USSA Cross-Country Technical Handbook

The National Governing Body for Olympic Skiing and Snowboarding
Introduction

This technical handbook has been prepared with the goal of assisting USSA cross country event organizers in preparing, planning and implementing successful competitions and events. Included in this manual are recommendations, which are subject to change at any time, often following rule updates or changes. The recommendations in the FIS Cross Country International Competition Rules (ICR) and in the USSA Nordic Competition Guide are used as a base for the contents in this manual, together with experiences from many years of high level competitions and organizations. The material is mainly intended to help organizers of high level USSA events, such as US National Championships and SuperTour events. It is also the hope that other USSA event organizers will find the handbook useful as well.

The handbook presents technical guidelines to Organizers in many areas, but most specifically in areas at the competition venue itself; technical requirements, stadium and course setup for various competition formats, and description of tasks for the different technical sport functions of the event. It also gives examples of successful facility layouts, forms and checklists for the Organizer.

The U.S. Ski and Snowboard Association conducts several elite, international and national level events each season. Conducting these competitions at the highest competitive level is critical to the development and quality of the USSA competitors.

This handbook should be used as a supplemental guide to the existing competition rules of FIS and USSA. USSA rely on the experience and expertise of the event organizers, and this handbook will help you understand the technical requirements and standards of high-level USSA competition.

In addition to this manual, the following USSA and FIS Cross-Country booklets and documents contain useful and important information for a high-level USSA event organizer:

- USSA Nordic Competition Guide
- USSA Event Handbook
- USSA Cross Country Timing and Results requirements
- FIS Cross Country International Ski Competition Rules
- FIS Cross Country Rules and Guidelines of the FIS points
- FIS Cross Country Homologation Manual
Organization

Organizing Committee Structure

High-level USSA events involve not only one or more competitions, but additional promotional, organizational and infrastructure requirements. The development of a comprehensive Organizing Committee (OC) with experienced leaders is a critical element to the success of the event.

The OC should consist of several individuals covering positions such as overall event management and coordination (Chair), Marketing and Sponsorship/Advertisement, Volunteer coordination, Lodging and Hospitality, Venue logistics and setup, Press and Media, Web site coordination, Medical services etc.

Below is an example of an overall organizational structure that may be typical for a large National Championship event. This structure includes all responsibilities and tasks of the event, and as can be seen, sport/competition management is only one part of many.

Example of Organizational Structure for large event:

For smaller USSA events, the organizational structure and tasks showed above will be simplified. Individuals alone can do the tasks of many of the committees. However, it may be useful to see this larger picture or get an idea of how to organize an event at a higher level. In this way, a smaller organizer knows better what tasks are involved with larger events.

This manual will mainly focus on the work, duties and tasks of the committee responsible for the technical competition aspects of an event - the Competition Management Committee.
**Competition Committee Structure**

The operational responsibilities of the Competition Committee is to:

- Organize high quality competitions that satisfy the criteria set forward by USSA
- Provide the best possible conditions for all participants in such a manner that all competitions are fair
- Provide the best possible conditions for athlete training and preparation for the competitions.

The operational responsibilities listed above can be organized into the following committee structure, each area with its own responsibilities directed by a “Chief”. The main committee structure is as suggested in the *FIS Cross Country International Competition Rules (FIS ICR)*:

- Secretariat
- Course
- Stadium
- Timing & Results
- Competition Control

USSA will assign individuals to work with the Event Organizing Committee to ensure the highest quality competition, as follows:

**Technical Delegate/Jury Members** – The TD and Jury members (particularly the Nordic Director, who is assigned to the Jury for major events) will work with the OC to oversee the planning and preparation of each competition venue to ensure safety, organization, and quality. The TD will work closely with the Chief of Competition and venue operators to ensure the highest quality competition.
The detailed tasks of the sub-groups of the competition committee can be found in the FIS ICR, but is included in summary form below:

Chief of Competition

The Chief of Competition is responsible for all activities that affect the sport-technical facilitation of the competition events. The Chief of Competition should in due time form a Competition Committee with sufficient technical expertise to satisfy the USSA and FIS requirements. It is important that the Chief of Competition is familiar with the technical rules of the sport (FIS ICR), and also knowledgeable of all the newest race formats, stadium setups and grooming equipment.

- Oversee and guide all technical aspects of the competition.
- Ensuring that all officials who are responsible for the organization of the competition are qualified enough to ensure that the competition is carried out according to the International Competition Rules (ICR) of FIS.
- Supervise and control of the work of all competition officials except the TD and elected Jury Members.

In the USSA Event Handbook, the responsibilities of the Chief of Competition are described as:

The Chief of Competition is responsible to oversee the preparation and conduct of the competition and ensures that the technical requirements of the competition (according to FIS and USSA rules and standards) are being met. The Chief of Competition represents the “race committee” on the OC and will work with USSA’s Nordic Director and Technical Delegate to ensure the highest quality competition.

Other key competition committee officials are:

Assistant Chief of Competition

- Will assist the Chief of Competition with his/her duties and at any time, be capable of substituting or replacing the Chief of Competition if needed.
- Will be assigned tasks by the Chief of Competition as situations arise prior to and during competitions.

Competition Secretary (Chief of Secretary)

- Responsible for all secretarial work concerned with the technical aspects of the competition.
- Prepares all forms for the entries, start, timing, calculation, draw and controls.
- Organizes the Team Captains’ and Jury meetings.
- Distributes Start Lists, other important information, minutes of the Team Captains’ and Jury meetings
- Arranges for the earliest possible publication of the unofficial results and for the distribution of official result.
- Handles all official protests
- Collects and distributes weather statistics
- Coordinates and distributes start, training and access bibs.

Chief of Course

- Involved in selecting and preparing courses to meet USSA or FIS norms in cooperation with the USSA TD and the Chief of Competition
- Involved in measurements and the production of course plans and profiles
- Responsible for timely preparation and grooming of competition and warm-up courses, stadium and ski test areas according to the rules, marking and fencing of the courses, verification of temperature measurements, coordination of location of first aid posts and feeding stations,
- Oversee and organize on-course snowmobile traffic when needed
- Sending forerunners and post runners around the course before and in between competitions
- Ensuring that competition courses are cleared after end of competition by using post-runners or snowmobile patrols.
- In case of difficult weather or snow conditions, coordinates (together with TD and Jury) the use of course preparation groups and the Forerunners to ensure that the course is in the best possible condition during the whole competition.

Chief of Timing & Results

- Oversees and quality checks the timing and results products of the Timing & Results Services provider/contractor
- Coordinates the work of the Starter and the Finish Order Recorders
- Provide support for the stadium announcer (in terms of results' screen or printed list)

Chief of Stadium

- Responsible for all activities and setup in the stadium area including start and finish, ski marking (if needed), commercial marking (if any), anti-doping control coordination (if used) and general set-up, control and fencing of the stadium area.
- Coordinating all timing related activities with the Chief of Timing & Results.
- Coordinating all snow preparation and grooming activities with the Chief of Course.

Chief of Competition Control

- Responsible for suitable placing of technique, video and bib controllers along the competition courses in close cooperation with the TD and Chief of Competition.
- Responsible for setup of all video review equipment
**Venue requirements and Facilities**

A high level USSA Cross-Country competition facility should include the following:

**Competition courses**

The courses used for the events must be homologated and certified competition courses suitable for the respective format and distance scheduled for the event. The homologation and certification details, requirements and procedures are described in the *FIS Cross Country Homologation Manual*. Homologation represents a “system of evaluation” that is designed to guide the development and upgrading of cross country competition courses. It is not just a set of numbers and standards, but is a process for certification that provides a forum for constructive discussion between Organisers, the homologation advisor and the FIS/USSA. The end result of the process is expected to provide varied and challenging courses that require competent skiing abilities, as well as stadiums that meet the requirements of the new competition formats.

USSA requires that U.S. National Championship courses are USSA homologated or that course maps and profiles are submitted to USSA prior to or during the application process. “Traditional” SuperTour organizers are also required to go through the same process.

The following table lists recommendations for length of competition course loops. In general, the longer loops should be used if the competition is in an interval start format, while shorter loops should be used for mass-start events.

<table>
<thead>
<tr>
<th>Competition Distance</th>
<th>Course loop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Sprint/Team Sprint</td>
<td>0.8 – 1.5 km</td>
</tr>
<tr>
<td>5 km</td>
<td>2.5 km or 5km</td>
</tr>
<tr>
<td>7.5 km</td>
<td>2.5 km, 3.75 km or 7.5 km (or 5 + 2.5 km)</td>
</tr>
<tr>
<td>10 km</td>
<td>2.5 km, 3.3 km, 5 km or 10 km</td>
</tr>
<tr>
<td>15 km</td>
<td>3.75 km, 5 km, 7.5 km (or 10 + 5 km)</td>
</tr>
<tr>
<td>30 km</td>
<td>3.75 km, 5 km, 7.5 km or 10 km</td>
</tr>
<tr>
<td>50 km</td>
<td>5km, 10 km, 12.5 km or 16.7 km</td>
</tr>
</tbody>
</table>

The width of the courses is increasingly important due to the new race formats. The following table lists recommendations for width of competition courses:

<table>
<thead>
<tr>
<th>Competition Format</th>
<th>Course width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interval start, classical technique</td>
<td>Minimum 3 m</td>
</tr>
<tr>
<td>Relay, classical technique</td>
<td>Minimum 4 m</td>
</tr>
<tr>
<td>Interval start, free technique</td>
<td>Minimum 4 m</td>
</tr>
<tr>
<td>Relay, free technique</td>
<td>Minimum 6 m</td>
</tr>
<tr>
<td>Mass-start, classical technique</td>
<td>Minimum 6 m</td>
</tr>
<tr>
<td>New pursuit, second part (first part is a classical technique mass-start)</td>
<td>Minimum 6 m</td>
</tr>
<tr>
<td>Mass-start, free technique</td>
<td>Minimum 9 m</td>
</tr>
<tr>
<td>Sprint, classical technique</td>
<td>Minimum 6 m</td>
</tr>
</tbody>
</table>
Warm-Up courses

Warm up courses for the competing skiers are required since skiers are normally not allowed to warm up on the competition courses. The warm up course should be adjacent to but separate from the competition courses, at least 1 km long, and optimally starting and ending close to the stadium and start area. The warm-up courses should include hills where the competitors can test the kick wax for classical technique races. It is important that the warm up courses is groomed at the same time and with the same equipment as the competition courses.

Ski Test area

The ski test area should be sufficiently large to accommodate all entered teams. Each team should optimally have a track or lane available. The optimal slope for a ski test track is between 10 – 16 % gradient, steepest at the top, and with a flat area to stop at the bottom. A flat platform of snow should be constructed at the top of the slope. An optimal ski test area size for a large National Championship is 50 m wide x 50 m long. It is important that the ski test area is prepared with the same snow, groomed at the same time and with the same equipment as the competition courses.

The profile of the ski test area can be in accordance with the following:

```
  6-10 m
/    \  10 - 16%
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The total length of the area is approximately 50 - 70 m, with a gradient of 10 to 16 %. The area should provide conditions where a skier is able to glide for at least 10 seconds and gain speed of 25 – 30 km/h in fresh snow conditions.

The layout of the area has to provide for easy and controlled access to the top of the slope from the bottom. This could be achieved as on the figure below (NOTE: the figure show only a section of the total area):
Wax cabins or tents

The OC needs to ensure that adequate waxing facilities are available for competitors and their industry representatives (i.e. waxing and ski companies). Specific requirements for waxing facilities must be reviewed with the Jury in due time prior to the competition(s).

If wax cabins or tents are provided, they should be located adjacent to the stadium, competition courses and warm-up courses. The area should be fenced off or controlled for access, and overnight security should be provided.

Inside the wax cabins the installations should include:

- Several electric power outlets
- Adequate heating and ventilation
- Proper ventilation is critical for the health of the ski technicians working inside the cabin.
- Shelves
- Waste bins
- Pegs on the wall for hanging ski poles and clothing
- A system for storing skis along walls or from the ceiling

Restrooms must be available adjacent to the wax cabins. Teams and athletes should if possible have access to this area almost 24 hours a day (depending on wax facilities in hotels). The athletes normally should follow access trails (ski or walk) from the Wax cabin area to the stadium. This distance should be as short as possible.

Technical Building (Competition Management Building)

A Technical Building in the stadium should (at a minimum) include spaces for:

Race Secretariat
Work area for Race Secretariat, including high capacity (80-100 pages per minute) copy machine, fax machine, PC and printers (2), telephones, and standard office supplies and equipment. This space should contain a counter or area for information exchange, as well as a large information board placed just outside the room for posting of official information and results.

Jury Room
Work and meeting area (table and chairs) for Jury, including video and TV monitor. It is important for the integrity of the Jury work that this room is secure, quiet and separate from any loud activities.

Timing & Results room
Optimally situated directly above the finish line, with clear view of the start area as well. Room for 2 – 3 computer workstations. Space for a photo finish camera/VCR and monitor must also be planned.

Announcer room
Must have great view of the whole stadium, as well as PA and sound system equipment. Announcer should optimally receive up to date timing & results information on a computer terminal.

Optimally, a media/press room, and the anti-doping facility should also be available at this location.

This facility will normally function as the “Operations Center” during the competitions, and as the communication and information center between the event’s Competition Committee and all participating
teams. The Competition Management building should optimally be situated directly across the finish line.

**Race headquarter and Team Captains’ Meeting room**

The Race Headquarter and the location for the Organizers’ information meetings with the teams (Team Captains’ Meeting) should be at a central location. It is important that the arriving athletes and teams can meet with the organizer’s representative as soon as possible. At this time important registration issues and directions can be given. This task is usually given to the Race Secretariat, since most questions are related to registration and entry procedures.

The Team Captains’ Meeting (TCM) room should seat up to 50 people. If large, it should have audio (microphone). Presentation tools (video/laptop projector and screen) should be available for a professional meeting, as well as copy machines for copying and distribution of start lists after the meeting. The location of the Team Captains’ Meetings will depend on the organizers’ overall schedule and the housing situation for the participating teams. If most of the teams stay in the same hotel, the meeting can be held at the hotel. If this is not the case, the best location for a meeting is at or near the stadium, preferably following the official training or competition.

**Stadium**

The location, shape, layout and setup or the stadium is very important for the success and spectator enjoyment of the competitions. Optimally, the orientation of the stadium should be such that the spectators are sitting in the sun, and also that the athletes’ faces are in the sun as they finish the race (better photos). It is also important that the skiers’ speed into the stadium is not too high, especially into the last 100 m (finish lanes) of the race.

Due to the local terrain there are several different stadium configuration around the country. One of the best configurations is a horseshoe shaped stadium where the spectators can see the skiers for a relatively long time. Other configurations are ski-through-stadiums, which are normally used where it may be difficult to provide the width that a horseshoe stadium requires.

Horse-shoe/U-shape stadium
- Direction of Start, Lap, Finish may differ

![Stadium Diagram](image-url)
Horse shoe “head” stadium
"Ski-through" stadium

2002 Paralympic Cross Country and Biathlon Stadiums
Cross Country - Relay Configuration

The overall size of the stadium (length and width) will depend on the layout of the overall stadium (see above), athletes’ access and egress paths, lap lane etc.

The length of the start area for relay, sprint and mass-start should be at least 100 m. The length of the finish lanes should also be at least 100m. The width of the start and finish lanes is important for providing equal conditions for the participating skiers. The following table lists recommendations:

<table>
<thead>
<tr>
<th>Start format</th>
<th>Start width</th>
<th>Finish width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interval start, classical technique</td>
<td>3 m</td>
<td>6 m (3 tracks 1.5 m apart)</td>
</tr>
<tr>
<td>Interval start, free technique</td>
<td>4 m</td>
<td>9 m (3 lanes 3 m wide each)</td>
</tr>
<tr>
<td>Relay: classical technique start, free technique finish</td>
<td>Minimum 14 m (10 tracks 1.2 m apart)</td>
<td>9 m (3 lanes 3 m wide each)</td>
</tr>
<tr>
<td>Old Pursuit – second part</td>
<td>Minimum 12 m (4 lanes 3 m wide each)</td>
<td>9 m (3 lanes 3 m wide each)</td>
</tr>
<tr>
<td>New (Double) pursuit</td>
<td>Minimum 16 m (using 11 classical track for first 45 m)</td>
<td>Minimum 12 m (4 lanes 3 m wide)</td>
</tr>
<tr>
<td>Mass-start, classical technique</td>
<td>Minimum 16 m (using 11 classical track for first 45 m)</td>
<td>Minimum 12 m (6-8 classical tracks about 1.5 m apart)</td>
</tr>
<tr>
<td>Mass-start, free technique</td>
<td>Minimum 16 m (using 11 classical track for first 45</td>
<td>Minimum 12 m (4 lanes</td>
</tr>
<tr>
<td></td>
<td>Minimum 8 m (4 lanes 1.5 m apart)</td>
<td>Minimum 8 m (4 tracks 1.5 m apart)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td><strong>Sprint, classical technique</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sprint, free technique</strong></td>
<td>Minimum 12 m (4 lanes 3m wide each)</td>
<td>Minimum 12 m ( 4 lanes 3 m wide each)</td>
</tr>
<tr>
<td><strong>New (continuos) pursuit exchange area</strong></td>
<td>Minimum 12 m wide for two rows of pits, minimum 6 m for one row of pits (the total width will depend on the layout and if the skiers are lapping through any of the exchange lanes)</td>
<td></td>
</tr>
</tbody>
</table>

Following the above recommendations, the total length and width of a good stadium is approximately 130 - 150 m long and x 50 - 65 m wide.

**Stadium Layout for Different Start Formats**

The following pages show examples of stadium layout for:

- Individual Interval start
- Mass-start
- (Continous) pursuit start and exchange
- Sprint heat start

Even though the following schematics are from the 2002 Olympic Games, and much too elaborate for regular USSA National events, they show the main elements of a proper stadium layout. These elements do not have to be as streamlined as during the Olympic Games, but still need to exist as part of any stadium layout.
The best start format for a high-level mass-start is the arrow format, with the best-ranked skier starting at the front of the arrow. Each consecutive pair of skier starts 1m behind, with odd numbers to the left and even numbers to the right. It is critical in this start format that the skiers are seeded correctly. If the seeding system is not correct (for junior skiers for example), a normal start (straight lines) should be used instead.
The new (double) pursuit setup is further explained in the next section.
The Sprint elimination heats normally consist of heats of 4 skiers where the best two skiers advance through rounds of quarter and semi final heats to the final heat. In rare cases of intentional obstruction etc, a fifth skier may advance as well. In this case, the fifth skier starts in a second row (still only two skiers advance to the next round).

The stadium layout for the Sprint Relay is a combination of a mass-start layout and a relay layout with an exchange zone.
Stadium Setup for Competitions

It is important to design and set up the stadium using straight lines.

V-boards
V-boards should be used to delineate the edge of the course and function as main lane dividers. The V-boards should be set out using long, marked ropes for straight lines and even spacing of the V-boards.

The V-boards are an excellent location for advertisement, especially in the stadium.

Use of V-boards can create a well-organized stadium
**Fences**
The portable fences used inside the stadium should be of light material and easy to move and setup. They should also be easy to store in a space efficient way. The height of the fences should be above 1.25 m if the purpose is to stop persons from crossing (or striding over). It is also important to make sure persons can not climb through the fence (use mesh or a banner if needed). Lower fences can be used if the purpose of the fence is to stop athletes from skiing into a certain area (where V-boards would not work).

Fences can be used to keep athletes and coaches in certain areas. This is important for a well-organized stadium.
New stadium requirements – (continuous) pursuit

The newest Cross-Country event formats, the new (continuous) pursuit, creates some new challenges for organizers, both in terms of requirements for setup, space and for equipment. Due to the use of both techniques during the same competition, it may also require removing the classical tracks after the first part of the event (while the first part of the free technique race is going on), especially in the stadium but also out on the course. This will depend on how much the two courses are separate and how wide those sections are.

Overview of example stadium setup for the (continuous) pursuit (other setups are used at other venues)
Each pit stop is about 1.3 m long x 2 m wide, with entrance for even and odd bib numbers on opposite sides (if using two rows). The total length of the required pit box area will depend on how many columns of pit boxes that are being used, for example in a double setup (as above), 60 skiers will require 45m length (two columns of 30 pit boxes 1.5 m long each). With a double setup (as above), the minimum width of the area is about 16 m, including two lanes of 3 m (one on each side for entrance into the pit stop boxes), and one 6 m lane in the middle where the skiers exit the pit stop boxes. In addition, the stadium should optimally have room to the side for the mass-start with minimum 11 classical tracks. The mass-start can also use the area in-between the two rows of pit-stop boxes.

For narrower stadiums, the configuration of the pit-box area may be different, using one row for example. The most important consideration is that each skier must ski an equal distance to and from the pit-box.
Setup of “pit-boxes” show that the large V-boards can be used for advertising. A non-slip mat should be used to keep the equipment within the “pit-box” area.
Removal of classical tracks is becoming more important due to the new (continuous) pursuit races, which may require using part of the same course for both techniques.
Finish line
The finish line (and red/control zone line) should be set down below the snow surface. Optimally, the material used for the line should be of plastic, such that it will not warp, bend or lose its shape over time.

The finish structure must not obstruct the photo finish camera. Due to possible use of transponder cables and equipment at the finish line, no electric cables (that may cause interference) should be buried within 2 m from the line.

A few rules of thumb regarding setup of the finish line and finish area for sprint and mass-start races:

- Use plastic (or wood if only thing available) 2x2 or 2x4 painted red as the finish line - NO red dye in the snow
- For photo finish, use a high-speed high-resolution video camera recorder capable of stop action, slow motion and playback, and a TV monitor large enough to view. The camera recorder needs to show the entire finish line.
- Use a covered area for camera and TV monitor - tent or building – with electricity sufficient to operate the equipment
- Test all equipment the day before with actual operator to practice quickly finding and playing back close finishes
- Use lane judges to pick numbers in each lane (relieves need for numbers on leg & extra camera looking at finishers numbers)
Tracks can be used as lane/corridor dividers, especially in case of a classical technique race in the morning followed by a free technique race later in the day. Short flags, small pine branches or survey tassels in bright colors should in addition be used to mark the division of the lanes.

Finish Area

Immediately behind the finish zone, the OC needs to provide an immediate opportunity for the media to obtain photographs and interviews of the top competitors. An Awards Ceremony/Flower Ceremony should also be staged in a location in close proximity to the finish are. It is important to also attract and allow public spectators to this area. This ceremony should take place immediately after the competition and protest period. Awards, medals, flowers and/or prize checks should be presented in a manner, which will create a good “photo opportunity” for the media.
Finish corridors

The finish corridors and finish zone (last straight 80m – 150m depending on stadium layout) must be well marked and equal across. The start of the zone must be marked especially well, since skiers from this point must choose lanes into the finish. It is important that all finish corridors are groomed and tracked equal, and are all perpendicular to the finish line (use triangulation to create a finish line that is perpendicular to the finish corridors).
Timing – Procedures and Quality Assurance

Accuracy is the most important aspect of timing a Cross-Country race. This accuracy can only be achieved by proper timing hardware, and a good backup system. For high level races, the following is required:

Interval start races: Electronic start-and and electronic finish eye
Mass-start races: Push-button system and video finish camera

A transponder system can also be used, but not to determine order of finish in mass-start races, or as a primary system in interval start races. All timing signals and data should automatically be imported into the timing software, and not manually entered. A simple (manual) backup system should also always be used.

In addition to accuracy; fast and timely results are the most important factor of good timing & result services. Unofficial result should be printed, signed (by Race Secretary at time of posting) and posted immediately (within 5 minutes) after the class’ last competitor has finished. This would be obtainable as long as preliminary results are verified and checked intermittently during the race (by being able to print results while the race is in progress).

Official results must be printed, signed and posted after the normal protest time has expired (15 minutes after unofficial results are posted, or as decided by Jury – see FIS ICR 355.1.1). The Chief of Timing, Race Secretary and TD must all review the official results before they are posted.

Quality Assurance

From experience it has been determined that the organizer of high level USSA events should provide a quality assurance person, called “Chief of Timing”, that oversees the services of the actual Timing services provider. The main job of the “Chief of Timing” is to perform quality assurance, and guarantee that the timing & results products meet the requirements of this document and the USSA/FIS rules (see FIS ICR rule 302.3.4). It is strongly discouraged that the person providing the practical and physical timing services also acts as the person signing off on the quality of the final (results) product.

Required Results Format

Results must be produced according to the following format.

- **Header:** The header must include:
  - Sponsor Identification. Main sponsors must appear in a prominent place at the header of all printed materials, including results, start-lists, press releases, etc.
  - Title of Event
  - Start Date and Time
  - Competition Format (Distance, Technique, Qualifier, Finals, etc.)
  - Name and Affiliation of Technical Delegate and Jury Members
  - Course Name (Including HD, MC, and TC)
  - Elevation
  - Weather Information (Temperature, Sky Conditions)

- **Body:** The body must be presented in the following format.
  - Column 1 must indicate the ranking (or place) of the competitor
  - Column 2 must indicate the competitor’s starting number
  - Column 3 must specify the competitor’s name (first, then last, in full)
  - Column 4 must specify the competitor’s hometown
  - Column 5 must specify the competitor’s FIS code (if a FIS event)
  - Column 6 must specify the competitor’s USSA membership number
• Column 7 must specify the competitor’s class (if necessary)
• Column 8 must specify the competitor’s team
• Column 9 must specify the competitor’s time
• Column 10 must specify the competitor’s FIS/USSA race points, calculated according to the given formula
• Additional requirements for Junior Olympic results are specified in the Junior Olympic rules

• Other:
  • Results must be posted to the official event website within 1 hour of the completion of the event
  • Results must be communicated in electronic format to the USSA Nordic Director within three days of the competition
  • Results should be posted and communicated in a text format, such as Microsoft Excel.
  • No times should be posted for competitors who qualified to compete past the qualifying round in sprint races. The column for time for the qualified athletes should read “Qual.” Competitors who did not advance past the qualifying round should be ranked according to their qualifying time, and their times should be listed.

It is important that the registration process and entry forms captures all the data required for the proper results.

USSA and FIS points calculations

Penalty Calculation for FIS competitions
The race penalty is calculated based on the sum of the best 5 competitors’ FIS points, eliminating the highest and the lowest points, then dividing by 3.75. If any of the best 5 competitors are without FIS points (no FIS license for example) they will be given 160 points for the purpose of calculations. Do NOT use USSA points as a substitute for FIS points for any athlete. Please make sure the latest FIS point’s list is used for the calculations (provided by USSA or downloaded from FIS web site).

Penalty Calculation for USSA NRL competitions
The race penalty is calculated based on the sum of the best 5 competitors’ USSA points, eliminating the highest and the lowest points, then dividing by 3.75. If any of the best 5 competitors are without USSA points (no USSA license for example) they will be given 250 points for the purpose of calculations (check the most current USSA Competition Guide for changes to this default points value). If any of the best 5 skiers is a foreign competitor without USSA points, but with FIS points, use the competitors FIS points for the purpose of calculation. If the foreign competitor in the top-5 does not have FIS points either, use 160 points for the purpose of calculations. Please make sure the latest USSA point’s list is used for the calculations.

Point Calculation
The following formula is used to calculate race points for all FIS and NRL races (except for NRL sprint races. See USSA Competition Guide for details of Sprint point calculation):

\[ P = \left( \frac{(T_x - T_o)}{T_o} \right) \times F \quad \text{or} \quad P = \left( \frac{T_x}{T_o} - 1 \right) \times F \]

\( P = \) Race Points
\( T_o = \) Time of winner in seconds
\( T_x = \) Time of the classified competitor in seconds
\( F = \) The F-Value

The F-value is assigned as follows:
Mass Start Competitions 1400
Pursuit (pursuit w/no break) 1400
Old Pursuit (pursuit w/ break) 1200
Sprint Competitions 1200
The **final FIS or NRL points** are calculated by adding the Race Penalty to the Race Points for each competitor. This point value should be included in the final results.

Please look up the minimum penalties as noted in the Cross-Country Rankings section of the USSA Competition Guide, which should be used ONLY if the calculated race penalty is lower than the minimum penalty set for these specific competitions.

**SPECIAL NOTE:** If any junior classes are skiing the same distance as the senior classes, and under similar conditions, the penalty and race calculations for the junior classes should use the values from the senior class (i.e. as if they were skiing in the same race). This would also include using a junior skier in the calculation of penalty if the junior skier is in the top-5 overall.
Course - Grooming and Preparation

General

Proper grooming for training and competition is among the most important elements of high level cross-country events. The goal of any organizer should be to provide Cross-Country courses that are smooth across the surface, such that the whole width of the course can be skied on. To best be able to provide an optimal skiing surface, the important elements to consider for an organizer is proper grooming equipment and attachments, and proper grooming procedures for all possible weather situations.

Grooming Equipment and attachments

Large grooming machines

Large grooming machines are strongly recommended for organizers of all sanctioned Cross-Country events. Sufficient and proper preparation of the snow surface is almost impossible without large grooming machines, and only in very special snow-conditions would smaller machines (snowmobiles) be preferred. However, for setting of classical tracks in an ideal line, snowmobiles are preferred.

There are several types and brands of large grooming machines used at alpine and Cross-Country ski-resorts around the world, and the important elements for Cross-Country snow preparation with large machines is similar to those of alpine resorts. The factors deciding the type of large grooming machine to use for Cross-County courses are usually the width of the trails, the “roughness” of the trail surface, the layout of the courses (“winding” courses through trees for example) and the typical snow-type at the site (heavy, icy, “powdery” and deep etc…).

The widths of large grooming machines today are from about 2.5 m – 5.5 m. Obviously, the largest possible machine is the most efficient in terms of the time needed for grooming. Larger and more powerful machines will usually also be capable of better restructuring the snow surface in case of icy conditions or heavy snow. Smaller, narrower and lighter grooming machines may however be better in case of low snow coverage or in places with windy or narrow trails. Special track-belts (summer tracks or low-profile tracks) are also manufactured for smaller grooming machines, and can be very helpful in early season grooming. The height of the grooming machines should also be considered in case of tunnels or bridges along the trails.
Attachments

Grooming machines must have the proper attachments and experienced operators to be able to produce an optimal surface for Cross-Country skiing. Cross-Country grooming attachments for large machines are front blade, tiller, renovator and track setter. The front blade is needed for pushing and leveling the snow across the width and length of the ski course.

The renovator can be also be attached in front of the machine, and will dig up and renovate the snow down to a depth of about 30 cm if needed. This is useful when the snow surface becomes very hard or icy, as well as a way to mix old and new snow. This process “renews” the snow by allowing air below the surface.

The tiller attached behind the machine will mulch, soften and till the snow into soft, granular consistency that will become leveled and even as the tiller’s comb compresses the snow into a final surface (often called corteroid).

The final attachment is the track setting pans. These will compress from one to several tracks into the snow for classical skiing. One important feature with the track setting pan is that the track setting elements are individually controlled, such the operator can decide how many tracks to leave behind.
Small grooming machines

Small grooming machines (snowmobiles) are used to compress and compact the snow in certain snow conditions, as well as for track setting of ideal line for classical skiing competitions. Snowmobiles are useful for packing of snow in early season, before the snow is deep enough to support use of larger grooming machines. After heavy and deep snowfall in dry snow conditions, snowmobiles may also be used to compress the snow on the trails before larger machines are used.

The main use of snowmobiles for high-level competition is when setting ideal line for classical skiing. To avoid opportunities for skating in classical races, the track must be set close to all inside corners, as well be able to diagonally cross the center line following the shortest line along the wide and winding trail.

Snowmobiles that will be used for grooming and pulling of grooming attachments should have engines that are designed for work-power rather than speed, and with a cooling system that is cooled by snow, not air. The track-width and length should be maximized (long-track or wide-track), as well as be optimized for short turning radius. The track-belts on snowmobiles should be of a type that does not leave big marks when driven on groomed services (non-paddle type is best).

Attachments

Attachments for snowmobiles are similar in functionality to the attachments for large grooming machines. A roller will compact the snow in a wider area than the tracks of the snowmobile, while a drag will level the uneven surface behind it.

A renovator is usually attached in front of the track setter attachment to loosen the snow before tracks are being set or compressed into the snow. For competition courses that are sequentially being used for both techniques, such as relay races and pursuit competitions, an attachment that removes classical tracks is also very useful. Implementations are now on the marked that will perform any of these functions. It is also important that the tracks being set with large grooming machines and snowmobiles use the same mold for the track pans. At large competitions parts of the tracks (for example in the stadium and at the ski test area) are being set by large machines, while the tracks out on the course itself is set with snowmobiles. This way there is no difference in width or shape of the tracks being set.
Grooming Procedures

Even with the best of grooming machines and attachments, the experience of the grooming operators and Chief of Course will determine the results of the grooming procedures. The consistency, age and humidity of the snow vary from site to site, and are usually known best by the local experts. However, there are a few general guidelines that should be followed by all:

Frequency of grooming
- Grooming with large machines should be done as infrequent as possible and still provide great skiing surface for every skier.
- With too frequent grooming and lack of new snow, the old snow will eventually become "used up", where the snow crystals has lost their capacity to bind with each other. The snow will become "sugary".
- Grooming machines constantly leave dirt particles, oil and other liquids in the snow.

Timing of grooming
- For large events, all competition and test areas should be groomed at the same or similar time. This means that to provide optimal conditions for the athletes and coaches, the ski test area, the stadium and the courses should be groomed with separate machines at the same time.
- The grooming should always be done when the air and snow temperature is falling (i.e. as it is getting colder). Since normally the coldest part of the day is just prior to sunrise, this means that the grooming is done in the evening, or during the night. Falling temperatures and clear skies will "dry out" the snow, and also harden the tilled snow and set tracks into a great and durable skiing surface.
- If grooming and track setting is done too early, while the snow still has much humidity and water in it, later freezing at night it may results is icy conditions.
- If grooming and track setting is done too late, the snow surface and tracks will not have time to harden, and the result will be mushy and soft conditions. In normal, clear conditions, a groomed and tilled snow surface will need 1-2 hours to harden (depending on temperature). This time may be shorter if new, humid snow has fallen.
In case of snowfall immediately before the start of competition, it is wise to use snowmobiles and attachments for grooming, since this will less likely create soft conditions than when using large grooming machines.

**Pre-event planning**

Planning, preparing and being ready for a high level USSA event often takes months, especially for a new organizer. The initial decision of applying for an event includes cooperation with the USSA in terms of budgeting, scheduling, sponsorship and marketing issues. In terms of readiness of the competition facilities, this includes several steps as outlined below.

Even though each organizer and venue has unique expertise and facilities, there are certain general steps in the planning process that is common and helpful for all. Following are examples of tools and information that may be useful.

**Long Term Planning - Critical Milestones**

- Start application process through USSA
- Organize study/observation trip to similar large event
- Design and layout stadium, courses, ski test areas
- Homologate all courses/stadium
- Hold initial local test events
- Determine sport equipment needs for large event
  - Grooming machines and attachments
  - Snowmobiles
  - Fencing and V-boards
  - Tools
  - Signage
- Communicate with USSA and event TD
- Select competent technical event “Chiefs” and key volunteers
- Recruit, train, educate general volunteers and staff
- Test timing systems
- Test volunteers
- Organize USSA/TD inspection
- Create final course maps/team manuals for event
- Install final on-course/stadium layout (fencing, km-signs etc.)
- Install/prepare finals athletes’ compound/wax test areas
- Create detailed schedules

**Long Term Planning - USSA and TD Inspections**

For most high level events (especially new organizers), an inspection either by USSA or the TD should be planned. This inspection should take place in the fall, 2 – 3 months prior to the event date. At this time, the persons responsible for the event should meet with the USSA representatives to go through the important aspects of a successful event. The purpose of the meeting is to answer all questions the Organizer may have, as well as to make sure the event planning and preparation is on schedule. Following is an example of a checklist that should be used either for event planning or during the inspection meetings:

**Inspection check list**

Recommended attendees:
• Technical Delegate
• Chairman of Organizing Committee
• Chief of Competition
• Chief of Course
• Chief of Stadium
• Competition Secretary
• Chief of Timing & Results (w/Timing Contractor if needed)
• Other officials as necessary

Part I - Organizational issues, non-technical

1. Introduction of Organizing and Competition Committee, TD and USSA officials, and contact info
   - Obtain organizational charts and lists including names

2. Review goals of site visit
   - Understand requirements and expectations from all sides (athletes, USSA, organizer)

3. Review Event Logistical requirements for TD, Jury, USSA
   - Exchange mobile phone numbers
   - Review transportation requirements
   - Determine requirements and availability of radios (talk groups)
     (Review available frequencies, jury must have separate radio channel)
   - Determine needs for accommodations for USSA officials (number of rooms etc)

4. Review overall timetable and daily event schedule

5. Review entries and registration process
   - Timetable of announcements, entry deadlines, posting of entry forms on web (if required)
   - Entry fee system (if required)
   - License requirements for participants
   - Verification of FIS and USSA codes, points and quotas
     (Who will be responsible for providing updated USSA and FIS lists?)

6. Accreditation
   -- Trail access for training days prior to event
     (How early can teams arrive and be able to train on courses?)
   - Parking accreditation
     (Usually a problem at large event, must be planned well)

7. Ceremonies/Hospitality
   - Prize-giving/awards ceremonies
     (Teams must be informed about location and times, and if mandatory participation is required)
   - Spectator/parents access to awards ceremonies
   - Banquet plan, opening, closing ceremonies
   - Hospitality for coaches, officials, VIPs etc

8. Marketing/Sponsorship
   - Inventory and placement for USSA and event sponsor banners, signs etc
   - Sponsor structures at start and finish – is power available?
     (Power must be available for “blow-up” structures)
   - Location and size of podium for flower ceremony
9. Media
   - Press center/Media center – location, equipment, phones, faxes, Internet access
   - Time and location of press conferences (Who will lead press conference?)

10. Budget Update

11. Progress Reports (made monthly)
   - Meeting minutes
     (TD should get copies of Organizer’s technical meeting minutes)

12. Other general issues from Event Organizer

Part II - Competition issues, technical

13. Distribution of FIS ICR Rules 300 and additional guidelines

14. Courses
   - Homologation/Certification review
   - Grooming equipment and expertise
     (Is equipment available for proper classical track setting and removal?)
   - Best-line grooming equipment and expertise
   - Direction signs, km markers
   - Fencing (esp. sprint course and stadium)
   - Warm-up courses/wax testing areas
     (Is this available, but separate from competition courses)
   - Course control locations (technique control and video equipment)
     (Equipment and monitors for reviewing tapes must be tested)
   - Access control on course (bibs, accreditation)
     (Will access bibs be used?)
   - Use of forerunners
     (Must plan for worst case weather)
   - Weather and snow data (location of official thermometers)
     (Data should be taken and distributed to teams on arrival)
   - Placement of medical personnel/ski patrol – evacuation plans

15. Stadium
   - General layout; athletes, officials, media, flow in and out
   - Specific layout; sprint, pursuit and mass start (lanes and length, start grid)
     (Is sufficient width and equipment available?)
   - Finish Zone (lanes and length), lane dividers
   - Refreshments (finish area), athletes’ clothing
   - Wax cabin/facilities on site/stadium (access, electricity, availability)
   - Warming facility for athletes if needed
     (Important mostly for sprint competitions)
   - Location of information boards for coaches and athletes (Sprint especially)

16. Timing
   - Timing equipment and cabling
   - Stadium display clocks (location, function, and supervision)
     (What is needed to inform athletes in start area?)
   - Sprint, mass-start and relay photo-finishes – high-speed video
     (Is photo finish camera and video available?)
   - Backup timing (separate data collection, comparison with electronic system)
     (Timing crew must have a separate backup to the timing contractor)
- Quality assurance process for timing data
  (Who will review that all printed forms are correct?)
- Procedures after last racer (Race secretariat involvement)
  (Review exact procedures and timeline for unofficial and official results)
- Production of results (final book to be distributed)
  (What are contents of results and protocol books?)
- Posting to web site (live or within minutes of event)

17. Administration and Officials’ Services
- Competition office/race secretariat – location, hours
- Phone lines, fax machine, computer/printer, high-speed copier for race-office
- Information board location
- Jury Room (secure)
- Jury meetings – times and locations
- Team Captain Meeting – location, setup, agenda
- Announcing plans
  (What is level of announcing, music?)
- Medical/Ski Patrol locations
- Anti-Doping control/blood control procedures
  (Who is responsible for standard of medical and anti-doping services?)
- On-site parking (Designated areas for teams, media, officials and spectators)
- Restrooms, portable toilets (number, locations)
- Site communication plan (radios, cell phones, quantities)

18. Special officials
- Starter – experience, training
  (Especially for sprint, mass-start and relay races)
- Technique control (classical technique races) – experience, training
  (Who is responsible for planning and training?)

- Minutes of Team Captain’s meetings
- Minutes of Jury meetings
- TD Report
- Official results - Distributed in 10 days to TD, Asst. TD, and FIS
Long Term Planning - Event Publications and Invitations

For a high level and successful USSA event, it is important to provide timely and informative publications, such as event invitations and Team Captain's Manuals. In addition, a detailed and informative Web Page is today the best way of informing about the event.

A Web site or an event invitation should be created or sent out 2 – 3 months prior to the event itself, if possible by mid-October. The invitation should have the following information:

- Welcome from Organizer
- Competition and event schedules
- Organizers' addresses and contact information (phone, fax and e-mail)
- Entry information – procedure, fees, deadlines and entry forms
- Accreditation procedures (if applicable)
- Awards or Prize money information
- First Team Captains’ Meeting location and information
- Accommodation/Lodging information including pricing
- Waxing facilities
- Course maps with profiles
- Area maps

The Team Captains’ Manuals should contain the following information:

- Welcome from Organizer
- Detailed training, competition schedule and Team Captain’s meeting times
- Competition Committee & Jury list
- Race headquarter location and opening hours
- Location of Official Notice Board
- Accreditation information (if applicable)
- Commercial markings restrictions (if applicable)
- Training hours
- Bib pickup location and information
- Wax facilities location and opening hours
- Area maps
- Course maps and profiles
- Ski test and warm-up tracks
- Seeding methods
- Awards, prize money and flower ceremony information
- Detailed phone number list for competition committee and race secretariat
- Medical & General information

If used, the Spectator Program should contain the following information:

- Welcome
- Event schedule
- Sponsors & suppliers
- Favorite athletes' bios
- Sport history
- Description of event formats
- Venue and course maps
- Other general information
Race Organization - elements

Day prior to race
Official training
The stadium and competition course should be groomed and set up for official training the day prior to the competition. The best time for official training is the time of day of the next day’s race. This way the skiers and coaches can test the proper race wax. The setup and grooming for the official training should be as close as possible to the race day, such that skiers and coaches can give good feedback to the Organizer.

Course grooming and marking
The course should be groomed at the optimal time, similar to what will be done for the competition. The course should be well marked, such that skiers can learn the proper race course and not be in doubt of their race course. Course marking and signs at intersections are always best done with two sets of markings and signs – one set prior to the intersection and one set at the intersection. This way the skiers first get a “heads up”, and then a confirmation of the directions.

Registration deadline
Optimally, registration should close 24 hours before the Team Captains’ Meeting. This way the race secretary and the timing provider can get all the entries into their database, as well as be able to perform a good quality assurance. Misspelled names, incorrect or missing USSA or FIS points are common mistakes, which may affect the seeding and draw if not controlled and checked well.

The race secretariat should be open during the hours of the official training, such that skiers and coaches can get information and answers to any race related questions while they are at the venue.

Team Captains’ Meeting
Prior to the Team Captains’ Meeting, the Organizer (Chief of Race) and Jury members should check with participating skiers and coaches and make sure most of their questions are answered. The Team Captains’ Meeting itself should consist of clear instruction and information from the Organizer and Jury. The meeting itself is best conducted using good visual display of courses and stadium setup (PowerPoint slides, for example).

At the beginning of the meeting, all coaches should be presented with a list of the entered athletes, such that any changes or deletions can be done before the draw is made. This list can also contain the seeding for the race. The draw should be done before the meeting is over, such that startlists can be copied and distributed before the coaches leave the meeting.

Distributions of start lists
Start lists should also be distributed to the hotels where the participating athletes are staying.

Bib pickup
Bib pickup can be done after the Team Captains’ Meeting, but must also be available in the morning of the race for those athletes not represented at the Team Captains’ Meeting.

Testing of PA system
The PA system and announcing should be tested the day prior to the event. It is important that both athletes and spectators can hear the announcer, and care must be taken that the speakers are in the correct location.

Testing of timing systems
Any required cabling and testing of timing hardware must be tested the day prior to the event.

Testing of finish video and monitor
The practical use of a finish camera and video must be reviewed the day prior to the competition. It is critical that the finish video can be reviewed instantaneously on a large TV monitor.
The best setup is a system where the finish camera is directly hooked up to the TV monitor, and can be rewind and reviewed during the race. This may mean that two camera systems is required.

Checklist
The race organizer should have a written checklist that is used to confirm that everything is in place for the race. An example of such a checklist is included in Appendix A.

Race day
Stadium and course setup
The course should be groomed such that the tracks are firmed up prior to the first skiers and coaches arrive for wax testing and warmup (the first coaches will arrive about 2 hours prior to the start of competition). The start and finish area should be closed with fences prior to the competition, such that the final setup of the start and finish lines, as well as the timing equipment can be done interrupted.

It is important that the natural flow of skiers and spectators are considered when fencing the stadium area. Fencing should not constrict the movements of the skiers, but rather guide them to the start (and from the finish) area.

It is also critical that all important information (such as startlists) is posted on the official Notice Board. The location of this Notice Board must be at the Day Lodge, or the entrance to the stadium and be well marked.

Course closure
The course should be closed for all skiers other than the competitors 5 minutes prior to the start of the competition. This is critical to ensure the safety of the competitors. Coaches and spectators should be allowed to move on skis along adjacent trails, or on foot along the edge of the competition course.

Volunteer food and organization
One of the organizer’s most valuable resources are the volunteers helping with the event. It is important that they are treated well. Food, snacks and warm drinks should be provided, both at lunch time and during other breaks. If possible, a small token of appreciation should also be provided.

Announcing
Good announcing and music enhances the enjoyment of the event for everyone involved in the stadium area. It is important that the announcer is briefed prior to the events, and able to assist the organizer in running the event according to schedule. The announcer’s main task is to keep the racers and spectators appraised of the pace of the event. The announcer should have all startlists, information about the favorite skiers, and also receive results as soon as possible after the skiers have crossed the finish line. The very best setup includes a monitor where the announcer can read the athletes’ results as soon as they are calculated.

Awards
For high level events, a brief flower ceremony should be held for the top-three skiers in the elite class immediately following the finish of the race. This is a great opportunity to create some media attention and recognition for the fastest skiers of the day. A complete award ceremony should be held later in the day.

Post-race
Posting of results
Posting of unofficial results should be done as soon as possible on the official Notice Board. The announcer should also announce the top results at this time. Results can also be posted before all the skiers have finished the race, for example after the seeded (red) group has completed their race. These results are then named Interim (or Provisional) results. The race secretary should do a brief quality control of the results before posting, as well as sign and time the posted sheets.
Protest time
The protest time for results are usually 15 minutes after the unofficial results are posted (not printed). It is therefore important that the race secretary signs and writes the time of day when posting the unofficial results.

TD approval
The official results must be reviewed and signed by the TD before posted.

Race report, final results to USSA and FIS
After the completion of the competition, the TD is obliged to write a TD report to USSA (and FIS if a FIS race). This report includes the standard USSA (and FIS) TD reports, and should also include a supplementary report to the Organizer. The supplementary report includes information from the TD (to the Organizer) on areas that can be modified, improved or optimized.
APPENDIX A – Example of checklist for race organizer (ideas taken from NENSA Race Organizer’s handbook)

Infrastructure
- Sufficient parking
- Sufficient indoor space
- Sufficient toilets
- Sufficient food concessions
- Sponsors accommodated
- PA system in place and tested
- Medical plan and ski patrol in place
- Official Notice Board in place

Stadium Layout and Preparation
- Stadium elements in place
  - Start line
  - Straight finish line
  - Straight finish corridors
- Start and finish areas fenced off
- Space for sponsor banners planned or in place
- Stadium sketch posted and provided to teams
- Spectator areas provided and fenced
- Waxing areas/tents provided to teams and skiers

Course Layout and Preparation
- Course and intersections well marked and signed
- Back-up grooming plan and equipment in place
- Course well groomed
- Course preview done or available
- Warm-up course available and groomed
- Course maps posted on Notice Board

Registration
- Staffed by knowledgeable volunteers
- Racers’ membership checked
- Plan for bib pickup in place
- Start lists available

Schedule
- Detailed race day schedule in place for all key volunteers
- Detailed race schedule in hands of announcer

Timing & Results
- Announcing and distribution of results planned
- Format of results discussed with TD in advance
- Immediate posting of results on web-site planned

Volunteer coordination
- Food (lunch) planned
- Warm drinks available
- Schedules and tasks provided for everyone
APPENDIX B – Example of race invitation

FIS SuperTour Classic Sprint
UW-Health Capitol Square Sprints
January 15-16, 2005
www.capitolsquaresprints.org

Invitation to competitors and officials to Madison, WI, USA

We would like to invite you to be part of spectacular cross-country ski classic sprint race around Wisconsin State Capitol in the heart of downtown and visit beautiful city of Madison.

**Date:** January 15th-16th, 2005

**Venue:** Downtown of Madison, WI. The course circles around Wisconsin State Capitol and finishes up by the Best Western Inn on Park Hotel. Back up race course is Tyrol Basin Ski Area.

**Training:** Race course will be open for training on Saturday, January 15th from 1.30pm till 3.00pm and on Sunday, January 16th from 10.00am till 12.00pm.

Madison, WI

You will find the best of all worlds in Wisconsin's vibrant capital city and picturesque surrounding towns: natural beauty and outdoor recreation, stimulating cultural offerings, distinctive restaurants and shops, and an irreverent spirit of fun. Built on an isthmus between lakes Monona and Mendota, Madison is renowned for its beautiful scenery. A total of five area lakes and over 200 parks provide an abundance of year-round outdoor activities, from hiking, biking, swimming and sailing along with cross-country skiing, snow sailing, and ice fishing. Urban culture, natural beauty, small town charm - the greater Madison area offers it all! Visit [www.visitmadison.com](http://www.visitmadison.com) for more info about Madison, WI

**Wisconsin State Capitol**

The capitol building reaches a height of 284.5 feet and is capped by Daniel Chester French's graceful, gold - gilded, bronze statue named "Wisconsin" which stands 15.5 feet tall and weighs over 3 tons. The capitol itself is an expansive 448, 297 square feet. The capitol building’s current uses include: the Wisconsin supreme court, the state senate, representative, and governor offices, as well as various other legislator’s offices. The capitol building's architecture is very similar to that of the capitol building in Washington D.C. The building’s architecture is that of the classical revival and beaux-arts style with a huge dome, numerous columns, pilasters, arches, as well as numerous sculptures, and decorative dentil details and friezes.

**Club Organizer**

RSSS Ski Club is the most active ski club in the Midwest and offers year round training programs for elite, citizen and junior level skiers. [www.rsss-usa.com](http://www.rsss-usa.com)

**Snow**

Tyrol Basin Ski Area near Mount Horeb will make about 100,000 cubic feet of snow using its snowmaking equipment. The snow will then be trucked to the venue in 70 to 80 loads by Hammersley Stone and spread around the course late Friday night. The snow will remain through the weekend and be cleaned off by Monday morning.

**Race Schedule**

Saturday, January 15th 1.30pm-3.00pm - Official Training
Sunday, January 16th 10.00am-12.00pm - Official Training
2.30pm-3.30pm - Finals
**Other Events**
- Junior Olympic Qualifier - U.S. Disabled Ski race - Wisconsin High School Championships Sprint Relay
- Citizen criterium-style and Sprint races.
- Demo & Open Ski (rental equipment will be available and provided on site)
- Family Clinics

**Registration**
Registration will be available online, by fax and by mail on November 1st.
- [www.capitolsquaresprints.org](http://www.capitolsquaresprints.org) Registration Deadline
- Registration will be closed on January 10th, 2005

**Press and Media Invitation**
Press and Media Invitation will be mailed separately or can be found at [www.capitolsquaresprints.org](http://www.capitolsquaresprints.org). For more info, please, e-mail info@capitolsquaresprints.org

**Prizes**
Money prizes are according to USSA rules.
- 1st place - $775
- 2nd place - $350
- 3rd place - $225
- 4th place - $175
- 5th place - $150
- 6th place - $125
- 7th place - $100
- 8th place - $75
- 9th place - $50
- 10th place - $25
- U-23 Bonus - $250 (payable to the top U-23 finisher in each competition)

**Complimentary Housing**
The race organizers will provide free accommodation in Madison, WI for the athletes who will provide their help at the Family Clinics on Saturday, January 15th, 2005 and who has 30 and less points in the current FIS Sprint ranking list. Athletes have to request free accommodation from race organizers no later than December 1st by e-mail info@capitolsquaresprints.org

**Transportation**
Dane County Regional Airport - Madison, WI. More than 600 domestic and 70 international one-stop connections. 22 direct flight destinations. More than 100 commercial planes depart and arrive at the Dane County Regional Airport on a average day.

**Accommodation**
The Madison Concourse Hotel is the Official Hotel and the headquarters for the Capitol Square Sprints. It is also the place where will stay U.S. Ski Team, U.S. Disabled Ski Team, Subaru Factory Team, Rossignol Team and other international athletes. The Madison Concourse Hotel is giving $79.00 Special Two-Person Guestroom Rate per night with the option of $10.00 for additional person. Hotel's Address: 1 West Dayton Street, Madison, WI 53703(603) 257-6000(800) 356-8293www.concoursehotel.com

Best Western Inn on the Park Capitol Sprints START AND FINISH LINE right outside our front door Madison's only full service hotel on the Capitol Square- Complimentary valet parking- Airport shuttle for ALL overnight guests Call us directly and ask for Capital Square Sprints Block!1-(800)-279-8811 Hotel's Address: 22 South Carroll Street, Madison, WI 53703(800) 279-8811www.bestwestern.com

**Insurance**
All athletes must have their own insurance or be insured through their national ski federation. The race organizers are not responsible for any injury to the person or any damage to the property. All attendants have to be covered by an adequate insurance policy, which insures for accidents, illness and civic liability.

**Competition Rules**
The race will be held in compliance with FIS Competition Rules

**Doping Control**
Anti Doping control may take place during the event
Local Transportation Services
Downtown Madison is very pedestrian-friendly, and many visitors find it easiest to park in one of the eight downtown parking areas (http://www.ci.madison.wi.us/parking/parking.html) and see the city on foot. Parking in the cashier-operated section of any City of Madison ramp costs just $2 weekdays after 6 p.m. and on the weekends. The Madison Metro Bus System (http://www.ci.madison.wi.us/metro/metro.html) offers convenient means for reaching all areas of the city. The Madison Metro VisiTour Pass allows unlimited bus rides for just $3 per day. Visitor passes can be purchased at Madison Metro, 1101 East Washington Avenue or at one of their 60 ticket outlets throughout the city.

Team Captains Meeting
Will be held at the Madison Concourse Hotel on Saturday, January 15th, 2005 from 5.00pm till 6.00pm

Organizing Committee
Yuriy Gusev - Chief of Competition
Duncan Bathe - Assistant Chief of Competition
Clare Seguin - Chief of Secretariat
Sepp Candinas - Chief of Course & Stadium
Chip Plumber - Chief of Athlete Compound
Tony Hartman - Chief of Sport Production
Dirk Mason - Chief of Competition Control & Security
Joe Cline - Chief of Athletes Medical
FIS/USSA Representative - Luke Bodensteiner
Technical Delegate - Scott Wilson

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