ANNEX A

Inline Speed Skating Track Homologation

1. TECHNICAL REQUIREMENTS

The rules herein contained represent the requirements for the homologation of all the new Inline Speed Skating tracks (either permanent or temporary) devoted to both practice and competitions. The levels of homologation of international facilities, setting the characteristics and the endowment of ancillary areas and services, shall be issued by World Skate.

1.1. SPEED SKATING TRACKS

Speed Skating tracks may be either indoor or outdoor, either permanent or temporary, and are endowed with two straightaways of the same length and with two symmetrical curves having the same diameter. Curves shall be raised on the outer edge and have a linear or curvilinear transverse profile.

The free height of indoor tracks, along the perimeter of the field of play including the external buffer area, shall be at least 4.00 m., and the height inside of the track shall not be lower than 5.00 m.

1.1.1 Size Characteristics For Type-Approval Of Speed Skating Tracks

The existing tracks may be approved provided that they comply with the following characteristics.

1.1.2. Length

The length of the track may range between 175 and 220 meters, measured along the line of the inner edge (on which the radius of curvature is measured).
The length of each track is measured by rounding off the measure in meters to the next decimal number.

1.1.3 Width

The width of the track, measured on the horizontal plane from the inner edge to the fencing, shall be between a minimum of 6 m. and a maximum of 7 m., with a minimum value deviation of 10 cm.

1.1.4. Inner Edge

The inner edge of the track shall have a steady height.

1.1.5. Straightaways

Each rectilinear section, along the outer edge, shall have a flat longitudinal profile for at least 1/3 of its length.

Straightaways may have a maximum transversal slope of 1% towards the inner part of the track.

1.1.6. Radius Of Curves

Tracks having radiuses of curvature ranging between 11 meters and 15 meters can be homologated.

1.1.7. Height And Profile Of Tracks

In curves and in the areas acting as a connection with the straightaways, the outer edge of the track shall be raised.

The profile of the transversal section of the track may be either linear or curvilinear, raising towards the outside, preferably under a parabolic law.

The height of the external profile of the curve shall be selected according to its width and to the type of transversal profile (either rectilinear or curvilinear).

1.1.8. Connections Between Straightaways And Curves

A connection is the portion of the track between the flat rectilinear area and the portion of the curve with the maximum height on the external profile.

Exception made for flat rectilinear areas, all the other sections of the track shall be gradually and seamlessly connected.

The length of the connection between the straightaway and the curve is free. Each connection shall begin after the finishing line and includes an arc of curvature that may range between 30 and 90 degrees.

The longitudinal profile of the connection when exiting the curves may vary from the profile in entering the curves.

1.2. SIZE OF THE NEW TRACKS APPROVED BY WORLD SKATE

The new tracks(designed after publishing of the regarding Annex), in order to be approved by World Skate for international competitions, shall comply with the size and the types and defined in the Annex published in World Skate's website, http://www.worldskate.org/speed/about/regulations.html .

Please note that the designs contained in the Annex above shall not be used as project designs as they are not referred to any specific location whatsoever and are particularly lacking in the destination of use of internal and external areas, as well as in all the technical details (characteristics of the flooring, kerbs, etc.) and in the detail of all fixtures, systems and installations (rainwater drainage, cable ducting systems for electrical installations, lighting systems, photo-finish camera systems, etc.).

The designs of the fencing (balustrades) included in the Annex are not binding. Other types of fending may be installed, provided that their functional and safety characteristics are the same as or higher than those described. In case of balustrades different from those of the Annex, it is advisable to seek the opinion of World Skate before making any final decision

1.3. NO-SKATING ZONE

Whatever the type of the track (either new or existing), a no-skating zone with a width of 45/50 cm. shall be arranged inside of the inner edge of the track. This area shall have the same flooring as the track, and will be endowed with anti-slipping adhesive strips, with 2-5 cm of width and 4 mm of height, arranged crosswise to the track, at intervals of 10 cm in curves and 40 cm along the straightaways. The anti-slipping adhesive strips must not be put on the white inner line of the track.

In particular cases and exclusively for the already-existing tracks, whenever the no-skating zone cannot be identified, derogations to the Regulations can be accepted upon discretion of the approving authority, without prejudice to the compliance with the safety requirements.

1.4. SAFETY ZONE

Inside the inner edge of the track and beyond the "no-skating area", the flooring shall have a safety zone at least 2.0 m. wide, flat, and free from any obstacle.

In outdoor venues, the safety zone may include drainage channels and have a maximum slope of 1% to the drains. The existing drains (raceways, drainage canals, etc.) shall neither alter the evenness of the flooring, nor represent a danger for skaters.

The drainage canals and the raceways may be closed through meshes whose weaving is crosswise to the direction of competitions or, preferably, with micro-pierced components; each component shall be guaranteed against opening. Holes shall not let through any rounded object with a diameter exceeding 10 mm.

There shall be no step-like flooring or irregularities between the safety zone and the inner part of the track.

1.5. INNER FENCING

Areas devoted to other activities can be organized inside of the track; in case fences are installed, they shall be suitably screened also towards the track, in order not to jeopardize the users of the track. Particular attention shall be paid to the protections of the corners towards the track.

1.6. EXTERNAL BUFFER ZONE

A zone with a width of at least 1.20 m. free from the public and from hindrances has to be arranged in addition to the fencing (balustrade).
In case of already-existing facilities whose buffer zones include non-removable structural components deemed to be harmful for the athletes participating in competitions, the Technical Commission shall identify the way to recover the safety conditions through the gradual increase of the height of fencing, or to protect the hazardous components with shockproof protections.

1.7. MARKINGS AND DEMARCATIONS OF THE TRACK

Along the inner edge of the track (on which the radius of curvature is measured) a white band with a width of 5 cm. must be marked. The inner edge of the band shall coincide with the line of measurement of the track, as its width is considered as belonging to the “competition area”.

As regards the position of the starting lines (5 cm. wide), please refer to the provisions presently in force. The finishing line “**A**” (5 cm. wide) shall be traced at the end of the flat longitudinal profile, preferably at a distance of ¼ of the straightaway, before entering the corner (as per the example below).

The finish line can be positioned up to 8 meters before the curve, always in a flat area of the straightaway.

1.8. FLOORING

The flooring of the field of play shall be perfectly smooth and non-slippery, in order to ensure the perfect adherence of skate wheels.

Below the track, near the starting and finishing areas, cable runs must be installed between the outer and the inner area of the track, devoted to all electrical connections and microchip antennas.
(The distance of the two microchip antennas before and after the finishing line shall be agreed with the timekeepers of the hosting country, as such technology may require different distances according to the different countries).

1.8.1. Types Of Flooring Allowed

As regards international homologations, a finish with resins on a base of asphalt and cement is required.

1.8.2. Color

As far as the flooring is concerned, no compulsory color is established. However, the color shall not be dark and must allow to clearly identify the markings on the track. By way of general principle, the colors that are presently used in tracks are the following:

RAL 5015 Inner part of the track, flat area
RAL 5017 Track

1.8.3. Uniformity Of The Surface

The surface must be perfectly smooth and flat *(within the limits of the roughness of the finishing material)*. When the flooring is completed, the deviations of the reference theoretical surface shall not exceed 5 mm. In rectilinear sections with a 3 m. straight edge there shall be no deviations exceeding 6 mm. The surface shall have no step-like discontinuity.

1.8.4. Friction

The surface shall allow skates to have an adequate and balanced degree of adherence.

1.8.5. Smoothness

The surface shall have a high degree of smoothness, hence minimizing the rolling friction of skates.

1.8.6. Conditions Of Use

For homologation purposes, markings - where required - shall be in clearly visible, and the flooring shall have no evident signs of degradation or wear and tear, which may alter its functionality or reduce its safety.

21.9. EXTERNAL FENCING OF THE TRACK

A fencing with a height of 1.20 m, and endowed with a continuous handrail, must be installed at the outer edge of the track. It shall have no protuberances towards the inside. A shock-resistant foot-stop panel shall be placed at the bottom of the fencing, detached from the ground by a maximum of 2 cm and with a height of at least 20 cm. The color of the foot-stop panel shall be contrasting from the color of the flooring.

Particular attention must be paid to the fencing, which shall meet the safety requirements in force for the protection of athletes. Fencing shall be of a smooth and seamless surface, possibly transparent, resistant to the dynamic action by athletes. Solutions with rounded edges and seamless surfaces shall be adopted, with junction seams having a maximum width of 5 mm, both vertically and horizontally *(exception made for the distance of 2 cm of the foot-stop panel from the ground)*.

Near the half-track line, two access gates shall be installed, one having a width of 0.80 m and the other a width of 1.20 m. Both access gates must open outwards (preferably anti-clockwise). Closed gates must ensure the continuity and the resistance characteristics of the entire fencing.
For approval purposes, the facilities shall be endowed with the characteristics below.

2. MAIN CHARACTERISTICS OF THE FACILITY

2.1. THE JUDGES' AREA (SECRETARIAT)

The facility shall be equipped with an external covered area (near the Track and the Finishing Line) of nearly 12 sq. m. (3 x 4) devoted to Judges.

2.2. THE TIMEKEEPERS' AREA

The facility shall be equipped with an external covered area (near the Track and the Finishing Line) of nearly 12 sq. m. (3 x 4), adjacent to the Judges' area, and devoted to Timekeepers.

Near the track, at the curve preceding the straight finishing line, near the relay section, an area devoted to coaches shall be arranged.

2.3. ARTIFICIAL LIGHTING

The artificial lighting during competitions shall comply with the level of homologation conferred. The minimum values of average lighting on the horizontal plane (in lux), and of the minimum lighting/average lighting ratio, shall be the following:

Level of facility	**Average lighting (lux) of at least**	**Minimum/Average lighting ratio of at least**
International competitions	**500**	**0.7**

As regards the assessment of the lighting characteristics, and anything not expressly covered by these requirements, please refer to UNI EN 12193 (Europe)or to the referring laws of the Host country.

In case of particular events and/or existing venues, the Technical Commission may – at its sole discretion - approve facilities with different lighting characteristics.

The adoption of systems for the reduction of light pollution upwards (outside) is recommended, by also considering the use of asymmetrical reflectors.

With a view to reducing energy consumption, please arrange systems that allow differentiated lighting (200 – 300 – 500 lux).

In order to reduce and optimize construction and running costs, the high levels of lighting for top competitions may be obtained by installing additional lighting on occasional basis.

2.3.1. Lighting At The Finishing Line

At least 2,000 LUX are needed at the finishing line, measured at 1 meter above the level of the track. The lighting at the finishing line supported by the “Finish Gantry”, shall be placed 50 cm beyond the finishing line in order to avoid shaded images of the “Finishlynx”

2.3.2. Emergency Lighting System

All the lighting systems shall be equipped with a battery emergency lighting system (UPS) ensuring 10 lux per 2 minutes and 5 lux per 30 minutes during training sessions. In case of events and competitions, the emergency lighting system (UPS) shall also be supported by a power generator, providing 20 lux per 2 minutes and subsequently 5 lux per 60 minutes also along the exit routes.