

# 2018



## **TECHNICAL PACKAGE SHORT TRACK SPEED SKATING**

# SHORT TRACK SPEED SKATING

1. **RULES:** This competition will be conducted under the rules of the International Skating Union (ISU) with modifications approved by the Arctic Winter Games International Committee. The rules may be further modified to adapt to the circumstances of the competition / venue at the recommendation of the Chefs and the approval of the Arctic Winter Games International Committee Technical Director and Host Society Sport Manager.

Equipment Note: Athletes must comply with ISU rules related to the use of cut resistant clothing for the Arctic Winter Games.

2. **CATEGORIES:**

Junior Male & Female:                      Born between July 1, 1998 and June 30, 2003.

Juvenile Male & Female:                      Born between July 1, 2003 and June 30, 2006.

Coaches may enter the 5<sup>th</sup> Juvenile who will be Junior age at the next Arctic Winter Games to skate as a Junior to fill the Junior category if there is a vacancy on a team under the required number of four per category. The coach will certify in writing that the skater can safely participate as a Junior. A skater can only compete in one age category for the entire competition.

3. **EVENTS:**

Junior Male & Female:                      All distances will be on a 111.12 M track  
500 meter individual  
777 meter individual  
1000 meter individual  
1500 meter individual  
3000 meter relay

Juvenile Male & Female:                      All distances will be on a 100 M track  
400 meter individual  
500 meter individual  
1000 meter individual  
1500 meter individual  
3000 meter relay

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

Relay events will include 4 skaters per team. A contingent can participate with 3 skaters if that team has only three skaters in that category or an injury prevents one team member from competing.

**Note: Age categories cannot be combined to fill a relay team**

**TEAM COMPOSITION:**

Junior Male:	4
Junior Female:	4
Juvenile Male:	4
Juvenile Female:	4
Coaches:	2

One coach must be female and one male. If a coach from one gender is not available a chaperone of that gender must be substituted.

**5. MEDALS:**

Individually by event and individually by team for relay events

GOLD	- 32
SILVER	- 32
BRONZE	- 32

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

**6. ARCTIC WINTER GAMES RULE MODIFICATIONS**

**6.1 Entries:**

- 6.1.1 Four weeks (4) before the games, each contingent will submit the names of their skaters to the designated Meet Coordinator/Chief Recorder.
- 6.1.2 Two (2) weeks before the Games, each Contingent will submit to the designated Meet Coordinator/Chief Recorder a 500 meter seed time for each Junior skater and a 400 meter time for each Juvenile skater. The time submitted must be from the current skating season.
- 6.1.3 The Meet Coordinator/Chief Recorder will provide each Contingent with a draft copy of skater seeding no later than the day before the first race to review for errors or omissions.

**6.2 Number of Skaters at the Start Line:**

- 6.2.1 Ice Surfaces 30m X 60m (100ft X 200ft) and greater (Olympic size)

Junior Skaters: 111.12 M track

Less than or equal to 1000 M	4 skaters
1001 to 2999 M	6 skaters

Juvenile Skaters: 100 M track

Less than or equal to 500 M	4 skaters
Less than or equal to 1000 M	5 skaters
1001 to 2999 M	6 skaters

- 6.4.1 For Ice Surfaces that are less than 30m X 60m (100ft X 200ft) (NHL size)

Junior Skaters: 111.12 M track

Less than or equal to 1000 M	4 skaters
1001 to 2999 M	6 skaters

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

Juvenile Skaters: 100 M track

Less than or equal to 500 M	4 skaters
Less than or equal to 1000 M	4 skaters
1001 to 2999 M	6 skaters

Modifications to number of skaters on line will be done as required for race efficiency and/or safety, at the Team Leaders/Coaches meeting prior to the games.

**5 Seeding**

For the first distance of the meet, the Meet Coordinator/Chief Recorder will make the heats based on the seed times submitted for each skater. After having established a list of times (from the fastest to the slowest), the heats will be established using the following manner:

<b><u>A</u></b>	<b><u>B</u></b>	<b><u>C</u></b>	<b><u>D</u></b>	<b><u>E</u></b>
1	2	3	4	5
10	9	8	7	6
11	12	13	14	15 etc

For the subsequent distances, the heats will be seeded based on the skater's accumulated points (see Section 6.4) according to the table.

- Second distance - seeded by points awarded after the first distance final.
- Third distance - seeded by the accumulated points from the first two finals
- Fourth distance - seeded by the accumulated points from first three finals.

If there is a tie in points then the skater with the faster seed time will be placed before the skater with the slower seed time.

**6.4 Point System**

All skaters who finish a final will receive the points for their respective final unless they are disqualified for a major infraction. These points will be used to seed the second, third and fourth distances (see section 6.3)

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

Points will be awarded according to this table:

1 <sup>st</sup> - 250	8 <sup>th</sup> - 35	15 <sup>th</sup> - 12
2 <sup>nd</sup> - 175	9 <sup>th</sup> - 30	16 <sup>th</sup> - 10
3 <sup>rd</sup> - 125	10 <sup>th</sup> - 25	17 <sup>th</sup> - 9
4 <sup>th</sup> - 75	11 <sup>th</sup> - 20	18 <sup>th</sup> - 8
5 <sup>th</sup> - 60	12 <sup>th</sup> - 18	19 <sup>th</sup> - 7
6 <sup>th</sup> - 50	13 <sup>th</sup> - 16	20 <sup>th</sup> - 6
7 <sup>th</sup> - 40	14 <sup>th</sup> - 14	

**6.5 Advancements (See Appendix A for details)**

6.5.1 All participants will skate heats, semis, and finals with the exception of the longest distance for the two age categories. The numbers of heats / semifinals / finals will be assigned according to the distance being skated and the number of skaters registered for each division.

6.5.2 Advancements will be by first (1<sup>st</sup>) and next fastest. (1 + \_)

6.5.3 The Chief Referee may modify the advancement schedule (Appendix A) at the meet if necessary to protect the safety of the skaters or to prevent a heat from having skaters from only one team.

**6.7 Infringements/Penalties**

6.7.1 A penalty in any heat will place that skater in last place position in that category of skaters, i.e., a skater penalized in a race with four skaters in three heats will receive the twelfth place ranking.

6.7.2 A penalty in a semi-final will place that skater in the last place position for their group of semi-finals, i.e., a skater is penalized in an A & B semifinal with four skaters per race will receive the eighth place ranking.

6.7.3 A skater penalized in a final race will receive the last place points for that final.

6.7.4 If a skater is penalized for non-sportsmanlike conduct or a major infraction, the skater will receive no points.

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

**6.8 Skaters Not Finishing/Skating a Race**

Skaters who do not skate in a final or who do not finish a final receive no points.

If a skater is unable to skate a race or will not be skating for the remainder of the day, the coach must notify the referee prior to the race in writing. The letter must state the reason, duration and be signed and dated.

**6.9 Relays**

6.9.1 Relay heats and finals will not be held on the same day.

6.9.2 Relay Seeding Process

The averaged total of the 500 meter (for Juniors) and 400 meter (for Juveniles) seed times for each of the skaters on the relay team will be used to seed relay teams in qualifying heats. After having established a list of times (from the fastest to the slowest), the heats will be seeded as follows:

<u>Heat A</u>	<u>Heat B</u>
1 <sup>st</sup> seed	2 <sup>nd</sup> seed
4 <sup>th</sup> seed	3 <sup>rd</sup> seed
5 <sup>th</sup> seed	

Advancements will be based on the first place finishers from the heats plus the next two (2) fastest times. (1 + 2)

**6.10 Protective Equipment**

6.10.1 Eye Protection: All skaters must wear shatter-resistant glasses or a complete visor. All glasses must be held in place by a strap.

6.10.2 Neck Protection: All skaters must wear neck protection covering the lower half of the full circumference of the neck and covering all soft tissue below the chin to a point extending below a line joining the armpits at the front of the body.

Neck protection must be made of Kevlar, Dyneema, or ballistic nylon. The neck protection must be fastened securely.

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

6.10.3 Cut Resistant Body Protection: All cut resistant skin suits or under suits must meet or exceed the ISU 1265 (see Appendix B)

6.10.4 Ankle Protection: A cut and puncture resistant anklet made of Kevlar or Dyneema must be worn on both legs, covering the legs from the top of the boot to 10 cm above the tops of the boots.

## **7. FACILITIES AND SCHEDULING**

### **7.1 Ice Scheduling**

There should be a minimum of 6 hours of ice (1 hour set-up and 5 hours of racing) each for one day of practice and four days of competition. Skaters should have a day off in the middle of the week. At least one day, preferably the day before the rest day, there should be late afternoon or evening ice in order to showcase the event and allow working members of the community to view it. For example, on the day before the rest day, speed skating should be scheduled from 3 to 9 pm.

### **7.2 Venue Size**

For the safety of the skaters, speed skating should be held at the largest ice surface available. Ideally the ice surface should be 30m X 60m (100ft X 200ft). A larger arena allows more skaters to safely be on the ice at the same time, and allows all skaters more area to slide before they hit the walls if there is a fall.

### **7.3 Track Layout:**

A 111.12 meter oval with a minimum of three tracks should be set for the Junior age category and a 100 meter oval with a minimum of three tracks should be set for the Juvenile age category.

The diagrams found at Appendix C2 of the Speed Skating Canada Red Book illustrate track diagrams for these tracks and the placement of the start and finish lines.

<http://www.speedskating.ca/resources/red-book/track-diagrams>



**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

**7.4 Ice Preparation**

**Ice temperature:** Maintain a slab temperature of –6C (21F) with a brine solution temperature of –14C (6F) in order to maintain the ice temperature during increased flooding in a competition.

**Ideal shave and flood:** The ideal situation would be to shave the ice to just below 2.5 cm (1 inch) then hose flood. This covers the entire ice surface with water and allows the water to settle into the low spots. As well this method seals any dirt already in the ice therefore reducing the chance of stripping skate edges. This step is not required but is recommended if time permits.

**Shave track prior to flooding:** Due to the fact that water is added to the ice during practice and competition it is recommended that the Ice Maintenance worker shave the track prior to flooding the ice surface. This will keep the ice level by shaving the excess water from the track and allowing the ice to freeze more quickly after a flood.

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

## Appendix A Advancements

**Distances less than or equal to 500 M (Olympic or NHL Ice)**

Number of skaters	Race Type	Who Goes Where
9- 12	3 heats, 3 semis, 3 finals	<p>3 first place + the next 5 fastest to Semi A &amp; B in snake pattern based on heat times. The rest to semi C.</p> <p>2 first place + the next 2 fastest from semi A &amp; B to Final A.</p> <p>Remainder to Final B.  <b>Final C is same as Semi C</b></p>
13-16	4 heats, 4 semis, 4 finals	<p>4 first place + the next 4 fastest to semi A &amp; B, remainder to semi C &amp; D. Seeded in snake pattern based on heat times.</p> <p>2 first place + the next 2 fastest from semi A &amp; B to Final A.</p> <p>Remainder of semi A &amp; B to Final B.</p> <p>2 first place + the next 2 fastest from semi C &amp; D to Final C.</p> <p>Remainder of semi C &amp; D to Final D.</p>
17-20	5 heats, 5 semis, 5 finals	<p>5 first place + the next 3 fastest times to semi A &amp; B, remainder to semi C, D, &amp; E. Seeded in snake pattern based on heat times.</p> <p>2 first place + the next 2 fastest from semi A &amp; B to Final A. Remainder of semi A &amp; B to Final B</p> <p>3 first place + the next fastest from semi C, D &amp; E to Final C.</p> <p>Final D next fastest 4.</p> <p>Final E remainder of skaters.</p>

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

**Distances less than or equal to 1000 M (Olympic Ice – Juveniles Only)**

<b>Number of skaters</b>	<b>Race Type</b>	<b>Who goes where</b>
11 – 15	3 heats, 3 semis, 3 finals	3 first place + the next 7 fastest to semi A & B Remainder to Semi C. 2 first place + the next 3 fastest from semi A & B to Final A. Remainder to Final B. <b>Final C is same as Semi C</b>
16-20	4 heats, 4 semis, 4 finals	4 first place + the next 6 fastest to semi A & B. Remainder to semi C & D in snake pattern based on heat times. 2 first place + the next 3 fastest from semi A & B to Final A. Remainder to Final B. 2 first + the next 3 fastest from semi C & D to Final C. Remainder to Final D.

**Distances less than or equal to 1000 M (NHL Ice – All Ages)**

\*Race configuration and advancement is the same as for Distances less than or equal to 500 M

**Distances 1001 to 2999 M (Olympic or NHL Ice)**

<b>Number of skaters</b>	<b>Race Type</b>	<b>Who goes where</b>
13-20	3 heats - 3 finals	3 first + the next 3 fastest to Final A. Remainder to Final B & C in descending order based on heat times

**Note:**

If pressed for time, the longest distance will be skated only once. In this case, the finals will be seeded by the total points accumulated at that time. Therefore the top 6 including ties will skate the primary final, skaters 7-12 including ties will skate the secondary final, etc.

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

**Appendix B**

**INTERNATIONAL SKATING UNION**  
**Communication No. 1265**  
**Cut Resistant Clothing in Short Track Speed Skating**

*This Communication is based on 2004 ISU Special Regulations for Short Track Speed Skating, Rule 295, paragraph 3 and will apply to all ISU Events and the Olympic Winter Games effective July 25, 2004. However the ISU strongly recommends these Cut Resistant clothing/uniforms to be worn at all ISU sanctioned events. The following replaces ISU Communication No. 1220 and updates ISU Communication No. 1159.*

**Introduction**

All participants in Short Track Speed Skating know and understand that the sport involves risks and danger of injuries, including cuts and puncture wounds, particularly those resulting from a collision or fall. ISU Members must instruct all participants to respect safety measures required to minimize such risks and dangers. In particular, Members and participants must observe all ISU initiated safety measures, including those stated in Rules 280 and 295 and in this and other Communications.

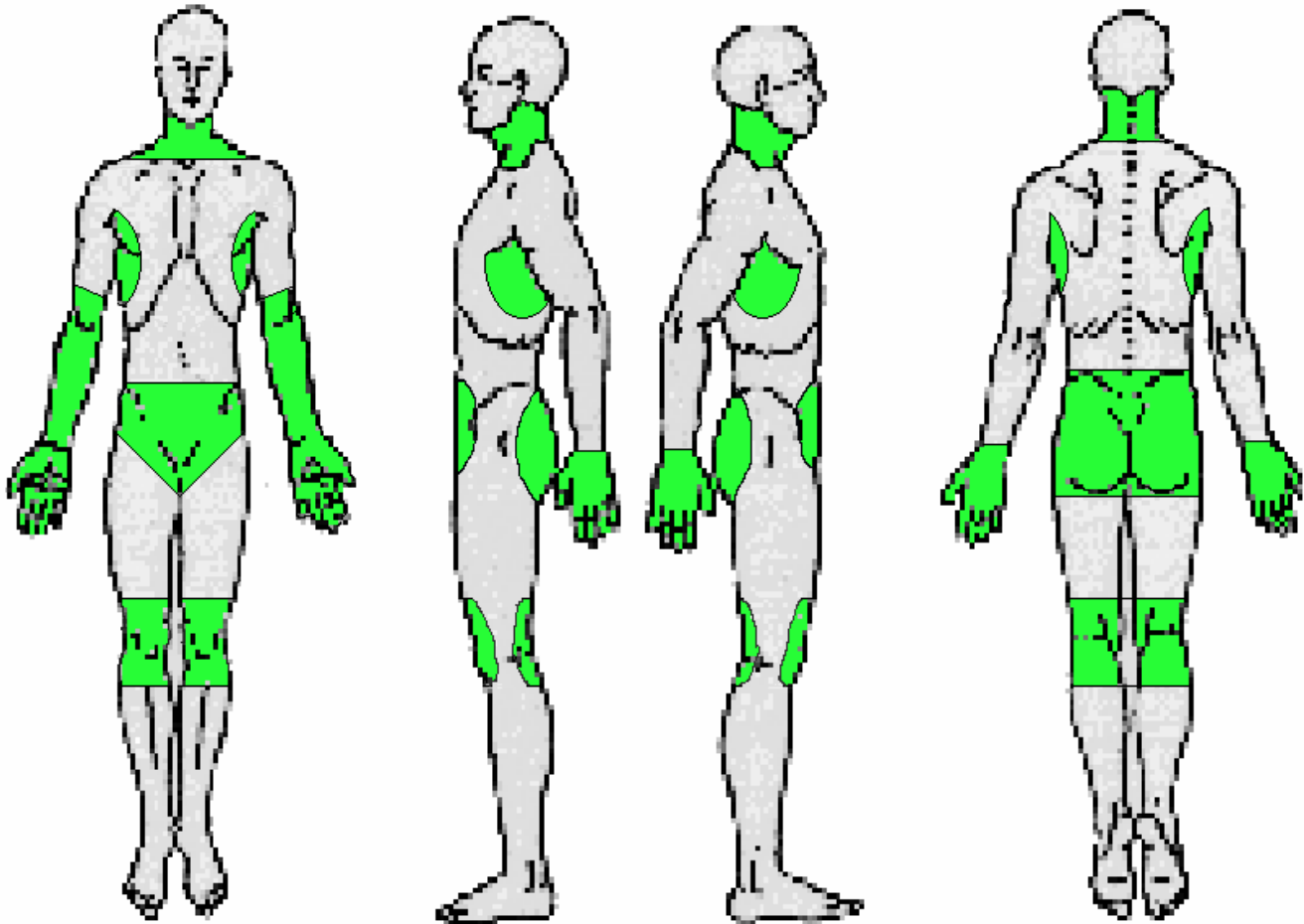
The ISU has commissioned a study of fabric standards for competition clothing/uniforms for Short Track Speed Skating including a medical assessment. The study identified the special areas of risk as those shaded in the drawing below. These include the neck, groin, axillar region, gluteal region, lower arms, hands, back and front of the knees. At a minimum, all of the areas specified in the figure below are to be protected by the cut resistant fabric specified in this Communication.

**Areas of risk**

**See Diagram below**

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---



In order to determine the suitability of competition clothing/uniforms materials for Short Track Speed Skating, tests were carried out to simulate the effect of extreme falls and determine the quality of materials. Through statistical and error analyses, the results from these tests have been correlated with test results using the same materials under international standard EN388 (this widely recognized standard will be familiar to clothing manufacturers). Using the test data, an equation has been determined which makes it possible to test a material according to standard EN388, and then calculate its suitability for Short Track Speed Skating.

**Cut Resistant Clothing**

No limitations will be imposed on the manufacture of protective competition clothing/uniforms other than, at a minimum, the material must comply with Standard EN388. A close study of the implementation process, the world wide availability of cut

# TECHNICAL PACKAGE

## 2018 ARCTIC WINTER GAMES

---

resistant clothing/uniforms and practical experiences has resulted in a reconsideration of the requirements. The cut resistant material used in protective clothing according to this ISU Communication must meet as a minimum requirement the Level 2 Standard according to EN388 in a cut resistance test (resistance to cutting by sharp objects). Cut resistant protection may be either integrated in the actual competition uniforms, or be worn as special underwear.

To ensure consistency in the testing of the fabrics used, the manufacturers of cut resistant clothing/uniforms are strongly recommended to have samples of their fabric tested at SATRA Quality Assurance, Ltd., SATRA House, Rockingham Road, Kettering, Northamptonshire NN16 9JH, Great Britain, fax no +44/1536 410 626.

The report commissioned by the ISU on the cut resistant study is available free of charge for ISU Members from the ISU Secretariat. For manufacturers and other third parties, the report is available at cost of mailing. Details of the Standard EN388 are available through every national standardization institute or can be ordered from SATRA Quality Assurance Ltd.

### **Application and Control**

According to Rule 295, paragraph 2, of the Special Regulations for Short Track Speed Skating, each Skater is solely responsible that his/her personal equipment meets the highest safety criteria in order to obtain the utmost safety for the Skaters. ISU Members are herewith requested to ensure that all Skaters entering international Short Track Speed Skating competitions shall respect the above-mentioned Rule and the requirement of this Communication for their competition clothing/uniforms as soon as possible, but at the latest as of July 25, 2004.

ISU Members are requested to ensure that their competition clothing/uniform manufacturers label their products stating that the cut resistant fabrics used meet the criteria of Level 2 Standard according to EN388, and/or provide documents that confirm the requirements of the cut resistant fabric. Such document must be in English, duly dated and signed by the manufacturer and it must be provided upon request before the competition clothing/uniforms will be considered acceptable.

3

The ISU may carry out random controls on the use of the required cut resistant competition clothing/uniforms. Skaters must be able to present proper documentation about the uniforms and the materials used. Non-compliance with the requirement at ISU Events after July 25, 2004 will result in an immediate exclusion of the skater(s) from the respective ISU Event or Olympic Winter Games.

**TECHNICAL PACKAGE**  
**2018 ARCTIC WINTER GAMES**

---

**Safety Measures**

Obviously, the safety program respecting cut-resistant uniform material, together with all the other safety measures specified in the ISU Rules, cannot absolutely assure full protection for all competitors under all conditions. Experience demonstrates that stumbles and falls occur in this high-speed ice sport. All ISU Members and their clubs, coaches and officials who conduct training programs are admonished to teach safe skating techniques during training and to insist upon compliance by their competitors with ISU rules during competitions.

Milan, **Ottavio Cinquanta**, President

June 28, 2004

Lausanne, **Fredi Schmid**, General Secretary