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**TR-12-98**  
**Intellectual Property**  
**Protecting Your Technology**  
**(A Primer on Patents, Copyrights, Trademarks and Industrial Designs)**

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**TECHNICAL REPORT**  
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Submitted by:  
Canadian Police Research Centre

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HER MAJESTY THE QUEEN IN RIGHT OF CANADA (2001)  
as represented by the Solicitor General of Canada.



SA MAJESTÉ LA REINE DU CHEF DU CANADA (2001)  
représentée par le Solliciteur général du Canada.

## **EXECUTIVE SUMMARY**

Intellectual property involves assets often derived in the law enforcement community by employees in the course of their work, through research and development, and work carried out under contract. Protection may take the form of:

- Invention
- Copyright
- Trade Secrets
- Plant/Breeders Rights
- Integrated Circuit Topographies
- Industrial Designs
- Trademarks

This report is in the form of a videocassette and transcript of a workshop hosted by the Canadian Police Research Centre and designed as a primer to the field of intellectual property.

## **SOMMAIRE**

La propriété intellectuelle désigne les éléments d'actif souvent élaborés au sein des corps policiers par des employés dans le cadre de leur travail de recherche-développement, ou par des entrepreneurs à contrat.

La protection nécessaire peut prendre différentes formes :

- Brevet d'invention
- Droit d'auteur
- Secret commercial
- Droits d'obtenteur de nouveautés végétales
- Topographies de circuits intégrés
- Dessins ou modèles industriels
- Marques de commerce

Le présent rapport est la transcription de l'enregistrement sur vidéocassette d'un atelier organisé par le Centre canadien de recherches policières; il se veut un document de base traitant de la propriété intellectuelle.

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## **Speaker #1 Glenn R. Carroll (Canadian Police Research Centre)**

Good morning, ladies and gentlemen. Thank you for coming this morning. I would just like to give you a brief introduction of who we are and why we convened this group this morning. My name is Glen Carroll. I'm with the Canadian Police Research Centre which, four of the five are resident in the Science and Technology Branch at RCMP Headquarters in Ottawa.

The Canadian Police Research Centre is a partnership between the Canadian Association of Chiefs of Police, the National Research Council of Canada and the RCMP. And we are mandated to provide law enforcement products, law enforcement services at the best possible price for law enforcement agencies across the country and in addition, to work with industry and work with various research organizations to bring these products to fruition.

An integral part of this operation is intellectual property and the protection of our intellectual property. So this morning, we have invited two guests from National Research Council of Canada, Intellectual Property Services Office, Wayne Anderson and Ron Brunet who are going to give us each a presentation this morning, each with a slightly different flavour. We will be starting out with Wayne, first of all, who is a patent agent with IPSO and he's going to introduce and define what intellectual property is. We'll have a short break and after that Ron, who's a commercialization advisor with IPSO, will continue with licensing, royalties and commercialization.

Now, why have we invited you folks here today? First of all, you represent those centres in the organization who are primarily concerned with technical matters, technical operation, developing technical ideas, and given that our resources are fairly limited, as I say there are only five of us and it's physically not possible to travel coast to coast talking with the entire law enforcement community. So we've decided to use some of the revenues that are generated from our intellectual property activities to produce this information video which we will then send out to approximately fifty different law enforcement agencies across the country who are what we call, technical partners. These represent law enforcement groups at the municipal, provincial and federal level, and include not only police services, but also provincial agencies that are tasked with law enforcement administration and, also, at the federal level, other government departments that have a mandate for law enforcement, such as National Defence, Correctional Service Canada, Transport Canada, etc.

So without further delay, Wayne, if you would like to continue along.

**Speaker #2: Wayne Anderson (National Research Council - Intellectual Property Services Office)**

Thank you very much, Glenn.

So, Ron and I are here this morning. We're with the Intellectual Property Services Office at NRC (IPSO).

This is an indicator of our general objective, the gospel according to IPSO. Providing leadership, advice, guidance, specialized services in the intellectual property field and we provide these services for NRC and for other government departments and organizations such as the RCMP.

**Why do we protect intellectual property?**

- Establish proprietary rights
- Provide basis for control of technology transfer and licensing
- Enhancing industrial growth
- Providing basis for action against infringers

And, perhaps the primary reason, to maximize returns.

If any of you have been involved in intellectual property, I'm sure you'll appreciate that virtually the first question that you are asked by a prospective licensee is, what is your intellectual property position and how is it protected? Without that, you're going to find there's a tough road to hoe.

**These are the forms of intellectual property:**

- Invention
- Copyright
- Trade Secret
- Plant/Breeders Rights
- Integrated Circuit Topography
- Industrial Design
- Trademark

invention protects the functionality of a device or a product, etc.

Copyright is an expression of the form of your idea, if you like.

Trade secret is an optional type protection to look at in terms of invention. There may be reasons why under certain circumstances which we'll get into later when we talk about details, why you would prefer the Trade secret route.

Integrated Circuit topographies are similar to copyright. They can protect the three dimensional form of an integrated circuit, for example.

Industrial designs protect the ornamental features of a device or product, in other words, what it looks like, its shape.

A Trademark is used to distinguish the source, the wares or services.

### **How do we protect Inventions?**

The definition of invention is there. It's a new, useful and an unobvious art machine, process, manufacture, composition of matter, or improvements, thereon. In fact, you'll find that most inventions are improvements on existing technologies.

## **PATENTS**

### **The three criteria for Patentability:**

1. New means novel, different, very easy to see when you compare the device that you have with the prior art.
2. Useful just means useful for the purpose that it's intended.
3. Unobvious is usually where we get most of the debate. You look at the difference you have and try and determine whether or not that difference is significant to the point where it's unobvious to a person skilled in the particular art to which your invention relates.

The protection that's available is a patent. It is noteworthy that a patent is an exclusive right which allows you to exclude others from basically using or copying your invention. However, it doesn't give you a right to use your invention yourself, which is the interesting aspect of it. For example, even though you've got a patentable invention and are able to get a patent yourself, you may find that you're infringing a dominating patent of someone else and you would have to take a licence or have a permission to use that dominating in order to practice your own invention. Patent application has to be filed. Filing is the act of depositing a patent application in a particular format with a patent office in your country of choice. The life of a patent, the term of a patent, is twenty years from filing in Canada, in fact in most countries, notable exception being the United States which is seventeen years and from issue, not from the date of filing the application.

This is what a patent looks like. We've chosen a rather interesting example, here. You'll see it's a device for supporting human head that's been removed from the body. There may be some way of preserving yourself in the event that your body fails and you'll see that there's an examination certificate at the top. And, in fact, this patent, although it's a recent one, in more recent times there were a lot of trivial patents in the past. But this is a 1992 patent that was issued by the United States patent office and there was so much kaffuffle about it that the Commissioner of Patents decided to re-examine it and, in fact, revoked the patent. So, it's no longer enforced. So, you can go ahead and infringe it.

Key points in patenting:

### **Establish the likelihood of patentability**

First step, make sure you're not re-inventing the wheel. Typically there is a patentability search involved. We look at the prior patents that have been issued, we look at prior publications. We do this in computer databases, backed up by manual searching, typically at the Canadian Patent Office. And for a very limited cost, it costs about \$700.00 to perform a patentability search, that comes with an opinion as to the patentability, the scope of a claims that are likely to be available, the strength of the patent you're likely to obtain, and so on. So, for a relatively small cost, it's a bit of an insurance policy so you don't plunge into the patent application, you can spend \$5,000.00 - \$6,000.00 and find when the patent examiner does his search, that there's a surprise and you're money's down the drain. So we highly recommend at the outset a patentability search assessment.

One of the key points in patenting is the inventorship. Inventorship must be correct or there's a danger the patent could be invalidated for the reason of incorrect inventorship. If you have typically more than one individual is involved, there's no problem having co-inventors provided that all contributed to the invention in a meaningful way. Individuals such as technicians, people around your lab, the director of your lab, you don't put their names on a patent unless they actually have collaborated in the establishing of the invention. These individuals, you can put their names on your publications, your papers, etc. and give them credit in that manner but please don't put their names on the patent as inventor.

### ***Publishing before filing may jeopardize the application.***

This is probably the most important point in this whole exercise, if you go away today remembering that, we'll have accomplished something. In Canada and most countries there's what we call a "first to file" system which means the first person to the patent office is entitled to the patent. If you file your patent application today

and somebody comes along next week and files an application for the same invention you're the one who's entitled to consideration for the patent. The other application is rejected outright. This also means, in relation to the publication issue, we have grace periods in Canada and the United States. In Canada and the US you have one year, if you make a publication today, you have one year from today to file a patent application without prejudicing your rights to obtaining a valid patent. This is not true in all other countries. It's an absolute novelty in all other countries. Grace periods are available in Canada and the United States only. Patents are territorial which means if you file a Canadian patent application to get a Canadian patent, it's not enforceable in any other country. So, you have to file corresponding applications in other countries where you desire to have the patent protection.

### **Secret Patents**

Organizations such as National Defence and perhaps to some extent, the RCMP, they have certain technologies that are classified. That doesn't mean that you can't file a patent application. The Canadian Patent Office and patent offices in our NATO partner countries will also accept classified patent applications. The application will be kept aside from the other applications and examined only by staff who are cleared to the appropriate level. The application will proceed like any other normal application up to allowance but the patent will not issue. And there are circumstances which change the scenario. For example, a few years down the road, perhaps the technology is not as sensitive as it was at day one, you can now inform the patent office that the veil of secrecy can be lifted and they will then allow the patent to issue.



## **The Costs**

This is an item of interest to a lot of you. The preparation cost is in this \$2-5K range. It basically depends on the complexity of the invention, the time spent by the patent agent in writing it up and so on.

Filing expenses. Governments in all countries have filing fees which are typically in the range of \$1,000.00 plus or minus a few hundred.

Maintenance fees during the application stage. Some countries have maintenance fees throughout the process. Canada, for example, has annual maintenance fees right from the second year following the filing, and they continue right up to the twenty year period, and they tend to escalate as the patent matures. Any time of course, you can abandon your patent by failure to pay the maintenance fees.

## **International Convention**

This gives you one year from your original filing date of your first application to file your applications in those countries and have them back dated to the date of your first filing. The other point here is that if there hasn't been any publication of your invention following the filing of your application in that intervening year, the priority year, you can still validly file applications in these countries but they wouldn't have the benefit of this international convention, in other words, they wouldn't be back dated to the date of your first application.

Some of you may have heard of the Patent Co-operation Treaty. It's a mechanism which enables you to group countries. For example, if you filed your first Canadian application and you're looking at corresponding filings in other countries and you come down and say, you've got a list of ten countries, without the Patent Co-operation Treaty you'd have to go country by country and file an application in each country and have it translated. You'd have to hire a patent agent locally. Generally speaking the expenses and duplication of effort that involved are quite considerable. So this mechanism was developed to enable you to postpone a lot of these up front charges to a later date, again to give you more time to find your licensee who's going to take over from you and pick up the on-going patenting costs. So you've got an extension of up to thirty months, that's from the first filing. So if you file your application today, you can drag this process out for thirty months before you have to go into this national or country by country phase. Eventually you have to do it anyway, but the beauty of this is that you can postpone most of the expenses, translation costs which are typically \$4,000.00 - \$5,000.00 per country, when you're looking at Japan and Germany and so on, translations are very expensive. And also you've got the one prosecution going on right up to an indication of allowability

and the countries that are members of this Patent Co-operation Treaty will respect the opinion of the examiner who happens to examine on behalf of PCT. For Canada, it's the European Patent Office that does our examinations.

### **Steps Involved:**

Search report: You get a search within six months, which is probably six months quicker than you'll get it anywhere else, in the United States it's about a year, in Canada, it's about three years—they're trying to do something about that but they can't seem to come to grips with it here, I don't quite know why, that's a fact of life.

The international preliminary examination is the second step. You have option of forgoing that international preliminary examination and going right to the national phase instead of taking the full thirty months you can take nineteen months. So you'll have that option of nineteen months to bail out of the process and go directly to the national phase if reasons dictate. We've already mentioned that filing can be typically in English, the postpone of the translation and the up front costs.

There's also another mechanism (that we don't have a slide for). It's a European patent and it's similar to the PCT idea. PCT has close to 60 countries now as members. Europe, there's about 15 countries as members of that organization. And, in fact, you can go from the PCT to Europe and stay in English if there are reasons for that, as well.

**Trade Secret**, we mentioned is another form of intellectual property. Trade secret is only of use if the information is kept totally secret. So you can't publish.

With a patent, you can publish, as we've seen as long as you file your patent application first. You can then go and publish your invention the next day, if you like.

The Trade Secret again is a right to prevent others from using. It excludes others just as a patent does. There's no registration of any kind. It's just a matter of keeping it under your hat and disclosing only in confidence. Here you can use confidentiality agreements, whatever other means may be at your disposal of disclosing information in confidence. Again, the life of it is unlimited whereas a patent you're looking at seventeen or twenty years. The life of a Trade Secret is unlimited provided that it's kept secret. For example, the formulation for Coca Cola has survived a couple of hundred years. I guess they keep parts of it in different places and use various precautions to maintain the secrecy. It's something that can't be easily reverse engineered I gather, in spite of taste tests and so on. So one

of the things you'd look at here, if you're looking at Trade Secret, is the inability to reverse engineer something. If you've got a process, for example, that includes parameters that are not going to be obvious and not easily discovered by your competitors, you may wish to seriously consider the Trade Secret option. The big bugaboo here is that independent discovery can be embarrassing and expensive. For example, if you've got something that could be patented and decide for whatever reason to keep it as a Trade Secret, a couple of years later, someone else discovers your invention independently, files a patent application, gets their own patent, you're now infringing someone else's patent on an invention that was yours but you'd kept it secret. So, that's a major downside. The last bullet, marking can prevent inadvertent loss. We strongly recommend that if you want to keep something Trade Secret, you mark your material with a Proprietary Notice. Now there's no magic in these words here but anything along these lines with the gist of indicating this material is proprietary and it's not to be released without permission, and so on. There are many shapes and forms of this type of notice, as I say, as long as its there and visible, please use it.

## **Copyright**

Another form of intellectual property protection. I know there's some software people here. This will be of most interest to them.

Generally the types of material that are protected: literary, including software; musical, dramatic, or artistic works; the key being originality. The protection that's available is copyright. And again, it's a right to prevent others from unauthorized copying, similar to patents and trade secrets.

The registration is optional in Canada. Although, in some countries, if you haven't registered your copyright, you're not in a position to sue for infringement of the copyright. It's a fairly narrow form of protection. It basically, prevents others from copying the exact nature of the material that you have. Although someone translating from French to English or vice versa of the same material is still going to infringe your copyright.

The life of copyright is typically the life of the author plus fifty years and there's a provision in the Copyright Act for Crown copyright which effectively says, any material that was bought and paid for, produced, etc., on behalf of the Crown, copyright and that material belongs to the Crown. That's Section 11 of the Copyright Act.

Now getting back to software again, before we get too far afield here. It used to be that there was some debate over whether software was copyrightable or how it was

protected under various intellectual property laws. The court cases were indicating that it was a literary work so there was some degree of assurance that you were protected even though it didn't specifically say so in the Copyright Statute. Well that's been changed now, and the Copyright Statute specifically states that computer software is good subject matter for copyright. Also, that's not to say that we can't get patent for software. If your software runs a process, for example, and you can define its operations in a series of steps, method steps, you can get a methodology patent for your software. In fact, we strongly recommend that you look at that aspect of it because a patent will give you a little bit more scope in terms of protection. Even though the term is shorter, it will give you more scope in terms of equivalents and so on. A copyright on a software will not extend to enhancements for example, if they're made by somebody else. That other person is going to have copyright in the enhanced version of your software. Whereas if you had a patent, your method claims might be broad enough to cover many enhancements of the software, depending on the way the method was defined. So we strongly encourage you to look at that aspect or have someone look at that aspect of the intellectual property when you do have commercial software and there's nothing to say that you can't have both,. You get your copyright protection as a matter of right . Upon creation your copyright exists even though it's not registered but if it is amenable to patent protection, someone should look at that as well.

The next slide is a copyright notice which is virtually essential that it be placed on your copyright material in order to have the protection in place. And there are three elements to this.

The first is the © or "c in the circle" or (c), which for word-processing these days, seems to be a little easier to provide.

The next is the full name of the copyright owner, and I emphasize full name. There are court cases where acronyms which were alleged not recognized by the infringer, so he was able to escape copyright infringement because he said he didn't know where to go, didn't know who the owner of the copyright was so he didn't know where to go for permission to use the copyright. Well, if you've got the full name, that argument goes down the drain.

The last item is the year, that's the year of first publication of your copyright work. And if it's unpublished, it's the year of creation. And if you have updates, you put on 1995 First Version, maybe your enhancement 1998 and so on.

So you'll often see the "c in the circle", the name and a series of years, indicating that there have been enhancements and so on.

This should go, if you've got user manuals for your software, put it on the first page of your user manual. Also put it in your software, on one of the introductory screens so that there can be no question that the reader is well aware of the intellectual property that's in place in terms of copyright for your software.

## **Trademarks**

We don't get into trademarks all that often. In the case of the RCMP, I know, there are several acronyms, I know the RCMP acronym, the crest, things like Musical Ride, I think there's a logo of a Musical Rider with his lance and so on, that's registered as well. These sort of marks or symbols provide basis for the licensing of these marks, for example for use on T-shirts, mugs and so on. I think they are big revenue generators in this organization.

The key elements:

There must be use before registration. The use can either be a prior use, your mark has been in use for the last five years, or whatever, or it's a proposed use. But the proposed use has to be before the mark is actually registered, so it has to be an impending use that's maybe going to come up in the next six months or so. If that's the case, you can still file your trademark application and have it proceed on the basis of a proposed use.

The criteria. They're not confusing with existing or pending registrations. Although, you can quite often have the same trademark associated with different wearers or services, with the exception of famous marks like McDonald's and Chevrolet, and things like this, Ford, you could never, even though they're restricted to fairly specific wearers, someone couldn't come along and have a dating service and call it Chevrolet or something like that and expect to register a trademark. Well, there is an interesting court case in the US involving the stealth bomber. I think most of you are familiar, you've seen that advertised, I think it's Northrop, the company that developed the stealth bomber. A small enterprising company in Texas decided that they were going to use the same mark for contraceptives. They were taken to court by Northrop and the company won. It was a clear case of using the same mark. The expression they used in their marketing was "They'll never see you coming." A sort of a play on the theme of the stealth bomber aspect and they had three colours red, white and blue for the American flag, and I think they pushed these quite heavily in the USO's and the like. Just an aside.

Word symbols, pictures. Basically what you're trying to do is distinguish your wares from others. If you have goodwill associated, that you've built up over the years with your particular mark, quality service, and so on, you don't want somebody else

coming out and using your trademark and perhaps selling inferior products or providing inferior services. So if something is an identifier with your business, the quality of your products, goods, services, etc.

Public Authority 1, that's section 9 of our Trademarks Act, enables organizations like the RCMP, other government organizations, universities, Olympic associations, and so on to register a trademark for virtually anything on the basis of use. In fact, you can even licence these marks on the basis of adoption and use of the Public Authority. Now you wouldn't get away with a famous mark, but a mark such as Musical Ride, if there was already someone out there who had a riding service, I know Musical Ride has been in place for a number of years, so perhaps it's a bad example. But for illustrative purposes, assuming it was something new, the force decided we'd like to get section 9 registration for this, even though there was McCormick's Biscuits or somebody, or Joe's Livery Stable had horses for rent and he played music in the background and he called this mark Musical Ride, the force could still use it without having to worry about his proprietary position.

There's no examination, it's just a matter of right. And it is licensable as well, as I indicated. The term is fifteen years and renewable every fifteen years indefinitely.

### **Industrial designs**

I won't spend a lot of time on this. I mentioned earlier it protects the shape, basically, the shape of this jug, aesthetic and appealing, it could be registered as an industrial design. It would be very unlikely to get a patent on it because the function has been known for hundreds of years but the shape of it could be unique and protectable by design registration. The maximum here is ten years protection, five years initially and another five years on renewal.

### **Reporting Issues:**

The first item here is PSIA, that's the Public Servants Inventions Act. It's government legislation that effectively requires inventors who are public servants to report their inventions to their Minister or I guess in the case of the RCMP, this would be the Commissioner or his/her delegate. Guest workers and so on, I think most labs have got such people around. We would certainly recommend that a guest worker agreement be developed which requires these people to assign their inventions to the Minister or in this case, the Commissioner of the RCMP. Usually, they're getting paid, they're usually happy to sign these. But what it avoids is, down the line, if you come up with an important invention and you have such a person involved as an inventor, the first question that comes up is, "Well, I guess I own half

your invention,” or whatever. So without such a guest worker agreement you’re going to get into a debate or contest as to ownership and it can get pretty messy.

## **Invention Reports**

The Public Servants Inventions Act has a form for reporting inventions that’s including within it and we’ll put that up shortly, not just yet, Ron, shortly.

This is a form that enables you to facilitate the process of reporting the invention to your Minister and it’s filled out by the inventor or inventors in the first part, and the second part of it is filled in by your supervisor who basically corroborates the information that you provided in the Invention Report.

## **Inventor’s Rewards and Royalties**

Under this Public Servants Inventions Act, there are provisions for sharing the royalties that may come back from licensing of your invention. For years it was generally 15% of the amount of the royalty. If you had a \$100,000.00 coming back, \$15,000.00 went to the inventors, to be shared amongst them based upon some agreement they may have amongst themselves or whatever. Recently this 15% has been hiked to 35%, so it’s starting to get worthwhile if you get a winner, the returns to inventors, the incentives are certainly there. (Editor’s note: Treasury Board Secretariat guidelines suggest a 15-35% discretionary amount.)

The next slide is the first page of the form. The most important one here is the bottom item. You can’t see it very well here but it’s basically the tombstone data. When you get down to No. 7, this is really where the meat of it comes.

There is a series of leading questions here that sort of enable us to understand what your invention is, facilitate the process and so on:

- What is the problem?
- How is it accomplished currently by others?
- ✓ What are the limitations, drawbacks of the existing technology?
- ✓ What are the advantages of your invention as opposed to what’s been done before?

And then the details of your proposal and what you think are the novel features of it. That gives us a good starting basis for getting a grip on what the invention actually is and facilitates setting up searching parameters and so on.

This is the second page of this Part One, again this is Form One, Item 8. The key point again, publication. We want to know, or the patent agent is going to want to know, if the invention has been published and in what mould and matter and so on. Sometimes maybe you haven't given away all the beans, maybe only part of the invention has been disclosed, now you still leave some room for some narrow protection that's patently distinct from what you published. Again, keeping in mind the grace periods that we have available in Canada and the United States, however you've got this absolute novelty in most countries and sometimes you may find that you can still get a narrow patent in some of these other countries even though there has been a publication. And again, references to other documents and so on that you may have in your possession that may give us a head start on the search assessment aspect.

The circumstances under Item 10. As I indicated earlier under this legislation, there's a requirement to report an invention that you make to your Minister and this Item 10 describes the circumstances surrounding the making of your invention. For example, if you're a chemist working in your lab on fingerprinting dyes or the like, like Della does, and you at home make an invention on a mousetrap and you use your own materials and your own time and so on, even though you must report the invention, it's pretty clear that the invention doesn't belong to the Crown because it doesn't relate to your duties. You used your own time, materials, and so on, in which case the next step in the process is the Vesting, in other words the ownership determination, whether or not it belongs to the Crown or to the individual inventor. This Item 10 enables us to make that decision or enables the Commissioner to make that decision and he will then issue a Vesting Notice in your favour which is Form 2 under this Public Servants Inventions Act, indicating that the invention belongs to you and you can do with it as you see fit.

There also is a Part Two to that form, as I mentioned which I won't bore you with. It basically corroborates the information that was provided.

Here is Della's patent. This is the United States patent that was recently granted to the RCMP via the Solicitor General of Canada from the CPRC, John Watkin and Della Wilkinson are the inventors. You'll see that their names appear as inventors, even though the invention belongs to the Crown as a signee, so you know you don't have to worry that credit will be lost or your name won't be associated with your invention. It remains in posterity and so on.

Just winding down here, my part of the presentation, just a bit of a review, overview, maybe pick up a few things that I've missed.

There's one thing that comes to mind that I did gloss over and should mention, it's the, sort of, from a damage control aspect. If, in fact, you've got an invention and you'd like to get a patent application filed very quickly, you know so you can go and



give a talk next week in Bermuda or something like that, if you've got the information together we can file what's called a Provisional Patent Application in the United States or you can file an Informal Application in the UK, they both have the same effect. And what they do is, they give you priority date for the material that you have and that you're going to disclose, even though it's not in the form of a patent application, you don't need the claims, etc. You can file this Provisional Application in the US, I think the filing fee is \$150.00. Again, another form of insurance policy if you like. It establishes this priority date and gives you then, the one year priority year under the International Convention to file formal applications in various countries of interest. Even if you don't decide to file a formal patent application, you have at least preserved that date for year and it gives you the option of filing a formal application within that year, at very little cost.

So, I guess that's about all in terms of formal presentation. At this point, are we going to take questions or are we going to break?

(Glenn) Let's entertain some questions. We've got a portable mic. here for the use of whomever.

## Questions & Answers

Questioner: I have two questions, .....(inaudible) You mentioned that you can publish before filing, that won't jeopardize your patent application, otherwise someone else can come in and patent your idea? If you have published your idea without a patent, doesn't that make it public domain and therefore unpatentable?

Wayne: It does, subject to the grace period. As I said, if you make a publication of your invention today, whatever you disclose today is no longer patentable in all countries except Canada and the US which give you a one year grace period to validly file your patent application.

Questioner: Someone else could within that year, could not patent within that year but afterwards they could?

Wayne: I'm not sure that I'm following you here. If you file your ...you go ahead and publish and you wait for a year to file your patent application...

Questioner: You don't file the patent at all, you just publish and then someone else thinks, hey that's a good idea, I'm going to patent that. By your publication of your idea, doesn't that make it public domain and therefore, unpatentable.

Wayne: Your publication would be citable against any patent application filed by somebody else.

Questioner: Is that likely to make that, therefore, harder to patent?

Wayne: Well, the other party could file their patent application and in the examination process, your publication would arise and would negate the other person's ability to obtain a patent.

Questioner: I see. So, actually, if you didn't feel that your idea was going to give you good enough return, you could still protect it sort of by publishing it?

Wayne: Well that's a defence of publication. That's one way, certainly of obtaining some degree of protection. It means that no one will have an exclusive right and it'll be basically public domain. The other thing you can do is sit on it and try to license it as trade secret or know-how and there are a lot of licenses on trade secret

and know-how, as I'm sure Ron will get into when he discusses licensing. So, nevertheless, it still could be useful, even if it isn't patentable or you decide not to patent for whatever reason, the option of trade secret protection is still there and it is licensable as such.

Questioner: The second question was in regard to trade secret. You said that trade secret can be undone if someone else patents the idea and then publishes. Wouldn't, when the second patent is being independently filed by someone else, wouldn't they find the trade secret under a search or...

Wayne: Well, if you're dealing with a trade secret, you're assuming there has been no publication, you're sitting on it, O.K., so it's not in the public domain, no one knows about it, theoretically, if someone independently discovers the same invention and files a patent application, there's no prior citation or it's not out there in the literature anywhere. So, on the face of it, this is a new invention, so the other party is going to be entitled to a patent.

Questioner: So there isn't a database that's held by a patent agent or patent agency of trade secrets.

Wayne: Trade secrets are totally kept by the individuals. There's just no dissemination, otherwise it's not a trade secret. There's no such thing as a confidential database of trade secret information.

Questioner: O.K. Thank you.

Anything else?

Questioner: .....In the creation of symbols, if you use, say a bitmap or something that is not copyrighted already, can that become part of your symbol? Or is there a problem in that?

Wayne: Well, the copyright, as I mentioned, is a very narrow form of protection. So, we're talking a trademark...there's a copyright and a trademark aspect to this. On the copyright front, I suppose the copying of your shape could be an infringement of copyright in that shape but it's a very specific type of protection, so if there are some changes, and it doesn't take very much of a change to a symbol to avoid copyright infringement, you're not going to be able to stop them. On the trademark side, if your shape is trademarked, again, there isn't a lot of scope in

terms of the infringing the shape. But there are some court cases where sort of the get-up or the make-up, sort of the overall...you know when you look at your mark and you look at the other person's mark, if they look substantially similar, I think there's going to be a greater chance of having trademark infringement than on the copyright side. But the copyright would exist without registration and your trademark would have to be registered unless it's a section 9 trademark. There isn't a lot of scope in either case, I don't believe, in terms of extending beyond the exact shape of your symbol.

Questioner: I was worried more about us infringing, if we chose something then took that to become a symbol...

Wayne: And would be registered as a section 9?

Questioner: Yes.

Wayne: No, section 9 enables the Crown or public authorities to use that same mark for their purposes unless, as I say, it's a very famous mark where you're going to get into trouble from, perhaps, a criminal standpoint, or a moral standpoint, rather than based on the actual trademark, being sued under the Trademarks Act.

Questioner: I have one question with regard to secret patents. If, for some reason, the RCMP was issued a secret patent, then we detected a latent infringement of this patent, what would the process be to enforce our rights to that patent?

Wayne: O.K. Well, a secret patent would not issue. As I said earlier, the application would be filed and proceed through the mill, just like a regular application would up to allowance. Then it would sit in limbo in allowed state, which wouldn't be a patent. So, in terms of ... it wouldn't be published, in other words. Yet it's sitting there and if you're dealing with a company that has the appropriate security clearance and so on, they could use the patent in the manufacture of product, or whatever and I suppose the products could be sold offshore. For example, DND has got what's called XC4 gas mask, it's a state of the art gas mask, perhaps the best one in the world and one of the patents that's associated with that is the rubber composition. When we filed the patent application, first, in fact there were two applications filed on the rubber formulations and these were classified and so the applications proceeded and a few years later, it was decided there was no longer any need to have the subject matter classified, so the veil of secrecy was lifted and the patent office informed and now patents have issued on those two rubber formulation. So, things can change. . But in the meantime, Canadian arsenals was making and selling those masks, well selling them to the Canadian

Forces, at least, and putting them into the Gulf War, for example. They used our masks over there and they had something like 60-70 masks on the Canadian soldiers and only about 6 of them came back. So you can imagine... this is supposed to be an experimental mask...anyway. A lot of them disappeared. But to answer your question, there really isn't any such thing as a secret patent because the patent will not actually issue. But you quite often hear that term secret patent, as we put it up on the slide and wanted to address it.

Anything else?

Questioner: In software development, we've heard of people that have developed software, they haven't protected it at all, somebody else gets a copy of it. Then, they develop the system and patent it. Then the first party then, either has to licence from them or loose rights to the software. What can you do as a minimum level of protection, if you don't want to go for the whole patent option?

Wayne: Well, publish it.

Questioner: That's the best form?

Wayne: Yes, and put your copyright...as soon as you publish it, copyright exists and you identify it with the manner I've indicated, with the c in the circle, the full name of the organization and the year. Then no one is going to be in the position to patent the software. However, as I said in terms of getting a patent on software, it's going to have to be in the form of a series of steps in a method and you're software.. I guess in user manual form and so on, is likely going to describe these method steps, and that should be citable against the third party patent application.

Questioner: Thank you.

**Speaker #3: Ron Brunet (National Research Council - Intellectual Property Services Office)**

This is a different topic.

My name is Ron Brunet. I'm with the Intellectual Property Services Office, as is Wayne. We basically provide a service to various number of departments within the Federal government, agencies and institutions. (Excuse me.) Basically our mandate: To assist NRC and selected other government organizations in the management of intellectual property. What does that mean? Well, we get into a number of issues when assisting our clients, we view them as clients. We never take over ownership of intellectual property, that always resides with our client. Basically, we provide expert advice, assistance and specialized IP management services. Obviously, Wayne spoke of the protection aspect of the Intellectual Property and I'll go into some of the other aspects. The intent, however, is to maximize the benefit from protection management and marketing, commercialization of the intellectual property. We basically enhance this IP management by officially delivering services to our clients on a cost recoverable basis. But it basically keeps us honest in assisting you in managing your intellectual property.

Now then, how do we assist you in regards to..(next slide please)...How do we assist you in managing it?

Well, basically, we take a team effort in our shop in assisting our clients. We have various professionals in different areas, obviously some patent agents on our end, licensing experts such as myself, who get involved in licensing, negotiating and the initial advising our clients in terms of what to look for in their intellectual property, how to proceed. By establishing a group of experts in our group who are able to achieve a critical mass and therefore, reduce the individual cost to our client's department. Several years ago, the central structure within the federal government was dismantled and each department was held responsible for managing its own intellectual property. The intent is, rather than have each department set up an IP office, where they may or may not need them or need them occasionally, our intent is to basically assist you in a cost effective manner while not having to incur a large office cost. And yet, providing all the assistance you require. Our intent is to encourage, educate the dissemination and the exploitation of intellectual property using a synergistic approach, a common word we see everywhere. However all that means is that by working with you, by using your understanding, your knowledge and ours we can maximize the benefit of this intellectual property.

When we talk intellectual property management, and I'll get to into licensing and so on, let's not forget that often we may be talking about, as well, collaborative research agreements and so, therefore, there's a number of types of agreements that can be put into place and I'll touch upon that later on.

The services we offer (**Intellectual Property Services**):

★ Basically, the protection, again that we've discussed this morning, in terms of intellectual property protection, patents, copyright, advising in terms of trade secret, trademarks registration, and so on. Commercialization, a very global term which involves both marketing, finding and securing a licensee out there; and taking the best advantage of your intellectual property which there may be different strategies, and again I'll get into that later on when we talk about licensing but the best approach may not be a license, it could be a collaborative agreement, it could be a with one partner, with multiple partners in terms of the private sector, so direct involvement with the end user/client. And again we explore all those avenues with our client and outline the advantages and disadvantages of each approach.

★ The administration:

We assist our clients in terms of administering, and again, I'll get into those details later on, basically the paperwork, the filing and so on. We have a unique database on our end to manage intellectual property so that you don't have to worry about deadlines, revenues, awards and so on, we can assist our clients in reporting all those factors.

★ Licensing, certainly; I'll discuss that issue later on.

Tailored IP portfolio management. Again, each client is unique. Each person we work with has certain requirements given the organizational structure and mandate and we adapt to that structure, mandate to provide the best service given their requirements.

Finally, we'll provide whatever, any kind of assistance related to IP matters and we're perfectly capable of handling those in terms of any aspect of the IP avenues and protection.

## Commercialization & Marketing

I guess the first thing I want to cover off is commercialization, marketing. There are different components when we talk about commercialization and a famous buzz word that we see in government institutions today which can refer to everything from privatizing certain sections of the government to licensing some intellectual property. However, the intent is basically a relationship between the public sector and the private sector. And how we define that relationship is open ended in terms of the approach that we can take.

In terms of managing your intellectual property, our first recommendation, and obviously discussed earlier, we have the invention disclosure that is provided. So we now have something to work with. We understand that there is a piece of software, some training material, new bomb suit, whatever the case may be. And how we proceed with taking advantage of that new technology. Well, beyond the disclosure, we work in at that point in time to look at two aspects. One, the protection and also the commercialization. Basically, we sit down with our client and say, alright what's the best way to promote, to take advantage of this intellectual property, this technology. Now that situation and those arrangements that we make with our clients vary and we try to keep them as flexible as possible. However, the initial step is to do a kind of market assessment, perhaps not a detailed one, that could be fairly expensive, but an initial market assessment and provide our opinions and suggestions as to approaches. We try to put a value to the intellectual property and its commercial potential. Now that can be achieved in many ways and we try to task different mechanisms. We obviously have a number of contacts, both from a technical and a commercial perspective in terms of our relationship with various government departments and industry. And basically using that network potential, we're able to assess a certain value to the intellectual property. Certainly we don't pretend to be the only experts in every field, that's just not possible, however, by relying upon various experts, yourselves, understanding market factors, we are able to at least get a sense of the market potential of a particular product. And at that point, proceed accordingly.

Some of the things we look at obviously are:

the applications--where will it be applied, market size, market segments, secondary markets, and I won't get into all the marketing terms, but to say that we can go into the various issues with you to determine what is most appropriate.

We will then try to tailor a business opportunity prospectus. Basically what we try to do initially is to put together a one pager that describes your technology. The components are basically, a section that describes the technology, secondly, describes the advantages that technology represents to the market, and finally, if



appropriate, perhaps discusses the application of the technology and the contact point finally. The contact point usually being the person responsible for that project per se. The intent there is to have a short, simple and directly to the point, so that somebody when they receive it, will read it rather than see a 5-10 page technical description that, unfortunately, we don't always have time to review. In addition, we also assist our clients in putting these together. We ask for your assistance obviously on the technical side but we'll assist you in putting together to properly describe the key benefits to the potential users out there. The intent, obviously of this one pager, is to try and secure an industry partner. A business partner that can take this and put it into the market.

Now then, why are we looking for an industry partner?

Well, that industry partner can offer several advantages in terms of perhaps, supporting the technology in the future. In the case of software, you may have a piece that needs to be tailored to specific requirements in each situation. Obviously we're not in a position to provide the support in each case and therefore, we would like to find an industry partner that can proceed with it. This one pager now allows us to get the information out there in a very quick format. Obviously, it can be distributed electronically. We attend certain conferences in the year. We also produce these sheets and provide copies to the inventors and other parties based on the research that we feel are the most appropriate to receive this information, in trying to secure an industry partner or the appropriate partner, depending on the situation. As I indicated earlier, a final point here, we're looking to collaboration, a venture interest assistance, it depends on the status of the technology. It could be at different levels of development and may need further development, in which case, a collaborative agreement is most appropriate.

(Next slide, please.)

Obviously our intent is not to just take the technology from the inventor, go and leave them in the dust. No, we work with the inventors, the scientists, the engineers. And they're key in promoting and marketing the intellectual property. Now our intent is not to make salespeople of all the scientists, no, that's not the intent. However we are looking to work with our inventors, our scientists to take and say, O.K., you understand the applications, who are perhaps, the most appropriate people out there, who are happy to perhaps, approach them, take that approach. Obviously when the scientists are tending conferences they do come across companies and so on, and if they have these sheets, certainly, they can distribute those. We're happy to follow up with communications with the individual industry partners. However, the intent is to work with our scientists and so on, to make it as simple and easy for them to take advantage of it.

## Licensing

The license is perhaps the most common form, in terms of setting up a relationship between the government institution and the private sector partner, not the only one, mind you but it is perhaps the most common one we see when dealing with intellectual property.

How do we manage that? First step is to develop a licensing strategy. Basically we sit down with our clients, the representatives in the department or institution and the inventors, and determine what is the best type of relationship. When I talk about best type, we could be referring to what types of rights will we be granting to the people or the industry partners. Will it be a non-exclusive, some kind exclusivity for certain geographical applications, for certain geographical territories, excuse me, or specific applications of the technology itself? What kind of fees, rates, whatever, that we're looking for in our relationship? Will we, will we not provide technical assistance, support? These are various issues. I won't get into all the aspects of licensing but there are many different aspects we have to consider before discussing with the licensee.

To clearly understand what your objectives are in getting the information and the technology out there and we explore those different avenues with our clients before discussing them with the licensee. We may have many licensees interested in the technology and therefore it may be necessary to select the appropriate licensee. And how do we proceed with that. Well basically it's which one can take advantage and move the technology into the avenue arenas that we wish. It's not always a monetary consideration, although that's an important one, there may be other issues that come to play. If there's a partner, who could perhaps advance the technology, develop the technology and is better suited to move the technology from that perspective, that may be the right partner. That doesn't preclude from working with several partners either. So there are various issues to discuss and look at from that regards.

Develop strategic plan. Begin negotiations. Obviously our specialty is to go in there and negotiate the best deal on your behalf, however, we'll approach it as you wish. Maybe you're more comfortable negotiating or you wish somebody there to negotiate on your behalf. We're happy to handle that however you wish, in that regards.

Finally, once we succeed in putting together a business arrangement, we can draft the agreement for you, where appropriate have it approved, or reviewed, I should say, by legal counsel, and then forward it on to you for your reviews and comments and have it reviewed by your counsel if necessary.

All this to say that we have a clear understanding of what relationship we want and we have it in paper, we can then forward it on to the licensee and conclude negotiations with them.

Now I use the term partner, please remember that it has to be a win-win relationship with the private sector partner. We cannot go in there with the intent that we're going to try and extract and get everything possible from that partner. That is not appropriate nor is it beneficial to either party. If one party feels that they're not getting out of it what they feel is required or is appropriate in the relationship, they will not work towards achieving a successful relationship. Therefore, both parties have to feel that they're winning from this relationship. One way the public sector, aside from the monetary aspects which we look at, is perhaps in terms of improvements. So if you strike a relationship with a private sector partner and say, yes we're willing to agree to these terms however we want access to the improvements that are made to the technology. That may be very beneficial to your organization and therefore may be one important consideration.

Moving on here, capital requirement. Obviously, if it requires future development, we have to understand what the company is willing to invest to further the technology to bring it to market.

What skills do they have, technical knowledge do they have to put it in the market? Yes it's nice to just grab a piece of software even, but you have to provide support to it. That licensee, that private sector partner has to be in a position to be able to provide that support. I don't think there is, or very few, public sector institutions or personnel that are in a position to be able to answer calls every day and say, O.K., no this is how you boot it up, here's how you respond to that problem. No we have many other duties and activities in our day to day activities that we cannot take on that kind of additional task. And so we have to assure that our partner has those skills and can respond to it.

## **Competitive factors**

Again, that's always a consideration. We perhaps rely a bit more here on the partner that we're dealing with to clearly understand what the competitive factors are in their markets.

Now there are other considerations; legal, taxation, trade requirements, obviously. We're talking international, global world today and we have to understand the international rules of the game. Again, we can assist on that front when negotiating these deals.

I'll briefly cover this, I think we've discussed some of these points already. Again, it's important to secure the right partner. Why? Because time could be seriously lost if you select the wrong partner and it takes you a year or two to find out, no this is not the person who can properly take advantage or market this technology. You may not have just lost your competitive edge but lost the market completely as other technologies have advanced forward. So we have to make sure we have the right group and the right people who can move this forward with the appropriate financial background and r & d capacity. What they're looking for? Again, as I indicated, it's important that they succeed. They're looking for some technology with market potential. Earlier on we discussed, yes the technology may have many, several advantages from a technical, new scientific breakthrough, but if it doesn't have any market potential then it won't be of interest to that private sector partner. Obviously they're looking at the return on investment at the end of the day.

## **Reduce investment risk**

Obviously what we're bringing to the table is certain tasks, research and development that has been completed, be it software or training material, it's been completed; they don't have to invest in developing it and often, testing it. That testing may have already been done to some extent. Therefore, they're able to take this and put it into market reasonably quick. There may be some product development or refinement however, they can move fairly quickly in bringing the technology to market.

## **Acquisition of protected technology**

One of the difficulties in the misunderstanding of patent protection, copyright and so on, is that often people sense that if it's patentable, fine, we can perhaps license it, if it isn't, we can't. That is incorrect. When working with the licensee or a prospective partner, realize that what they're buying is a package not just a technology. But the potential markets, the know how that goes behind it, the *raison d'etre* that goes behind the technology, why was it developed and its applications. It may or may not be patented, you may want to keep it trade secret, and that's sometimes appropriate. Patents offer certain levels of protection from a legal perspective, however, it's very expensive, it's limited to certain territories and can be circumvented in certain ways and in certain cases; and therefore, you cannot rely solely on the fact that you have a patent to carry you through. What's most important is that the technology have some market potential, that will carry you the furthest in all of the tech transfer.

So we have to understand, O.K., we have some form of protection, patents if that's appropriate, if not, copyright, yes perhaps from the legal perspective, it's a bit more limited in its protection but is still a valid form of protection that prevents people from unauthorized copying.

And yes, people perhaps can find ways around it but you have to look out from a business perspective. Is it appropriate to spend the time and effort in research and development to rewrite some software code or redraft some training material, to redevelop something that you could quickly license and you know works already, perhaps not, in most cases not. And therefore, rather than take up a year or half a year or two years, depending on the circumstances, the companies are willing to pay a reasonable fee and in that case, both parties win.

Finally, when we talk about trade secrets, know how. Very rare that a company will just license or work on a collaborative agreement just with the ... say O.K., transfer your technology and I don't want to hear from you. No, that's not the case. They want access to the brain power behind that technology. They need access to it because, for the most cases, the technology will advance, will develop over time and they want access to those people who can bring to bear the philosophy behind the development, the thinking behind how this was conceived, why it was conceived in such a way, and how we can further develop. That's very important to companies, that's not to say they're interested in taking you on full time for the next year but they will want access to that it and that part of it is very important; the know how is very important. The best way to explain that, I guess, is when you publish something, sure you may publish results or research procedures, but you don't give all the little tricks of the trade, obviously, you don't have the space nor the time. As many of you realize, in writing code, sure somebody could duplicate it, but it may

take them three, four, five, six months, even more to figure out all those aspects to do it efficiently and properly, and by then, you've moved further beyond that. Therefore, those are very important considerations in dealing with clients and partners out there.

In regards to trademarks or official marks, as discussed earlier, these again can be very important in getting across the goodwill. Obviously, the RCMP has a certain reputation and has obviously capitalized on that in the appropriate usage of that lettering. Similarly, when we apply a certain term to a software you may not see that having a great value today but in the future, if the software becomes the accepted norm, one way of distinguishing your software from some competing software *is* through the use of a trademark. Automatically, you say, O.K., that's the real thing, the Coca Cola example that was used earlier, for example, but they quickly identify that, it's not just that type of soda but it's that brand and we can expect that quality level that goes along with it. Now, we use this in terms of the fast food chains, but I guess if we look at the word processors, for example, and we take the term the Word or the WordPerfect software. Yes, there are other word processing packages out there but just the fact that we've attached the name of Microsoft and Corel with WordPerfect, or whoever it might be, automatically assigns a value to it so that there may be software pieces that are able to do the same functions in many of the same ways but because the name and reputation are there, they carry a lot of weight and we have to look at that aspect as well. We' have to look at a complete package when dealing with our clients, then.

I'm not really going to get into too much here on the pricing factors except to say that, when discussing a relationship, it is perhaps the most sensitive one with our clients and with our private sector partners. It's not always a question of percentage, royalties or a flat fee per copy of software or be training manual, or whatever that may be. But there are other considerations that we can try to secure. Perhaps, the company is willing to consider some in kind contribution in exchange for some cross licensing, so you may have access to some of their software. That may be most appropriate in your situation. As I indicated earlier, perhaps you can get access to the future improvements. Yes, it may belong to them but we can have access, basically grant back rights to the intellectual property that they develop. We have the right to use that intellectual property for our internal purposes. And there are other avenues and strategies that can be used in determining an appropriate structure. When going in, I always keep a very open and flexible approach. It's the best way to approach the private sector. We never want to say, this is how it's done, no, we say, here's the types of approaches we take, there are obviously rules and regulations that apply that many of them we despise but we have to work within, and some of them are there for good valid reasons. Understanding the reasons why they're there, how you work with them, and where they apply, which way they apply can allow the person within the government institution to set up the

proper agreement without any legal concerns and yet, still have a win-win relationship with the client. ( I guess we'll move on from there.)

Now I've discussed some of the licensing issues and there are many others. However, once we've structured an agreement with our clients and we're able to say, O.K., here's the relationship, we have to allow the private sector partner to go off and do their thing, to succeed in the market. At that point in time, there is some on-going management. Now if you only have a few files in house or one or two files to look after along with your other activities, it's not appropriate to me to set up a system to manage it. And so, we basically provide assistance to our clients in managing their intellectual property files for both the protection and licensing or the agreement perspective. We have developed a database that manages the intellectual property for both NRC and our various other clients, Health Canada, Transport Canada, HRDC, Forestry Canada, anyway I can go on for a while here but the point being that we basically set this up with basically alarm dates, reporting formats that allow our clients to say, O.K. I need a report on what's going on in this file. We can quickly get that information for you. It's in a controlled fashion so that when payment due dates, maintenance fees are due, we can respond to those so that you don't miss those particular dates. Similarly, we can, on an annual basis or semi-annual depending on what the arrangements are, monitor the licensee obligations and make sure they are submitting whatever amounts of funds are due, sales reports, and whatever else is due from them, upgrades and so on.

We should also talk, I guess, a bit about the awards inventors and I know that Wayne touched upon it earlier. The Treasury Board Policy has changed in respect to the Public Servants Inventions Act. Basically what it allows, it allows that the discretion, in your case the Commissioner of the RCMP, the legislation states that of the Minister, but obviously it's the delegated authority, typically finds itself around the Director, Director-General level in a government institution. It allows them the discretion to pay inventors an award on the order of 15%-35% of the license revenues, and it's at their discretion. Basically what we do is, we'll obviously make recommendations to our clients as to what an appropriate award is, however, it's not our decision. The decision is always with the appropriate management personnel. It's been my experience that they've been very good and generous in the approach that they take to it so that, yes the inventors succeed. What is perhaps not always realized is that licensing revenues form often only a small part of the benefit of the relationship with the private sector partner. It's rare that a license will generate millions of dollars of royalties, of money coming back to the host department. Unless you have something to sell to the mass market rather than specialized market, and sees a wide audience with a fairly large sum, you just won't achieve those levels. That's not to say there's no advantage and the best advantage, I've found, is that the relationship that you establish with this private sector partner. Often cases they'll set up contracts for the development with the host department to advance the technology, to work with them, to support them in some regards or

other. For example, you may have some software that includes a database and the database has to be continually updated for whatever reason, to keep the information current. And, in that case, it may be part of your normal duties to do that anyway, but you can have the company supplement the costs, cover some of those costs off. There's one advantage. And so suddenly you've seen one advantage to your shrinking budgets every year that establishing this relationship with a partner out there can help. So, it's not to say that awards are not important. They are, especially considering the salary freezes, although that's expected to change, however we'll have to see how that moves along. But awards are just one component to the benefits to the scientist, the engineer and the public servant involved in the situation.

I just want to highlight external resources. I guess I wanted to indicate that, yes we have a group of experts in house however, even we realize that it's not always possible to have experts in every field and to make it cost effective for everybody. Therefore what we do is rely on many external resources. The protection side is perhaps the easiest to demonstrate for you. We have some patent agents on staff but realistically they can't be experts in every technological field, that's just not possible; nor, given the volume of work, can manage every file that comes in. Realize that these agents are working both with NRC in terms of their files, as well as some of these other departments. They'll obviously take on the ones that are most appropriate and the ones they're most comfortable with, however they will rely on outside agents to secure or to proceed with some of the work. Now, then, in doing so, what have they done?

Well, one, they know who to go to. Obviously who aren't in the game, aren't in the field don't know necessarily know which agent you should be approaching. They understand which agent should be approached, how to go about approaching that one and which one is, perhaps, an expert in this field or that one, the best one to do the job. Also they understand what are appropriate rates, what are the appropriate fees for a particular service and so on, where in our cases we may not know the going rate for this particular service. So, if offers those kinds of advantages and we see that as a benefit to our clients, to say, yes we don't pretend to provide everything, where it's not appropriate. We have the people in house where it is appropriate, where it is cost effective but where it isn't, we can point you to the right groups and we keep in contact with these right groups.

Establishing industry contacts. Obviously the way we approach it is that we're continually communicating with industry on a number of files, not only yours but others in other departments and NRC. That allows us a wide base to approach. These various companies know where to go. And in NRC, we're perhaps a bit more fortunate in that we have access to the IRA program and the ITA's involved with that and therefore it allows us a large distribution network in terms of O.K., who's out there interested in this particular technologies or pursuing this opportunity,



Linkage with other government departments. The advantage there is that...myself, for example, will work with a number of departments and although, they may be involved in different disciplines, they do have some common problems, they have addressed them in certain ways and by working with the different departments we can see solutions that can be applied to your situation. For example, when we talk about a software database, obviously data itself is not the copyright part, we will copyright the actual software that goes and seeks and secures, so you may want to protect the data. That's been a very important consideration when you're looking at geomatics, the maps people for the government of Canada. So, obviously they set up certain types of agreements that allow them to control the flow of information of that data which is very important, which is their lifeline, and are very successful in setting up those types of relationships. So, we can take that kind of expertise and apply it, where appropriate, to other situations in the government. So, it's sort of a cross realization of these kinds of ideas that we're able to bring into other departments either through direct experience or through discussions with our colleagues in house through our team approach. We talk about centres of excellence, linkage to OGD's other government departments, network with universities. Personally, I've worked for the University of Ottawa, so I do have contacts there, as well as to other universities, given my work there. They're perhaps in an earlier stage of research but have similar problems in many ways and therefore working with them, allow us to take advantage of some of their solutions. Government committees more or less functional depending on which ones we're talking about, however can be useful in certain circumstances. And then there are various associations that we belong to that, again, allow us to take advantage of solutions.

I guess to summarize, my intent is not go through all this. This is just a bit too overwhelming. I'm going to leave it up there so you can see the different avenues that we're looking and the different considerations. We're looking at the protection of the intellectual property. Commercial, the assistance that we can provide in terms of licensing and so on. Both the management and administration of the intellectual property and the various advice and guidance be it Treasury Board policies, government acts or regulations, and conflict of interest, these kinds of issues that we can provide some general advice, more specific advice depending on the case so you understand. For example, again when we go back to the awards. The Treasury Board award policy basically indicated that each department or agency is required to publish their own awards and so we're working with the office here to develop and establish that award policy for the RCMP. So those are the kinds of assistance that we can provide and help for in terms of our clients in the overall management of their intellectual property. Now I've covered a lot of things in a very short period of time. I understand I haven't really gone into much detail here and so, I am happy to perhaps discuss certain specific issues in regard to some of these aspects at this point in time.

## Questions & Answers

I don't know if there are any questions or....

Questioner: I'm just wondering what about something that you would invent that is detrimental to the public as a whole but very useful either to a government agency or a specific government department such as software that would be able to decipher any encrypted data. You don't want it available to anybody but you've developed this, it exists and now you want to make it available to who and how would that work. Your work is very important and how would you get compensated for it because you can't really market it?

Ron: Well, from what you're telling me, we're talking something that could be useful to other government agencies, maybe just not in Canada but abroad as well, if it obviously has that kind of application from what you're telling me. So my initial reaction is well, why not approach those potential users. They may be interested in paying for or supporting the project in one way or another. The US is perhaps the easiest example because we're so close. O.K. so in that case, identifying the appropriate party in the US and approaching them or perhaps finding a company that deals at that level of security. There are companies that deal in this type of secure technologies that have the appropriate level of security classification. In either case, we would try to identify people who are interested because even though it may not have a general public application to it, it does have some application beyond your particular office. Now then there are certain award compensation rules internal to the government that we don't get directly involved in but do have some value to the inventors. The government and the agencies have...each department has its own individual awards program for the use of a certain technology that has been developed by one of its employees and we can certainly get into some of those details with you later on. I'm not always familiar with every department's set of rules but those do exist as well. So there is the government use of some particular invention that has a value as an award. But in terms of absolute dollars, let's say, the greatest one is obviously when bringing outside dollars as a percentage, if I'm talking strictly awards. I don't know, does that respond to your question?

Questioner: I guess so. I just...obviously it has to be kept internal, you can't just divulge it to anybody.

Ron: No and even if you identify, let's say a commercial partner, to go out there and beat the bushes to find somebody in the US and Europe. You can license them to go out there and find those people without giving them the information. You can

give them general information like you've given me without the actual detail or the software and it would be their responsibility to find somebody out there. Once that partner is identified is appropriate you could directly transfer that technology to that government agency in England, or something, whatever may be most appropriate in that situation. Therefore you control the security of that particular software, I guess in this case, or whatever the technology is. It doesn't get outside, into outside hands. Now if you're expecting the company to provide technical support and so on, then they may need access to that particular technology. It depends again on the relationship you want with the company. So, it's not impossible. It can be done. You just have to look at the circumstances such as yours and say, how do we approach it to resolve your concerns in regards to your objectives in negotiating an agreement with, via another government agency or via some private sector partner. And a private sector partner is not always appropriate. Sometimes it has be government to government. It depends on the situation. My inclination towards a private sector partner is usually because they can provide all these support aspects and marketing functions that you're maybe not in the best position to proceed with. I mean we don't have the time nor the budget to fly off here and there to find these people to pick up and take interest in these technologies. Whereas these companies may already be out there with other technologies and so adding an additional one is not that great a marginal cost for them and you get your message across.

Questioner: Ron, the law enforcement community is historically operated on a goodwill basis where assistance and in some cases technology is freely given from one agency to another, this seems to run counter to the current philosophy or some form of revenue exchange or cost recovery, if you will. Can you comment on what happens when technology is given away as opposed to some form of reimbursement?

Ron: It depends on the circumstances. Obviously we try to advise you and assist you. It is appropriate in some cases to maybe do some exchange with your partner out there. But please realize that when you give, let's say some software or training material or some procedures manual or some testing procedure. The danger in just giving it away is that, especially in the litigious society we find today, is certain liability issues. By giving it away you're indirectly taking out certain responsibilities even though that wasn't your intent. If you give it away without any conditions, they may use that software for certain purposes that it wasn't intended for or maybe hasn't been tested for, encounter certain problems and then come back to you for some form of compensation. It may not be appropriate, even though you gave it away but even so, given the nature of our society, I see more so in the US than in Canada, but even so, because of the liability issues you want to cover yourself in that respect. And I hate taking that negative approach too, but it is there and we have to accept it.

Secondly, giving it away is not always the best way to promote your technology. We have a tendency to say, it's free, it's not worth anything. You assign the value that you pay for it. And that's not always appropriate but unfortunately, that's often the way we view it. If I give you a ten page manual today or a training manual, wow you gave it to me and when I get to it, I'll look at it. Now if I charge you \$500.00 for it, well, you'll at least take the time to read the cover and look at it because you invested something, you've committed part of you to it. And secondly, I don't give it away to people, who at least don't have a certain level of interest so that you, at least, know they're going to take advantage of it. You find the partner, the industrial partner, maybe you won't get a lot back from the relationship, maybe 5% royalty or something, you're not expecting a lot back but at least you know that the people who are going to look at it have, in their own mind, assigned a certain value to it.

Finally, I think we've all experienced that you maybe give some software to someone for free. They get it, they can't get it to boot up, they can't get it started. Well, they call you up and .... what's wrong with this? Well, turn the machine on. I exaggerate obviously but these things do happen and you're automatically involved in the support to some extent. And yet, it's taking up some of your valuable time to support these particular functions. For somebody who may or may not be seriously interested in it and for which it is maybe not appropriate for you to take up your time. There may be circumstances where it is but for where it may not be quite appropriate. So by setting up the right kind of relationship with them and it doesn't always have to be on paper or it can be very quickly done on paper, I'm not really one to say it should be a 50-page license agreement, no that's not appropriate. With software maybe a shrink wrapped license, a one pager that we see in all the license agreements, it's the quickest way to go about it and we can attach that very quickly and get it out there quite quickly. So it has that kind of advantage to establish an appropriate relationship with your client. My intent here is not to try and encourage everybody to set up a deal every time and go through negotiations, no that's not it. My intent is to sit down with you, look at it from a very practical perspective. I understand the government rules and regulations. You understand your objectives, the mandate of your organization, what you're hoping to achieve. And then, maybe say, O.K. well this is perhaps the best way to go about it. As indicated earlier, it's not that every technology that comes out of a lab or a research group is going to make millions and that's not the intent, you did it for your own purposes, for your own needs, fine that's acceptable. However, please realize that in dealing with other groups, other organizations, doing nothing is not necessarily the right approach either. As long as you understand there are issues involved, then when you proceed at least your acting on a basis that is well founded rather than a basis of being naive of certain issues, rules and so on. And so we have to take those into consideration and that's why we're here. That's why myself and Glenn and so on, are here to assist you in those regards, not to try and block you but to assist you through the system and the understanding of the issues.

Questioner: Given your experience in government organization, do you have any advice on how to get revenue that has been generated by a patent or a license back into the particular group within the government that generated the invention in the first place?

Ron: Fair enough. Basically the best way we assist our clients in that regard is to work to change the government rules. There are various government rules in place and at present the Treasury Board states that the money generated from these agreements do go back to the host department or agency but through a mechanism that is complicated, at best. It does happen but it's a rather long road let's say, it can take time and is rather complicated. And the way we try to assist our clients is to work with them and Treasury Board to set up the financial arrangements and that can be done, it's not impossible. It can be done but it will take time. It won't happen overnight but it can be done so that the money will eventually come back. And so with our client departments, we will assist them, work with them to maybe set up a unique arrangement. Now, in addition, we do have people on staff who have many, many years of experience, been in the game for twenty -thirty years, are considered some of the experts in the field, who Treasury Board rely upon, actually, when you call them it comes back to our office often. But again, we will try and work with them to slowly implement change to the rules. It does not happen overnight, I'm not going to pretend that and the money is coming back to some of the departments, it is working its way through but it does take time. The intent is that the money comes back. Unfortunately in the transition from a purely public sector mode to one that works with the private sector in certain cases, the relationship and the financial structure hasn't kept pace and that will of course take a bit of time.

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