



# CROSS COUNTRY SKI

High Performance Review

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## Introduction

Cross Country Canada (CCC) is in a state of renewal. A significant goal for the organization is to increase the number of medals won in future Olympic Games. Achievement of this goal will require significant change in the organization's overall high performance vision, strategy, structure and priorities. Hence the reason for this review and resulting report with recommendations.

During the research portion of the project, I was struck by how much congruence there was in identifying what's working, what isn't and what needs to happen to have more success. Everyone is similar in at least identifying where the key gaps are. There might be more variance in opinion on solutions but at least there will be agreement on what needs to be addressed. The challenge, as with any report or plan, is to implement. It is my hope that the Canadian cross country skiing community is able to come together and collectively raise the bar on delivering high-performance programs capable of getting every athlete to reach their full potential and with several able to win World and Olympics medals. I am very optimistic that this can be the case.

For CCC to have a successful high performance structure and system moving forward they need to understand that this is not a quick fix one year or even 4 year plan it is an 8-12year plan to put skiers on the podium. On one hand, there is a sense of urgency – you must start now to realize positive gains down the road and on the other CCC must be patient and give time to make the required changes.

### The Review Process

As outlined in the terms of reference the objectives for this review are as follows:

1. To provide a 3<sup>rd</sup> party independent examination of the current high performance structure, systems and programs to determine what is working, what isn't and what needs to be in place to ensure sustainable future success beyond 2022.
2. To make recommendations to CCC for building a high-performance structure that will ultimately need to be in place for future success to happen.

The audit included the following activities:

1. Review of critical documentation including but not exclusive to Strategic Plan 2018, Business Plan 2015-16, OTP documents, LTAD-CCC, English version of the Norwegian LTAD, Org charts, HP Leadership Roles,
2. Interviews (in-person and phone) with 30 individuals involved in various roles in the high-performance programs. This includes several former and current athletes.
3. Interviews with key international individuals from Norway and the USA. (Trond Nystad, Tor-Arne Hetland, Chris Grover)
4. 15 Survey Monkey long answer interviews.
5. Several visits to Canmore.

The information gathering and interviews took place from July 2016 – September 30, 2016

## **Brief History**

Cross Country skiing has been part of the Olympics since the inception of the Olympic Winter Games in 1924. The program currently has 12 events with 32 medal opportunities. Cross Country is the second largest sport in the Winter Games with 54 nations competing in Sochi 2014. Amongst these many nations, Norway, Sweden, Russia and Finland are clearly the top tier group. In recent years the USA has developed a very strong women's program.

Since being included on the Olympic program, Cross Country Canada (CCC) has won a total of 3 Olympic medals, all of them coming from women's sprint and pursuit events. Canadian men have also won 4 medals over the past three World championships.

## **Present**

Preparation of the 2018 team is well underway as the top athletes, coaches and support staff are striving to achieve the best possible results at the Olympic Winter Games. Beyond that, CCC has set a goal to win 1-2 medals at the 2022 Winter Olympic Games, from a pool of 3-5 athletes with medal potential.

Canada currently has 6204 participants in the Jackrabbit program, which by most accounts is a good critical mass for grassroots development (one individual felt the number needed to be doubled). However, as in many sports there is a massive drop-off of participants at Track Attack level with only 1274 moving up from Jackrabbits. The number of licensed athletes is 1061 (athletes on distance CPL) This would be considered relatively small compared to the top nations. Therefore, it is extremely important for Canada to be efficient and effective in maximizing the talent that does come through – there is no room for error.

## **Observations, Challenges and Issues**

All the information in this section is what has informed the recommendations that follow.

### **Information gathered from international experts**

I had the opportunity to interview several leading international cross country skiing experts over the course of the review. This included 3 external individuals and several internal, Canadian/International experts. Let's not forget that Canada does have several people that have experienced success at the highest level and they have excellent insights that we can all learn from as well.

The one thing that came across loud and clear from all was that there are no magic bullets. If there is a gap between Canadian athletes and the best in the world, it is because we aren't doing the right things at the right time. As one individual noted "Cross country skiing is actually not so complex. It's just hard to do. Keep it simple so people can understand. It needs to be shared and you need to see progression in the whole system." In fact, when each of the experts was explaining why things were working for them, most their comments were around building a great culture, being able to share knowledge and collaborate and make the experience fun. The motto, "If you're not having fun, then you're not serious", summarizes many of their comments.

Below I have outlined some of the comments and observations coming from the external international experts I interviewed. I think they are important for keeping in mind as CCC begins to make the necessary changes in their high-performance structure.

- i. Having a developmental pipeline is required to be successful. After sharing Canada's LTAD with one of the interviewees, his comment was, "If that's all you do, you should be good." Meaning that we do have an excellent document for developing athletes – and many of the people I interviewed thought it was very good – the challenge is implementing it. I have included in this report an English version of the Norwegian athlete development pipeline. It appears to be more thorough in what you need to do compared to the Canadian document. However, it was interesting to me how similar the two documents are. Again, reinforcing the idea that there aren't any real secrets to preparing athletes to be successful on the world stage – you just have to do it.
- ii. Dictating doesn't work. Don't leave things to just one person, everyone involved in the HP stream needs to have a "want to learn attitude" and an opportunity to positively contribute.
- iii. Develop strong coaching teams to keep the interest high, collaborate and challenge each other.
- iv. An observation about the Canadian system is that we miss getting knowledge from our athletes. We "do" things to the athletes and instead we need to teach them the ABC's and help them understand why they are doing, what they are doing. Over time this will lead to athletes being engaged in making excellent decisions about their training programs.
- v. The clear majority of countries are club and training camp based. Neither Norway, Sweden, Finland or the USA has full time centralization. Each athlete goes back to their clubs (a few work on their own) between training camps and after the competitive season.
- vi. Beginning around age 16 athletes can start to qualify for regional camps, then 18/19 Jr. National training camps, then U23 and NT training camps. There are opportunities where each level gets to integrate with the level above it, so there are always role models.
- vii. Athletes are educated and empowered, so from a young age they learn "why" they are doing "what" they are doing so as they progress they are more empowered to contribute to their training and make good decisions. Knowledge = Confidence = Empowered Athletes.
- viii. Important to on the one hand have individualized training plans and on the other be part of a strong training group.
- ix. Norway has what they call a "Coaches Club" – every year they have a 2-3 day conference where all the coaches get together, exchange knowledge and share best practices.
- x. One of the best practices that Norway has is the interactions and debriefing opportunities that their NT staff has. When they are on the road, the coaches meet daily to debrief. Beyond that they meet 5/times a year to discuss athletes and programs and share information. In April of every year they meet and set the plan for the next year and have a thorough debrief of the previous season. The athletes are a big part of the process, each year they complete three surveys – one pre-season, one post season and one on-line anonymous survey.

There are several commonalities and parallels between Canada and the USA. They have many of the same struggles such as geography challenges, access to European races, and funding shortfalls. Below I have outlined the findings I feel are most useful. While a made in Canada plan is important and will have

culturally specific nuances, the similarities to the USA are many and in my view, “if they can do it, we can do it.”

- i. What is the reason for the US Women’s current success?
  - a. Fortunate to have a talented group coming through the pipeline at the same time. (Was mentioned that this is Canada on the Men’s side right now)
  - b. Kikkan is a natural leader, with a strong work ethic and desire to win. She role modelled to the others how to be and wasn’t afraid or intimidated with the younger athletes but used them to push everyone forward. This then resulted in relay success and now has transcended into individual success as well.
  - c. They created a “staff” around these athletes – coaches, IST etc. but were very careful to make sure it was the right people and now they have a team atmosphere where it is fun/positive and at the same time very focused on what they need to do to keep getting better.
  - d. There is clarity of vision and transparency. Then younger athletes become indoctrinated into the culture and behavioral expectations are very clear.

Very interesting to note that when I spoke with a couple of the Canadian Women that were part of the 2000-06 success, they talk about having a very similar environment to what the USA women currently have.

- ii. In the USA, they tried to do centralized training for several years in Park City. Put simply it didn’t work at all. Now their NT program is club and camp based. All athletes on the national team must attend the planned training camps and then they go back to train with their club, or if they are older athletes on their own if they wish. It should be noted however that most of the athletes come from one of two clubs (12/16). This in a way becomes its own form of non-mandatory centralization, where you have a critical mass of athletes training together in one place.
- iii. The clubs in the USA have bought into being a major player in the development of NT athletes. They did a major outreach and went into the clubs, working and mentoring the coaches. It was a four-year process and now it is the reason they should be able to have sustainable success over time.
- iv. The NT in the USA consists of 16 athletes which includes Sr. A and B (World Cup) athletes, plus 5 development athletes coming from the Jr. and U23 ranks. Interestingly, when an athlete comes on to the NT they get to choose who they want their coach to be. It can be their personal coach or one of the NT coaches. This sounds like it could be a disaster but it is felt that since the athlete is responsible for getting results, they should have some say. All the coaches apparently can work very well together.
- v. The operating budget for Cross Country in the USA is around 150k more than what OTP gives CCC, however, when you consider the additional amounts from Sport Canada, NSO discretionary and other sources, both countries are operating under similar budgets. The USA budget includes the salaries/benefits of 4 national coaches and 5 wax techs. Much of their IST support they don’t have to pay for as it comes from the USSA which supports the IST for all ski sports. Positions such as strength trainers, sport psychologists, recovery &

- regeneration experts are supported for all snow sports via this body and is not part of Cross Country's operating budget.
- vi. Cross Country USA pays for their Sr. A Team athletes to all training camps and competitions. These are athletes ranked top 30 in the world. All other athletes must pay their own travel and room and board for all training camps and competitions. Many of the unsupported athletes get bursaries and assistance from their home clubs or from the National Nordic Foundation, which helps offset much of their costs. The idea is for them to be allowed to train full time and not have to work a part time job at the same time.
  - vii. After several years of experimenting with the number of camps per year (between May and the middle of November) for the NT, they have narrowed it down to 4 or 5. They used to do more but they found with all the travel and the recovery time required before and after each, that they were not actually getting enough of the hard training in. Also, it becomes very expensive. This year they will do 4. Each camp is two weeks long and there are four to five weeks in between each camp. Typically, they will have one huge camp a year where they will invite up to 40 athletes to attend. Then the rest will be smaller, such as the New Zealand camp where only the NT attends.
  - viii. Because there have been many thoughts around whether Men and Women should train together, I think it is important to note, that the USA does not normally separate them. When in the club training environment, the men and women typically start at the same place/time with the same coach and then each does the workout appropriate for them.
  - ix. The USA employs 4 national coaches: Head Coach, Women's Coach, World Cup Coach and a Development Coach. While each has their own title, they work closely together and there is lots of cross over in their daily work. They also take personal and club coaches with the Team on the World Cup and at every major championship. They go to support the club athletes that they coach/work with daily.

#### **Information gathered via interviews, survey monkey questionnaire and various print resources**

I have organized the major points and put them into the categories below. Several themes emerged and there was a lot of consistency in people's thoughts. This I believe is a good thing as I don't think there will be a lot of push back on what needs to happen. People were honest in their feedback in a positive way and even though a lot of challenges were identified, for the most part people were respectful of each other and kept comments professional and not directed at specific individuals.

##### **1. Changing the culture to be more collaborative**

If there was one common thread throughout all the interviews it was the notion of team work, collaboration and knowledge sharing. Everybody must start interacting, put egos aside, avoid a top down approach and think selflessly about what is best for the athletes. Everyone involved in high performance development must have a clearly identified purpose and role for how they fit into ultimately achieving the objectives. There needs to be alignment of clubs, provinces/divisions and national with each having a clear stake in building a successful and sustainable performance over time.

None of the areas below can operate in a silo and expect to have success. They are interdependent on each other and when each performs well the performance of the whole will be greater. Each depends on the effectiveness of the other for it to work. Almost without exception during the interviews everyone spoke of the desire to work together much more collaboratively. It was the “Theme Song”. This tells me that at least at the intellectual level people understand that working together for a common cause absolutely must happen for sustained success to occur. What remains to be seen is, if people at every level of the organization, will be able to act in this manner. I believe that most stakeholders would like to act more in this manner. This is a good thing, there seems to be a general sense of willingness. It will be incumbent on CCC to set up the structure and associated programming that reinforces this approach. It will take strong leadership and role modelling to change the current culture to be less top down and more collaborative in nature. The challenge is understanding that collaborating and working together does not mean lowering standards and expectations. It means raising them and all stakeholders being responsible and accountable to doing their piece at a world class level.

## **2. High Performance Structure and Programming**

The HP programming is the underpinning upon which the structure and processes are built. Without programming, what do you have? This area is the single most important thing to get right if you want to be able to achieve repeatable and sustainable success at the highest level of competition. Over the past several years the sport has eliminated projects and programs which left a gap in its ability to service national athletes and coaches at a high level.

The most notable was the removal of a dedicated Jr. National Team coach and any programming that went with it. The current situation is an athlete will get named to the team but other than a few clothes that’s it. In terms of developing athletes for the future with the capacity to achieve podium performances at Worlds and Olympics, not having high level programs in place is deadly. Almost every person interviewed had “bring back the Jr. NT program” as one of the top 3 most important things to do to move the sport forward.

Beyond the Jr’s it appears that programming at all levels has been cut back. It was generally felt that there are not enough training camps for the U23/25 and World Cup teams during the May to November period. Certainly, the importance of training camps and daily training during that period was identified by all the international experts I consulted with. Apparently, Canada used to have more training camps, but they have also been cut back due to finances.

Club programming needs to align with the athlete pathway and the LTAD. The training gap appears to begin at the pre-16 level, where many clubs are not offering programs between May and November. They don’t get started until they are on snow. This results in younger athletes coming through the system that haven’t had enough training and technique work behind them, then when they reach a national level, the coaches must do a lot of remedial work to get them up to par. This results in athletes reaching their potential much later, if they ever do. Many comments were around finding ways to get more exposure with the young athletes in the off season, things such as developing roller skiing and having fun doing other sports. The point is to



stay active, challenged and have fun while developing physical literacy and general fitness so that as the skiing season begins you are starting at a higher level each year.

### 3. Athlete Development

The international experts I interviewed provided some excellent insight into their views of athlete development and how Canada could be more effective in the development of our athletes over time. While I understand that some comparisons cannot be made – especially with Norway where cross country skiing is ingrained in their culture – there are many fundamental things that if implemented should see considerable improvement in the development of young Canadian athletes. As mentioned above the Canadian LTAD is generally seen as an excellent approach and is like other models from top countries. It sometimes gets confusing with these models, because competition tends to be chronological age based but on the athlete pathway individuals are developed according to biological age and training base. There can be a tremendous variation across individuals and before puberty it is difficult to distinguish between good results based on ‘talent’ and those that come from early maturation. Therefore, it is very important not to pick out talent too soon. Everyone’s path needs to be adapted specific to what they need. Therefore, club and coach development will be important moving forward. The development of future talent starts in the club and they are an integral part of making it all work.

I would say the sport is quite aware of where their gaps are in terms of preparing athletes for future high performance success. The technical leadership and understanding of the international competitive landscape is strong for sure. CCC has plans for mitigating many of gaps.<sup>1</sup> The problem seems to be in implementing them and that is for several reasons such as lack of funding, clarity of the plan – what you need to do, and available staff to implement. In reviewing the tracking tool/dashboard on the website it seems all initiatives are in the blue phase meaning “Future Mission”.

There are huge gaps in athlete development as addressed above under National Team Structure and Programming section. Athlete development and national team programming are inextricably linked. In the case of CCC, the challenges go deeper than just the NT level and begin earlier at the club level. Many respondents spoke to the importance of improving the proper implementation of appropriate training along the entire athlete development pathway.

In terms of athlete selection for various teams, many indicated that simply using IPB’s and CPL could leave out athletes with potential. Several indicated that had teams been selected that way in the past, we would have missed some of the athletes that won medals. In getting further clarification on this, it is important to point out that in 2015 there was a significant overhaul of the criteria.<sup>2</sup> It should also be noted that when CCC names athletes to senior teams, they are given 2 years to meet or improve on the benchmarks. This makes sure that athletes are not overlooked because their biological development might be slower than others. There are also

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<sup>1</sup> See attached documents Business-Plan-2015-16

<sup>2</sup> See attached criteria

important markers in the U23 age group. The idea is that all outliers and late bloomers should be captured by international performance benchmarks and IPBs by the end of this age group.

One of the things that Canada does not do well is educate the athletes on all that goes into being a great cross country skiing athlete. This ranges from teaching them “why” they are doing “what” they are doing in training to some of the more general areas such as nutrition, recovery/regeneration, and sport psychology. Someone said it well, “We do it to them as if they are our pawns.” In a sport such as this where athletes can perform at a high level well into their 30’s, it is crucial they have ownership and input into their training. They can’t do that well if they haven’t been educated along the way. All the international experts interviewed talked about this. They talk about the coach as being an advisor as opposed to a dictator. In Norway, the athletes know how to make training plans and make wise decisions for themselves. The theme of collaboration goes all through this report and this includes collaborating with the athletes, they are after all the ones that must go out there and perform.

A significant part of athlete development is the competitive/racing component. Because of the lack of programming for those athletes not at the level of the world cup team, it means that often they do not have the best access to the right competitions at the right times. Many spoke of athletes that only have Canadian/North American race experience and then don’t understand how fast they need to go to compete on the world stage. They can be winning here, but are way behind their European counterparts. Conversely, an athlete can do well here and get put on a world cup event and get blown out of the water. Then we punish them by taking away their support for a poor performance. It becomes a catch 22. The challenge going forward will be to make sure athletes are having access to the races that will promote and support their development.

#### **4. Club Development and Provincial/Divisional Alignment**

For years, and not just in Cross Country Skiing, sports have talked about how important it is to join forces with the clubs. They talk about how the athletes the clubs are producing aren’t good enough when they hit the national team and then the coaches must do remedial work and they are already behind the best in the world. We talk about communicating and collaborating with the clubs’ ad nauseam. But at the end of the day, we talk about doing it and yet never do anything concrete and meaningful to change it. We have been having this same conversation in sport for a long time. Even as evidence mounts that mandatory, long term, full time centralization for the most part doesn’t work, we keep promoting it. This ripples out and affects the clubs as well. Top athletes are taken away and there are no strong role models for the young athletes. At the end of the day many athletes quit before they should or are unable to reach their full potential.

Working with the clubs to develop athletes is going to be very important. Give them support and education from the national technical leadership team and from the NDCs that are in their area. Over time (and to some degree this is already happening) the best clubs will emerge and become your high performance super clubs. Athletes will naturally migrate to them and you will

ultimately end up with pockets of excellence across the country that can provide strong daily training environments for top athletes.

The other important part to Club Development is the retention of younger athletes coming through. There is a large drop off in numbers going from Jackrabbits to Track Attack. Current numbers sit at Jackrabbits = 6204 and Track Attack = 1274. This represents an 80% drop in participants from one level to the next. CCC has identified a goal of doubling the membership and to get a clearer understanding of the retention rate from year to year.

## **5. Coaching**

The most common comment in this area was the lack of consistency in coaching over the years. CCC has gone through several National Coaches and for various reasons none have stayed over the long haul. Also, many believed we need “Made in Canada” coaches and that bringing in foreign coaches (i.e.: Norwegian Coaches) is not a long-term solution. Currently, there is not a national coaching team per se and as mentioned above, not much programming that would put them in the trenches coaching.

Recently CCC hired a NST Senior Coach and while there have been some concerns identified around his coaching experience and knowledge, many are excited about his athletic experience, coaching potential and passion for the job. The athletes are feeling positive about the change which is important. This is an opportunity for CCC to create a new coaching staff, with a new mandate to be in the trenches coaching and work with NDC and club coaches to provide the best athlete preparation.

Coaching and club development go hand in hand. Although there are several excellent coaches currently at the club or NDC level that are doing an excellent job, it was often brought up that club coaches don't have the time, expertise or resources to effectively train athletes along the podium pathway and therefore when athletes come to the NST they come unprepared and need a lot of remedial work. Regarding building a system for 2022 and beyond that is capable of consistently putting athletes on the podium, the coaching gap must be closed. It should be noted here that focusing on building the clubs is what the USA did (see above) and they credit much of their current success to that initiative.

Many suggested that it is important to integrate the personal coaches into the process once an athlete has been named part of the NST. Both the NST coach and club coach should work together to provide the best for each athlete. Again, this notion goes back to the sharing knowledge and collaboration theme throughout the report.

## **6. Training Centres**

### **National Development Centres (NDCs)**

There was a significant amount of concern and questioning of the existing training centre model. There are currently three regional centres in operation – the Canmore- Alberta World Cup Academy (AWCA), Thunder Bay (TBTC) Training Centre, and Pierre Harvey Training Centre

(CNEPH). CCC considers each of these centres to be National Development Centres (NDCs) and there is a document that outlines the guidelines and expectations for being a supported NDC.<sup>3</sup>

Training centres are defined by CCC as follows: “Entities operating on a nationally or regionally-centralized basis that provide HP services and infrastructure to establish an appropriate environment for selected athletes in the L2C and above stages of LTAD to prepare and/or develop optimally.”

According to CCC, “...the essence of the HP program is an updated training centre system that complements and assists with the delivery of the National Ski Team (NST) program. This system is an athlete development and support vehicle that consists of a National Training Centre operated by CCC in Canmore and up to four additional self-governing national development centres (NDCs) that are formally affiliated with CCC.”<sup>4</sup> CCC has accountability agreements with each centre, however there are some issues relating to how strictly they are adhered to.

The mandate goes on to say, “It is also expected that the NDCs will have both a responsibility and the ability to execute both outreach and in-reach, thus enhancing the full HP system down to and including club level.”<sup>5</sup> While I wholeheartedly agree that this would be an important role for the NDCs, there is no process or mechanism in place to ensure this happens.

Each centre operates slightly differently; each has differing levels of success and has different challenges. I believe in moving forward CCC should look at each individually to determine what is the best mandate for each centre and realize the structure and mandate of each does not necessarily have to be the same.

Below are the comments I heard consistently through the interviews and in the written submissions regarding training centres.

- i. There is a lot of confusion around “The Centres” that makes it very difficult to understand how they function, what their purpose is and what accountability they have for getting results. Here is a sample of the kinds of questions that kept coming up: Who is eligible to go to a training centre? If an athlete doesn’t go to a centre are they black listed from making a team? Why are there selection criteria that don’t seem to be followed? What integration and collaboration is there with clubs? With CCC? What responsibility/accountability does a centre have for specific results? What accountability does CCC have to the centres?
- ii. CCC contributes a significant amount of funding to each centre. There were several concerns around how effective the use of the funds has been and if there would be better, more scalable ways to use the funds.

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<sup>3</sup> <http://www.cccski.com/National-Ski-Team/National-Development-Centres.aspx>

<sup>4</sup> See footnote 3

<sup>5</sup> See footnote 3

- iii. It is important to note that all 3 coaches from each of the NDCs were strongly advocating that they needed to collaborate and work together more often. The alignment camp was mentioned frequently as to its value and there should be at least one training camp a year where they all come together.
- iv. Overall, it is seen that the CNEPH is the most effective of the three centres. They have strong IST support, full time coaching, education options (mainly French) are readily available at all levels and the staff from the centre are reaching out and working with the clubs to help them better prepare athletes. They understand how important the clubs and high level coaching is and believe there should strong connections between the clubs and the training centre. CNEPH has the benefit of being able to access B2Ten funding and has access to their various experts.

At the same time, there are still areas to be improved. The overall collaboration and communication with CCC and the NT staff in Canmore needs to be much improved. There needs to be a lot more collaboration with the coaches and IST from Canmore and the coaches and IST in Quebec. Except for Alex Harvey, the centre has not produced a significant number of national team athletes over the years, however the work that is being done there now should provide a more fertile ground for future potential to be able to develop. Certainly, having Alex there as a role model for younger, up and coming talent is a huge bonus.

- v. The TBTC has a strong connection with the province/division and they are well supported by them. Ontario has the highest number of athletes and historically the most potential. In the absence of a strong national junior development program, the centre has taken on a few initiatives that will give valuable experience to athletes and coaches. For example, they are taking a group of athletes to race in Europe, a great opportunity for the Ontario ski team and they are working with the top clubs in Minnesota.
- vi. The AWCA has been criticized for bringing in athletes who haven't made the criteria but can pay the fee and so are invited to be part of the centre. When you ask the question, "why don't athletes want to come to the AWCA?", you get many responses. These answers are usually one or more of the following: it is too expensive, there is no secondary school option in Canmore, and I won't necessarily get better coaching. The AWCA is fully centralized. When this happened in 2007, many felt it was the demise of the clubs in the area. Of all the NDCs, this one had frequent comments relating to staff not willing to collaborate or work with clubs.

On a positive note, AWCA has been working collaboratively with the NST Men that are centralized in Canmore under Ivan Babikov. This is very positive in that it creates stronger training groups and allows for the coaches and national IST to share knowledge, work together, and find ways to be even better. The women at the centre are also starting to show some good progress and it is very important that they can

continue with consistent coaching and IST support as they are a big potential for the future.

### **National Training Centre**

The National Training Centre is based in Canmore and is operated by CCC. The NST Senior Coach is based here and reports to the HPD. He is currently coaching 4 male athletes at the Centre, and is also working closely with the coaches and athletes from the NDC in Canmore.

### **7. Sport Science/Medicine**

The area of sport science and medicine is a great strength for the sport. Having a national IST based directly in Canmore, working daily with the athletes and coaches is very positive. The IST's in place at CNEPH and to a slightly lesser extent TBTC are also having a positive impact in the daily training environment. Some of this is starting to trickle down to the club level as well.

Similarly, to what has been discussed above, the sharing of knowledge and integrating IST support across the country is crucial to future success. While there is a lead IST in Canmore, there is currently very little sharing of knowledge and best practices with other IST's. Overall there could be improved alignment of sport science/medicine across the country.

An area identified that needs work is that of athlete monitoring which tends to be inconsistent at best. All identified athletes should be completing their training logs and someone should be assigned to reviewing them weekly. Doing this will also help in educating athletes and getting them to take more responsibility in their own program.

## **Recommendations**

I can easily see why there has been a lot of frustration among many of the stakeholders around doing yet another review, or study, or plan and then nothing happens. In my research, I came across many such documents that outline what needs to be done to increase and sustain performance at the highest level. All of them are similar in the conclusions they make and the recommended actions to take. Including this report! In Canada, we seem to love to do multiple studies, reviews and plans and then let them sit on the shelf. This is not exclusive to CCC. But let's face it, one can have the best plan in the world but if no action is taken it makes no difference. CCC needs to commit NOW to taking action. Just start, and know that you might not do everything perfect at the outset, but at least you will have something concrete to react to and refine.

All the recommendations below work together. If all are not implemented the ultimate success of any one of them will be diminished. They work synergistically together and should lead to creating the environment where talented athletes coming through the system will be able to meet their full potential with highly qualified, effective coaching and CCC should achieve its established performance goals.

It also is understood that you cannot just go in and blow everything up. There are many things that are currently working and they must be maintained. As an example, currently the NDCs provide centralized training for athletes in the region. For the present time, this is working well but overtime, as clubs

become more capable of providing a world class training environment, their role may evolve to be more of a support centre delivering services to the clubs. The responsibility and accountability for ensuring this environment is created and evolves as appropriate falls under the jurisdiction of the High Performance Director. Strong leadership, direction and support will be critical to future success.

For many of these recommendations it will take about 8 years for CCC to see the positive results of the changes. This means it will be important to be patient, stay the course and every year do an analysis to see where adjustments might need to be made to keep on track. However, there is also a sense of urgency, the 8 years don't start until the recommendations are actually implemented.

### **1. High Performance Structure, Leadership and Program Model**

(See [Structure and Program Diagram.docx](#) for more detail)

I believe that in order to effectively move forward the sport needs to go to a program based model. Any NT coaches that are hired need to be associated with one or more of the programs, working in the trenches delivering the programs. Below I have outlined 4 programs that I believe are necessary to be in place to become a consistently high performing nation. If the sport is unable to establish all four at once, then the Olympic Team Program and the Junior National Team Program should be the two to focus on immediately.

#### **1. Olympic Team Program**

This program would be in place between now and the end of the 2018 Olympics at which time it would roll into the SNT Program. Each quadrennial this team would be identified for the final season before the Games. The program attached to it would be determined by the personal coaches and NT coaches to ensure that these athletes are getting the optimum, individualized training programs and competition plans. (I believe this is what is currently happening for Korea)

#### **2. Senior National Team Program**

This program could operate in a similar way to the USA. It would consist of A Team members – those athletes that have achieved performance benchmarks that puts them consistently in the top 30 in the world, and then B Team members who would be up and comers including strong U23/25 athletes. The NST coach would be responsible for leading this team – establishing the plan, coaching at the training camps, attending world cups and other appropriate races, working/overseeing any other coaches that become part of the program etc. The program would consist of 4 to 5 training camps per year – each established for specific outcomes that have been established in a 4 year quad plan and linked to each year's specific YTP. The race plan would be determined as appropriate for each athlete (i.e.: New Zealand for snow in summer, altitude etc.). IST support, including any required testing and monitoring, would be integral to the program as would the integration of personal and/or club and NDC coaches. The program will become an excellent way to develop and partner with club coaches so they can deliver exceptional training in the club environment.

#### **3. Junior National Team Program**

This program was in place in the past with its own dedicated coach. See below for more specific details. For me this program MUST get put in place immediately.

4. Club and Coach Development Program

This program would go a long way toward establishing a strong club network that is given some ownership and responsibility to develop athletes to the highest level. For it to be effective CCC will need to invest in someone with strong technical and coaching ability whose job is to go into the clubs and help the coaches with designing appropriate training plans for their athletes. Also, they would assist in “club audits”, helping with identifying strengths and weaknesses and then determining the best solutions.

Funding this “Program Model” will be the most effective way to improve performance. The sport needs to take a close look at how they can realign the budget so they can support this model. So, for example, is it more important to fund NDCs or hire a Junior National Team coach that can run programs. Some tough decisions must be made. I also see, that much like the USA, this approach will still have to rely on athletes self-funding. However, there could be savings to athletes in this model if they can stay at home in their clubs for part of the year.

There needs to be a significant ask to OTP/Sport Canada/COC for the Next Gen athletes (this would be the Jr. National Team and some of the Sr. NT athletes.) Funding for this group for training camps and competitions could help offset some of the costs from the athletes.

Another benefit of going with a program model is that you can plan well in advance. The HPD in consultation with the coaches would make a costed-out training camp and competition plan that spans the quadrennial. This will help with budgeting for both CCC and those athletes that will be self-funding.

**2. Ensure strong support/programming for the 2018 Olympic team**

From what I understand there is a huge opportunity for the Men’s team to have some excellent results in Korea. All the international experts I interviewed spoke highly of the possibilities for this team. Both from an individual perspective with Alex Harvey and the opportunities to do well in the relay events. The men’s team right now is tracking in a similar fashion to the USA women a few years ago and there is an opportunity to capitalize on that. Make sure that all athletes with medal potential in 2018 are optimally supported.

Interestingly, when I asked various experts what they felt was the most important thing to do specifically in Alex’s preparation, their main comment was “Keep him healthy”. In speaking directly with Alex, he has a strong belief in what he is doing and feels well supported. He has lots of confidence in Louis. From experience, I would say the most important thing that CCC can do right now is to support the coach and believe in him. There is always a tendency to second guess what the coach is doing the closer we get to the Olympics. Even though it is with the best of intentions, it often only serves to undermine the confidence of the coach. Partner with him and give him the opportunity to focus mainly on Alex, but also insure he is part of the decision making for the relay team training and racing program.



The preparation of the athletes that will potentially be on the relay team is incredibly important this year. CCC's technical leadership needs to make sure they are all getting the training and competition that they need. Identify the group of athletes that can contribute to medal results in 2018 and ensure CCC and OTP are supporting them so their potential can be realized. It will be especially important to provide support to Ivan as a new coach. Fortunately, he knows the pressures that comes with an Olympic Games but be on the lookout to see how you can provide mentoring and support to help him do his best coaching.

While the Women's team is starting to show some good results they are not expected to medal in 2018. However, it is important to support this identified group as much as possible going into 2018. The experience gained at this Olympics will go a long way toward preparing them for medal performances in 2022.

### **3. Reinstate a Junior National Team Program immediately**

In the past, pre-2007, there was a program in place which included a Jr National Team coach. With budget cutbacks over the years this program was eliminated. Now, a Jr. World Team is announced, and these athletes attend Jr. World's however there is no programming attached to it other than possibly a pre-world's training camp.

The first step is to hire the coach. The coach would be responsible for coaching at the training camps and for visiting clubs where the athletes currently reside. I believe this initiative is the single most important thing that CCC needs to do if they want to see more sustained success from 2022 onwards. For this program to be successful it will require a high level of collaboration between the HP clubs, NDC's and the high-performance department of CCC.

Below is a suggestion for how it could work:

1. Start with identifying the current cohort (2017 season), which would ideally be a group of both male and female athletes from age 17 (born in 2000) through to age 20 (born in 1997). Criteria would be established – preferably a combination of IPB's and a subjective coach analysis of future potential. This is to make sure athletes are not eliminated from the system too soon.<sup>6</sup>

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<sup>6</sup> The reference for this comes from the Norwegian "Developmental Staircase" (DS) which I believe is important in how talent is considered. "Even if the DS has competition in age based classes as a starting point, everyone must be developed considering biological age, and training base. This can vary tremendously and before puberty it is difficult to distinguish between good results based on 'talent' and those that come from early maturation. We should therefore be careful about picking out talent too soon. The advice given in the DS must therefore be adapted to each individual's development, and an optimal staircase or step, must be created for each. No two plans will be alike."

2. In each subsequent year, 20-year old's age out (hopefully to the Sr. National Team program) and new 17-year old's come in.
3. Each year there is an evaluation to determine if an athlete continues in the program or not. There is also an opportunity each year for performing athletes in the age group to enter the program.
4. Each athlete will be associated with a club program and a coach. The club coach and the Jr. National Coach will work together to create individualized training programs for each athlete based on an analysis of their strengths, weaknesses and biological age. The club coach is responsible for implementing the program in the daily training environment and at identified competitions.
5. On-going testing and monitoring would be mandatory for all athletes.
6. A training camp program will be established for this group between May and November. Some of the camps would be integrated with the Sr. National Team and the NDCs to start a positive ripple effect from the top athletes' role modelling for the younger athletes emerging.

#### **4. Advance and support club and coach development**

In every interview without exception, the need for club and coach development was identified. In the past the sport was club based and then as more funding came into the system there was a push for centralization and bringing everyone together with strong coaching and IST support provided in one location. As athletes reached a certain level within the club setting, the idea was they would have to move to centralized training in Canmore, Thunderbay or Quebec City. For many reasons (financial, clubs losing key athletes, no school options, didn't believe the program was better than the one they came from etc.), this model has not worked.

From interviews with key international experts and their experience with centralization (and it not working), I believe the solution is to strengthen and give ownership for athlete development to the high-performance clubs and those coaches. Athletes would stay in their clubs until at least 20-years old and ideally up to U23. Ideally, (as is the case in USA) the top athletes will stay affiliated to a club or will be on their own during the times in the year that they are not at training camps or competitions. Over time you will see athletes migrate to HP clubs of their choice and you essentially end up with non-mandated centralization of top athletes. This model will lead to more sustained success; however, it won't happen overnight and change needs to happen incrementally as opposed to making a complete change of the current model. You also need to be cautious of protecting what is currently working.

For this to work however, the calibre of coaching and the daily training environment needs to be of a very high standard. Currently, it is a mixed bag. There are some excellent, very experienced coaches working in clubs and they need to be encouraged and supported in what they are doing. They are also needed to share their knowledge, experience and expertise with other developing coaches and NT coaches. The coaching fraternity should come together as one, with a unified focus on developing Canadian cross country athletes capable of performing on the

world stage. They should have opportunities to learn and engage in healthy debate with each other about how they can better prepare athletes.

Below are some suggestions for how CCC could begin to advance and support clubs and coaches.

1. Include all club coaches with an athlete on any of the NT programs to be part of the training camps so they can learn and take information back to their own coaching staff and club.
2. Coaching Audits – Help coaches identify their own strengths and weaknesses and help them with an individualized professional development plan.
3. Provide appropriate mentoring opportunities for talent identified coaches.
4. Clubs being named as HP Clubs for CCC. (kind of like getting the CCC seal of approval).
5. Clubs receive visitations from the Club and Coach Development Leader and/or the National Coach(es) each year and get support in creating YTP's for the top athletes
6. Testing, monitoring and tracking services for athletes.
7. Have a top coaches club where they come together for 2 to 3 days a year bringing in international and national presenters and exchanging knowledge. (Apparently, this used to happen.)

The development of the clubs and the coaches can be done in hand in hand with the Sr. and Jr. National Team programming.

**5. Reassess each of the NDCs and clarify each's mandate and relationship with CCC**

I think it is important to do an analysis of each of the three NDCs to determine how they can be most effective in serving the region. As mentioned above, they do not have to be doing the same things.

There had been some talk of potentially adding more NDCs. I would stay away from that for several years and focus on maximizing the ones you have and building the clubs.

I do think, that while NDCs are important for developing high performance athletes, I do not think they should be funded by CCC in the current manner. I think they should be funded by the region. Only in the case that you may have a NT coach working out of an NDC, or where a critical mass of NT athletes is training out of the centre should CCC provide funds. Then it would be funds directed to the coach and things such as IST support for NT athletes.

It does appear to me that the CNEPH is becoming a strong centre and that it is needed to serve the Quebec region. Given that it is also where Alex Harvey is based, CCC will need to be involved to insure he is getting the support and expertise he needs to be successful. Funding for this would come out of the budget for the Olympic Athletes Program.

I see there is a role for TBTC as well. They have strong provincial support and have been running some interesting programs on their own initiative such as the European camp and training in Minnesota.

As for the AWCA, I'm struggling to see its benefit. I think it would be much more advantageous to take the top athletes (mostly the female athletes that are showing promise) and join forces with the National Team Training Centre. It seems redundant to try to run two centres out of the same location essentially doing the same things. Then you could bring in an assistant coach to work with the NST Senior Coach. Currently they are training together anyway.

**6. Assess the current coaching and technical leadership pool and identify what roles need to be filled.**

As the quality of coaching (at all levels, including club coaches) and technical leadership was often mentioned during the interviews, I would recommend CCC undergo an assessment of their entire coaching and technical leadership pool. This includes all IST staff as well. Identify their strengths and weaknesses and where they might best fit into the national team programs (or not). For those deemed as world class or the potential to be so, design and implement an individualized professional development plan. Place your best coaches and technical leaders in the right environment and make sure you are there to support them and help them be successful. Ensure that it is very clear what their specific responsibilities are and how their performance will be measured.

## **Implementation**

Once the recommendations and direction of this report are approved, the HPD should be responsible and accountable for ensuring an implementation plan is developed and executed. To assist with this, a small working/management team should be assigned to support the HPD and help monitor the progress. The High Performance Advisor from OTP should be part of this team, as well as the CEO for CCC.

## **Other Comments and Observations**

During the interviews and answers from the Survey Monkey, there were points and concerns made that have not been addressed. They didn't make it into any of the recommendations but that's not to say they weren't important. It's just that you have to be very clear on what the priorities are and not get distracted trying to fix too many things.

**1. Education**

There were many conversations around education, mostly post-secondary. Some individuals believe there should be a stronger push for more support for University skiing. Others felt CCC should maximize the NCCA. And others felt that "we need to fix ourselves before we can engage other partners."

Given the limited resources, both human and financial, I don't believe CCC should spend any time or money trying to develop the CIS and/or create a university based racing circuit. At the same time, I don't want to take anything away from what has been developed in Ontario. I see that would be a provincial initiative.

What is most important for now is to try and accommodate an athlete's educational needs as they are training full time for the sport. This will be very individualized. The proposed "program model" should help to alleviate some of the concerns around school because athletes will be able to be based out of their home clubs much longer.

**2. Gender and discipline specific coaches**

I did not recommend to go the route of having gender specific or discipline specific coaches. Looking at the limited budget and rather small number of elite athletes, I believe both can train together effectively. Certainly, many of those I interviewed felt the same. As time goes on, you may find it necessary to have gender/discipline specific national coaches, but you need to have a larger pool of athletes before this makes sense.

**3. Creation and use of North American racing opportunities**

There were many mentions of finding ways to have more and better quality racing experiences in North America. This would help keep costs down for both the USA and Canada. Once the programs are established, I would recommend the technical leadership look for ways they can partner with the USA for shared training camps and competitive opportunities. This area does not have its own separate recommendation but is integrated into the programming for both the Jr. NT and the Sr. NT.

**4. Athlete Pool**

There were many comments about the importance of getting more participants into the sport and finding ways to compete with all the options that young families have available to them today. Naturally having more people is important and needs to be addressed but it is beyond the scope of this report.

**5. Provinces/Divisions**

There is a need to engage the provinces in developing HP athletes. Currently some provinces are doing this very well and others struggle. Moving forward, CCC must be very clear on what the role of the province is and how all three levels (clubs/provinces/national can work collaboratively together maximizing both human and financial resources.

**6. Finances**

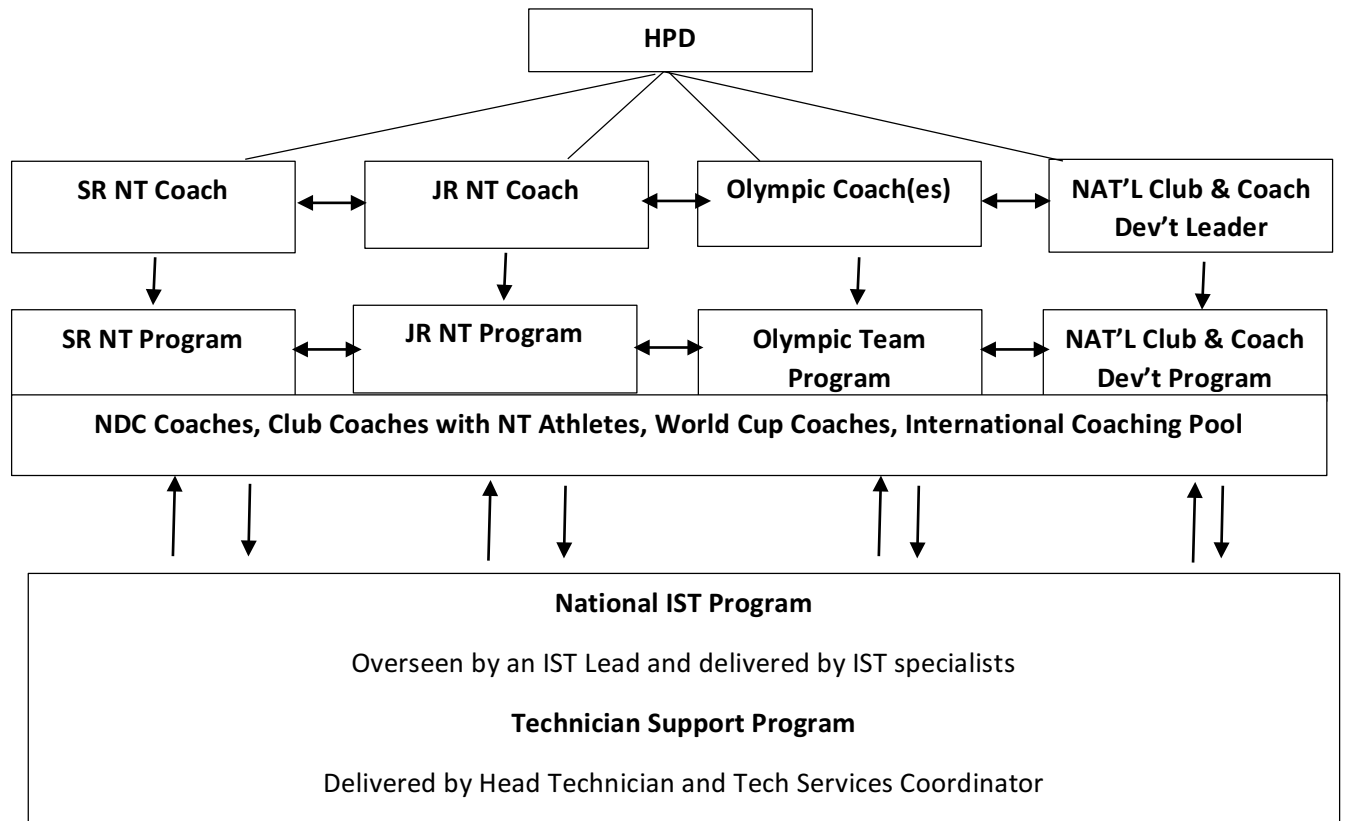
Without a doubt, the lack of finances to implement programs has been identified as having a debilitating effect on the results and performance of the team. That withstanding, this report deals with what you need to do if you want to reach your goals. CCC will need to look for ways to make the most of the current resources, potentially shifting how the dollars are allocated. In addition to that, they will need to be looking for ways to increase the revenue by other means – increased government support, sponsorship deals, retail/product sales and membership fees.

## **Conclusion**

I have purposefully tried to keep the number of recommendations down to a manageable number. I believe with the implementation of each initiative, CCC can reach high levels of success. None of these recommendations works in a silo, the integration of each will yield greater rewards.

As I mentioned at the beginning of the report, I believe there is a collective will to make this happen. People want to collaborate and share and to do this there must be very strong leadership. Collaboration and sharing information doesn't mean you get to just do what you want. It means all opinions and ideas are listened to, evaluated and considered but at the end of the day someone needs to be able to make the decisions. It's not about lowering the bar; it's about collectively raising the bar at every level – from the athletes to the coaches to the IST.

**Appendix 1 - High Performance Staffing/Programming Model**



## **Roles and Responsibilities of Technical Leadership and Coaching Staff**

Developing comprehensive job descriptions for each of the positions is the first thing that needs to be done. This is very important because how they are written and what the responsibilities and accountabilities for each is will help shape how the coaches and technical leadership work together moving forward. As an example, if you identify in the job description for the SR NT Coach, that he/she is to collaborate with the personal coaches of NT athletes to develop individualized YTP's, that starts to initiate the process of sharing knowledge and getting out of silos.

Below, I have identified at a "high level" the roles and responsibilities for each of the positions. This is by no means a comprehensive job description but will give a flavour of what each involve. Probably the most important part about this proposed structure is how all the NT Coaches need to work as a team, sharing their knowledge with each and constantly challenging each other to be better. Each of the NT Coaches is responsible for a specific program. Other coaches that have athletes in the programs, need to also be part of the program. In this manner, you can be upskilling the coaches so they can provide better training back in the clubs, NDCs and/or regional training centres. This is what true teamwork and collaboration does – gives everyone some "skin in the game" and a responsibility to execute their role at a world class level.

### **1. CEO**

- a) As it relates to the HP program, the CEO's job is to make sure the appropriate environment is created so the HPD, coaching staff and athletes can focus on what they need to do without any distractions. This means making sure that budgets are provided where you will get the most ROI. It also means making sure the vision for the HP structure and resulting programs is clear and shared with the entire CCC community. As with most Olympic sports in Canada, this role also involves exploring all options for increasing funds so the HP Programs can be better supported.
- b) This role does not include the CEO making any technical decisions. It is a true leadership position, where success will come when you have hired the right experts who can make decisions and be responsible and accountable to enact their role.

### **2. High Performance Director**

- a) Overall management of the HP Program including but not limited to team selection criteria, developing and monitoring budgets, ensure alignment of all programs along the athlete HP pathway through to NT.
- b) Working with coaches to ensure the most appropriate quadrennial and yearly plans are developed, implemented and evaluated.
- c) Create the environment for the coaches to do their best work in the trenches with the athletes. This means, specifically, that programs are developed for each area that include training camps, IST support and appropriate competitions.
- d) Ensure all coaches are given opportunities and support to develop and increase their coaching effectiveness.

### **3. National Coaching Staff**

- a) Each identified coach is responsible for their specific programs as identified. The arrows indicate how important collaboration of all technical staff is to achieving overall success.



**4. IST**

- a) This team, led by a national leader (likely the physiologist), who will work closely with the coaches to establish the best IST support and ensure it is shared and monitored nationally. A national lead for specific areas is also important. For example, in strength development, one person would be identified to take the lead. They will work closely with NDCs, RDCs and clubs to ensure athletes are doing the most appropriate strength work in their daily training environments.
- b) Attend regular IST meetings to discuss programs and individual athletes as a group to maximize the integration of services. For example, the nutritionist needs to know what the training demands are of each athlete throughout the year to provide the best nutritional advice for recovering between sessions.

**5. Technical Support Staff**

- a) Supporting every program are the technicians. They are fundamental to achieving success both in training and competition. They are responsible for the planning, preparation and delivery of comprehensive ski support to the HP programs. There is also an ongoing responsibility to do research and testing to ensure the most informed decisions are made in determining ski selection and waxing.

## **Appendix 2 – Summary of Recommendations**

- 1. The High-Performance Structure, Leadership and Program Model**
- 2. Ensure strong support/programming for the 2018 Olympic team**
- 3. Reinstate a Junior National Team Program immediately**
- 4. Advance and support club/coach development**
- 5. Reassess each of the NDCs and clarify each's mandate and relationship with CCC**
- 6. Assess the current coaching/IST/technical leadership pool to determine strengths and weaknesses and identify what roles you need filled.**