



The Norwegian Ski Federation

**TV-graphics and timing/results
system**

National Winter Championships 2024

Principal:

The Norwegian Ski Federation (NSF)

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**Tender deadline:
June 15th.**

About National Winter Championships 2024

From 18-24. March 2024 we will have our national champions for five of our disciplines at the in the same week in Lillehammer. There will be competitions from Monday – Sunday. See draft of program attached for date and times (Attachment 1). NRK is the host broadcaster of the event and will broadcast all of the competitions in the program in the best broadcast time on TV.

TV Graphics and timing/results system

The National Winter Championships will be held in 3 different arenas in Lillehammer:

- Birkebeiner Stadium
- Lysgaardsbakken Skijumping arena
- Kanthaugen

In this tender we request offers from a supplier who can deliver TV-graphics and/or timing/results system for either all disciplines described below or some of the disciplines.

Requirements for each discipline

Cross country

Description

Cross country skiing will be held in Birkebeiner Stadium. The athletes will compete in sprint relay, 5/10km, 30/50km and mass start junior (only timing/results system).

Format

Competition format is sprint relay, 5km/10km individual and 30km/50km according to FIS/NSF rules. There will also be a mass start competition for cross country juniors in six different classes on Sunday that will be part of the tender for Cross country.

Number of participants

Sprint relay: 80 teams

5km para sit-ski: 4

5km ladies individual + para: 300

10km men individual: 500

30km ladies individual: 85

50km men individual: 165

Mass start junior men: 50 + 50 + 50

Mass start junior ladies: 50 + 50 + 50

Ski mountaineering

Description

Ski mountaineering is one of the fastest-growing activities in Norway in the past years. Nationally the competition in Ski mountaineering is growing and there are exciting competitions in especially west and northern Norway. We recently had tv production in Tromsø for the WC ending in the disciplines Sprint and Individual.

Format

Competition in national will be sprint and individual. Sprint will be in Kanthaugen and individual in Skeikampen. There will only be sprint competition on live television.

Sprint is built up the same way as cross-country sprint with qualification, quarterfinals, semi-finals, and finals. There will be an In-line start. In the course there will be areas where the racers must change their way of progression on the way up in walking boots with skis on the backpack, racing with skis uphill, and kick turns with skiing on their way down. From the end of the downhill gentle back hill to the finish line. Times and finishing orders must be established by an electronic timing system, and with photo-finish. The finishing order is established when the competitor's front foot crosses the finish line.

Individuals are built up on fell running with a mass start at the bottom of the hill, with different technical elements on the way up so they change their progression like the racers do in sprint. The race will switch between both uphill fell running, running with skis on the backpack, and skiing down the tain. The first to reach the finish line is the winner. This competition will be held in Skeikampen.

Number of participants

Approximately around 30 – 50 competitors for men, and around 20 competitors for ladies.

Nordic combined

Description

Nordic combined is one of the toughest sports where you compete in both ski jumping and cross country. In Lillehammer there will be Gundersen method normal hill for both men and ladies, and mass start large hill for men. Back on the program is the competition style where you turn the order around with mass start in the trail first and then end the competition with ski jumping in the big hill.

Format

Gundersen method 10km for men and 5km for ladies and mass start 12,5km for men and 7,5km for ladies, and sprint according to FIS/NSF rules. Full results system and TV-graphics for both ski jumping and cross country in both arenas. The score system is 2 points per meter in ski jumping and 15 points per minute in cross country course.

Number of participants

Wednesday: Sprint first and then SJ LH both ladies and men: 50

Thursday: Mass start Men 12,5km and ladies 7,5km then SJ NH ladies and men: 50

Friday: Gundersen Method 10km men and 5km ladies, normal hill: 50

Telemark skiing

Description

Telemark is a race where you compete in slalom, jump and cross country. We start with gates like in Alpine GS, but the distance between the gates is from 19m to 24m. Every gate has to be passed in telemark style, if not 1 sec penalty. In the middle of the course, we have a jump, here we have a limit to avoid penalties. The landing must be in telemark style, with no telemark, and missing the limit 4-sec penalty. After the last gate, go into a 360 with walls up to 2m. Then we go out of the 360, and into the skating part into the finish line.

Format

Competition in national will be sprint. This will be in Kanthaugen, on the same course as Ski Mountaineering. The race format is similar to Alpine GS. Ladies go first, then men in the same course. Penalties are added to the race time as they come in from the gate judges, preferably before the racer crosses the finish line. For the second run competitors start in reverse order based on results from the first run.

Number of participants

10 ladies

15 men

Ski jumping

Description

Ski jumping on national and international level are held in normal and large hills where one and one athlete is jumping at a time.

There are individual competitions for both men and women.

Format

Competition format for individual competitions in Large Hill (LH) Tuesday and Normal Hill (NH) Wednesday according to FIS/NSF rules.

Please note that following functionality should be covered:

- 3 phase start light
- Coach Request handling
- Gate compensation (points pr. gate / meters in inrun)
- Wind compensation w/7 anemometers in LH and 7 or 5 in NH
- Result system must be able to handle DSQ of athletes
- Result system must also be able to handle multiple classes on the NC competition for men Wednesday (NorgesCup with Elite, NC A and NC B classes)
- For the result list also inrun speed should be collected.
- Information monitors at start, coaches stand and at exit gate.
- The result system should also have a "live ticker" or be able to present the data live on internet during the competition.
- Sample result lists to see what should contain can be found at web pages for Skiforbundet:

<https://www.skiforbundet.no/hopp/hopprenn/norgescuphopp/resultatnorgescuphopp/>

Data for the graphics on screen is provided from the result system. Either your own, or one you choose to integrate with.

Templates with information wanted:

- Information about the hill (illustration with key data)
- Judges
- Jury
- Weather information
- Start list pages for upcoming round (with data from first round when start list for final round)
- Result list pages (so far and final) with rank, name, distance(s) and point
- Athlete information when at start bar
- Start light information
- "To beat" information and gate information for current athlete.
- Athlete information and data/points for jump(s) after jump (when at exit gate)
- Inrun speed (when in flight)
- Distance (during replay before rest of data is available)
- General templates to be used for names with title / role
- General template to be used for messages (like delay, changes etc.)

Number of participants

Tuesday: Official training 2 rounds + Qualification + competition large hill: 15 Ladies and 75 Men.

Wednesday: Official training 2 rounds + competition normal hill: 20 ladies and 100 men.

Procurement and requirements for supplier

Specific TV-graphics and timing/results systems for all competitions

There must be TV-graphics and timing/results system that is competitive with the Norwegian Alphabet. The graphics and results should be able to write and show with the Norwegian letters « Æ, Ø and Å».

All TV production will be in HD 1080i.

Commentator information system

Commentator information system (CIS monitors) for the host broadcaster has to be included in the offer.

Expenses to travel, accommodation and diet

Expenses to travel, accommodation and diet on competition site are covered by documented expenses. Travel and accommodation must be booked through each organizer. There will be food at each event.

Other equipment/software

The offer must also include specifications and other equipment/software which is included in the offer.

Requirements for supplier and documentation of qualifications

Offers can be given by invited suppliers, who must meet eligibility requirements. Selected supplier becomes NSF's contracting party and responsible for the entire delivery. Subcontractors may be used, but these must be stated and approved by the principal.

The host broadcaster will access all offers and confirm that TV-graphics and timing/results system can deliver those services and technical formats needed to complete the events.

Offer content

The offer with attachment must be written based on information in this letter.

Send the offer by e-mail to:

marita.andresen@skiforbundet.no

The offer must be delivered at the latest **June 15th**. It is the provider's responsibility to deliver the offer on time. Late arrivals will be rejected.

If you have questions and clarifications, please contact on e-mail.

Program for National Championships 2024 - draft

Tuesday 19.3:

Ski Jumping Large Hill - Official training and qualification (not televised) - Lysgårdsbakken

Nordic Combined Normal Hill PCR (not televised) – Lysgårdsbakken*

Ski Jumping Large Hill - 1st round women and men - Lysgårdsbakken

Ski Jumping Large Hill - 2nd round women and men - Lysgårdsbakken

Wednesday 20.3:

Official training Ski Jumping Normal Hill (not televised) - Lysgårdsbakken

Sprint Nordic Combined Women and Men - Birkebeineren Skistadion

Nordic Combined Large Hill Women and Men - Lysgårdsbakken

Ski Jumping Normal Hill - National Championships Women/Nordic Combined Men - Lysgårdsbakken

Ski Jumping Normal Hill - National Championships Women/Nordic Combined Men Final round - Lysgårdsbakken

Thursday 21.3:

Nordic Combined Cross-Country Mass Start - Women and Men 5/10 km - Birkebeineren Skistadion

Qualifying heats for Team Sprint - Birkebeineren Skistadion

Nordic Combined - Ski Jumping Normal Hill - Women and Men - Lysgårdsbakken

Cross-Country Skiing - Sprint Finals + Para Standing and Sitting - Birkebeineren Skistadion

Friday 22.3:

Cross-Country Skiing - 5km Classic Women + Para Standing and Sitting - Birkebeineren Skistadion

Nordic Combined - Ski Jumping Normal Hill - Women and Men - Lysgårdsbakken

Cross-Country Skiing - 10km Classic Men - Birkebeineren Skistadion

Nordic Combined Individual Gundersen - 5/10 km Women and Men - Birkebeineren Skistadion

Saturday 23.3:

Cross-Country Skiing - 30km Women - Birkebeineren Skistadion

Cross-Country Skiing - 50km Men - Birkebeineren Skistadion

Palm Sunday 24.3:

Telemark Sprint - Kanthaugen

Randonee Sprint - Kanthaugen

*Junior Norwegian Cup Finals – Skeikampen**

**Not yet decided*