

# WC 2018

NOKIAN TYRES  
WORLD CUP

ØSTFOLD NORWAY 2018

31 August – 2 September



World Cup round 3 &  
Pre-WOC  
Norway

  
Orienteering  
WORLD CUP

**BULLETIN #4**

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## Welcome to World Cup round 3 & Pre-WOC

On behalf of WOC 2019 Organising Committee, I wish you all a warm welcome to the World Cup round 3 & Pre-WOC in Østfold - Norway 31 August – 2 September 2018.

Norwegian Orienteering Federation has delegated responsibility for planning and conducting the World Cup 2018 / Nokian Tyres World Orienteering Championships 2019 to the orienteering clubs and the local orienteering federation in Østfold. Eight orienteering clubs in collaboration with the local orienteering federation have established an organiser company. Planning for the WC 2018 will be done as a wide collaboration between the organising company, the orienteering clubs, Østfold county and all the municipalities in Østfold. We will do our best to facilitate good conditions for the athletes.

The Orga  
 welcome  
 Østfold.

# WC 2018

NOKIAN TYRES  
 WORLD CUP

ØSTFOLD NORWAY 2018

**Per Bergerud**  
 Director WOC 2019



## Welcome to Østfold

It is a great pleasure to welcome you to the World Cup in Østfold - Norway 31 August – 2 September 2018. World Cup 2018 and World Orienteering Championships 2019 will be held in Østfold, one of 18 regions in Norway. You will find it in the south-east part of Norway, close to the Swedish border. Østfold has unique areas whether you like hiking in the forest, visit an idyllic town, enjoy our beautiful coastline, visit tourist attractions or just enjoy one of many activities that we offer. Either way, we promise that you will be in good hands.

Orienteering is a sport with long traditions in Østfold. For example, in Halden, where we find some of the best orienteers in the world. Halden Skiklubb has produced a number of world orienteering champions over many years, but also Fredrikstad, Sarpsborg and Mysen have world elite runners. During the last couple of years, several major national orienteering competitions have been held in different cities of Østfold. The Norwegian O-festival - Norway's largest orienteering race, was hosted by Sarpsborg in 2016, and the Norwegian orienteering Championship was staged by Halden in 2017.

Therefore, we are sure that we will be well prepared to welcome the world elite runners, both in 2018 and 2019, when our orienteering clubs join forces to organise the events. That will be the fourth time the WOC is staged on Norwegian soil, and we are incredibly proud that this assignment has been awarded to Østfold for the first time.

We will do our best to support the organizer.

We look forward to three days of major sporting achievements, drama and excitement and not least good companionship.

Enjoy!

**Ole Haabeth,**  
Chair, Østfold county council



## Sponsors and partners

Gold sponsor



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National main sponsors



Ren bærekraft



National cooperative partners



Public cooperative partners



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Rakkestad Kommune  
Trøgstad Kommune  
Marker Kommune  
Askim Kommune

NOF main sponsors



# 1 Information about the organiser

The company *VM Orienteering 2019 AS* is the organizer of World Orienteering Championship 2019.

**CEO WOC 2019:** Per Bergerud

**Event director:** Bjørn Axel Gran

**IOF Senior Event Advisor:** Lars Forsberg

**National Controllers (NOF):** Ivar Maalen and Kjell Blomseth

**Other important roles**

Chief IT and timekeeping: Hallvard Koren

Chief Transport, Safety/Security: Tore Sandem

Chief Arena: Asle Gudim and Jørn Haugerud

Chief Arena Græsholt, Aremark: Vidar Backstrøm

Chief Arena Ulvestad, Våler: Thomas Roskifte

Chief Media and market: Claes Tommy Hærland and Martin Nielsen

Media contact: Jens Erik Mjølnerød

Chief Culture and ceremonies: Bente Jæger and Regine Hansen

Chief Public races: Finn Henry Lillestrand and Anne E. Ramtvedt

Chief Public races Aremark: Irene Felde Olaussen

Chief Course planning and mapping: Bernt O. Myrvold

Course setter Long distance: Øyvind Helgerud

Course setter Prologue: Tore Bjørnerød

Course setter Pursuit: Bjørn Erik Glomsrød

Course setter Relay: Erik Sandbæk & Morten Johansen

Chief Youths and volunteers: Svend Sondre Frøshaug

## 1.1 Contact information

Official info: [eventor.orienteering.org/Events/Show/5326](http://eventor.orienteering.org/Events/Show/5326)

Email: [post@woc2019.no](mailto:post@woc2019.no)

Web page: [www.woc2019.no](http://www.woc2019.no)

WOC 2019 secretary (Event Office): Per Bergerud

Email: [per.bergerud@woc2019.no](mailto:per.bergerud@woc2019.no)

Phone: +47 482 42 628

Opening hours: work-days 8:15-16:00

Other contacts:

Event director: Bjørn Axel Gran,

[bjorn.axel.gran@woc2019.no](mailto:bjorn.axel.gran@woc2019.no), +47 909 55 295

Media services: Jens Erik Mjølnerød,

[jenserik@mjolnerod.no](mailto:jenserik@mjolnerod.no), +47 917 85 911

Accounting/invoicing: Tor Ragnar Andersen,

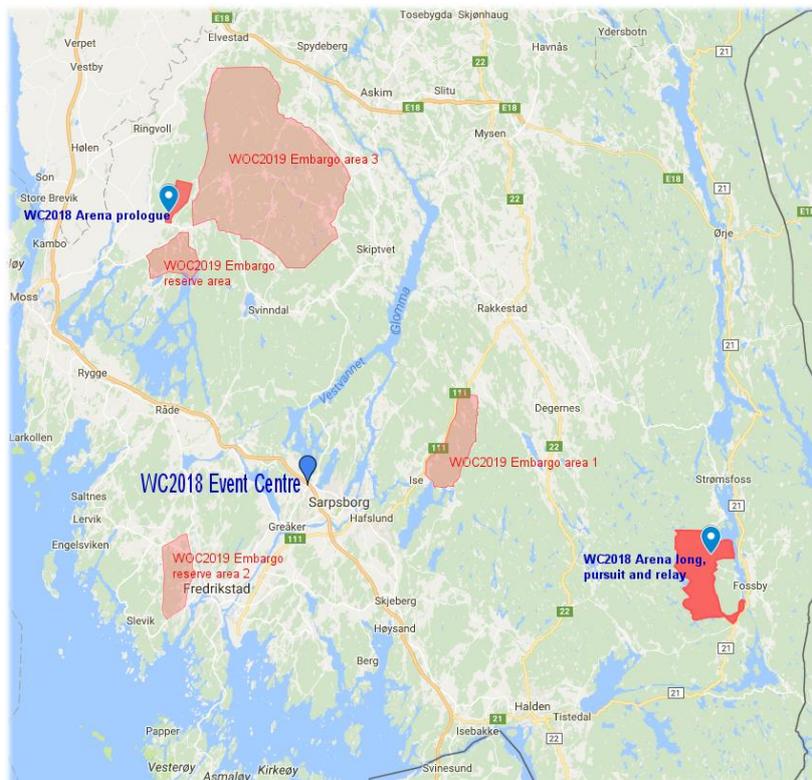
[tragn@online.no](mailto:tragn@online.no), +47 928 98 311

## 2 Program

Day & Date	Time	Event/Race	Arena /Location
<b>Thursday, 30.8.2018</b>	09:00 – 21:30	Event centre open	Quality Hotel, Sarpsborg
	10:00 – 16:00	Model Event	Skolleborg, Aremark
	12:00	Deadline for entries long	Eventor
	17:30-17:50	Technical Model Event	Quality Hotel, Sarpsborg
	18:00 – 19:30	Team Officials' Meeting for all races	Quality Hotel, Sarpsborg
<b>Friday, 31.8.2018</b>		<b>World cup - Long</b>	Aremark
	09:00-15:00	Event centre open	Græsholt, Aremark arena
	09:30	First start	-
	12:00	Deadline for entries prologue & pursuit	Eventor
	14:05	Winner women	Græsholt, Aremark arena
	15:00	Winner men	Græsholt, Aremark arena
	15:15	Flower ceremony Women and Men	Græsholt, Aremark arena
	18:00-21:30	Event centre open	Quality Hotel, Sarpsborg
<b>Saturday, 1.9.2018</b>		<b>World cup - Prologue</b>	Ulvestad arena, Våler
	09:00	First start	-
	11:30	Winners women/men	Ulvestad arena, Våler
	14:00-17:00	<b>Public race</b> KM long Østfold	Græsholt, Aremark arena
	14:00-19:00	Event centre open	Græsholt, Aremark arena
		<b>World cup - Pursuit</b>	Græsholt, Aremark arena
	17:00	Start women	Græsholt, Aremark arena
	17:47	Winner women	Græsholt, Aremark arena
	17:57	Flower ceremony Women	Græsholt, Aremark arena
	18:00	Start men	Græsholt, Aremark arena
	18:45	Winner men	Græsholt, Aremark arena
	18:55	Flower ceremony Men	Græsholt, Aremark arena
		Prize ceremony Long & Pursuit	Græsholt, Aremark arena
	20:30-21:30	Event centre open	Quality Hotel, Sarpsborg
<b>Sunday, 2.9.2018</b>	09:30-11:00	<b>Public race</b> KM middle Østfold	Græsholt, Aremark arena
	07:00-12:00	Event centre open	Græsholt, Aremark arena
		<b>World cup - relay</b>	Græsholt, Aremark arena
	09:15	Start women	Græsholt, Aremark arena
	11:10	Winner women	Græsholt, Aremark arena
	11:20	Start men	Græsholt, Aremark arena
	11:25	Flower ceremony Women	Græsholt, Aremark arena
	13:20	Winner men	Græsholt, Aremark arena
	13:25	Flower ceremony men	Græsholt, Aremark arena
	13:45	Prize ceremony Relay	Græsholt, Aremark arena

## 3 Venues, access and transport

### 3.1 Overview



### 3.2 Transport /travel opportunities

For all races the organiser will provide transport from the Event Centre to the arenas for those teams that have requested it.

### 3.3 Competition arenas

**Long distance, pursuit and relay** in the World Cup 2018 will take place at Græsholt, Aremark, placed between Halden and Ørje, 25 km from Halden, 61 km from the event centre. The arena location at Græsholt, Aremark (Coordinates: 59.24423, 11.64296). Parking at Græsholt Aremark is on the arena. Access to the arena Græsholt, Aremark, is marked

- from south (south of Aremark sentrum) in junction Road21/Fv861
- from north (Strømsfoss) in junction Road124/Fv861.

Access to the long quarantine-1 in Aremark Sporthall is marked from Road 124 in Aremark sentrum (Coordinates: 59.22607, 11.69565).

**Prologue** in the World Cup 2018 will take place in Ulvestad, Våler, 37 km from the event centre. Parking and quarantine is, marked from Road 121, see instructions under Prologue.

The distance from the prologue to the arena at Græsholt Aremark, is 97 km. Recommended route to the arena at Græsholt, Aremark, is by E6 to Halden, and then Road 21 in direction Aremark (80 min.).

## 4 Event Centre (office)

The Event Centre will be located in room “Sollie” at Quality Hotel & Resort Sarpsborg.

At the Event Centre there will be accreditation for teams, leaders, media, VIP and other officials. The Event Centre opening times will be:

Day	Quality Hotel	Arena Aremark
Thursday	9:00 – 21:30	
Friday	18:00 – 21:30	9:00 – 15:00
Saturday	20:00 – 21:30	14:00 – 19:00
Sunday		7:00 – 12:00

The phone number to the Event Centre will be: +47 948 47 155.

Quality Hotel & Resort Sarpsborg include rooms for the following purposes:

- Team Officials’ Meeting at Thursday (in room “**Gandalf 3**”)
- Meeting rooms (has to be pre-booked, free of charge)

The organizer will have access to the entire hotel:

- 260 guestrooms with 720 beds
- 14 different meeting rooms
- The largest plenary hall has a capacity of 1000 people
- Banquet hall with capacity of 700 people
- Restaurant Østfoldstuene with a capacity of 470 people
- Waterland and Superland, miniature golf etc.
- Fitness studio of 800 sqm and Spa section
- Free wireless network
- 500 parking spaces free of charge



## 5 Entry, registration and accreditation

### 5.1 Official entry and registration for teams

Entries are to be made via IOF Eventor by the National team manager, on: [eventor.orienteering.org/Events/Show/5696](http://eventor.orienteering.org/Events/Show/5696)

	30. May (Start of entry)	30. June (-2 months - Team size deadline)	19. July (-6 weeks - Entry payment deadline)	21. August (-10 days - Team Names entry deadline)	30. August (Event starts)	6. September (+1 week)
<b>Team Size Entry Periods</b>	Team size	+20% (80% refund)		+50% (50% refund)	EVENT	
<b>Team Names Entry Periods</b>		Team name		+10 Euro		
<b>Payment schedule</b>		Payment			Pay/refund changes	

#### Competition Entries

Names of the competitors and, if required, their starting group, shall be entered in IOF Eventor, before 12 noon on the day before an individual competition. Names of the competitors and their running order shall be entered in IOF Eventor, before 12 noon on the day before a relay competition.

#### Late Entries, Changes of Team Size or Team Names

Late Entries and changes will be accepted, if possible, up to Event start date, 30 August 2018, 12:00. No late entries or changes will be accepted after this. Late entries and changes will always have a defined extra cost (surcharge) as shown in the figure above. Late entries and changes will always be treated equally and must be communicated directly to the organiser on [post@woc2019.no](mailto:post@woc2019.no). The organiser makes the changes in IOF Eventor after deadlines.

### 5.2 Payments

The payment should be transferred to the WOC2019 AS bank account. Payment in Norway are in Norwegian krone (NOK). **Important note:** The payer shall cover all bank charges. **Payment details:**

**Bank: Eidsberg Sparebank (Postal adress: Karl Johans gate 1, NO-1706 Sarpsborg / [post@esbank.no](mailto:post@esbank.no))**

**IBAN: NO43 1020 3012 360**

**SWIFT/BIC: EIDSNO21XXX**

### 5.3 Entry fee descriptions (athletes and teams)

Category		Fee
Competitors	Accreditation fee per athlete	400 NOK
	Entry fee per individual race	400 NOK
Relay Teams	Entry fee per relay team	1200 NOK
Team officials	Accreditation fee per official	400 NOK

## Notes

- Accreditation covers model events, parking at the arena and a set of maps to all competitors and team officials.
- WOC transport package includes transport from the Event Centre/Sarpsborg centre to the competitions.
- Teams where the functions of the team officials are performed by an athlete will not be charged a fee for the team official.

## 5.4 Registration for media, IOF officials and guests

All registrations are to be made in IOF Eventor, please select the correct category [eventor.orienteering.org/Events/Show/5696](http://eventor.orienteering.org/Events/Show/5696) Registrations must be confirmed by 30 June 2018. Persons that need help to register should contact the media contact.

The accreditation includes:

- VIP service on the Arena at Græsholt, Aremark
- Competition maps

To a limited extent, accreditation will be possible upon arrival in the media centre, but it is preferred to register ahead of time on IOF Eventor. Please do not forget to include your photograph to avoid lengthy waiting times at accreditation.

## 5.5 Accreditation

Only one person per team is requested to check in at the Event Office in Quality. As part of this process, all team members' passports must be shown to prove their nationality. To avoid lengthy waiting times at accreditation, please upload photos of all team members on IOF Eventor. Otherwise do not forget to bring missing photos with you.

Teams will be asked to provide a telephone number so that the organisers can quickly contact key team officials if necessary.

Each team will get an information package at the event office after accreditation which includes:

- Bulletin #4
- Accreditation cards for all team members
- Form for contact information (to be filled in and left at Event Centre)
- Parking permits for Arena/Quarantine
- emiTags for all competitions
- List of emiTags assignments (each pair of emiTags is personally assigned to a competitor and shall not be used by another athlete)
- GPS vest for athletes that have requested it (see info about GPS)
- Model event map

**Hours of check-in for teams:** Thursday: 9:00 to 21:30

## 5.6 Summary of entries

Federation (31)	Men	Women	Team Officials	Total
 Australia	2	1	1	4
 Austria	6	6	1	13
 Belarus	2	1		3
 Belgium	3		1	4
 Bulgaria		1		1
 Czech Republic	8	8	3	19
 Denmark	4	4	2	10
 Estonia	5	6	1	12
 Finland	9	10	5	24
 France	10	4	3	17
 Germany	4	4	1	9
 Great Britain	11	6	1	18
 Hong Kong	6	5	1	12
 Hungary	2	1	1	4
 Israel	2			2
 Italy	2	3	1	6
 Japan	1	1		2
 Korea, Democratic People's Republic of	1			1
 Latvia	4	3		7
 Lithuania	1	2	1	4
 Moldova, Republic of	3	1		4
 New Zealand	2	1		3
 Norway	10	9	7	26
 Poland	4	3	1	8
 Russian Federation	6	10	1	17
 South Africa	1			1
 Spain	1	1		2
 Sweden	8	9	4	21
 Switzerland	9	9	4	22
 Ukraine	4	2		6
 United States	3	1		4
<b>Totals</b>	<b>134</b>	<b>112</b>	<b>40</b>	<b>286</b>

## 6 Accommodation and food

### 6.1 Accommodation

For accommodation, we recommend the official WOC2019 hotel “Quality Hotel Sarpsborg”.  
[www.nordicchoicehotels.com/hotels/norway/sarpsborg/](http://www.nordicchoicehotels.com/hotels/norway/sarpsborg/)

Use the booking code “VM2019”.

Offered rates:

Category	Rate
Price per day per person in single room	NOK 872
Price per day per person in double room	NOK 556
Price per day per person in triple room	NOK 451
Price per day per person in a quadruple room	NOK 398

The price includes:

- Large breakfast buffet
- Water park

### 6.2 Food

At the arena at Græsholt, Aremark, Norwegian food and drinks will be offered for sale.

**Local currency:** Norwegian krone (NOK).

**Banquet:** There will be no banquet



## 7 Embargoed areas

For information about all embargoed areas, see info at:

[eventor.orienteering.org/Events/Show/5326](http://eventor.orienteering.org/Events/Show/5326)

and use [this link](#) for details:

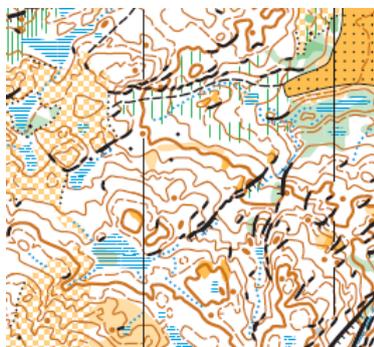
### **Embargoed areas World Cup 2018:**

The area is embargoed for runners and team officials until the competition is finished. Any attempt to survey or train in the competition terrain is forbidden, unless explicitly permitted by the organizer. Driving, biking and running along paved roads (roads with asphalt cover) is permitted.

### **Latest colour copy of maps of embargoed areas.**

You will find a colour copy of the most recent version of any previous orienteering map(s) of the embargoed areas on our website: [www.woc2019.no](http://www.woc2019.no)

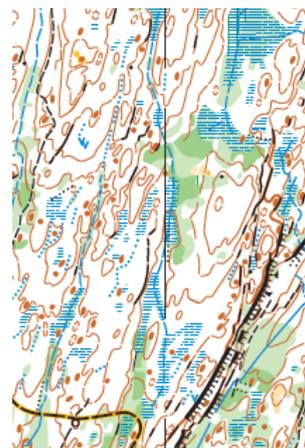
- [Previous map of WC 2018 area \(Moltemosen, 2017\)](#)
- [Previous map of WC 2018 area \(Skolleborg, 2017\)](#)
- [Previous map of WC 2018 area \(Vestfjella, 1978\)](#)
- [Previous map of WC 2018 area \(Tusetter-Skolleborg, 1996\)](#)
- [Previous map of WC 2018 area \(Lindtjern, 1986\)](#)
- [Previous map of WC 2018 area \(Tusetter, 1972\)](#)
- [Autogenerated map of WC 2018 area](#)
- [Competition map of WC 2018 prologue \(Kirkebygden, version 8th of February 2018\)](#)



Map sample from Skolleborg



Map sample from Moltemosen



Map sample from Kirkebygden

For location of the competition arenas see section 3.3.

## 8 Training possibilities

Maps and areas are announced and updated at on our website: [woc2019.no/en/trainings](http://woc2019.no/en/trainings)  
This also include maps outside Østfold made by the WOC mapper (Kristen Treekrem). Please note that some of the training areas are in the proximity of the embargoed areas.

Here one also will find information about parking and periods for when areas are not open.

### **Official training courses available August 2018 are:**

No. 1, Gillingsrød, long distance, 13,1 km, white tapes in the forest

No. 2, Ise, middle distance, 5,4 km, yellow/red tapes in the forest

No. 3, Våler Varde, relay training, 8,3 km, yellow tapes in the forest

In addition to the courses mentioned above, the following courses will be made available for the first official training camp, 28.8 - 5.9.

No. 4, Rudskogen, o-interval, 6,8 km, yellow/red tapes in the forest

No. 5, Rudskogen, long distance, 13,4 km (scale 1:10000/1:15000, remember to make a note in the map order form about what scale you want)

No. 6, Bjerkeskogen, long distance, 12,8/8,6 km (course-setter and map-maker as for WOC2019 LD)

No. 7, Knatterudfjellet nord, middle distance (course-setter and map-maker as for WOC2019 MD)

### **Relevant training maps which also are recommended:**

Nesodden nord: Scale/Contours: 1:15 000 / 10 000 / 5 m, Mapmaker: Kristen Treekrem (2011)

Isebakketjern: Scale/Contours: 1:15 000/1:10 000 / 5 m, Mapmaker: Bjørn A. Paulsen (2012/2015)

Ise: Scale/Contours: 1:10 000 / 5 m, Mapmaker: Tormod Jensen, (2017)

Olaåsen: Scale/Contours: 1:10 000/1:15 000 / 5 m, Mapmaker: Morten Dalby (2013)

Dælæne: Scale/Contours: 1:15000/1:10 000 / 5 m, Mapmaker: Morten Dalby (2013)

Gillingsrød: Scale/Contours: 1:15 000/1:10 000 / 5 m, Mapmaker: Lars Ole Klavestad/Svein Jacobsen/Gaute Hallan Steiwer (1996, updated 2017/2018)

Våler Varde: Scale/Contours: 1:10 000 / 5 m, Mapmaker: Harald Lundhaug (2017)

Lødengtjern: Scale/Contours: 1:10 000 / 5 m, Mapmaker: Harald Lundhaug (2016)

Kirkebygden: Scale/Contours: 1:10 000 / 5 m, Mapmaker: Bjørn Paulsen (2018)

Embargoed for World Cup 2018. Open for training after 2.9.2018.

Ringvoll: Scale/Contours: 1:10 000 / 5 m, Mapmaker: Harald Lundhaug/Bjørn Paulsen (2012/2013)

Torebråte: Scale/Contours: 1:10 000 / 5 m, Mapmaker: Harald Lundhaug (2015/2017)

Guttersrød: Scale/Contours: 1:10 000 / 5 m, Mapmaker: Jussi Silvennoinen (2017)

Skolleborg: Scale/Contours: 1:10 000 / 5 m, Mapmaker: Janne Weckmann/Morten K. Moe (2017)

Venåsmarka, Scale/Contours: 1:10 000 / 5 m (2005)

Akselås: Scale/Contours: 1:10 000 / 5 m, Mapmaker: Morten Dalby (2012)

Maps and areas are announced at our website: [woc2019.no/en/trainings](http://woc2019.no/en/trainings)

This also include maps outside Østfold made by the WOC mapper (Tre ekrem). Please note that some of the training areas are in the proximity of the embargoed areas.

Maps can either be purchased as files (OCAD/PDF/JPG) or in printed form (laser-print) with or without controls. For ordering maps and information please contact Håvard Lucassen, using this e-mail: [training@woc2019.no](mailto:training@woc2019.no)

During the world-cup the maps can be picked up in the Event Centre at Quality Hotel. Here it is also possible to pay for training maps during Thursday.

## 8.1 Training camps

From 28<sup>th</sup> of August to 5<sup>th</sup> of September 2018 an official training camp for WOC 2019 is arranged. Program will be announced at our website.

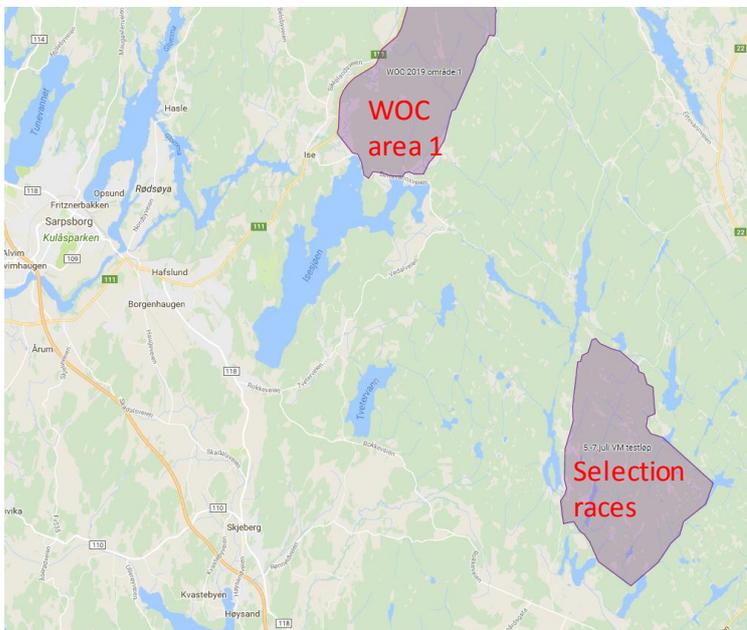
Preliminary dates for the two next camps are

- 19th - 25th of June 2019
- 6th - 12th of August 2019

## 8.2 Selection races

Preliminary dates for selection races are 5 July and 7 July 2019 with Halden SK as organiser.

Embargoed area: [www.google.com/maps/d/viewer?mid=1Ty0mN9pGReL7mAXSvXWoEdVl-fc&ll=59.226926598054106%2C11.371138350000024&z=13](http://www.google.com/maps/d/viewer?mid=1Ty0mN9pGReL7mAXSvXWoEdVl-fc&ll=59.226926598054106%2C11.371138350000024&z=13)



## 9 Rules and general information

### 9.1 Competition rules

The Competition Rules for IOF Foot Orienteering Events (version of 2018) shall be applied for participation in the world cup. Please refer to the Competition Rules on the IOF website [orienteering.org/foot-orienteering/rules/](http://orienteering.org/foot-orienteering/rules/)

#### **Maximum number of competitors per team**

The number of competitors per competition and team is limited according to annually published National Quota: [Link to pdf at IOF.](#)

Special Rules for the 2018 World Cup in Orienteering: [Link to pdf at IOF.](#)

### 9.2 Classes and entry regulations

Classes: WOMEN, MEN without any age restrictions ( § 5.7)

All competitors represent a Federation ( § 6.5). All athletes must be full passport-holding citizens of the country they are representing ( § 6.2). Athletes being citizens of more than one country should represent the only country they have participated in IOF events for during the current calendar year (rule 6.1).

### 9.3 Anti-doping

Doping is strictly forbidden, and the organisers of the world championships are dedicated to support the anti-doping authorities in their work. Doping controls may be carried out any time during the competition period in accordance with the procedures described in the WADA International Standard of testing. The IOF Anti-Doping Code and rules and the World Anti-Doping Code 2015 apply as of 1st of January 2015. Athletes who are selected for the doping tests must bring an official identification (with photo) to the doping test area. The athlete should also bring along their therapeutic use exemption (TUE) if applicable. In general, it is advisable that athletes bring along their ID to all competitions and events. For more information, please consult: [orienteering.org/athletes-licence/](http://orienteering.org/athletes-licence/)

### 9.4 Insurance

All insurances are the responsibility of the federation or the individual competitor according to their national regulations. Competitors participate at their own risk (including the warm-up) and assume their own safety precautions.

### 9.5 Climate and any hazards

Average temperature in early September is normally between 10 and 20 C. Low humidity, but risk of heavy rain showers. No specific hazards. Due to little rain the summer 2018 use of open flames is forbidden.

## 9.6 Directions for obtaining entry permits (visas)

Some nationalities do not need a visa to visit Norway because they hold a passport from a country that Norway has a visa exemption agreement with. This also applies if you have a residence permit in an EU/EEA country or if you have a special passport. For more information, see: [udi.no/en/word-definitions/persons-who-do-not-need-a-visa-to-visit-norway-/#link-708](https://udi.no/en/word-definitions/persons-who-do-not-need-a-visa-to-visit-norway-/#link-708)

## 9.7 Athlete licence

The licence is needed for athletes participating in Senior (Elite M/W 21) World Championships and World Cup competitions. The Application (signed form) and payment should reach the IOF Office or IOF Office representatives before participating in a World Championship or World Cup event. The licence is annual and is valid for all orienteering disciplines. Payments of the annual licence fee is done in IOF Eventor, please consult the proper IOF Eventor Guide for this. For more information, please consult: [orienteering.org/athletes-licence/](https://orienteering.org/athletes-licence/) Last minute signed licence forms can be scanned/photographed and sent to [iof@orienteering.org](mailto:iof@orienteering.org) for a "Preliminary" registration status of the licence. The original can be either sent directly to IOF Office or handed over to the Event Centre. IOF will not accept cash payments of the licence fee. If your federation needs any special arrangements, you must contact [david.wastlund@orienteering.org](mailto:david.wastlund@orienteering.org)

# 10 Media

The media service includes:

- Free of charge connection to internet
- Power
- Working area in a tent with access to printer
- Access to photo control/zones

The Pursuite and the Relay races will be broadcasted live in Norway and Finland.

All four races can also be followed live on the internet worldwide on [www.liveorienteering.com](http://www.liveorienteering.com)

The link to live Internet-TV, to GPS tracking and for the results can be found at [www.woc2019.no](http://www.woc2019.no). There is a cost for live Internet-TV and GPS tracking; live results are free.

## 11 Competition information

### 11.1 Punching, timing system and GPS tracking

Emit Touch-Free punching and timing system is used for all World Cup races. Each runner will carry two emiTags around the same wrist. The punching is performed by holding the emiTag 0 - 50 cm above the control for a short moment. The LED light in the emiTag will start flashing after successful punch and will keep flashing for 5 seconds. It will be possible to test the system at the technical model event. Timekeeping services are provided by EQ Timing. The emiTags are handed out in the Event Centre as a part of the accreditation. It is the athletes' responsibility to bring the emiTags to the start for each race. The emiTags will be collected at the finish at the relays. For athletes not running the relays, one team member shall return all tags used by the Team athletes at the Event Centre or event office on venue no later than Sunday by 2PM.

**GPS system to be used:** Tracking devices from TracTrac will be used for viewing the competitions on the large video screen in the event arenas, for live transmission, and as part of the TV production. The electronic tracking device is carried on the back of the runner in an elastic harness. Tracking will be offered at all competitions and carrying a tracking device will be mandatory for all runners. Tracking devices will be placed into the harness by an official at the pre-start and collected at the finish.

**Runners are allowed and encouraged to use their own GPS harness.** The organizer will only provide GPS harness to runners that request so prior to the event. Consequently, any runner that wishes the organizer to provide a GPS harness must inform the organizer by mail [bjorn.axel.gran@woc2019.no](mailto:bjorn.axel.gran@woc2019.no) no later than 28<sup>th</sup> of August. GPS harnesses that have been ordered beforehand will be handed out together with the team bags and must be returned to the event office on the venue on Sunday by 2PM.

### 11.2 Clothing

Full body coverage is required, but T-shirts/singlet are permitted.

### 11.3 Team official meeting

Team officials' meeting for all races take place at Thursday 18:00 in room "Gandalf 3" at the Event Centre. We appreciate questions in advance! Please email Bjørn Axel Gran at [bjorn.axel.gran@woc2019.no](mailto:bjorn.axel.gran@woc2019.no) within 3:30 pm.

### 11.4 Number bibs and control descriptions

All competitors must wear their number bibs at all competitions. The bibs must be worn on the chest and be visible in their entirety. They may not be folded over or cut down. Bibs will be handed out in the quarantine when the athlete has signed in. We encourage all to reuse the safety pins.

### 11.5 Quarantines

Quarantine zones are described in detail in each competition's section. There will be a check-in when entering the quarantine zone at each competition. Competitors and team officials must show their accreditation cards and sign the list. Teams are allowed to take their own tents to the quarantine

areas of all competitions. In the quarantine there is water available. The use of mobile phones, computers or any other communication device inside the quarantine zones is strictly prohibited. It is not allowed to bring any maps of the competition areas into quarantine zones. Runners and coaches are not allowed to visit the finish area for the long distance before entering the quarantine zone. Competitors must enter the quarantine zone before the specified deadline; otherwise they will not be allowed to participate in the competition. Should you need help in case of “acts of nature beyond control”, contact the person indicated on the back of your badge. It’s possible that a TV team will enter the quarantine and film athletes (for presentation purposes). Athletes should be possibly cooperative if requested.

## 11.6 Start procedure

The competitor’s name and bib number is called at the pre-start. It is the competitor’s responsibility to watch for his/ her start time. There is also a clock showing competition time in the pre-start area. There will be clocks on the start line showing competition time. At all individual starts, the competitors pick up the control description from a table (see each race for specific time). Control description is always also printed on the competition maps. For details see descriptions in each competition’s section. The start triangle is marked in the terrain by a control flag. The route to this flag is marked with IOF tape and competitors must follow this marked route to the start point.

## 11.7 Competition maps, terrain

Maps are drawn according to the International Specification for Orienteering maps (ISOM 2017). All competition maps were revised in July-August 2018. Last updates (if any) will be marked with purple colour. Maps are off-set printed on paper and will be handed out in sealed plastic bags.

There are signs of forestry in parts of the terrain with felled areas and use of machinery. The major signs of these are included in the maps. However, many minor signs are not mapped.

## 11.8 Coaching area

In arenas with an athlete’s passage along the course there is an area reserved for coaches.

## 11.9 Refreshment controls

There are refreshment controls in the forest for the long distance, and at the arena passage on all competitions. It is served water and sports-drinks (Maxim Sports Drikk).

## 11.10 TV-production

There will be made TV production partly or completely from all competitions by Gearbox Production (Karel Jonak). There will be TV cameras and photographers between and at controls (not marked in the control description) for the pursuit and the relay. Running cam and cable cam may also follow the athletes for a part of the course. Team presentation or single athlete presentations for TV in advance of the races are possible. Instructions will be given during the Team Officials Meetings or in the quarantine.

### 11.11 Finish procedure

Time will be measured at the moment of crossing the finish line. After crossing the finish line the athlete enters an area of restricted-access for EMIT-tag downloads and removal of tracking units. Athletes selected for anti-doping testing will be met here by their chaperones. Athletes then access the mixed zone. Coaches are allowed, and drinks are available as well as access to first aid if needed.

### 11.12 Complaints, protests and jury

Final results will be available in paper form in the competitor's area and announced by the speaker. Any complaint shall be made in written form and handed over to the organisers at the arena event office or to the event manager as soon as possible. A special form is available at the event office (in the event centre or in the arenas). Complaints regarding the results shall be made no later than 15 minutes after publication of the official results list.

A written protest can be made against the organiser's decision about a complaint. Written protests shall be delivered personally to a jury member or to the IOF senior event advisor no later than 15 minutes after the organisers have announced the decision about the complaint. A protest has to be accompanied by a payment of 50 EUR, refundable in case the protest is accepted.

**Jury:** Jaroslav Kacmarcik, CZE\*, Carl Göran Struts, SWE and Unni Strand Karlsen, NOR

\*: Since Kacmarcik also is a team leader, the team leaders have to accept this.

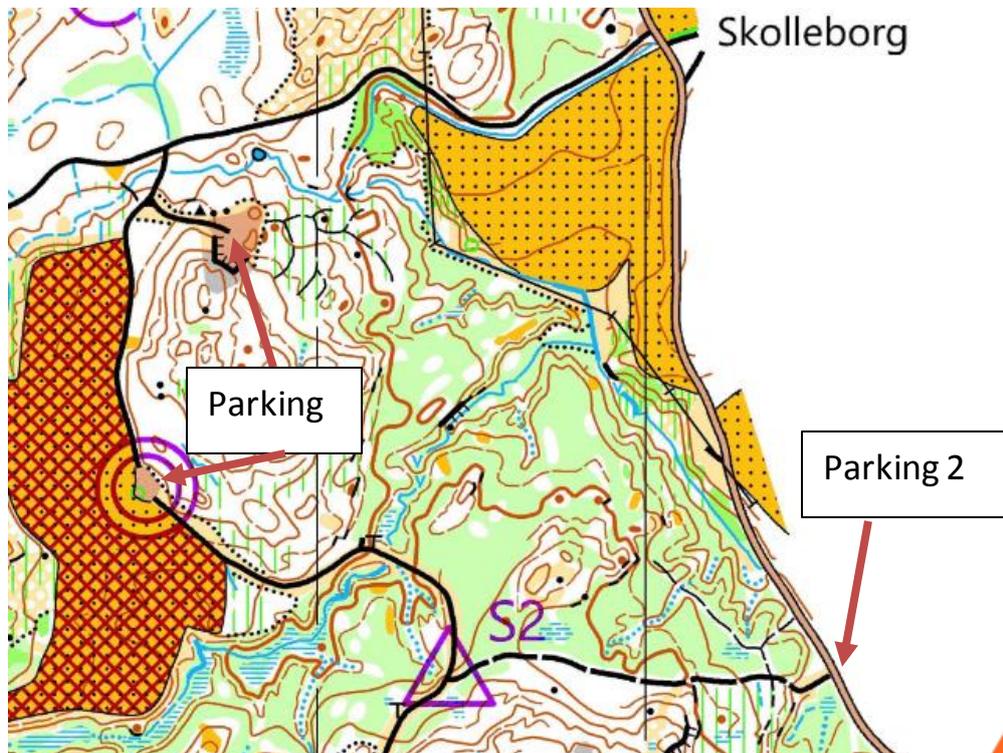
### 11.13 Ceremonies

The flower and prize ceremonies will be held on the arenas after the competitions. The prize and flower ceremonies for the races are scheduled as indicated in the schedule. Athletes ranked 1-6 shall be present behind the podium 10 minutes prior to the beginning of the prize giving ceremony. National flags, signs, sun glasses, hats, head bands, bottles and other such items are not allowed on the stage. Final instructions to the participants will be given prior to the ceremonies on site. Dress code for athletes: national team's competition uniform or national team uniform.

## 12 Model event

Date: Thursday 30<sup>th</sup> of August 10:00 to 16:00

Location: Skolleborg (Coordinates: Lat 59.22553739, Lon 11.66929353) (about 4km south of the arena). Parking is allowed at the finish and in the quarry marked on the map below. Outside the time 10-16, parking is also possible at the junction marked "Parking 2".



There will be one public toilet at the finish.

The terrain is, relevant for the long, pursuit and relay, and is on the map "Moltemosen" (2017, revised (2018)). The model map will be both in 1:10000 and 1:15000. The Norwegian Championship 2017 Relay was on the same map, see links to maps and tracking on [o-nm2017.no/](http://o-nm2017.no/)

The model event is with control flags and emit units since the controls will be used in the public race at Saturday. We therefore encourage all to fair play and not share the map with the participants in the public races.

At the east end of the field between control 90 and 125 there is an example of out-bound marking with the tapes used in the competition.

## 13 Technical model

Date: Thursday 30<sup>th</sup> of August 17:30 to 17:50

Location: Event Centre, Sarpsborg

A model of the Touch Free punching will be available at the Event Centre at Thursday.

The following procedures will be shown: Emit Touch Free +punching. Bring your EmiTag for testing.

The drinks used at the refreshment controls, "Maxim Sports Drikk" will be served.

## 14 Long

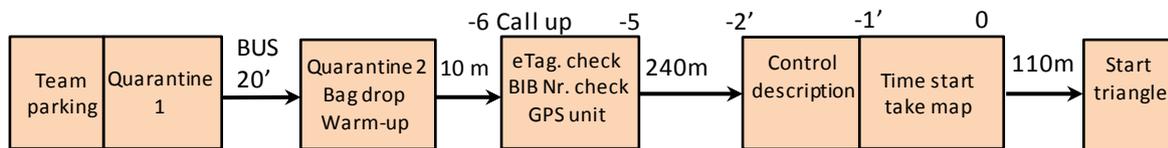
Date:	Friday 31 <sup>st</sup> of August
Format:	Shortened long distance (winning times 65 minutes for women, 80 minutes for men).
Arena:	Græsholt, Aremark. (59.24423, 11.64296)
Access route:	Access to the arena is marked from south (south of Aremark sentrum) in junction Road21/Fv861. From north (Strømsfoss) in junction Road124/Fv861,
Quarantine 1:	Aremark sport hall. (Coordinates: 59.22607, 11.69565). Marked from Aremark sentrum, Road 21. In-door in sport hall. Quarantine has an interior area, which is accessible only with clean sport shoes. There will be toilets and water available.
Check-in time:	07:30 – 09:30
Transport to Q2:	Mandatory transport by organiser for the athletes and coaches from the quarantine 1 to the quarantine 2 and pre-start is by means of minibuses and cars (estimate up to 20 min transport time). If there are too many persons for a scheduled transport, athletes with lowest start time will have preference. The athletes shall bring their bags to Quarantine 2.
Quarantine 2:	At the drop-off of the buses and close to the pre-start. The quarantine 2 is limited to the area shown on the warm-up map. Wandering outside the warm-up map borders may result in disqualification. Quarantine 2 is situated in the terrain. There will be some tents, toilets and water available. Teams can also bring their own tents. The athletes shall leave their bags at the marked drop-off point. The bags will then be transported to the team zone at the finish arena. Coaches shall join the bag-transport from the pre-start to reach the arena. They may also follow the bus back to the parking at Quarantine 1, but are not allowed to re-enter Quarantine 1.
Warm-up:	The warm-up map will be handed out when arriving quarantine 2. Please notify that the warm-up map has no outer bounds. The athletes have the responsibility to keep within the warm-up area
Pre-start:	The pre-start is located in the terrain. At the pre-start GPS units will be handed out. The runners are responsible of being there at the right time.
Map:	Skolleborg, 1:15.000, 5m. Based on LIDAR data.  Mapped by: Jussi Silvennoinen (2017-18)

**Terrain:** The terrain is medium undulating with mostly open pine forest with good runnability. There are signs of forestry in part of the terrain with felled areas and more dense areas with young forest. It's a lot of marshes in the terrain. Some marshes and re-entrants are grass-covered. The grass may reduce the runnability.

**Course planner:** Øyvind Helgerud

**Starting order:** Start interval to be 2 minutes, except for the last 15 starters, for which it will be 3 minutes. The start order is determined strictly by the order of the World Ranking as of 29 August (highest ranked last).

**Start procedure:**



The maps will be placed face down on a table next to the start line

**Remarks:** There will be no arena passage on the long distance, and the organiser have got approval for a rule deviation (rule 19.10): there will be no refreshment station where the athletes shall have the opportunity to have their own drinks.

**Course details**

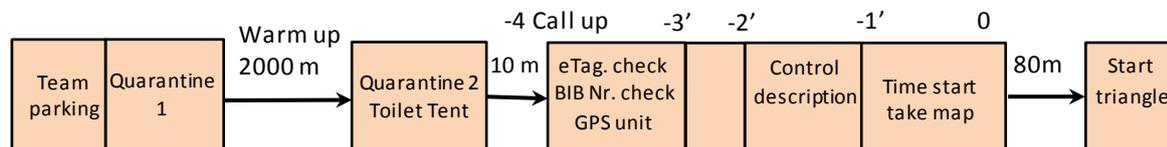
	<b>Women</b>	<b>Men</b>
First start	9:31	9:30
Start interval	2 / 3	2 / 3
Course length	9,3 km	13,6 km
Total climb	275m	425m
Number of controls	13	16
Number of refreshments	2	3
Winning time	65 min	80 min
Maximum time	3 hours	4 hours
Control description size	112 x 53 mm	131 x 53 mm

**Cool-down:** Only within the arena, see arena sketch for Græsholt, Aremark, at the end.

## 15 Prologue

Date:	Saturday 1 <sup>st</sup> of September
Format:	Prologue (winning time 23-25 minutes for men and women)
Arena:	Ulvestad, (59.4948888, 10.8656644)
Access route:	Marked from Road121. Parking is at the Våler church (59.488767, 10.8666946), and 500 m to walk to the arena.
Quarantine 1:	At Vålerhallen (59.4896686, 10.855075). Parking at the quarantine 1. Quarantine 1 has an interior area, which is accessible only with clean sport shoes. There will be toilets and water available. The athletes leave their bags at the drop-off point in the quarantine 1.
Check-in time:	07:30 – 09:00
Transport to Q2:	Mandatory walk/warm up along marked route, <b>2 km</b> , to the Quarantine 2/Pre-start.
Warm-up:	There is a warm-up map showing the route to quarantine 2.
Q2/Pre-start:	<p>At the end of the marked route the athlete arrives at Quarantine 2/Pre-start which is situated at the pre-start. The Q2/pre-start is located in the terrain. At the pre-start GPS units will be handed out. The runners are responsible of being there in due time.</p> <p>There will be one tent in case of bad weather. There are toilets and water available. The athletes can leave warm-up clothes at the pre-start. These will be transported to the finish arena and thereafter to the quarantine (Q1). The coaches shall follow a marked route to the finish area, max 2 km. After leaving Q2/Pre-start it is not allowed to return, to neither Q2 nor Q1.</p>
Map:	<p>Kirkebygden, 1:10.000, 5m. Based on LIDAR data.</p> <p>Mapped by: Bjørn Paulsen (2017-18)</p>
Terrain:	Undulating, medium height differences with mostly spruce forest. Mostly good runnability, but there are areas with reduced running speed. Some smaller marshes and streams.
Course planner:	Tore Bjørnerød
Starting order:	The prologue will have a start interval of 1 minute, with the starting order determined by a group system (the last group being the 15 highest-ranked runners in the World Ranking as of 30 August, the second-last group being the next 15 highest-ranked, and so on), with the order within each group being drawn randomly.

Start procedure:



The maps will be placed face down on a table next to the start line.

Remarks

Lørdagskjappen by OK Moss (2018) took place in the neighbour terrain (west part of the map Kirkebygden)

In the terrain there are about 6 animal figures as shown in the pictures. These are not marked on the map.



## Course details

	<b>Women</b>	<b>Men</b>
First start	9:00	9:00
Start interval	1	1
Course length	3,3 km	4,0 km
Total climb	55m	80m
Number of controls	12	14
Number of refreshments	-	-
Winning time	23 min	23 min
Maximum time	2 hours	2 hours
Control description size	130 x 53 mm	150 x 53 mm

**Finish:** At the arena, Ulvestad, all preliminary and final results will be published. As there are no event office at this arena, complaints have to be delivered to the event manager in the arena. In the arena there will be no sale, only water. There are toilets and medical care.

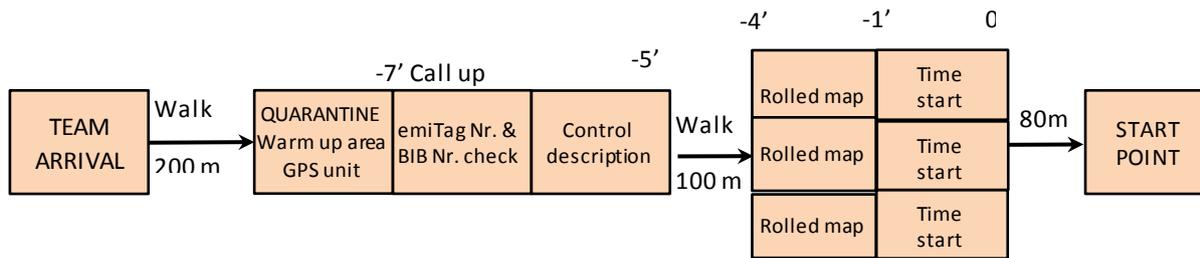
**Cool-down:** From the arena athletes and coaches follows the obligatory marked route, about 2 km along road or 800 meters on pasture fields with a cool-down map, to the wardrobes and showers at Kirkebygden school, next to, but separated from quarantine 1. Here the bags will be handed out.

**Arena Sketch:** See sketch at the end.

## 16 Pursuit

Date:	Saturday 1st of September
Arena:	Græsholt, Aremark. (59.24423, 11.64296)
Access route:	Arena is the same as for long. Access to the arena is marked from south (south of Aremark sentrum) in junction Road21/Fv861. From north (Strømsfoss) in junction Road124/Fv861, Parking at Græsholt, Aremark, is on the arena
Check-in time:	15:00 – 16:40 (women) / 16:50 (men)
Quarantine:	Quarantine is on a field close to the arena and is accessed by walking through the arena. At the quarantine there will be tents in case of bad weather. Teams may also bring their own tents. There are toilets and water available. The athletes leave their bags at the drop-off point in the quarantine. The coaches that leaves the quarantine, cannot return.
Warm-up:	There is no warm-up map. Warm-up can be done within the quarantine zone which includes a field and some open terrain.
Pre-start:	The pre-start is located at the entrance of the quarantine. The runners shall pick up their GPS in due-time to avoid ques and stress.
Map:	Ara, 1:10.000, 5m. Based on LIDAR data. Mapped by: Jussi Silvennoinen (2017-18)
Terrain:	The terrain is alternating between parts with open forest with mostly pine, to areas with dense, mixed vegetation and reduced visibility. Some areas are old open spruce forest with very good visibility and good runnability. There are some felled areas, both new and some years old. The terrain alternates from relative flat to medium steep. Some marshes and re-entrants are grass-covered. The grass may reduce the runnability.
Course planner:	Bjørn Erik Glomsrud
Starting order:	The time each competitor starts after the leader in the pursuit race will be double the amount of time they were behind the leader in the prologue, with final results being the order across the finish line. Competitors more than 8 minutes behind the winner in the prologue will take part in a mass start 20 minutes after the first start in the pursuit, with their final result on the basis of the sum of twice their prologue time, plus their pursuit time; they will be ranked after all finishing competitors in the 'normal' pursuit. Competitors who are not placed in the prologue may start in the mass start but will not receive an official result.

Start procedure:



The maps will be rolled and handed out in the start lane. The map has two sides, and the maps will be rolled such that the runners see the side that is the first part. The competitor is not allowed to open the map before his/her start time. At the beginning of each of the 3 start lanes there is a start list showing bib numbers, name and starting time for each lane. The start time will be displayed at the end of each start lane, see picture below. An official releases the competitor by taking his hand off his/her shoulder at the start time.

The unit is showing running time 10:51:42, and that it is 18 seconds left to the start for the runner with bib number 514. There is one unit for each start lane.



**Remarks** In the forest, the athletes may encounter areas with newly uprooted trees, especially around the north / northeast side of felled areas. In one particular area of the pursuit race, there is an area with many uprooted trees across a path. This area is marked on the map in purple diagonal lines, as it may stall the runner.

**Arena passage:** There will be an arena passage in the middle of the course. Refreshments as shown in the technical model event will be served. There is a coaching zone which can be accessed by up to 2 coaches per nation.

Course details

	<b>Women</b>	<b>Men</b>
First start	17:00	18:00
Start interval	See start order	See start order
Course length	5,9 km	7,6 km
Total climb	200m	230m
Number of controls	16	19
Forking	No	No
Number of refreshments	1 (arena)	1 (arena)
Winning time	47 min	45 min
Maximum time	2 hours	2 hours
Control description size	144 x 53 mm	163 x 53 mm

Cool-down: Only within the arena, see arena sketch for Græsholt at the end.

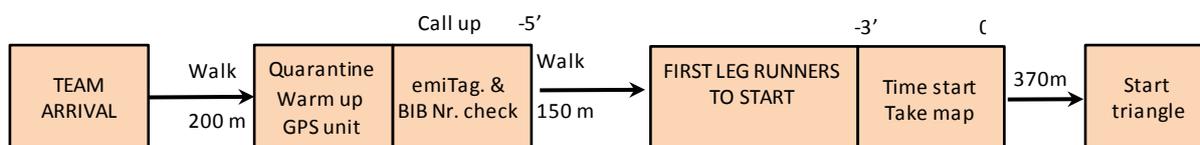
## 17 Relay

Date:	Sunday 2 <sup>nd</sup> of September
Arena:	Græsholt, Aremark. (59.24423, 11.64296)
Access route:	Arena is the same as for long. Access to the arena is marked from south (south of Aremark sentrum) in junction Road21/Fv861. From north (Strømsfoss) in junction Road124/Fv861. Parking at Græsholt is on the arena
Check-in time:	08:30 – 09:40 (women) / 09:50 (men)
Quarantine	Quarantine is on the same field as the pursuit and is accessed by walking through the arena. At the quarantine there will be tents in case of bad weathers. Teams may also bring their own tents. There are toilets and water available. The athletes leave their bags at the drop-off point in the quarantine. The coaches that leaves the quarantine, cannot return.
Warm-up:	There is no warm-up map. Warm-up can be done within the quarantine zone which includes a field and some open terrain.
Pre-start:	The pre-start is located at the entrance of the quarantine. The runners shall pick up their GPS unit in due-time to avoid ques and stress.
Map	Bakkeli, 1:10.000, 5m . Based on LIDAR data.  Mapped by: Jussi Silvennoinen (2017-18)
Terrain:	The terrain is medium undulating with mostly open pine forest with good runnability. There are signs of forestry in part of the terrain with felled areas and more dense areas with young forest. Some marshes and re-entrants are grass-covered. The grass may reduce the runnability.
Course planners	Erik Sandbæk and Morten Johansen
Start procedure:	First leg runners are called up at the pre-start point 5 minutes before the start. They are then guided to the start line where they will be handed over their maps which are rolled. The map has two sides and the maps will be rolled so the runners see the side that is the first part. The competitor is not allowed to open the map before the speaker announces the start signal.  2nd - 3th leg runners will be called 5 minutes before the arrival of the first team and can then move to the change-over area. When entered into the change-over area they cannot go back to the quarantine.

**Changeover:** The incoming runner will:

- 1) Cross the finish line
- 2) Continue to the map board
- 3) Collect the map marked with bib number
- 4) Hand over the rolled map over the board to the next runner.

It is the competitor's responsibility to take the correct map. Teams running with a wrong map will be disqualified at the next change-over



**Remarks** A public race takes part in the neighbour terrain at the same time.

**Coaching zone:** The courses will pass the arena where it also is refreshments. There it is a coaching zone which can be accessed by up to 2 coaches per nation.

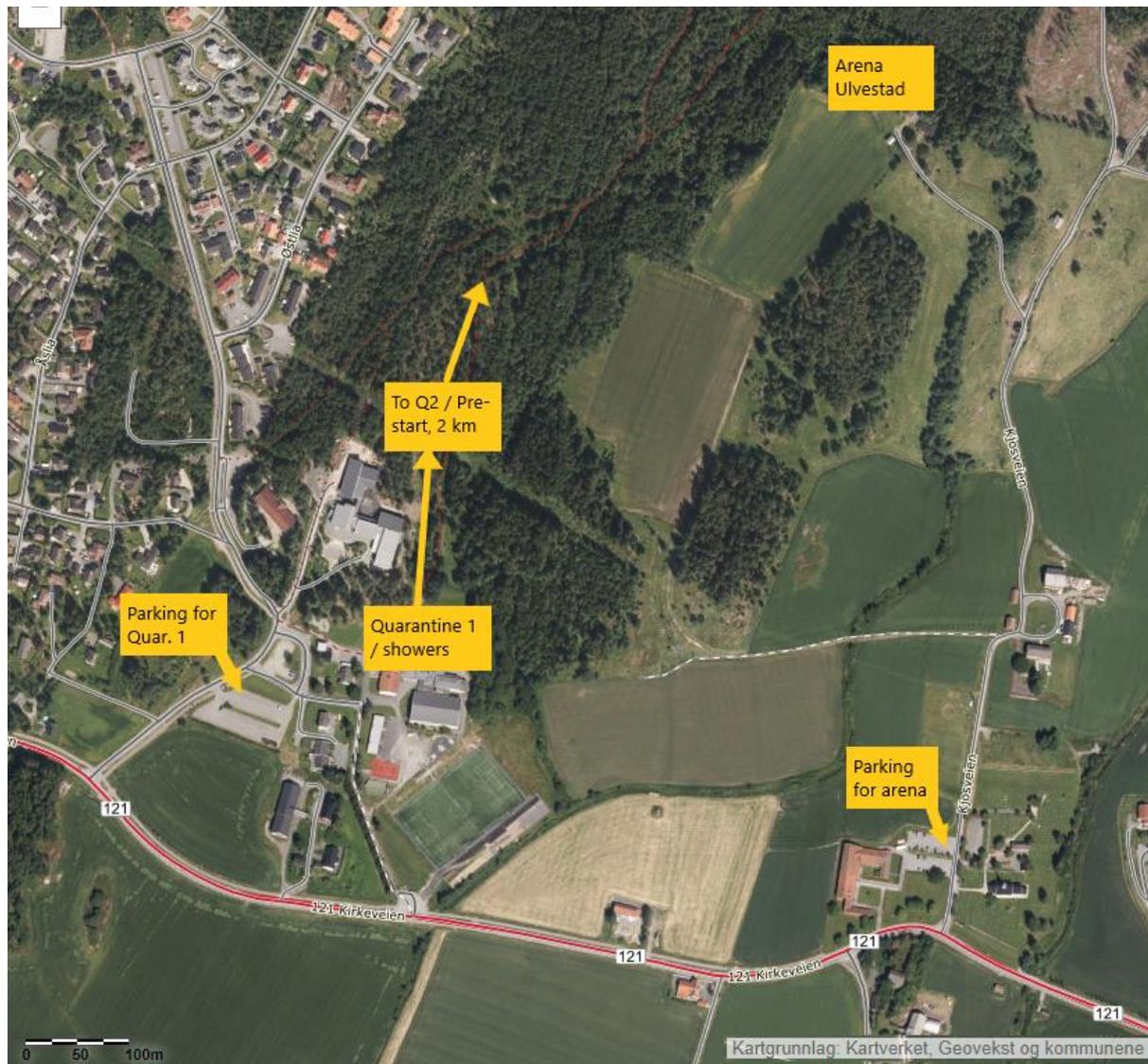
**Course details**

	<b>Women</b>	<b>Men</b>
First start	9:15	11:20
Course length (per leg)	5,3 km	6,6-6,7 km
Total climb (per leg)	175m	210m
Number of controls (per leg)	13	15
Number of refreshments	1 (arena)	1 (arena)
Winning time (per leg)	36 min	37 min
Maximum time	4.5 hours	4.5 hours

**Cool-down:** Only within the arena, see arena sketch for Græsholt, Aremark at the end.



## 19 Arena sketch prologue Ulvestad



## Public races

**Publicraces 2018** See invitation in Norwegian Eventor:

- Saturday, Long: [eventor.orientering.no/Events/Show/9584](http://eventor.orientering.no/Events/Show/9584)
- Sunday, Middle: [eventor.orientering.no/Events/Show/9585](http://eventor.orientering.no/Events/Show/9585)

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Test the unique WOC terrain and have some amazing experiences. Run 1 spectator race or run all 6 of them. Run in the regular classes or run in the open classes. At the WOC competition you can follow the event on the big screen, enjoy a rich variety of food & drinks for sale, as well as a shopping- and activity area. The children can try our kids course, the maze, punching courses and children's park. We promise the best WOC experience you can wish for: **so sign up now!**

- Bus transport from several places within Sarpsborg to/from all arenas.
- Car parking close to all of the arenas.
- Spectator races next to the WOC arenas.
- A designated camping area close to Sarpsborg city centre.
- We are happy to assist clubs booking accommodation
  - Contact person for clubs: Finn Henry Lillestrand
  - Phone: +47 993 80 703, E-mail: [fhillestrand@gmail.com](mailto:fhillestrand@gmail.com)

# WOC PROGRAM/ SPECTATOR RACES

*Exact times will be announced during the summer of 2019*

#### Mon 12th August

**WOC:** Opening Ceremony and cultural program (*evening*)

**Spectator race:** Sprint: (*afternoon/evening*)

Sarpsborg town square

#### Tue 13th August

**WOC-qualifications:** Middle distance (*mid-day*)

**Spectator race:** Middle distance, Norgescup junior (*mid-day*)

Knatterudfjellet

#### Wed 14th August

**WOC-final:** Long distance (*afternoon*)

**Spectator race:** Middle distance (*afternoon*)

Mørk

#### Thu 15th August

**WOC:** Rest day

**Spectator race:** Middle distance (*afternoon/evening*)

Fredrikstad (close to the coast)

#### Fri 16th August

**WOC-final:** Middle distance (*evening*)

**Spectator race:** Long distance, Norgescup junior (*afternoon*)

Mørk

**WOC:** Prize giving ceremonies and cultural program (*evening*)

Sarpsborg town square

#### Sat 17th August

**WOC:** Relay (*afternoon*)

**Spectator race:** Shortened middle distance (*afternoon*)

Mørk

To read more about entries and more information about the races – visit [www.woc2019.no](http://www.woc2019.no)

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Gjensidige

