
Swiss Timing Service catalogue

FIS Nordic Combined Grand Prix 2021

1. Equipment

Scoring System Ski Jumping

- UPS backed up¹ computer network (main and backup network)
- 5 judging terminals
- Speed measurement (main and backup speed measurement unit) start & stop light beam
- FIS certified Main & Backup high definition video distance measurement system incl. 4 video cameras
- 3 Phases start time control system with time display and lights (red, yellow, green) at the start gate, in the Jury room and at the coaches platform
- Coach request Terminal at the coaches stand (not for Ladies)
- Trainer scoreboard (BIB number, speed, distance, points)
- 5 wind measuring devices with analysing Software for the Jury. Wind display at the Coaches Stand (3 for Ladies and no display at the coaches stand)
- Pan, tilde, zoom camera including video replay system to observe starting gate (no backup)
- Main & Backup Evaluation system with 1 laser printers for all lists required by FIS in English (printer located in the judges tower)
- Real time interfaces to the video distance measuring system, in run speed measurement, wind speed measurement, start time control system and CIS
- Real time interface to live results of the FIS homepage (XML interface)
- Interface for PDF result upload to FIS homepage

Timing system for Cross Country

- 1 start displays
- Timing system for finish line
- The following features are available for finish line: transponder-based timing system, trigger, transmission electronics unit.
- 80 pairs of active transponder
- Finish camera (resolution: 1/1000 sec, OMEGA SCAN-O-VISION)
- Results system with laser printers for all lists (in English) required by FIS
- Control video camera for the finish
- Real time interface for live results on the FIS Homepage (XML Interface) only possible if DSL (Cable) Connection is available

Media Information System (MIS) with 3 MIS terminals (1 MIS Terminal for Ladies)

Following information is displayed:

- General competition information
- Start lists, intermediate results, final results
- Distance, points, World Cup standing
- Biographies

Locations:

- 1 MIS terminal Competition Management
- 1 MIS terminal for the announcer (not for Ladies)
- 1 MIS terminal coaches Stand (not for Ladies)

All MIS terminals are assigned only to above locations. Please contact us if you want to use MIS at different location.

¹ Backup Power allows to finish the current athlete and to shut down computers to avoid permanent damage of computers.

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2. Staff

- Up to 6 Swiss Timing sport experts for Nordic Combined Grand Prix

3. Obligations of the organizer

The organizers shall provide the following:

Board, Lodging, Transport, Accreditation

The accommodation of the FIS service team has to be arranged in the same hotel as the FIS Jury / Competition Management. Accommodation in a different hotel has to be confirmed by SWISS TIMING.

- Accommodation (single rooms, international standard) with full board for all staff members. If required, lunch has to be provided at the venue.
- Accommodation for a separate pre installation team (4 persons) or additional staff, if the FIS Calendar schedule requires this (SWISS TIMING will inform the Organizers on time.)
- On site shuttle service for all staff members on request
- parking permits close to SWISS TIMING working space, number of permits will be given close to event
- **Full Access** accreditation for all SWISS TIMING team members

Volunteers

6 volunteers are required for transport purposes, setup and dismantling. Date and time of their availability will be submitted by SWISS TIMING prior to the event. If not informed differently the following things need to be considered regarding this.

- Support by 6 volunteers for 3 hours on the installation day (the day before the first training) and the venue shutdown day (shutdown starts about 1 hour after the last competition).
- (Important: Dismantling after jumping even if cross country run takes place at the same time)!
- Support by 6 volunteers for the timing support and the transponders' distribution and - pick up.

Internet and telephone connection

The FIS Grand Prix organiser shall provide a separate DSL connection or LAN (cable) and one additional international telephone line incl. telephone free-of-charge in the data centre cross country and one in the judges tower. The lines need to be available from the arrival day on.

In addition, an internet connection DSL or LAN should be available at the location of the team captain's meeting in order to email start lists. All mentioned connection need to be unrestricted and without any volume restrictions

The following ports must be unblocked at the provided internet connection before arriving of the Team:

- 1650-1653 live.wc.fisssi.com / live.fisssi.com for live upload to FIS SJ → INBOUND
- and OUTBOUND
- 1643 live upload to FIS NC SJ → INBOUND and OUTBOUND
- 1753 live upload to FIS NC CC → INBOUND and OUTBOUND
- UPD 500 (IKE) Connection VPN → INBOUND and OUTBOUND

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- UDP 4500 (IPSEC) VPN encryption → INBOUND and OUTBOUND
- 3306 db.fissski.com connection to FIS Database → INBOUND and OUTBOUND
- 11195 connection for MIS → INBOUND and OUTBOUND
- 80 http / MIS → INBOUND and OUTBOUND
- 443 https → INBOUND and OUTBOUND
- 587 secured Mail → OUTBOUND
- 143 secured Mail → INBOUND
- UDP 1139 VPN → INBOUND and OUTBOUND

Radio Frequencies

The FIS Grand Prix organizer shall provide exclusive radio frequencies for the duration of the Grand Prix event.

- For the competition week: valid permission for the use of wireless frequencies for onsite transmission -> tuning range (833 MHz - 928 MHz); requested frequency (874.0000, 879.0000); bandwidth (1 MHz); output power ERP (0.5W); antenna (2dBi); antenna over ground (2m); reason: collecting real time wind data; connection: ground - ground; number of devices: 10; Manufacturer: ANSolution ANY900 STIN
- For the competition week: valid permission for the use of radio frequencies: 160,090 MHz; 160,110 MHz; 160,130 MHz

Print Distribution

The organizer is responsible for the print distribution service and to make sure that printed reports are distributed within the required time to the specific location

4. Technical Requirements

We advise the organizer to provide the required installations in conformity with international working safety standards. This includes access paths by stairs, climbing ropes, mountings, removable poles and safe access to video distance installations.

The local organizer shall be responsible for the provision of the following:

Container (if requested)

- Office Container, if requested prior, has to be available from day of arrival
- Heated/Air-Conditioned and even with the ground
- Minimum Dimensions: Length x Width x Height – 6m x 2.4m x 2.5m
- Main power supply (3x 220V, 16A, seperatly fused)
- 6m of table working space and a minimum of 5 chairs (NO BENCHES)

Location of the team captains Meeting

- Working space of 2x1m including table and chair as well as power supply and internet

Judges Tower

- Main power supply (220V, 16 A, separately fused)
- Room for PC and laser printer with a working area of about 5 x 1 m
- Intercom connection to the judges tower
- DSL or LAN(cable) connection

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Timing Center Cross Country

- Main power supply (220V, 16 A, separately fused)
- Space located beside Finish Line Area for Timing Car (Ford Transit) with minimum Size 7x4 m
- Room (5m x 2m) near by Finish Line for the storage and cargo load of the accumulators of start clocks and transponder technology (power supply(220 V, 16 A))
- DSL or LAN (cable) connection

Jumping Hill

- Installation of mounting fixtures for the speed measurement
- Installation of 5 removable poles (diameter 4 - 5cm) for the wind measurement according to the FIS rules; height similar to the athletes' flight trajectory (see appendix)
- Power supply is mandatory at each wind measurement position (110 to 230V, 10A, separately fused) in order to ensure proper working of the wind measurement
- Installation of mounting fixtures for the start time control at the start, close to the lowest Start gates, according to FIS regulations, including power supply (220V, 16A)
- Power supply (220V, 10A) for the coaches scoreboard at the take off
- Provision of camera towers for the video distance measurement that need to comply with the industrial safety regulations including power supply (220V, 16A)
- Power supply (220V, 16 A, separately fused) at the coaches stand

Miscellaneous Requirements

- The organizer shall ensure that no cables such as high voltage current lines, power supply lines, telephone lines, TV cables etc. are laid out within 7 meters of the finish line.
- 3 parking permits close to SWISS TIMING working space in the timing room jumping hill / finish area roller ski

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Examples for Wind Poles and Power Installations

