



Ski Cross

Race day - race protocols



Content

SX Officials

Race Procedures

Key Rules



SX Officials

Major Officials

Minor Officials

Other Personnel



Ski Cross Officials

- * Major Officials:

- * Technical Delegate
- * Chief of Race (Competition)
- * Referee



JURY MEMBERS

-
- * Chief of Course
 - * Chief of Start
 - * Chief of Finish
 - * Chief of Gate Judges
 - * Chief of Timing
 - * Course Builder
 - * Connection Coach / Course Setter

Ski Cross

Major Officials

* **Technical Delegate**

- Assigned by NSA or FIS
- Responsible for applying rules of the governing organization, supervises work by competition officials, inspecting all medical protocols, inspecting Ski Cross Course safety procedures and installations
- Chair of Race Jury

* **Chief of Race**

- Assigned by Organizing Committee
- Responsible for overall race operations, liaison with host resort, manages work of competition officials
- Member of the Race Jury

* **Referee**

- Assigned by FIS, NSA, TD or Club
- Assists the Technical Delegate
- Records reports from Chief of Gate Judges about any rule infractions or gate faults
- Records results of heats provided by finish judges
- Provides results information to data/timing service, signs official results and post results to notice board
- Member of Race Jury

Ski Cross

Major Officials

- | | |
|-------------------------------|--|
| * Chief of Course | <ul style="list-style-type: none">Assigned by Organizing CommitteeResponsible for maintaining the Ski Cross course, including the start area, race surfaces, terrain features, finish area, installing timing system, and managing work of course workersSets the race course (i.e. gate panels) in consultation with the Connection Coach |
| * Chief of Start | <ul style="list-style-type: none">Responsible for managing the start area and start procedures, including directing work of starter and assistant starters |
| * Chief of Finish | <ul style="list-style-type: none">Responsible for managing the finish area and directing the work of the finish judges |
| * Chief of Gate Judges | <ul style="list-style-type: none">Responsible for directing the work of the gates judges and conveying necessary information to the Referee |
| * Chief of Timing | <ul style="list-style-type: none">Responsible for directing the work of the hand timers and time keepers for electronic timing system.Responsible for ensuring the electronic timing systems are operating correctly.Responsible for communicating with the starter regarding operations of the timing system and course holds |

Ski Cross Major Officials

- * **Course Builder**

- Assigned by Organizing Committee
- Responsible for designing layout of course and directing the construction of the Ski Cross course (person often drives the snow cat during construction)

- * **Connection Coach /
Course Setter**

- Assigned at TC Meeting
- Responsible for setting gates on Ski Cross Course

Ski Cross Officials

- * Minor Officials:
 - * Starter
 - * Assistant Starter
 - * Bib Coordinator
 - * Gate Judges
 - * Bib Collector
 - * Finish Judges
 - * Hand Timers
 - * Finish Line Timers
 - * Medical Services Coordinator

Ski Cross

Minor Officials (selected)

- * **Bib Coordinator**
 - Responsible for the preparation, assignment, distribution and collection of all bibs provided to the competitors & other officials
 - Keeps track of which athletes are assigned which colour bib during heats
 - Located in the Start Area
-

- * **Gate Judges**
 - Minimum of 4 and Maximum of 8
 - Positioned along Ski Cross Course so all gates and features have a visual reference
 - Responsible for 1 or more gates
 - Must be familiar with the rules of Ski Cross
 - Observe whether the racers pass correctly through the gates in their area of observation or commits a rule infraction
 - Reports observations to the Chief of Gate Judges
-

- * **Bib Collector**
 - Located at bottom of Ski Cross Course
 - Responsible for collecting coloured race bibs from racers at the end of each heat
-

- * **Finish Judges**
 - 4 judges
 - Responsible for recording order racers cross finish line

Ski Cross Officials

- * Other Personnel:
 - * Side Slippers
 - * Hand Shapers
 - * Ski Patrol
 - * Results /Notice Board
 - * Start Gate Assistants
 - * Security / Course Marshals

Summary SX Officials - World Cup

Start	Timing/Result	Finisharea	Course				Medical
Chief of Start	1 Timing Comp.	1 Chief o. Finisharea	1 Chief o. Gatejudges	1 Sectorchief 1	1 Chief o. Slope	1 Race Doctor	1
Start Operator	1 Tabulator	1 Bib Collector	Gatejudge 1	1 Sectorchief 2	1 Coursebuilder	1 Rescue 1/1	1
Start Assistant	Assistant	Notice Board	Gatejudge 2	1 Sectorchief 3	1 Sideslipper 1	Rescue 2/1	
Start Assistant	Hand Timing	List Distribution	Gatejudge 3	1 Sectorchief 4	1 Sideslipper 2	Rescue 1/2	1
Hand Timing	List Distribution	Chief o. FinishJudge	1 Gatejudge 4	1 Sectorchief 5	1 Sideslipper 3	Rescue 2/2	
Notice Board	1	FinishJudge	Gatejudge 5	1 Sectorchief 6	1 Sideslipper 4		
Bib Distribution		FinishJudge	Gatejudge 6	1	Sideslipper 5		
		FinishJudge	Gatejudge 7	1	Sideslipper 6		
		FinishJudge	Gatejudge 8	1	Sideslipper 7		
					Sideslipper 8		
	3	2	2	9	6	2	3
= nr. of radios							
to be filled with names							
total nr. of radios							



ski cross race format

Ski Cross Race Format

- * Start of the Day
- * Inspection Phase
- * Training Phase
- * Time Trials/ Qualification Phase
- * Training
- * Finals Phase/ Heats (Knock Out Format)



start of the day

Start of the Day

- Officials meet in race office to review days schedule
- Officials meet at the bottom of lift
- Officials inspect the course
 - **WHO?** - Jury Members, Course Setter, Chief of Course, course workers
 - **WHY?** - Assess snow conditions, check timing systems, set course, check safety

Start of the Day

- Determine locations for gate keepers, course maintenance workers and coaches
- Conduct course maintenance
 - paint all features and skiers' line of travel
 - smooth out start area & features
 - side slip course as required
 - check starting gate - make sure it works!
 - check timing system

Start of the Day

*Make sure the course is
safe for EVERYONE
before inspection starts!*



course inspection

Course Inspection

- * Inspection is an integral and MANDATORY part of the race
- * Entry to the course prior to inspection is controlled by the Technical Delegate
- * All gate keepers, timers, course workers must be in place on the course at the start of inspection

Course Inspection

- * All athletes must participate in course inspection and wear bibs & helmets
- * Minimum of 15 minutes
- * Slowly side slip alongside or through the course
- * At the end of inspection a Jury member must clear the course of athletes from top to bottom



training

Training

* BEFORE TRAINING BEGINS

- The course is closed to all skier traffic.
- Course is cleared from top to bottom via radio communication, starting with Starter ending with the Finish Judge.
- “Start - clear”, “Gate Judge 1 - clear”, “Gate Judge 2 - clear” ...
- NO MOVEMENT ALLOWED ON COURSE

Training

- * Integral and MANDATORY part of the race
- * Should be a minimum of 1 hour
- * Ideal - 1 day prior to the Ski Cross Race (FIS)
- * Athletes must wear bibs
- * Clear communication between officials along the entire length of the course
- * Jury placed along the length of course
 - Receive feedback from coaches & athletes

Training

- * Officials (the Jury) may change course set as a result of training
- * 1st training session, skiers will train in “sections”, including starts
- * If an accident occurs, close course (communication between gate judges and officials) - **NO SKIING AT ALL!!**

Training

- * If an accident occurs, skiers below the accident may continue to end of course
- * If multiple stops, officials may extend training phase of the event. (Jury decision)
- * **BEFORE TRAINING STARTS AGAIN, COURSE MUST CLEARED VIA RADIO FROM TOP TO BOTTOM**



time trials

Time Trials

- * 1Timed Run
- * Single Athlete on course at a time
- * Set intervals between starts - 30 seconds; multiple skiers on course at the same time as approved by Chief of Timing. Not necessary pending field size.
- * Every skiers starts from same gate position; close off other start gates

Time Trials

- * Determines seeding for Finals (e.g. Knock Out format)
- * 1 run Time Trial Qualification
- * If 2 athletes tied with same time: FS ICR 4505.4.2
The athlete that started later in the day is ranked higher
- * Results posted on Notice Board in Start & Finish Areas



finals

“knock out” format

Finals

- * Single “Knock Out” Format
- * No timing system required
- * Organized into 8, 16 or 32 athletes
(or other approved by Jury and Chief of Timing)
- * Heats run 4 skiers at a time
- * Top 2 skiers from each heat advance
- * Training before Finals for “Qualifiers” only
- * If on separate day, Inspection and Training are required

Finals - Heats

Ranking for 8 heats/4 per heat (32) Men

Heat #	1 st position	2 nd position	3 rd position	4 th position
1	1	16	24	32
2	8	9	17	25
3	6	11	19	27
4	4	13	21	29
5	3	14	22	30
6	5	12	20	28
7	7	10	18	26
8	2	15	23	31

Ranking for 4 heats/4 per heat (16) Ladies

Heat #	1 st position	2 nd position	3 rd position	4 th position
1	1	8	12	16
2	4	5	9	13
3	3	6	10	14
4	2	7	11	15

Finals- Flow

FIS SKICROSS RUNNING ORDER 1/8 MEN u. 1/4 WOMEN FINAL

Run Time	0:00:50	Delay Time	0:01:00	Delay Time	0:01:00	Delay Time	0:01:00	Delay Time	0:01:00
Start Time	13:30:00	Start Cadence	0:02:30	Start Cadence	0:02:30	Start Cadence	0:02:30	Start Cadence	0:02:30
Start Cadence	0:02:30	Trans. Time	0:07:00	Trans. Time	0:07:00	Trans. Time	0:07:00	Trans. Time	0:07:00
Trans. Time	0:07:00								

1/8 Final MEN		1/4 Final WOMEN		1/4 Final MEN		1/2 Final WOMEN		1/2 Final MEN	
Heat		Heat		Heat		Heat		Heat	
1	13:35:00	9	13:51:00	13	14:02:00				0:03:30
2	13:32:30				14:02:00				
3	13:35:00	10	13:53:30		13:40:20	17	14:13:00	19	14:19:00
4	13:37:30			14	14:04:30		14:13:00		14:19:00
5	13:40:00	11	13:56:00		14:04:30		14:01:20		14:12:20
6	13:42:30				13:45:20		0:02:30		0:02:30
7	13:45:00	12	13:58:30	15	14:07:00	18	14:15:30	20	14:21:30
8	13:47:30				14:07:00		14:15:30		14:21:30
					13:50:20		14:05:20		14:17:20
				16	14:09:30				
					14:09:30				
					13:55:20				

Delay Time	0:01:00	Delay Time	0:00:00	Delay Time	0:02:00	Delay Time	0:01:00
Start Cadence	0:02:30	Start Cadence	0:02:30	Start Cadence	0:02:30	Start Cadence	0:02:30

Con Final WOMEN		FINAL WOMEN		Con Final MEN		FINAL MEN	
Heat		Heat		Heat		Heat	
21	14:25:00	22	14:27:30	23	14:32:00	24	14:35:30
	14:25:00		14:27:30		14:32:00		14:35:30
0:03:30	14:23:20	0:02:30	14:23:20	0:04:30	14:29:20	0:03:30	14:29:20

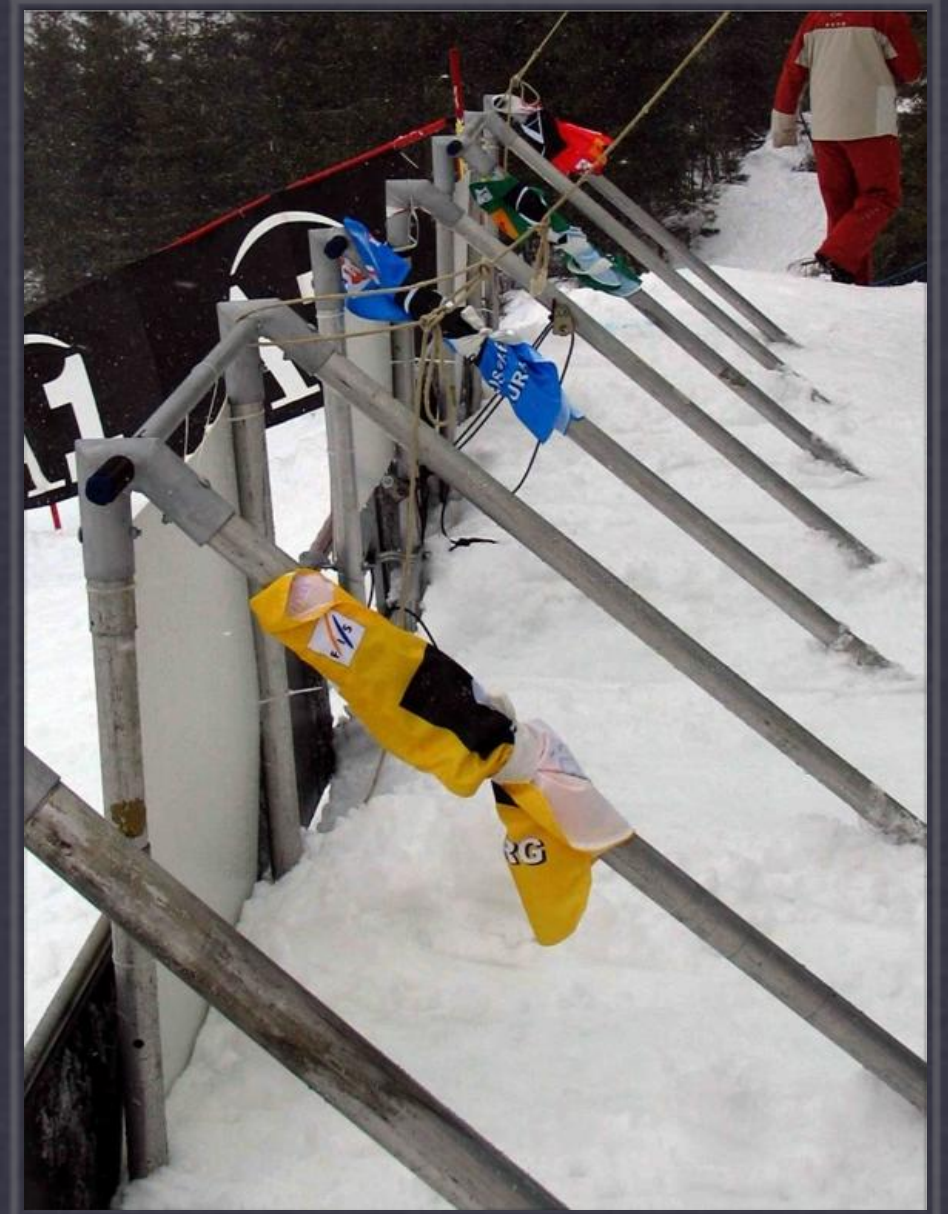
TOTAL Duration 1:56:25

runtime + startcadence + transuntime
 last starttime + startcadence + delay
 0:02:30 calculated startcadence (for control)



FINALS

START PROCEDURES



Finals - Start

- * Skiers seeded & assigned to heats according to time trial /Qualification Phase results
- * Bib Coordinator distributes Numbered bibs according to rank from Qualifiers
- * Start lane choice during each heat based only on the skier's qualification results.

Fastest qualifier in the heat can chose his/her lane; 2nd fastest qualifier chooses lanes next etc.

- * Fastest Qualifiers in each heat assigned specific Bib Colour (e.g. Red = fastest, Green= 2nd fastest, Blue = 3rd fastest, Yellow = 4th fastest).
- * Bib Coordinator distributes coloured bibs in the Athlete Warm Up in the Start prior to the start of each heat.

Finals- Start

- * Start Command (from Starter):
 - * “We are ready for the next Heat, Proceed to the start gate”
 - * “Enter the Start Gate” (30 seconds before start command)
 - * “Skier’s Ready”, then “Attention!” follow by the Starter opening the gate . The starter should delay ,at random, the opening of the Start Gate.(recommended between 1 and 4 seconds)

FINALS

ON-COURSE

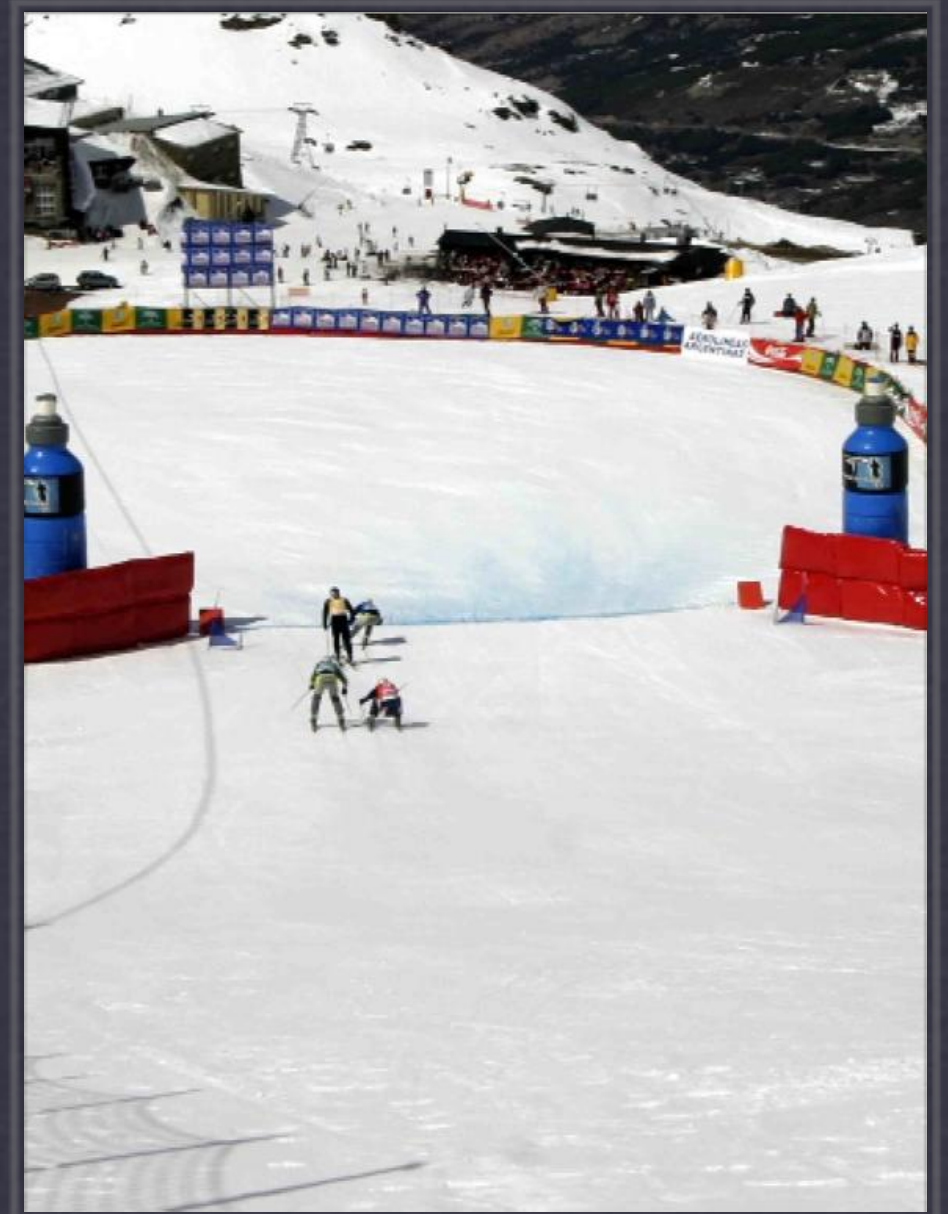


Finals - On Course

- * Gate Judges observe race and record missed gates and rule infractions.
 - Record by Bib Colour
 - Reports to Chief of Gate Judges immediately.
- * Chief of Gate Judges reports infractions to the Referee Immediately. All infractions must be confirmed before the start of the next heat.
- * Chief of Gate Judges and Referee are located in the Finish Area

FINALS

FINISH LINE



Finals - Finish Line

- ✱ 3 Finish Judges place at Finish Line
 - Each Judge assigned 1st, 2nd or 3rd place
 - Record finish by Bib Colour
- ✱ Referee:
 - Records finish position by Bib Colour
 - Confirms finish with Finish Judges
 - Confirms on-course infractions with Chief of Gate Judge
 - Alters rankings based on report from Chief of Gate Judge
 - Reports results to Data Service and Announcer

Finals - Finish Line

- * Confirm if any athletes missed gates or had a rule infraction
- * Confirm results from Data Service
- * Clear start for next Heat
- * Start the next Heat
- * Athletes who are eliminated drop bibs to Bib Collector in Finish Area (suggestion - have a large can available into which the athletes to drop bibs)
- * Athletes who are eliminated have their suits measured.
- * All athletes have suits measured following Big & Small Finals. FIS Equipment Rules Section E, 6.1

Finals - Finish Line

- ✱ Moving to the next Round:
 - Jury must:
 - Confirm if there are any Protests
 - Decide on Protests
 - Confirm results from ALL HEATS before starting the next Round

Finish - Determining Results

- * **Skiers 1 - 4** ranked according to their finish in the final heat
- * **Skiers 5 - 8** ranked according to their finish in the consolation final heat
- * **All remaining skiers** ranked:
 - * According to round they go out, place in that heat and qualification time from Time Trials.

Reference : FS ICR 4510.1

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- ✱ Bruce Robinson, CFSA, Chief Operating Officer
- ✱ Joe Fitzgerald, Freestyle Coordinator / Race Director, FIS
- ✱ Heli Herdt, FIS Freestyle Ski Cross Working Group
- ✱ Dave Pym, CSA, Managing Director
- ✱ Erik Kalacis, Technical Delegate, SX/HP - 2011 Freestyle FIS World Championships
- ✱ Chris Moore, Chief of Competition, SX, 2010 Olympic Winter Games
- ✱ Jim Sidorchuk, Technical Delegate SB & FS, Ski Cross National Officials Chairman Alpine Canada Alpin

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