

Canadian Team Ranking System (CTRS) & Order Of Merit (OOM) Points Structure ~ 2015-16 Season

The CTRS/OOM points model for the 2015-16 season will determine the points awarded for all events using a combination of size and strength of field, size of purse, and relative importance of large events (Grand Slams, Canada Cup, Scotties/Brier, Europeans, etc.).

This points model operates on a basis similar to the current model. The OOM ranking will be updated weekly, and at the end of each season the year-to-date (YTD) cumulative number becomes a teams starting point for the following season. Teams are allowed to count their best 8 events each season.

In this model, there are two categories of events:

1. Tour Cashspiels -
 - The Tour Cashspiel category represents the bulk of the events played on tour, including all events that qualify as CTRS sanctioned events (see details below). This category will also include the GSOC events outside of the 4 Grand Slams that meet the format requirements for CTRS inclusion.
2. Playdown/Special events -
 - The Playdown/Special events category represents the following events: Provincials, Nationals, Worlds, Europeans, Canada Cup, Olympic Trials, Olympics, the 4 Grand Slams, and events similar to those described as per the eligibility requirements (see below). Pre-qualifier tournaments (regionals, zones, districts, etc.) are eligible under this category.

General rules that apply to all events:

- Similar to the old system, this model utilizes a SFM (strength of field) number multiplied by a base-point value to determine the number of points available. In this model there is no Top 10 influence on the base-point values, so in all events the structure is:

Placing	Base Point Value
1 st	7
2 nd	5.5
3 rd -4 th	4.25
5 th -8 th	3

- All events will utilize a SFM value (including all Playdown/Special events). This SFM value reflects the quality of the teams participating in the event. The SFM value will be calculated using the WCT's Order of Merit ranking on



the Tuesday prior to the event, and will reflect a cumulative total using the following system:

WCT Ranking	SFM Contribution
1	0.45
2	0.44
3	0.43
4	0.42
5	0.41
6	0.40
7	0.39
8	0.38
9	0.37
10	0.36
11	0.35
12	0.34
13	0.33
14	0.32
15	0.31
16	0.30
17	0.29
18	0.28
19	0.27
20	0.26
21-30	0.25
31-50	0.20
51-100	0.15
101-200	0.10
201+	0.05

* Throw together teams (with less than 3 regular members) will be counted in the SFM multiplier, using the same formula to create teams at the beginning of the season. Back-end players (max 2 per team) will count 25% of their current OOM points, with front-end players counting 15% of their points, for a team total of 80%. This team will then be seeded into the SFM like any other team. This team is **not** eligible to earn points, but this will better reflect the true SFM value this team brings to an event.

- The cumulative SFM number, as calculated above, will then be scaled to a 24-team format. This scaled SFM value is now normalized so it does not reflect the number of teams at an event.
 - Example 1: A 32-team event with a cumulative SFM of 5.6:

$$5.6 * (24/32) = 4.2$$
 - Example 2: A 16-team event with a cumulative SFM of 2.4:

$$2.4 * (24/16) = 3.6$$



- Example 3: A 24-team event with a cumulative SFM of 4.5:

$$4.5 * \left(\frac{2^4}{24}\right) = 4.5$$

The amount of teams in an event will still be factored into the equation (see below). This scaling was implemented as the strength of field at an event should be based entirely on the quality of teams present. The cumulative nature of the SFM reflects the number of teams present, which is why scaling every event's SFM to a 24-team format normalizes the SFM value.

For Tour Cashspiel events, the cumulative SFM number does not have a limit. After scaling the SFM to the 24-team format there is a max value on the scaled SFM of 5.0.

- The exception in this Tour Cashspiel category is the non-Grand Slam GSOC events. These events will not have a max value even after scaling which reflects the quality of these events and relative importance in the tour.
- After the scaled SFM has been calculated, it will then be adjusted to reflect the number of teams playing in an event.
 - For Tour Cashspiel events, the minimum number of teams for CTRS inclusion is 12 and 10 (for men's & women's respectively) and this corresponds to a minimum factor of 0.875 and 0.813 respectively. The adjusting factor maxes out in an event with 32 teams, at a maximum value of 1.5. For events in-between this range, the following formula will determine the factor where n represents the number of teams playing:

$$1 + (n - 16) * 0.03125$$

- The Playdown/Special events category will calculate this team factor slightly differently for both Playdown and Special Events.
 - For all Playdown events: Pre-provincial qualification, Provincials, Nationals and Worlds, there is no minimum number of teams to qualify for CTRS/OOM inclusion. Events with 10 or more teams will use the factor described above $(1+(n-16)*0.03125)$. Events with less than 10 teams will use a more discounted formula:

$$\frac{n}{16}$$

- For all of the Special events: Olympic Trials/Qualification, Olympics, the 4 GSOC Slams, Sanctioned Federation Events (Canada Cup, Europeans, etc.) there will be a minimum team limit of 6 to qualify for CTRS/OOM inclusion.



- National/International Federations will be allowed to sanction 1 event per season in this category. This event must be used to either internally rank teams in a region, or towards Olympic qualification.

These special events will use the general team factor equation $(1+(n-16)*0.03125)$ for all events, excluding the Sanction Federation events where the discounted formula $(n/16)$ will be implemented for events with less than 10 teams that do not have at least 50% of the field in the OOM Top20.

- For example: The Canada Cup is a CC-sanctioned event used for Olympic qualification so it fits under this rule. The event currently runs with fewer than 10 teams (at 7 right now), but given more than half of the field is Top20 or higher, the usual (and more generous) equation is used $(1+(7-16)*0.03125 = 0.719)$. If another federation wants to create a similar event in this category but does not have half the field Top20 or higher they will use the discounted formula $(7/16 = 0.438)$. The Europeans will use the more general formula in all cases given it meets the minimum 10 teams qualifier.

- Lastly, for all Tour Cashspiel events there will be a second factor that reflects the size of cash purse available to the players. The minimum purse requirement for CTRS inclusion is \$300/team playing (ie. a 24-team event must have at least \$7,200 total purse). This purse factor will range in-between 0.96 to 1.25 where the minimum (\$300/team) represents the 0.96 factor, and the maximum (\$2000+/team) represents the 1.25 factor. For purse's in-between this range, the following formula will determine the factor where p represents the purse value divided by the number of teams:

$$1 + (p - 500) * 0.00017$$

This means that a 32-team event will maximize the purse factor with a total purse of \$64 000, and a 16-team event will maximize the purse factor with a total purse of \$32 000. See below for a list of tabulated values:

Purse Size per Team	Factor
\$300	0.96
\$500	1.0
\$1000	1.083
\$1500	1.167
\$2000+	1.25



Certain events that fall into the Playdown/Special event category will also be eligible for this factor. This will apply to all non-Playdown events. The size of purse at the Canada Cup or Grand Slams for example will reach the max of 1.25, but other events will use the formula as described above.

- After the SFM has been calculated and scaled to the 24-team format it will then be multiplied by the 2 factors (number of teams and purse size) to get a final value. This final SFM value is then used in combination with the base-point structure (as shown above) to determine the number of points available. The following is an example:
 - Example 1: A sanctioned Tour Cashspiel has 32 teams competing for a purse of \$50,000. In the field of 32 teams there are:
 - 5 top 20 teams ranked in the positions # 1, 4, 7, 13, and 17.
 - 2 teams ranked #21-30.
 - 4 teams ranked #31-50.
 - 1 team ranked # 51-100.
 - 6 teams ranked #101-200.
 - 14 teams ranked #201+.

The cumulative SFM value using the above table is: 4.63. This value is then scaled to the 24-team format:

$$4.63 * \left(\frac{24}{32}\right) = 3.47$$

The first factor (number of teams) is at a max for a 32-team event: 1.5

The second factor (purse size) is calculated using the equation below. The value of p is ($\$50\ 000/32 = 1562.5$):

$$1 + (1562.5 - 500) * 0.00017 = 1.18$$

The final SFM value is then calculated by multiplying both factors to the scaled SFM value:

$$3.47 * 1.50 * 1.18 = 6.15$$

The last step is using this final SFM value in combination with the base-point structure to determine the points available:

Place	Final SFM	Base Points	Total
1 st	6.15	7	43.05
2 nd	6.15	5.5	33.83
3 rd -4 th	6.15	4.25	26.14
5 th -8 th	6.15	3	18.45

* This event yields a total of 202.96 points.



- Points per win will be available for all events in the Playdown/Special events category and for events in the Tour Cashspiel category for non-playoff teams only. These points per win will be rewarded as per:
 - 0.35*SFM points-per-win: The 4 GSOC Slam's, Olympic Trials, Olympics and Federation Sanctioned events with more than 50% Top20 teams (Canada Cup, Europeans, etc.).
 - 0.25*SFM points-per-win: National/World Championships, non-Slam GSOC events and Federation Sanctioned events with fewer than 50% Top20 teams.
 - Events in the Tour Cashspiel category, and all events that do not fit into one of the 2 above categories, will also award points-per-win. After the final SFM value has been calculated, they will receive 0.15*SFM value worth for points-per-win.
 - For example: The Tour Cashspiel events have a max scaled-SFM value of 5, therefore if both the purse factor and teams factor are maximized (1.25 and 1.5 respectively) the final SFM is 9.375. Teams playing this event would therefore receive $9.375 \times 0.15 = 1.4$ points per win for non-playoff teams only.

See Appendix A for Tour Cashspiel examples from the 2014-15 season.

1. Tour Cashspiel rules:

Any event in the world can be sanctioned as a CTRS/OOM qualifying event if it meets the following criteria:

- A. The event must have a minimum number of 12 for men's or 10 teams for women's events.
- B. The total cash purse divided by the number of teams must be at least \$300/team.
 - International events will be converted to CAD to determine eligibility. This will be done a week prior to the event occurring.
- Acceptable formats are: round robin, double/triple knockout, and pools.
- The Four Rock Free Guard Zone rule must be used for all games.
 - **This rule does not apply to non-Grand Slam GSOC events that fall into this event type category. These events may also play under the Five Rock Free Guard Zone rule.**
- All games in an event must be either 8 or 10 ends in length.
 - Tiebreaker games may be 6 ends if required.
- Events that have fewer teams than the above limit (12 for men and 10 for women) may qualify for points to a minimum of 8 teams (both genders) if the field contains at least half Top20 teams as per the weekly OOM list. Events using this rule to qualify for OOM/CTRS points will use the discounted



equation to calculate the team factor contribution to SFM calculations (ie. an 8 team event has a factor of 0.5 - using the n/16 formula).

- Each region or tour will be eligible for 1 event per season that falls into a special “end-of-season” category. The event must be a sanctioned tour championship (ex: ECT championship). These events will use the regular Tour Cashspiel rules for calculating OOM/CTRS points, but have a reduced minimum teams limit of 6 (for both genders). If the event has fewer than the normal minimums (12/10 respectively) then the discounted equation will be used to calculate the team factor contribution to SFM calculations. (the minimum factor would be 0.375 for a 6 team event).
- CTRS/OOM playoff points are available to the top half of the field (rounding down) to a maximum of 8 teams. Events with 16+ teams will therefore generate 8 teams with playoff points and events with 12-13 teams can generate playoff points to the top 6, and etc.

Other rules for the Tour Cashspiel category are:

- For a team to count CTRS/OOM points toward their yearly total, they must have at least 3 of 4 of the registered players on the ice at all times during the event.
 - This means during every end of every game.
 - The duty rests on the team to indicate when they are not eligible.
 - Teams found in violation will lose all points for the event in question and subject to a penalty of 2 times the scaled SFM value (ie. if the scaled SFM value was 3.5 the penalty would be 7.0 points).
- Team changes - Due to the nature of testing out lineups, teams have until October 31st of the current season to finalize their lineup to earn points for the season. Should a team make a lineup change that will affect the opening season points or points earned during the season, changes will be made retroactively to reflect the new lineup.
- The SFM value will be calculated on the Tuesday prior to the event in question.
- After scaling the SFM to the 24-team format there is a maximum value of 5.0 for all events in the Tour Cashspiel category.
 - There is no minimum SFM value if an event meets the other criteria.
- Due diligence - Tour Cashspiels register their events for sanctioning in good faith with the CTRS/OOM. Should an event actually not deliver the minimum criteria required, the event will be taken off the board and the points will be taken away (teams will be advised when this occurs)
- Mixed gender events will generally not be considered for CTRS/OOM inclusion.
 - Women's teams will be allowed to enter the men's division of a spiel **if** there is no women's division available.



- Women's teams using this rule will be ineligible to collect any CTRS/OOM points from the event as their play will be considered as "training purposes only".
- If an event has more than 25% women's teams then the entire event will become ineligible for CTRS/OOM inclusion.
- The SFM calculations will include a 0 contribution for the women's team entry, thus diluting the scaled-SFM number for the men's teams eligible to collect points from the event.
- Teams must use spares from their own gender to be eligible for any CTRS/OOM points (no mixed gender teams allowed).
 - The duty rests on the team to indicate when they are not eligible.
 - Teams found in violation will lose all points for the event in question and subject to a penalty of 2 times the scaled SFM value (ie. if the scaled SFM value was 3.5 the penalty would be 7.0 points).
- Events qualifying more than 8 teams must be able to distinguish the final 8 to be eligible for CTRS/OOM inclusion.
- Note to Tour Cashspiel organizers - For your event to be eligible to offer CTRS/OOM points, you must register the event as soon as possible with the event name, all contact information, playing dates, number of entries, format, prize purse and entry fee. You will also be required to submit a list of competing skips to the OOM no later than the day before the first day of your event. At the conclusion of the event you will also be required to submit results.
 - Registering is free, and can be done through Gerry Geurts at CurlingZone (gerry@curlingzone.com)



2. Playdown/Special rules and calculations:

Specific rules for this category of events are:

- Only the following events are eligible in this category: Pre-provincial Qualification, Provincials, Nationals, Worlds, Olympic Trials, Olympics, Sanctioned Federation Events (Canada Cup, Europeans, etc.), and the 4 GSOC Slams.
 - Events corresponding to Provincials/Nationals/Olympic Trials will be included for all countries.
- The minimum number of teams required for eligibility in the Playdown category (all events leading up to Worlds) is 2, while the minimum number in the Special Events category is 6.
 - Events that fall into the Special Event category, but cannot reach this minimum will not be considered for CTRS/OOM inclusion.
- Teams finishing in the top half of the field will receive CTRS/OOM points to a maximum of 4 teams.
 - In a 2 or 3-team event, only the top team will receive points.
 - In a 4 or 5-team event, only the top 2 can receive points.
 - In a 6 or 7-team event only the top 3 can receive points.
 - In events with 8+ teams only the top 4 can receive points.
 - The exclusion to this rule are the 4 Grand Slams, which will receive points for the top 8 as per the base-point rubric explained earlier.
 - For all other events in this category the rubric below will be implemented:

Placing	Base Point Value
1 st	7
2 nd	5.5
3 rd	4.25
4 th	3

- Points are available on a per-win basis as described earlier.
- These events will use the same calculation algorithm as described above, with the change that the scaled SFM value does not have a maximum value of 5.0 (see examples in Appendix B).
- Playdown events (Provincials, Nationals, Worlds, Olympic Trials, and Olympics) do not have a purse factor, and the remaining events (Canada Cup, Europeans, and the 4 Grand Slams) will have a purse factor as calculated normally: $1 + (p - 500) * 0.00017$.
- To reflect the relative importance of events in this category, they will be awarded a bonus multiple to determine the points available for CTRS/OOM. This factor will be applied at the very end, and represents a percentage



increase based on the importance and will be done according to the following:

Event Type	Percentage Increase
Provincials	N/A
Nationals	90%
Worlds	90%
Canada Cup^	35%
Europeans^	35%
Olympic Trials	25%
Olympics	100%
Grand Slams	10%

* All of the events in this category are still predominately SFM-based events. This additional factor was implemented based on historical significance to adjust the points available to match the importance of winning/placing in such events.

^ The Canada Cup and Europeans represent events of the Sanctioned Federation type. The description for events to meet this category is:

- National/International Federations will be allowed to sanction 1 event per season in this category. This event must be used to either internally rank teams in a region, or towards Olympic qualification. The minimum number of teams required is 6.
- The bonus for events in this category (35%) will only be rewarded when more than half the teams playing are in the Top20 as per the OOM on the Tuesday before the event.
- As described above, the specific team-factor equation used is also dependent on whether or not there are at least 50% Top20 teams. These rules prevent a federation from artificially propping up teams using this category of events.
- Events at the Junior/CIS level will only be calculated at the National/World levels using the same formula for calculation (including the importance multiple) as described above.
 - Teams not registered on the tour will be factored into the 201+ group for SFM calculations, but will be ineligible for receiving CTRS/OOM points.

See Appendix B for Playdown/Special event examples from the 2013-15 season.



Appendix A: Tour Cashspiel examples from the 2014-15 season:

Example 1: Oakville - 30-team, \$30 000 purse, the total SFM currently used: 5.51 -
 $(5.51/30)*24 = 4.408*(1.44 \text{ # multiplier})*(1.08 \text{ purse multiplier}) = 6.86$

Place	SFM	Base Points	Total
1 st	6.86	7	48.02
2 nd	6.86	5.5	37.73
3-4 th	6.86	4.25	29.16
5-8 th	6.86	3	20.58

* This event yields a total of 226.38 points

Example 2: The Shootout - 16-team event, \$22 000 purse, the total SFM currently used: $2.22 - (2.22/16)*24 = 3.33*(1.0 \text{ # multiplier})*(1.15 \text{ purse multiplier}) = 3.83$

Place	SFM	Base Points	Total
1 st	3.83	7	26.81
2 nd	3.83	5.5	21.07
3-4 th	3.83	4.25	16.28
5-8 th	3.83	3	11.49

* This event yields a total of 126.39 points

Example 3: Brockville - 24-team, \$45 400 purse, the total SFM currently used: 5.92 -
 $(5.92/24)*24 = \max @ 5.0*(1.25 \text{ # multiplier})*(1.23 \text{ purse multiplier}) = 7.69$

Place	SFM	Base Points	Total
1 st	7.69	7	53.83
2 nd	7.69	5.5	42.30
3-4 th	7.69	4.25	32.68
5-8 th	7.69	3	23.07

* This event yields a total of 253.77 points

Example 4: Crestwood - 24-team, \$50 000 purse, the total SFM currently used: 3.61 -
 $(3.61/24)*24 = 3.61*(1.25 \text{ # multiplier})*(1.25 \text{ purse multiplier}) = 5.64$

Place	SFM	Base Points	Total
1 st	5.64	7	39.48
2 nd	5.64	5.5	31.02



3-4 th	5.64	4.25	23.97
5-8 th	5.64	3	16.92

* This event yields a total of 186.12 points.

Example 5: Red Deer - 32-team event, \$41 000 purse, the total SFM currently used:
 $2.65 - (2.65/32)*24 = 1.988*(1.5 \text{ # multiplier})*(1.13 \text{ purse multiplier}) = 3.40$

Place	SFM	Base Points	Total
1 st	3.40	7	23.80
2 nd	3.40	5.5	18.70
3-4 th	3.40	4.25	14.45
5-8 th	3.40	3	10.2

* This event yields a total of 112.20 points

Example 6: Portage - 31-team, \$60 000 purse, the total SFM currently used: 5.82 -
 $(5.82/31)*24 = 4.506*(1.47 \text{ # multiplier})*(1.23 \text{ purse multiplier}) = 8.15$

Place	SFM	Base Points	Total
1 st	8.15	7	57.05
2 nd	8.15	5.5	44.83
3-4 th	8.15	4.25	34.64
5-8 th	8.15	3	24.45

* This event yields a total of 268.95 points



Appendix B: Playdown/Special event examples from the 2013-15 season:

Example 1: 2015 Scotties, CAN National Championship: SFM: $3.09 - (3.09/12)*24 = 6.18$ (no max.)*(0.875 # multiplier)*(1.0 - no purse multiplier)*(1.9 importance factor) = 10.27

Place	SFM	Base Points	Total
1 st	10.27	7	71.89
2 nd	10.27	5.5	56.49
3 rd	10.27	4.25	43.65
4 th	10.27	3	30.81

Example 2: 2015 Brier, CAN National Championship: SFM: $3.65 - (3.65/12)*24 = 7.30$ (no max.)*(0.875 # multiplier)*(1.0 - no purse multiplier)*(1.9 importance factor) = 12.14

Place	SFM	Base Points	Total
1 st	12.14	7	84.98
2 nd	12.14	5.5	66.77
3 rd	12.14	4.25	51.60
4 th	12.14	3	36.42

Example 3: 2014 Masters of Curling, Grand Slam: SFM: $5.66 - (5.66/15)*24 = 9.06$ (no max.)*(0.969 # multiplier)*(1.25 purse multiplier)*(1.1 importance factor) = 12.05

Place	SFM	Base Points	Total
1 st	12.05	7	84.35
2 nd	12.05	5.5	66.28
3-4 th	12.05	4.25	51.21
5-8 th	12.05	3	36.15

Example 4: 2014 Canada Cup of Curling Men's: SFM: $2.81 - (2.81/7)*24 = 9.634$ (no max.)*(0.7 # multiplier)*(1.25 purse multiplier)*(1.35 importance factor) = 11.18

Place	SFM	Base Points	Total
1 st	11.18	7	78.26
2 nd	11.18	5.5	61.49
3 rd	11.18	4.25	47.52

* Since this event had 7 teams it was only eligible to count the top 3 for CTRS/OOM.



Example 5: 2015 AB Men's Provincial Championship: SFM: $1.96 - (1.96/12)*24 = 3.92*(0.875 \# \text{multiplier})*(1.0 - \text{no purse multiplier})*(1.0 - \text{no importance factor}) = 3.43$

Place	SFM	Base Points	Total
1 st	3.43	7	24.01
2 nd	3.43	5.5	18.87
3 rd	3.43	4.25	14.58
4 th	3.43	3	10.29

Example 6: 2014 Olympics (Women): SFM: $3.34 - (3.34/10)*24 = 8.02*(0.8125 \# \text{multiplier})*(1.0 - \text{no purse multiplier})*(2.0 \text{ importance factor}) = 13.03$

Place	SFM	Base Points	Total
1 st	13.03	7	91.21
2 nd	13.03	5.5	71.67
3 rd	13.03	4.25	55.38
4 th	13.03	3	39.09

Example 7: 2015 Women's World Championship: SFM: $3.12 - (3.12/12)*24 = 6.24*(0.875 \# \text{multiplier})*(1.0 - \text{no purse multiplier})*(1.35 \text{ importance factor}) = 10.37$

Place	SFM	Base Points	Total
1 st	10.37	7	72.59
2 nd	10.37	5.5	57.04
3 rd	10.37	4.25	44.07
4 th	10.37	3	31.11

