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And we'll be looking at this morning now some very specific details, on protection of intellectual property rights, so what we'll get into is looking at one of WIPO's key systems for protection of global IP, and that's the Patent Cooperation Treaty.

Now the PCT itself is a treaty that's been in place for many years, it was adopted in 1970 and then it became fully operational in 1978, and what it is is essentially the treaty is a simplified one, which allows an inventor to be able to protect his or her invention but internationally, so not just locally, and this means that in fact what the inventor is doing is using the treaty, in order to seek patent protection in many countries, and not having to go through a traditional patenting system, where an inventor would take a patent application and file, in fact in individual patent offices, because doing that for an inventor would mean that the inventor would actually be looking at filing multiple applications, in various offices and having to comply with those requirements, so many of you and I'm sure there are many of you working in the patent industry, know that each national patent office has its own requirements, well what the PCT does actually says you can take innovation, put it into practice but seek an international way of patenting it, by only allowing for one application to be filed, and that one application is filed with one office, and then it undergoes a set of one formality requirements. So really it's a simplified process, and in a few moments I'm going to show you by looking at the fundamentals of the PCT, how this actually works.

So a few general remarks to keep in mind, I don't know how many of you, we could have a show of hands, are using the PCT system now. Is anyone filing using the PCT? So there's quite a few of you, so what you'll be able to take away from today, is some of the new features, and some of the advantages in terms of continuing to use the system. For those of you that are new to it, I'd just like to highlight that under the treaty, what is protected is invention, so other forms of intellectual property protection, copyright, trademark and so on, we have several other forms in WIPO, international treaties that would protect this intellectual property right.

Now not only that but inventions can come in other forms, we might have patents of addition, utility models, the PCT is specifically designed in fact, as an international treaty what it does is it allows for what we call under the treaty, an automatic an all inclusive designation system, and this means that any type of protection that is related to an invention, for example utility model, utility models can also be protected automatically, so an inventor is not going to have to indicate in a PCT application, which designates those many countries, it does not have to specify what specific type of invention it is.

Second important point to take away is that the treaty is designed really to look at, simplifying the means in terms of cost and time, for applicants, inventor applicant as well as offices in filing and processing it, it's not about granting a patent. Under the PCT what we do is we design the regulations to allow applicants to benefit from a streamline procedure, but we leave the granting procedure to decide whether that invention will actually be given a patent grant, to every national office under the system.

So let's have a look at a traditional patenting route, and that will give us an idea of why so many applicants use the PCT today. Under a traditional patent system what we normally see is that an applicant would file a patent application at 12 months, right after filing the local patent application, and

this is based on what we call the Paris route, because it comes and stems actually from the Paris Convention for the Protection of Industrial Property. It's a treaty that dates back to 1883, and what we've done in WIPO to help keep things consistent in the patenting procedure, is we take the fundamental concept of claiming priority, of your first patent application, which is your core invention, if you want to claim that priority but own the rights to that invention in many countries, you normally then under the Paris route would have to file abroad, in the countries that you want to seek patent protection in within 12 months time, now under the PCT system we've taken that concept, but the key difference is that you only file once, so you don't have to file, if I want to protect my rights in New Zealand, but also China, also Australia, perhaps the United States, I don't have to file individually and comply with national patent requirements. I can go ahead and file automatically a PCT application, so what you see here is a very quick snapshot of the two systems at play, you have a traditional patent system, but then you have a system where you can seek internationally and have a global patent.

So what I'd like to do is actually go through the steps of how you would file under the PCT, because this is really at the core of how the system works, and then what we'll do is look at some of the recent developments in the PCT system, so what you can expect and how the system is evolving to allow you to be able to enhance your intellectual property protection in terms of patents.

So the first step, and again this comes directly from the Paris Convention, normally as an inventor what I would do, so here locally this is our case scenario, I would file a patent application, my patent application here with the receiving office in the PCT, this is the terminology we use, it's the office that receives the PCT application, with IPONZ and that would typically be my national application. There are some cases and in terms of statistics we see that this is not normally the case, inventors decide they want to file PCT immediately, so their first filing, that local filing is a PCT application, and what an inventor can do then is still claim the priority of that international application, and claim that within 12 months, but the common scenario and this is what we often see, is that inventors will go ahead and they will file a PCT application in 12 months time, let's see if I can show you this. 12 months time on the timeline, claiming priority, again claiming priority is this concept as an inventor where I don't lose any legal rights to that first application, that local application so it's still valid. You would file what we call a PCT application, now there are certain requirements in order to receive a filing date for your PCT application, in order to make sure that that has a legal validity, and basically what that is, is a) in the application if I have more than one inventor applicant, and that's usually the case as you know with economic cooperation we often have co-applicants, we are working with many and some who are abroad as well. I might have an applicant from New Zealand, a national or resident from New Zealand, I might also be working with a co-applicant that is a Chinese national or resident, well I just have to make sure in that case that at least one of the inventors is a national or a resident of a PCT contracting state, it's quite easy to do today because we have 152 member states, so you have a very broad range and you can really collaborate and have a good system going with other inventors in order to protect.

So that's the first condition, make sure that at least one of the applicants is a national or a resident of one of our contracting states, and the second is a language requirement, so when I file with a receiving office I want to make sure that I file in a language that it accepts, if I'm going to file with IPONZ I'm going to have to file in English, what if I have a co-applicant that is Chinese or Japanese, I have the luxury under the PCT system, this is how it's designed, this broadens the perspective of where I can file. I could actually file with the Chinese patent office if I'd like to, I can also file directly with the Japan

patent office, with a JPO. Because of the fact that my applicant therefore has nationality and residency there as well, so that's a strategic decision that the applicant takes. Where do I want to file.

So therefore I've now filed my PCT application, and again typically it's filed with a local office. The next step in the procedure, and this is a very crucial one because this is in fact the key difference between using PCT and filing under a traditional patent system. When you use the PCT system, you receive an international search, a thorough search by a qualified patent examiner, and this is called the international search report, at the same time the examiner will issue a written opinion. So what is the international search report, those of you working in the patent industry will know, and of course we have a few patent examiners from IPONZ which is great, you will know that this is of course a determination of patentability, so first determination what is the probability of having a grant on my invention, and under a traditional patent system and you seen a few moments ago, there was no possibility to gain that information within 12 months, sure as an inventor I can go and use the services available to me, and I can carry out my own search to see what is out there, and to see whether it's normal, but I don't have a finding by an established authority. You'll ask yourself who are these authorities, and how do they actually have the competence to carry this out.

Well as you see here we have 22 international searching and preliminary examining authorities under the PCT. These authorities are appointed officially by the international bureau of WIPO, and this is carried out as part of our collaboration with our member states, we work with key offices that have been working on quality control, and can issue reports establishing findings on patentability. In New Zealand IPONZ has appointed actually four offices, so you'll note that the Intellectual Property Office of Australia is one of the competent ISIPAs, as well as the Korean Intellectual Property Office, the European Patent Organisation and the Korean Intellectual Property Office, so you have quite a broad range and again the reason for this, and this is something that IPONZ has done to benefit applicants in fact, is what if you have many applicants on your PCT file, and you want to have the option to also file with the Korean Intellectual Property Office to carry out your search, you have that choice in your application. The PCT actually stipulates this in the regulations, the applicant can say well there's more than one competent authority in place that IPONZ allows for, so I have the choice ad hoc to go ahead and choose one of the four. So in this case this is exactly how the international search report will be furnished, one of the key authorities here will be able to provide that to you.

Now what are you going to receive, I'm unable to share an entire search report with you, but this is the basis for the search report. As you see this is a full citation of the documents on file, the claims and the description and what an examiner will do in this case, is it will furnish to you findings on novelty and inventive stuff, two of the three criteria patentability that the invention must be new, but in terms of inventive step it should contain non obviousness, it should not be obvious, the invention at hand in that technical field, should not be obvious to a person skilled in the art, and what will happen at this stage under the PCT system is the examiner is already furnishing his or her preliminary findings on that. You'll also see in our search report a citation in the margins, in terms of what claims relate to these findings, so it's very easy for you as an applicant, soon as you get your search report, to decide what you'd like to do. Maybe you want to make some amendments to your application, this is a particularly good stage to do that. Try to overcome objections in a search report early on in the PCT system.

Now after I receive my search report as an applicant, by the way you will have the search report furnished to all the designated offices at the end of this timeline, I'm going to speak a lot about entry

into the national base, so you don't need to worry as applicant, I often have this question, I used to work for the Canadian Intellectual Property Office, and I would advise a lot of patent applicants on using the PCT system and they would say but, how will all the offices be informed about the search results, well that's automatically communicated, so this is really a core function of WIPOs work in facilitating this type of intellectual property protection. We will take the search reports, we will communicate them automatically to all of the offices that are designated in that application.

The next step again this is a sole task of the international bureau of WIPO, just as we communicate the documents to all offices, we have to publish the international application as its filed. Why do we do this, not only to disclose the invention at hand, because the confidentiality period has expired at this point, we need to share this invention as prior art as disclosure, but again we also want to disseminate technical information for the benefit of stakeholders, so they can also carry out a search and see what prior already exists, what is relevant to their invention before they consider whether they want to file. So at 18 months this is a very prompt time limit by the way, there is no option to postpone publication. So strategically if you're an inventor, if you're a patent attorney your client is a little bit nervous about disclosing his invention, there is one trick like I'll share that with you, I shouldn't be sharing it with you, you could postpone the publication, in fact you can simply if you have more than one priority claim, so let's go back to local filings.

If I had two earlier priority applications, I could withdraw the earliest priority, because under the PCT all time limits are always calculated from the local filing. So that would shift the timeline down, everything would be recalculated from my second priority and that would shift the publication date down, but at no point in time can you actually request the international bureau to postpone it. What is possible and I think this is very useful for those of you within the patent industry, sometimes you're anticipating a third party infringement, or you feel there may be another invention circulating that could destroy some concept of novelty or inventive stuff. You can ask us to publish early, because the earlier we publish the better for you, it's disclosed, it's now officially prior art. So this is something we will do, and that's a request that you send the international bureau directly.

By the way we will also make available at international publication, the international search report, we will publish it in the language of filing, so if it was filed in Chinese, very possible I mentioned some scenarios earlier, we will publish the application in the language of filing, but another task of the bureau as you can see we're quite busy with this system, we will also translate that document and we'll make sure that the international search report is also published in English. So this is again for ease of reference and searching in our system, which is called PATENTSCOPE and I'm about to show you that now.

Where do you find this published application, where do you find the search report. You can go to our gateway called PATENTSCOPE, it will be introduced to you in fact by my colleague Mr Takagi later this morning. PATENTSCOPE is a database where you find basically millions of patent information, patent documentation but we have over a collection of 56 million patent documents. And today we have over 3 million PCT applications that have been filed. So every Thursday is publication day, and every Thursday we will go live with the published applications of that week, and this is to give you an indication on our website how this will look to you, you can see in fact it's a very convenient way to search. So if I don't know the application number, I may not have it handy, I might just have the last name of the inventor and that's sufficient, I can access my application.

This is a cover page of what you will find when you file a PCT application, and once it's published at 18 months. We basically extract all the relevant data from the application, if the applicant, many of you will know again those that are filing patent applications, sometimes the inventor does not submit drawings, because maybe it's not necessary for understanding of the invention. If he does we ask the inventor to indicate which one best illustrates the invention, and that's what's published on our cover page, as well as all the relevant data. Title of the invention, abstract, who are the inventors, who are the inventor applicants. I also just want to highlight for you when you do access this, it's fully electronic of course, it is found in PATENTSCOPE, you can also very easily download your application in a PDF format, so you don't need to worry about logging into the system each time. This is a system where you can automatically collect your documents that you need for your work.

So the next step in the system I'm not going to spend too much time on it this morning, because it's an optional step, and this is called international preliminary examination. It's not commonly used anymore, and the reason being because most of the applicants using the system can really rely on the findings of the international search report, we call this the international preliminary report on patentability, and the short form of that is the IPRP, and that's because that already has a documentation of findings, so there really isn't any need in most cases. So why would someone actually opt for this procedure, essentially it's in place to overcome objections to the rest of the application, because under the international search phase, the only possibility I have is to amend my claims. If I'm not happy with an examiners findings, relating to the claims in my invention, I can do that following the issuance of the search report, and as you see here that's at 16 months time from the filing. I cannot amend my description, I cannot furnish any drawings at this stage either, so this is again a decision to be taken case by case, in your daily work if you're going to file PCT, don't file it for examination unless you really need to amend your application. The only other reason I would advise you to do it, and again this is why the PCT is designed this way, is to have a dialogue with the examiner because in fact there's no option to have that discussion under the international search phase, ok the European patent organisation by the way this is a very new development, has something called the PCT direct, some of you may have heard of it, it's been in place for a couple of years now, 3 years, and it was a pilot project and basically the EPO said well there's so many inventors that want to address these issues, and not go further with examination, so they have said you can file informal comments directly with us to try to overcome any of the arguments we have related to claims, but other than EPO only the Israel Patent Office allows this. Perhaps in the future in the evolution of the PCT system, this is some of the work that we're doing at the international bureau, other ISIPAs will allow this, but for now you would need to go for this optional procedure, in order to amend your application and try to overcome objections to all of the parts of your application.

So assuming that I don't go for the international preliminary examination, that's the common scenario we see, automatically the findings from my search report will be documented and furnished by the international bureau of WIPO, at 30 months time we will send it to the designated offices. Why because now the international phase under the PCT system is complete, we're now moving to the national phase, this is where you need to decide as an applicant where do I want patent protection, where do I want to seek patent grant. I'll just highlight to you there are some cases where you can enter the national phase after 30 months, not to be biased being Canadian but in Canada you have actually 42 months, and in New Zealand you have more time, so the New Zealanders and the Canadians we're very accommodating, we're very friendly, we have a good relationship, and we have a lot in common in

terms of our national patent law, we allow for in fact more favourable conditions, what we say is in Canada for example the national patent law says if you pay a small fee, it's a minimal fee compared to the fees that you invest to patent your invention, I think it's \$200 CAD, you actually receive an additional 12 months, so you have 42 months to decide if you want to have a patent grant, and in New Zealand you also have the option to ask for a specific extension of time.

So this is something very specific keep it in mind, there are places where, there are certain countries and I know that due to the economic cooperation of New Zealand with China, I would like to highlight this to you, some patent office's that use the PCT, have made what we call reservations of incompatibility, their national law is not compatible with certain requirements under the PCT, and so in China for example if you miss this time limit, you will not be able to reinstate your rights, reinstatement of rights is a legal remedy that's provided for in the PCT, and out of the 152 member states there's only 10 that don't provide for that. I mentioned New Zealand and Canada but that's because we have more favourable conditions for the applicant, you can have extra time. In China definitely they also have other mechanisms in place, but you need to be very careful about that, so my advice to you is, when you're approaching the 30 month timeframe, start early, give yourself you know a good 6 months to decide where you're going to enter national phase, and on our website, on the PCT website you will find a table published up to date, showing you exactly what the time limits are for every member state, so you never need to go looking for this information anywhere else, we update it for you as soon as it changes we make that available. In all other cases really all you need to worry about is making sure that at 30 months time you're ready to enter national phase, and like I say it could be later in some other states.

So I mentioned membership, we actually have had an update over the last week, we've had a new member state that exceeded, so we're now at 152 and not 151, and that's the state of Jordan that joined the PCT last week, so what does that mean membership for you when you file, well it means that when I file my PCT application, whether it's a first filing or I'm filing it within 12 months, automatically I have legal effect upon that filing date in up to 152 member states.

We've just had some recent releases in terms of the trends of filing in 2016, they usually are released at this time of year in March, so what we have seen in 2016 in the PCT in particular, is a 7% increase and you can see that in 2015 we went up by 1.7%, so we've had a huge increase in fact in one year now bringing us to 7%, and a lot of that goes to thanks to the economic activity in the Asia-Pacific region, because in fact in 2016 in particular in China, we see a very high increase overall, we have seen a 44% increase overall, now keep in mind in terms of talking about patenting in Asia, overall when we look at PCT filings in general, this slide shows you the top countries using the PCT that are filing, but the activity in filings we see that nearly 50% of the filings are actually originating from Asia, the exact figure is 47%, so there's a very high activity there for you, and noting again the strong cooperation that New Zealand has in particular with China, and of course as will come in the future with other states in that region, that's particularly important, you have high filing coming from the region, you can easily collaborate with co-applicants in the filing of your PCT applications.

So you see here I mentioned China as leading in that region with the growth, but also in Japan and Korea we have consistent increases, and what we do and you'll see this later this morning when you look at our global databases for intellectual property that we administer, we make sure that now because of this high growth in Asia, we have tools in place where all of our inventors can access PCT applications, but be able to translate the contents of the applications in Asian languages, so this is

being enhanced and we constantly have the latest tools available for you in that particular region, so you can actually make use of the documents.

So how about in New Zealand, we've seen a very consistent growth over the years. New Zealand exceeded to the PCT in 1992, but in fact we have strong growth because we see that it's steady up until 2015, in fact we had 262 PCT applications filed. Now this is based on economic activity where we look at the first named applicant in our PCT applications, this is how the economics division carries this out in WIPO, so if I had 5 applicants on my file, we will actually extract the data based on the first named applicant, and we had these filings based on applicants from New Zealand, filed with IPONZ.

Now I'd like to highlight towards the end of the presentation here, I'd like to highlight really what are the key benefits, why do businesses actually rely on the PCT so heavily, when they want to protect their patents internationally, so meaning in more than 5 countries let's say, because really statistically the PCT is used when businesses want to protect multinationally but they're looking at between 5-7 countries, that's really where one would see the economic benefit. So the reason that most businesses are using this system, is because it will help to save considerable cost and time, how do we know this, we can have a look actually at a comparison of the advantages. I had showed you a timeline earlier, and now what we can see towards the end of this morning, is that in fact in this presentation I wanted to show you a comparison so you could also see a comparison of advantages. Here I have a traditional patent system versus a PCT one, the reason being is that you can automatically see that all of the fees I would have to pay, to seek national patent protection, I'm not actually furnishing any of these fees until 30 months time, so I've gained as an inventor, I have gained 18 months of time, I did not have if I was filing under the Paris Route.

What can I do during that time, I can take the international search report that's been issued to me by one of the competent ISAs, have a look at that first finding of patentability, and make informed decisions about where I want to enter the national phase, and where I really think I have a good chance of having a patent grant, but at the same time this is the chance for businesses to look at the marketing potential of their intellectual property, so what's the commercial viability, do I need to license my invention, do I need to sell the rights. This is the time to do it, and at that point during the 18 months you then decide if you really need to enter national phase. Another key advantage here during this timeframe that you're actually saving a lot of time is, at 30 months there's actually no penalty if I don't enter the national phase. I just simply do nothing at that point. I decide not to go further with the case, I don't lose out at all, I haven't invested any more money in patenting at that point. So really there is a key economic advantage in using the PCT for that reason.

Now another key advantage is harmonisation of certain requirements, and this is very specifically in terms of relation to how the application is filed. I don't need to worry in the national phase about changing the format and the content, because the regulations basically stipulate that in the national phase, when national patent examination takes place, for patent grant, the offices have to abide by the fact that they should accept the application as it was filed in the international phase.

Now we also have a system in place for those of you that were looking at the timeline perhaps thinking to yourselves, what if I miss the time limit to file my PCT application, so I file at 13 months and not 12. Well in response to the stakeholders, WIPO carried out consultations and in 2007 we introduced something called the restoration of the right of priority, and this means that inventors have a chance to

prove, there are certain conditions, and it's a specific criteria that is used, why did it miss the time limit and if it can prove that in fact it could have done so it was just in spite of due care, unintentional, this is the key criteria, then this could be restored, so this is another benefit of using the system. Under a traditional system there would be no restoration of the right of priority, it would be subject to the national patent law in every country in which you want to seek for patent protection.

Just to highlight to you, I was talking a lot about the use and the high number of member states, so it's widely used but it's of course used by our businesses, and you can see the majority here statistically is business as opposed to individuals, but also an emerging area is the use by universities that are coming up with viable technologies in their work, and they're using the PCT to patent them, and so these are some of our key filers, now by the way at the moment because we now have the latest statistics as of today, ZT is no longer the third in terms of top applicants, it's now the first in terms of our PCT applicants in 2016, ZT has taken over and is in first place, and then we have Huawei Technologies and Qualcomm is actually the third one. Qualcomm is a US multinational that comes up with digital communication as technology, and interestingly it filed the two millionth PCT application, so it is really, this is also why it remains in terms of the top filers.

Now by the way we also had the three millionth, we reached a milestone this year, February 2nd we had the publication of our three millionth application. This is a list of the universities that use the system, in New Zealand many of you may be familiar with these top applicants, and we based this on the number of publications based on the applications that we received, and this is again the 2015 data. I did share all the 2016 statistics with you, but in terms of top applicants this is now something that will be released naturally within the next days.

Testimonial from one of our inventors in Japan that had won in 2014 a Nobel Prize for his LED technology, whose been using the PCT for quite some time.

And as well there are some systems in place, one is the patent prosecution highway, and this is a system whereby in fact as an inventor I have a great advantage, I can ask for an acceleration of the patent grant procedure in the national phase. I can do this only when there's a bilateral agreement in place between two offices, so let's take the case of IP Australia, IP Australia is part of the patent prosecution highway, if I have an application that the searching authority, because we know that IP Australia is one of the competent ISAs, that it carries out and it finds that at least one of the claims is patentable, it looks at novelty and inventive stuff, well the second office where I'm seeking patent grant, could actually accelerate the national patent examination procedure based on that, and so at the moment this patent prosecution highway has now been incorporated into a PCT patent prosecution highway, and about 50% of the work taking place under this, is really in a PCT environment, so many offices are actually able to grant more quickly because they rely on work products of a first office, and this is PCT work products meaning the international search reports, and optionally the examination reports.

I'd like to leave you with a few features, I unfortunately don't have a video for you so you've been stuck with me for over 30 minutes, but I would like to share with you some of the enhancements that we have in the PCT, many of you will know we work in a paperless environment as all offices do, at the international bureau we have a system in place called the EPCT, we'll be hearing about it as well this morning from IPONZ, and EPCT allows as an applicant to file fully electronically, it's an online system,

we have over 46 actual receiving offices, and of course in New Zealand this is one of our key offices using EPCT, accepting your applications electronically, there's no need to file using paper anymore. And in terms of updates, what we will have in place is we're keeping up and evolving with what the users need, most of the users have requested not always having to use digital certificates, to be able to file online, so we're going to have mechanisms in place where you can actually go in and use email addresses, use your mobile phone and start to receive a code, and that will give you an encrypted access, so we're keeping up with technology and keeping up with the demand in terms of how to use the system.

PATENTSCOPE what I'd like to highlight to you here other than publication, is the fact that not only can you access your published application, but you can also automatically have a look at what is happening in the national phase, is there a grant taking place in certain countries, in which countries has it entered national phase, and I can actually have access to the dossier in those offices, so this is a project that's ongoing, New Zealand provides this information to us, and we have actually I believe over 50 offices doing this, so it's a continuing project that we carry out at the bureau.

Just quickly I mentioned translation to everyone, there are specific tools in place, there's quite a few but one of the key ones related to PCT is called the WIPO Pearl, the WIPO Pearl is a multilingual terminology database, so what it does is it takes the patent documents, and it basically scans all of the key scientific and technical terms, that are related to a lot of technologies, medical fields, medicine, health, food, energy and we take these fields and we publish the translation of those scientific terms, so this would be very useful for you when you're carrying out searches on your invention, and you can find as you see here over 115,000 terms now, that PCT translators verify and we work with stakeholders to make sure we have accurate information.

Now the last two features before I wrap up relate to specifics that we have, in terms of making your invention available for licensing, so if you're looking for someone to license your invention to, what we do in PATENTSCOPE is we say you can send us a request at the international bureau of WIPO, saying that you're looking for someone to license to, we just have to make sure we get this within 30 months time, so we can publish it during the international phase, and you will find this automatically in PATENTSCOPE, you can see here where the tab is, so when you search for applications, you can also tick the box that's highlighted here and I can automatically in my search find out who's looking to license their invention.

The last feature relates to third party observations, I did hint about this earlier, sometimes we anticipate that others might have an invention similar to ours, we do allow third parties to submit what we call observations, related to only novelty or inventive stuff. If they have observations that they think would affect the validity of either of those criteria, then they can submit that, we will publish those observations in PATENTSCOPE, but we'll also communicate all those observations to the designated offices. Now for those of you that might find this frightening because somebody might submit observations on one of your applications, don't worry because applicants always have an option to revoke, to basically object to those observations, we will also publish any rebuttal to a third party observation. This is to show you where you would be able to submit directly on PATENTSCOPE website if you like, but you can also use the EPCT system.

So lastly to wrap up this morning keep in mind this was a very specific presentation on the PCT, but it can be very detailed, and you can find all the information in our training sessions online, on the PCT website, we've got also a YouTube channel, in particular we have webinars so don't worry about where to find the information, we're constantly providing you with further training. You can contact also the PCT info line that runs from 9am-6pm Geneva time, and if all else fails you can always contact me directly, I'll be very happy to hear from you, and to provide you some advice on using the PCT.

So I thank you for your attention this morning and I look forward to exchanging some views with you during the Q&A. Thank you.

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