fault tolerant storage and bandwidth efficient distribution of diagnostics imaging exams for the health sector

www.bdc.ca

W2. Western Diversification (WED) – federal agency

Contacts: Doug Chambers (strategic partnerships) & David Prud'homme (CBSC Director)
WED Edmonton (Head office)
Suite 1500, Canada Place
9700 Jasper Avenue
T5J 4H7

1-888-338-9378

Fax: (780) 495-4557

- runs the CBSC's in the West

www.wd.gc.ca

W3. University of Saskatchewan Technologies Inc (UST) – University is a big patent filer

Contact: Tom Roberts (legal counsel & patent agent)

University of Saskatchewan Technologies Inc.,

Room 304, Kirk Hall

117 Science Place

Saskatoon, SK S7N 5C8

Phone (306) 966-7331

Fax: (306) 966- 7806

www.usask.ca

W4. University Technologies International Inc. (UTI)

Contact: Don Moresby

Suite 130, 3533 – 31st Street NW

Calgary, Alberta T2L 2K7

(403) 270-7027

fax; (403) 270-2384

Email: Info@uti.ca

- IP advice and assistance
- on-going and post-agreement management of IP transactions

www.uti.ca

W5. Westlink Innovation Network Ltd

Contact:

Stuart Cullum

Senior Business Development Manager

(403) 443-9667

Fax: (403) 443-9668

Email: stuart.cullum@westlink.ca

- based in Calgary
- membership is 25 western Canadian universities, colleges, and research institutes
- well plugged into key community (universities etc.)

www.westlink.ca

W6. Gary Dunn – computer and technology law advisor

Contact:

Gary Dunn

Suite 610

1665 Broadway Ave.,

Vancouver, BC V6J 1X1

(604) 739-7011

fax: (604) 739-7013

Email: gary@dunn.com

- practised in BC for 25 years
- practise includes e-commerce, software and data bases, information technology, the internet, telemedecine and employment, technology and intellectual property law matters for start ups and expanding businesses

www.dunn.com

W7. PATEX (formerly PATSCAN) – patent research and consulting

Contact:

Ron Simmer

5230 Patrick St.,

Burnaby, BC V5J 3B3

(614) 438-5935

fax: (604) 438-5945

Email: Ron@Patex.ca

- associated with UBC (started in UBC library)
- widely used and lots of experience in IP

Strengths, Weaknesses, Opportunities and Threats in the Canadian Intellectual Property System

The strengths, weaknesses, opportunities and threats listed below are a compilation of comments, criticisms and suggestions by the individuals contacted for this report.

Strengths

CIPO provides official recognition and approval for the ownership rights to innovative ideas.

CIPO has developed a significant reputation based upon the service and contributions by its local representative in Halifax and when it had offered more extensive services in Montreal and Toronto. In some cases, the interviewees clearly distinguished between the local representative and the central organization, praising the former and complaining about the latter.

CIPO tends to have a good reputation around the delivery of its core services (with the exception of the slow turnaround time) that are provided by patent examiners. "It's examiners are good, its pricing is good, the availability of its examiners is good, the examiners are very helpful and provide good advice and they do care about being helpful (unlike in other jurisdictions)." It seems as if those who have direct interaction with this level of CIPO's operation credit the organization for quality service. The database, website and pamphlets get mixed reviews.

CIPO is generally viewed as being a trusted neutral and objective partner with respect to the patent process. (However, this was not shared by all interviewees. Some felt that CIPO was in a definite conflict of interest position when it advised people about patenting because it ultimately collected fees, granted patents and regulated the process.)

Several interviewees commented on the potential value in the development of various kinds of analysis including trend analysis associated with the patent process, although such efforts would clearly have to respect the confidentiality of applicants. It was suggested that CIPO investigate the system for exploring the strategic use of patents that was created by IBM and then later bought by the US Patent Office.

CIPO's position within Industry Canada seemed to offer the potential for the coordination and exchange of IP information among all Industry Canada departments and agencies such as CBSC and the Regional Offices and the industry portfolio group that includes IRAP, ACOA, WED, FedNor, etc.

Judging from CBSC records, there is a strong demand for information on intellectual property -- copyright information ranked 24th, patent information ranked 13th and trademark information ranked ninth among CBSC's most requested documents in the West.

Relative to other international jurisdictions like the USA, Japan and the EU, CIPO's filing costs tend to be low.

Weaknesses

Core Services

From the perspective of interviewees, it was not clear what CIPO or its outreach program were trying to achieve (this even after we explained the goals of both to them). There was no consensus among the stakeholders that those goals were the right ones for the patent system. If the goal is to generate more patents in order to generate more revenue for CIPO, then that doesn't serve the interests of SMEs and the economy. The largest filers are the multinationals. If

it's to generate more innovation, why should CIPO worry about those who are the least sophisticated and productive in the patent process? If the goal is the production of new companies or jobs then emphasizing patenting actually reduces revenue production and next generation outcomes and so lessens the chance of SMEs surviving to create stable jobs. Some interviewees suggested CIPO has a weakly defined value proposition that doesn't help to align goals, actions and outcomes.

Several people remarked on the slowness of patent reviews compared to other jurisdictions -- 6 months in best case Australia or 12 months in the USA. The current 25-month turnaround time is considered unacceptable, particularly when it means that some applications are incomplete even after five years.

SME's and Inventors

CIPO's visibility outside the IP professional community is essentially non-existent, certainly among SMEs. The several business people we spoke to had no idea what CIPO was.

It was felt that the information being provided by CIPO should reinforce the business decision that inventors or small businesses people have to make, such as illustrating the cost-benefit scenario of taking out a patent. For example, the one-on-one work that was done in the past in the Montreal office was seen to be very helpful to illustrate what's involved in the patent process, what could be learned and what could be gained.

It was felt that CIPO could be better at spelling out the IP process in layman's terms in a step-by-step fashion. At the moment the perception is that CIPO's material does not do this. In addition, several people remarked that for entrepreneurs the most effective way to communicate with them was through presentations and one-on-one meetings.

Several people remarked that filing costs were a barrier to the patent process and the recent major increase in filing costs did not help. However, an equal number said these costs are part of doing business and helped to screen frivolous patents. One person commented that while the latter argument was true for individuals, it didn't apply for SME's. In fact Canadian SME's were at an international competitive disadvantage because other jurisdictions provide tax credit relief for patent filing and Canada does not.

Given this, it was also interesting to see that while support for the patent process can come from ACOA, FedNor and WED (if it leads to manufacturing), this support is not well known nor is there any type of support mechanisms for Southern Ontario.

Intermediaries

The most frequently cited weakness of the IP system was the bureaucratic and non-responsive nature of the CIPO organization. This was directed not at the delivery of its core services but at CIPO's administrative environment (its apparent unwillingness to address feedback from stakeholders, its lack of visible presence, the poor or non-existent nature of its relationship management with partners or in the provision of basic information). As one partner commented "tell them that we are still alive and giving good service but we need to hear from them more often".

Sometimes there is little commitment by patent filers to proceed with the manufacture of their idea. This should be required as it is in other jurisdictions to prevent patent parking. We heard that the Canadian system encourages both patent parking (through its low-cost, self-serve approach) and the submission of frivolous applications (which get published by default). We were told this increases the overall workload in the patent process and reduces the perceived value of a Canadian patent.

Universities

There seems to be little or no contact between CIPO and the many university technology managers except when the latter makes an IP application. As one UTM put it, "I haven't noticed CIPO has been present or has had any profile at any of the IP related conferences I've been attending. I don't think CIPO has considered the university sector at all." Yet the universities are likely involved in thousands of patents each year.

Several people remarked on the weakness of university patents owing to the premature innovation that the university attempts to patent, their lack of connection with the business community sufficient to identify the full range of business applications, and the lack of university resources to pursue patent infringements.

Several people remarked that the lack of recognition afforded patent producing professors by their university institutions was a barrier to patenting activity although an equal number indicated it was not a problem.

There is a need for support for the translation costs associated with international patent filings.

There seems to be an uneven distribution of CIPO material at the university level. Some universities have it and are using it while others do not appear to have it at all.

IP Professionals

Several people remarked on a lack of feedback on suggestions for improving the system or on the decreasing amount of information related to from CIPO such as information on price changes or in the use of courtesy letters to patent agents.

Each of the patent professionals – lawyers, independents and university technology managers -- indicated their desire for a more supportive role from CIPO as champion of the IP system within the federal government and across the country.

Several people remarked that CIPO's lack of enforcement around registered patent agents and its lack of investment in the marketing of its own brand encouraged the fraudulent misuse of the patent system by "IP scam artists".

The lack of keyword searches associated with early patent documents was seen as an area that could easily increase the efficiency of the patent database and improve service.

Threats

The most frequently cited threat was associated with CIPO's image as an overly bureaucratic organization, and not as a trusted partner organization. This image is so entrenched that interviewees were quite skeptical that any real change was possible.

The removal of the CIPO representative from Halifax would jeopardize both the organization's reputation and its service quality not only in Atlantic Canada but also in much of the country. This would likely lead to outcomes similar to those in Toronto, Vancouver and Calgary where staff has been withdrawn and where CIPO is now considered to be practically invisible and irrelevant.

The willingness of the government to allow IP scam artists to operate in Canada with impunity is harmful to inventors and small business and will seriously reduce the credibility of the patent authority. Further, the apparent unwillingness of CIPO to culture its own brand leads to a market vacuum, which results in the same thing.

The retention problem being experienced by CIPO and the growth of inexperienced patent

examiners is leading to declining credibility and trust due to an over reliance on rules and an insufficient amount of attention going to clients and users.

The publishing of frivolous applications by default increases the workload of everybody in the system and reduces the credibility and value of a Canadian patent in comparison to other jurisdictions.

There is a perception that Industry Canada and its portfolio of associated departments, such as IRAP, ACOA and WED, encourage through their actions the idea that the IP process is cheap, easy and can be conducted in a self-service way. This diminishes the value of IP professionals and their contribution to the IP system. Industry Canada is seen as the principle competitor of IP professionals not as a partner. This continues to whittle away CIPO's trust levels in the market.

The policy slowness associated with the adaptation of Canada's IP system to new technologies will drive inventors and innovators to other jurisdictions. CIPO unwillingness, for instance, to take on an IP champion role around the Harvard mouse decision or the current Monsanto case in Saskatchewan were frequently cited illustrations of how CIPO is mired in century old attitudes and not adapting to new technologies. The US Patent Office it was said has essentially the same rules but takes a more liberal attitude in interpreting them.

Given the general trend towards filing for a U.S. patent first, largely because it has more market value but in some instances because it is faster, value conscious patent filers may encourage a North American patent system solution, i.e. the imposition of a U.S. solution.

Opportunities

Core Services

There is an opportunity for CIPO to embrace a role as champion of the IP system in the government and the country.

The opportunity to learn from the experiences of other jurisdictions, particularly the USA, Europe and Australia. One person remarked, "if you want to see how to do outreach right look to Europe."

The opportunity to make use of the publishing of CIPO's annual report as an annual informational touch stone event and conference for the industry. Such an annual event would allow CIPO to disseminate new strategic information on Canada's IP system and be seen as a facilitator of debate on IP related issues.

SME's and Inventors

The opportunity that ACOA will provide support for patent filings if it leads to manufacturing.

The opportunity to reach New Brunswick businesses as they register each year with Service New Brunswick.

The opportunity of a national event like the publishing of its annual report to connect CIPO not just to a paper approval process but to the inevitable positive results of new innovation in terms of new technologies or new companies. CIPO should encourage the celebration of Canadian creativity.

The opportunity exists to improve its visibility by investing in building its national image through a low cost TV advertising vehicle. Apparently a company, BTV, has offered to create a seven minute TV profile for federal departments and ensure that it gets aired on Global-TV at a cost of \$25,000. The clip could then be reused in other venues. CBSC and other Industry Canada

departments are considering.

The opportunity to improve SME competitiveness by introducing an IP tax credit for small business.

Universities

The opportunity to provide basic IP education to high school and university students through cooperation with science museums, the sponsorship of inventor and innovation competitions, and presentations to high school science teachers at annual regional meetings. The suggestion was “go where the students have already self-selected their interest in innovation”.

The opportunity to facilitate a national university-business IP network or a national inventor network. As it turns out both of these exist, but CIPO could engage in cross marketing relationships with both groups.

The opportunity to come to the aid of smaller universities, colleges and hospitals, which cannot support technology transfer offices. These groups have a real paucity of IP expertise. That said it was pointed out that one college instructor had taken out over 200 patents.

The opportunity to work with the Association of University Technology Managers of Canada, the Licensing Executive Society and university technology managers across the country to develop and deliver short one to one half-hour training sessions on IP.

The opportunity of delivering IP workshops for Ontario's Centers of Excellence or presenting at their conferences.

There's an opportunity to link with Natural Science and Engineering Research Council's “Idea to Innovation” program and Canadian Institute of Health Research's “Proof of Principle” program.

Intermediaries

The opportunity to work with CFIB to help identify regional targets and to have CFIB district managers spread the word about IP and CIPO.

The opportunity for CIPO to be referenced in IRAP's contribution agreements and to assist in the development and delivery of their training modules.

The opportunity to capitalize on the new openness to cooperation between the federal and Ontario governments. In particular, an Ontario regional working group comprising MEDT, Industry Canada, IRAP, CBSC and other industry associations meets to discuss how to help Ontario entrepreneurs. It was suggested that CIPO should be at the table as well.

The opportunity for CIPO to conduct training on IP issues with MEDT's internal training program.

The opportunity to receive funding from WED to support workshops, conferences and awareness building efforts on IP in the West.

The opportunity to collect statistics about IP information demand through CBSC.

The opportunity to work with the BC Business Services Society, CBSC's not-for-profit partner in British Columbia, as a delivery agent for CIPO services in BC.

The opportunity to gain greater visibility by placing CIPO's logo on the new Business Gateway Portal of Industry Canada.

IP Professionals

The opportunity to become more cost and quality competitive and more responsive relative to other jurisdictions in order to attract external business.

The willingness of patent agents to facilitate industry partnerships with such organizations as Bio-Quebec and Bio-Canada to reach 1,000's of small and medium sized companies.

Abbreviations

ACOA	Atlantic Opportunities Canada Agency
AI	phases one (A wareness) and two (I nterest) of the AIDA model
AIDA	four phase model used by IBM
BSC	business support community (intermediaries)
CBSC	Canada Business Service Centre
CFIB	Canadian Federation of Independent Business
CIC	Canadian Innovation Centre
CIPO	Canadian Intellectual Property Office
CIPO(IB)	CIPO's Information Branch
CO	Commerce Officer
CRIQ	Centre de recherche industrielle du Québec
DA	phases three (D esire) and four (A ction) of the AIDA model used by IBM
DFAIT	Department of Foreign Affairs and International Trade
ED	executive director
EPO	European Patent Office
FedNor	Industry Canada entity for economic development in Northern Ontario
FTE	full time equivalents (measure of human resources)
IC	Industry Canada (the department and the portfolio)
IP	Intellectual property
IPO	international patent office
IRAP	Industrial Assistance Research Program
MEDQ	ministère développement économique et régional du Québec
MEDT	ministry of economic development and trade
NCR	national capital region
NSERC	Natural Science and Engineering Research Council
RA	regional advisor
SME	small or medium sized business
SOA	special operating agency
SRED	Scientific Research & Experimental Development Program
SWOT	strengths, weaknesses, threats and opportunities
TIS	technology information services
TPC	Technology Partnerships Canada
UTM	university technology manager
WED	Western Economic Development Agency

About Inveniré4

Inveniré4 is a private firm specializing in action research to assist clients faced with challenges problems of governance and stewardship. It also develops and conducts interdisciplinary educational programs for executives, managers and community leaders, and organizes forums, colloquia and symposia on governance and stewardship issues.

The activities of Inveniré4 focus on the design of practical organizational approaches that are rooted in social learning and reflection-in-action. Such work is meant to generate useful conceptual frameworks and analytical tools of general applicability.

Inveniré4 is associated with the Governance and Public Management program at the University of Ottawa And contributes jointly with the Program to the publishing of *Optimumonline*, *Gouvernance*, and the soon to be published journal on *Governance, Education and Economy*.

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