



Bulletin #4

World MTB Orienteering Championships Junior World MTB Orienteering Championships

Falun Sweden
July 15-20 2022



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1. Invitation

Dear friends,

We look forward to seeing you in the beautiful region of Dalarna this summer. Traveling in Dalarna is like experiencing Sweden in miniature and it's a very popular tourist destination. The competitions will take place in Säter and Falun just two and a half hours drive from Stockholm Arlanda airport, or you can easily travel by train directly from the airport.

We want to give the participants challenging competitions in varying terrain types. The Event Centre is situated at the sports complex Lugnet in Falun, which is Sweden's national cross-country skiing and ski jumping centre. 60 different sports can be practised there, and it has become a major centre for mountain biking in recent years. The middle distance and relay races will be held in Säter in a mostly open pine forest with a network of fast cyclable trails. The sprint race in Falun offers fast route choices through a varied urban, park and wooded area. The long distance and mass start races, also in Falun, will be in challenging hilly terrain with lots of route choices on tracks of very varying character.

I wish you all welcome to Sweden, I hope you will have a great time here!

Jannike Wåhlberg, Event Director WMTBOC 2022 Falun



2. Contact information

Organisers

IOF

www.orienteeing.sport

SOFT - Svenska Oriente-
ringsförbundet

www.svenskorientering.se

OK Kåre, Falun

okkare.se

Säterbygden OK, Säter

www.saterbygden.se

Event office / Event Centre

Stora Ensohuset

Lugnetvägen 20

S-791 31 Falun

info@wmtboc2022.se

+46 76 7208091

Leader: Berndt Adolfsson

[60.6214570](tel:60.6214570), [15.6550523](tel:15.6550523)

Event Director

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Competition Director

Sprint, Mass start, Long
distances

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Competition Director

Middle, Relay distances

Per Sandberg

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wmtboc2022.se

+46 70 6404673

IOF Senior Event Adviser

Vera Parizkova, CZE

National Controller

Magnus Blåudd

magnus@blaudd.se

+46 70 2611309

Technical Director

Steven Hale

steven.hale@wmtboc2022.se

+46 76 8444030

Media contact

Malin Fuhr

media@wmtboc2022.se

+46 70 7716415

Information

info@wmtboc2022.se

wmtboc2022.se

<https://www.instagram.com/wmtboc2022/>

<https://www.facebook.com/wmtboc2022/>

3. Venues

Event Centre and athletes village Falun. Distance to the races in Mora by, Säter is 40 km. The races in Falun will all be within 5 km of the Event Centre.

The Event Centre will be located at Lugnet in Falun.

Lugnet is one of Europe's most complete sports facilities and is located in the eastern part of Falun.

In the early 1970s, Lugnet's sports part started to be built and the area and the facility have since been purposefully developed. Lugnet has hosted the World Ski Championships 1954, 1974, 1993 and 2015. Lugnet has also hosted the O-ringen, EOC 2012 and, among other events, the Swedish Championships in MTB orienteering.



General map of the region

A complete facility

At Lugnet there is the national arena for cross-country skiing and ski jumping, ice stadium (ice rink and artificial frozen bandy court), swimming pool, the large sports hall (four floors 20x40 meters), athletics stadium, mountain bike arena, swimming pool, outdoor pool, gym, tennis arena, martial arts hall, floorball hall and athletics hall. At present, 60 of the Swedish Sports Confederation's 70 special federations can conduct their activities in the area. Falu municipality owns most of the facilities, but some are also run privately.

In the Lugnet area there is also a funicular, sports lab, Dalarna University, Lugnetgymnasiet, Scandic hotel, camping and various outdoor activities. Lugnet is an extremely complete facility where it is close to everything.

The Event Centre will be open between Tuesday 12th and Thursday 21st July 2022.

For more information on Lugnets Sports Arena and facilities, please visit:

<https://www.lugnet.se/lugnet/om-lugnet.html>

Competition Venues

Mora by, Säter is a small village located 40 km from the Event Centre in the municipality of Säter. Two events will be held – middle distance and relay.

The terrain is sandy with pine trees, many tracks, heights and depressions. The Swedish MTBO Championships were held here in 2016 and also quite a few national events over the years.



Falun. In conjunction with the Event Centre three events will be held – long distance, sprint and mass start. The venues will be held close to the city of Falun.

The terrain is hilly with mainly pine trees, many tracks, also used for skiing in the wintertime. On the slower paths it is often rocks and roots. Major orienteering events have been held in the area and also high value MTB events.



4. Classes and participations restrictions

WMTBOC women's and men's classes are also included in the CX80 World Cup, U23 World Cup and Team World Cup as follows:

	Middle 15th July	Relay 16th July	Long 17th July	Sprint 19th July	Mass start 20th July
CX80 World Cup	x		x	x	x
U23 World Cup	x			x	x
Team World Cup		x			

WMTBOC

There is one class for women and one for men, without age restrictions.

In the Mass start, Middle distance, Long distance and the Sprint every Federation may enter up to 6 women and 6 men and, in addition, the current World Champions for the distance may be entered by their Federation.

In the Mass start, Middle distance and Sprint each Federation may enter up to a further 2 women and 2 men who qualify for the Women U23 and Men U23 classes respectively. No U23 classes are offered in the Long distance.

In the Relay, each Federation may enter up to two women's teams and two men's teams, each consisting of 3 team members.

JWMTBOC

There is one class for women and one for men. Only competitors who are entitled to compete in the classes W20 or M20 may participate.

In each competition every Federation may enter up to 6 women and 6 men.

In the Relay, each Federation may enter two women's teams and two men's teams, each consisting of 3 team members.

The Long distance and Sprint also count in the Young Guns World Series M20 and W20 (Junior) classes.

U23 World Cup

Women and men born 1999 or later are entitled to compete in the Women U23 and Men U23 classes respectively. They compete simultaneously in the WMTBOC Women's and Men's classes and are treated in all respects as competitors in those classes except that their results and scores are also listed separately in Women U23 and Men U23 lists.

5. Program

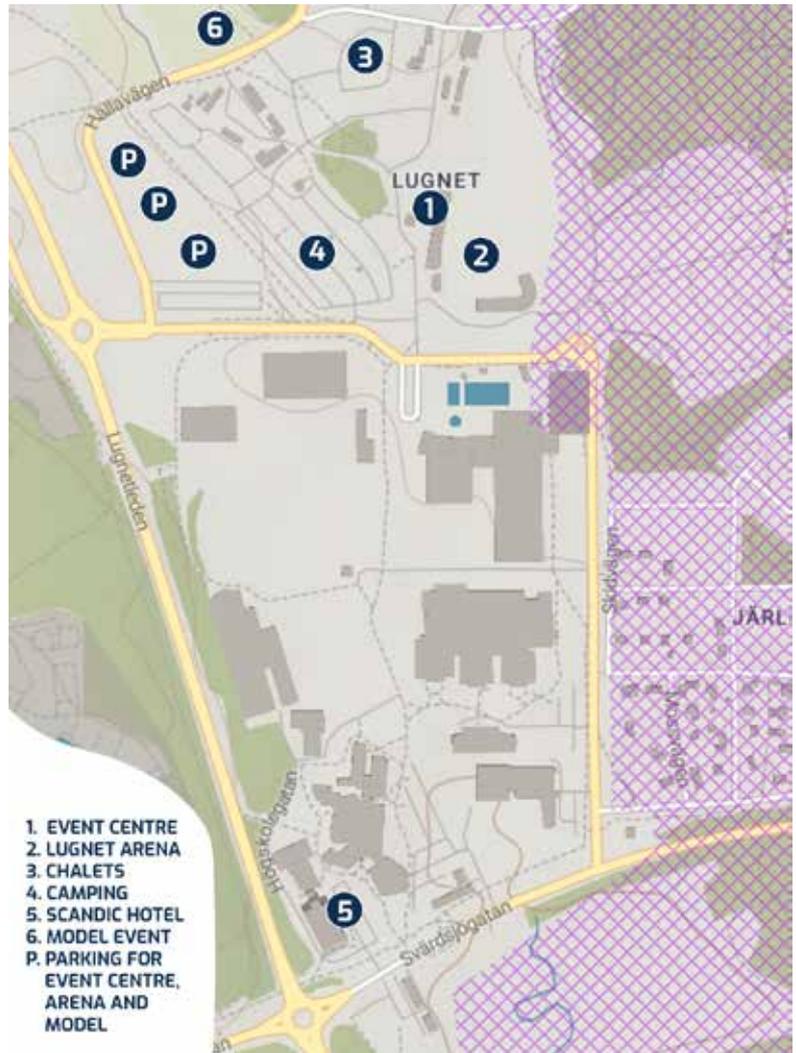
Date	Time	Events
12/7 Tuesday		Arrival and training in Falun and Säter
13/7 Wednesday	All day	Arrival and training in Falun and Säter Model events in Falun and Säter
14/7 Thursday	All day 12:00 19:00	Model events in Falun and Säter Deadline Confirmation name entries Teamleaders meeting, Event Centre
15/7 Friday	All day 6:30 9:30 15:00 ca 15:00 19:00 20:00	Model events in Falun and Säter Breakfast (for guests at Scandic Hotel only) Middle distance, Säter Deadline Confirmation name entries Flower ceremony in Mora By, Säter Teamleaders meeting, Event Centre Opening ceremony followed by Prize-giving ceremony, Event Centre
16/7 Saturday	All day 6:30 10:00 14:00 ca 14:00 19:00 20:00	Model event in Falun Breakfast (for guests at Scandic Hotel only) Relay, Säter Deadline Confirmation name entries Flower ceremony in Mora By, Säter Teamleaders meeting, Event Centre Prize-giving ceremony, Event Centre
17/7 Sunday	All day 6:00 9:00 ca 14:30 20:00	Model event in Falun Breakfast (for guests at Scandic Hotel only) Long distance, Falun Flower ceremony in Falun Prize-giving ceremony, Event Centre
18/7 Monday	All day 14:00 19:00	Model events in Falun Deadline Confirmation name entries Teamleaders meeting, Event Centre
19/7 Tuesday	All day 7:00 10:00 14:00 ca 13:45 19:00 20:00	Model event in Falun Breakfast (for guests at Scandic Hotel only) Sprint, Falun Deadline Confirmation name entries Flower ceremony in Falun Teamleaders meeting, Event Centre Prize-giving ceremony, Event Centre
20/7 Wednesday	7:00 10:00 13:00 18:00	Breakfast (for guests at Scandic Hotel only) Mass start, Falun Prize-giving ceremony, Event Centre Closing ceremony and banquet, Falun
21/7 Thursday		Departure of the teams

Note! All timing are subject for change.

Opening hours Event Centre

Date	Event Centre Lugnet	Säter
12/7 Tuesday	9-13	
13/7 Wednesday	9-13	
14/7 Thursday	9-13 & 17.30-19.00	
15/7 Friday	17.30-19.00	9-15
16/7 Saturday	17.30-19.00	9-14
17/7 Sunday	8-14 & 19:00-20:00	
18/7 Monday	9-13 & 17.30-19.00	
19/7 Tuesday	9-13 & 17.30-19.00	
20/7 Wednesday	9-13 & 17.30-19.00	
21/7 Thursday	8-12	

Note! Event Centre opening hours are subject to change.



6. Entries

Entries

All entries via IOF Eventor

World MTBO Championships:

<https://eventor.orienteering.org/Events/Show/6736>

Junior MTBO Championships:

<https://eventor.orienteering.org/Events/Show/6737>

Competitors may only be entered by their Federations.

Entries opened on 1st March 2022.

Contact regarding entries

robert.oestlund@wmtboc2022.se

Deadlines

Late entries and withdrawals

Late entries/withdrawals will be accepted as follows:

After 14th May 2022

- Entries will be accepted with surcharge of 20%.
- Withdrawals will receive a refund of 80%

After 4th July 2022

- Entries will be accepted with surcharge of 50%.
- Withdrawals will receive a refund of 50%

A charge will be made for a name change after 4th July of 100 SEK per name.

After 14th July 2022 at 12.00 (noon) no entries will be accepted.

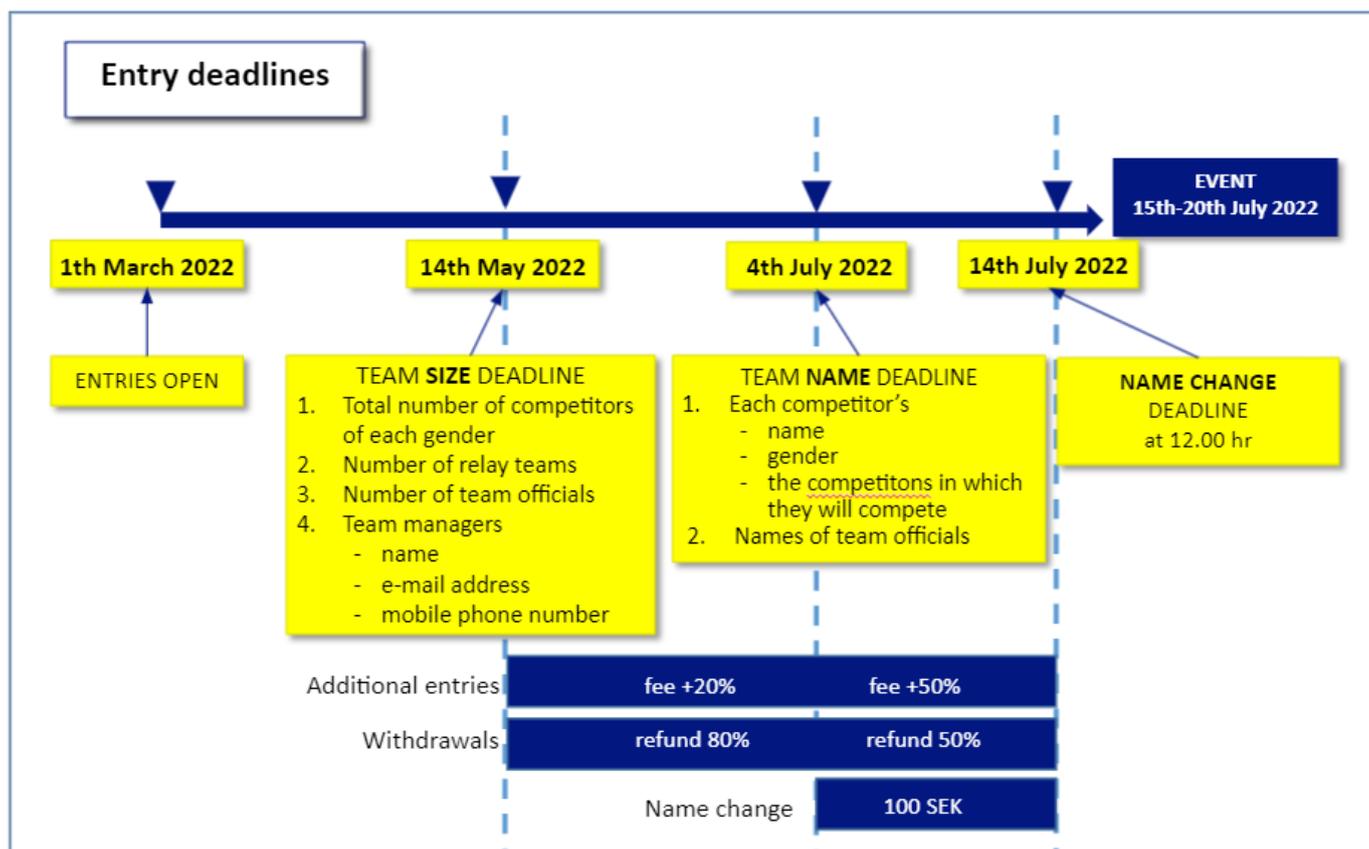


Figure.

Entry Fees and payments

Entry fees	WMTBOC	JWMTBOC	Team leaders
Accreditation (per person)	650 SEK *)	450 SEK *)	650 SEK
Mass	650 SEK	450 SEK	
Sprint	650 SEK	450 SEK	
Middle	650 SEK	450 SEK	
Long	650 SEK	450 SEK	
Relay (per team)	1 900 SEK	1 300 SEK	

*) Includes Model Events and final banquet

Fees for additional entries and name changes, see figure on previous page.
Press / media free of charge.

Payment details

Payee: Säterbygdens orienteringsklubb, Livens väg 1, S-781 60 Gustafs, Sweden.
VAT-no: 882601-3388
BIC: HANDSESS
IBAN: SE81 6000 0000 0007 3998 7348
Bank: Handelsbanken. Box 191, 781 22 Borlänge, Sweden

All charges and bank fees are to be paid by the payer

Note!

Full payment of all entries including accreditation fees must be made by 3rd June 2022 at the latest.
An additional fee for late payment is 10%.

For additional entries or name change payment must be in time before race day. No payment, no start.

Refund for withdrawals, see figure on previous page.

Summary of Entries received

<https://eventor.orientering.org/Events/Show/6736>

7. Services

Accommodation

For accommodation go to www.visitdalarna.se/en

Bike Storage

Bicycles can be stored in hotel rooms and in cabins. There are also a number of lockable cabinets at arena Lugnet for hire at reception Lugnet. No warranties from the organiser.

Bike Washing

Bike washes can be found at Event Centre Lugnet and at competition venue Mora By, Säter.

Bike Service and Rental

There are a number of bike shops in Falun and Säter that sell spare parts, offer full service on competition bikes and some offer rental of MTB.

Cykel- & Längdbutiken

Opening hours in Falun (town centre):

Mon-Fri 10-18

Sat 10-15

Sun Closed

Tel. +46 23 63862

Opening hours in Säter:

Mon-Fri 11-17

Sat 11-14

Sun Closed

Tel. +46 225 22223

Intersport Falun I13

Opening hours:

Mon-Fri 10-19

Sat 10-17

Sun 11-16

Tel. +46 23 21800

Biketown, Falun

Opening hours:

Mon-Fri 10-18

Tel. +46 23 6690080

KBK Bikes (at Falu copper mine)

Opening hours:

Mon-Fri 7-16 (shop 10-18)

Sat 10-15

Sun Closed

Tel. +46 23 - 664 90 00

Food

There are plenty of restaurants on and near the accommodation facilities. In the competition arenas, there will be simpler restaurants, with warm fastfood, sandwiches, beverages, sweets etc during all racedays. Preferable paid by credit card.

Friday July 15t , Mora by Gustafs

Stew with beans, rice & bread (vegetarian)

Saturday July 16th , Mora by Gustafs

Asian pork wok with vegetables

Vegetarian Asian wok with soy mince and vegetables

Sunday July 17 th, Tuesday 19th & Wednesday 20th, Lugnet Falun

Nasi goreng with chicken

Vegetarian Asian wok with soy mince and vegetables

Price: 75 SEK

8. Opportunities for Training

For everyone interested in training with a map before the event, we offer the opportunity to train in three different areas around Falun and Borlänge.

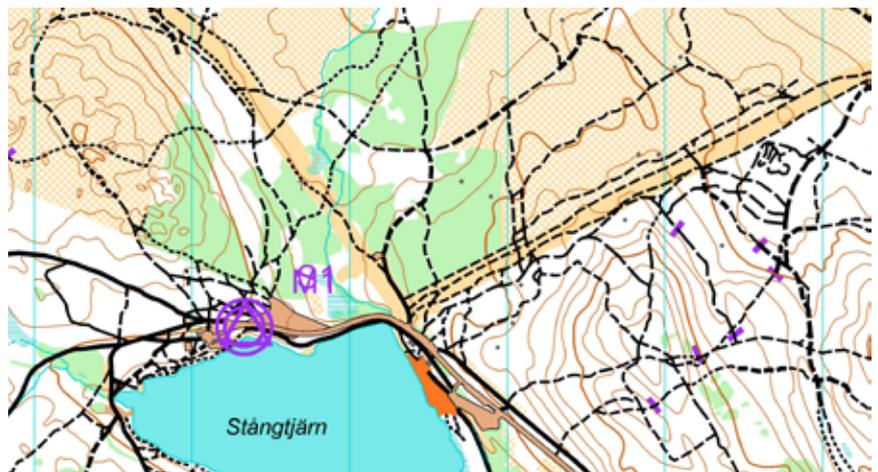
- Stångtjärn 1:10 000 and 1:15 000
- Källviken 1:10 000
- Bäsna 1:10 000

The price is 50 SEK per map. The maps will be blank with the possibility to lay your own courses. We will offer a number of controls on each map. A limited number of maps will be available for purchase at Event Centre.

To ensure that there are maps available when you arrive, we ask you to contact Rasmus Nordgren, rasmus.nordgren.rn@gmail.com with how many maps you want, at least two weeks before arrival.

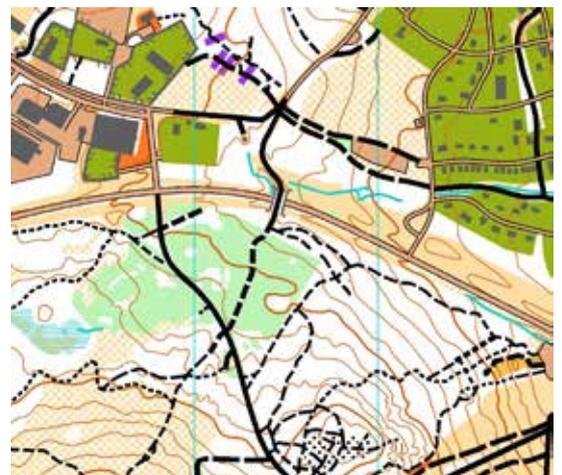
Stångtjärn

ISMTBOM 2022, surveyed 2019, updated and extended 2020 by Steven Hale. Mapped area 35km². Relevant terrain for long distance and mass start. 5km from the Event Centre.



Källviken

ISMTBOM 2022, surveyed 2020/2021 by Steven Hale. Mapped area 11km². Relevant terrain for long distance, sprint and mass start. 5km from the Event Centre.



Bäsna

ISMTBOM, updated 2018 by Anders Thomasson. Mapped area 13km². Relevant terrain for middle distance and relay. 40km from the Event Centre.

9. Punching system

SPORTident Air+ will be used in all competitions. The maximum working range is 180 cm. All competitors must use an ActiveCard (SIAC). Competitors may use their own SIAC or use one provided by the organiser at a charge of SEK 50 per race. If a SIAC provided by the organiser is not returned the full cost of SEK 800 will be charged.

If a competitor uses their own SIAC it is their responsibility to check the battery before the competitions. This can be done here: <https://www.sportident.com/siacservice/>

Back-up:

The IOF MTBO Commission implemented a back-up solution scheme for recording visits to controls. The solution is to equip each competitor with a second SIAC. This second SIAC is only provided as a back-up and data recorded in will only be used in exceptional circumstances, if the main SIAC does not work properly. The backup SIAC must be prepared for use before the start in the same way as the primary SIAC. The back-up SIAC will be provided by the organiser.

At each control there will be a primary SportIdent Air+ station and a backup SportIdent station configured for classic punching. If the primary station fails or appears not to be working the competitor must punch the reserve station.

10. Race details

General Notes on Races in Säter (15/7 & 16/7)

The arena for middle and relay will be at Morbyvallen, Förgyllarvägen 2, 781 60 Gustafs. Coordinates: [60.396353, 15.589683](#). It is not allowed to visit the arena before start of middle distance.

Map and terrain

- Boulders are shown on the map if they are visible from roads, paths and rideable areas.
- Tracks from forest machines are generally not shown on the map. Forest tracks are only mapped if single-track occurs in one- or both wheel tracks.



Forest track not shown on the map.

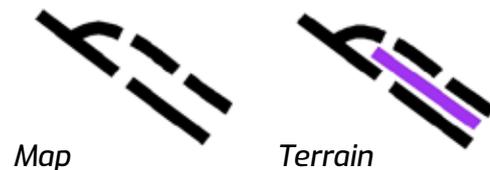


Old forest track shown on the map (with single track).

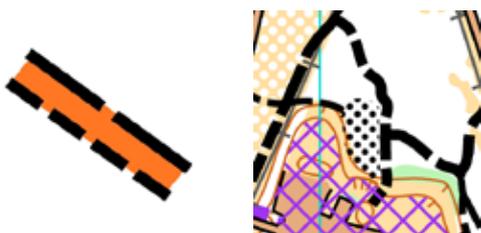
- Sidelines of roads are drawn with 0,18 mm thickness (1:15 000) to make them more visible.
- Symbol 719 "Dangerous section" is used on paths that are very steep or have a distinct drop in the terrain. Distinct drops are also shown with symbol 717 "Obstacle across track or path. Warning signs will occur at most critical places.



- Some areas in the terrain invite cutting between paths which is not permitted. Tape in the terrain (not shown on the map) will occur to counteract short-cutting. Breaking the rules leads to disqualification. There will be marshals out in the forest.



- Symbol 718 "Forbidden to pass" is used to indicate that cycling is not permitted. Tape in the terrain will occur to clarify riding is not permitted. There will be marshals out in the forest.
- Symbols 824 "Open land, permitted to ride" and 825 "Forested area, permitted to ride" are used where off track riding is allowed (this also indicates where cutting between paths is allowed).



Blue and yellow tape to counteract short-cutting. Only used for critical places.

- Forest thinning has been done in some areas after printing the maps. The visibility in these areas are better than shown on the map.

Traffic

Minor roads are not closed to traffic. There will be marshals at strategic places but it is the competitor's responsibility to cycle safely and follow the traffic regulations.

Middle Distance 15/7

Competition		MEN	WOMEN	M20	W20
Middle	Length	19,9 km	16,7 km	15,7 km	13,3 km
	Climb	265 m	235 m	220 m	190 m
	Controls	29	25	20	21
	Refreshments	0	0	0	0
	Winning times	50 - 55 min	50 - 55 min	40 - 45 min	40 - 45 min
	Map turn	1	1	1	1
	Map size	30x42 cm	30x42 cm	30x42 cm	30x42 cm

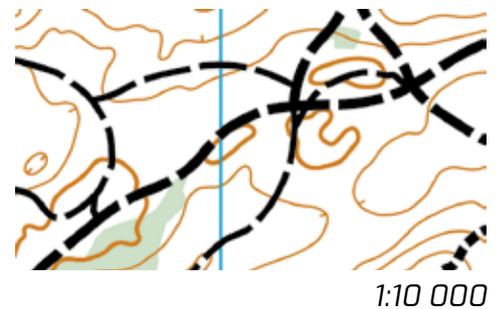
Mapper: Oskar Sandberg

Scale: 1:10 000 and 1:7 500

Contour interval: 5m

Course setter: Oskar Sandberg & Kjell Klaar

Terrain description: The area consists of a pine forest with big depressions. The terrain is generally moderately hilly with some steeper slopes. The area contains a dense network of mostly good rideable paths and forest roads. Some paths may be slow due to the sandy surface, partly old sandpit area. Good visibility.

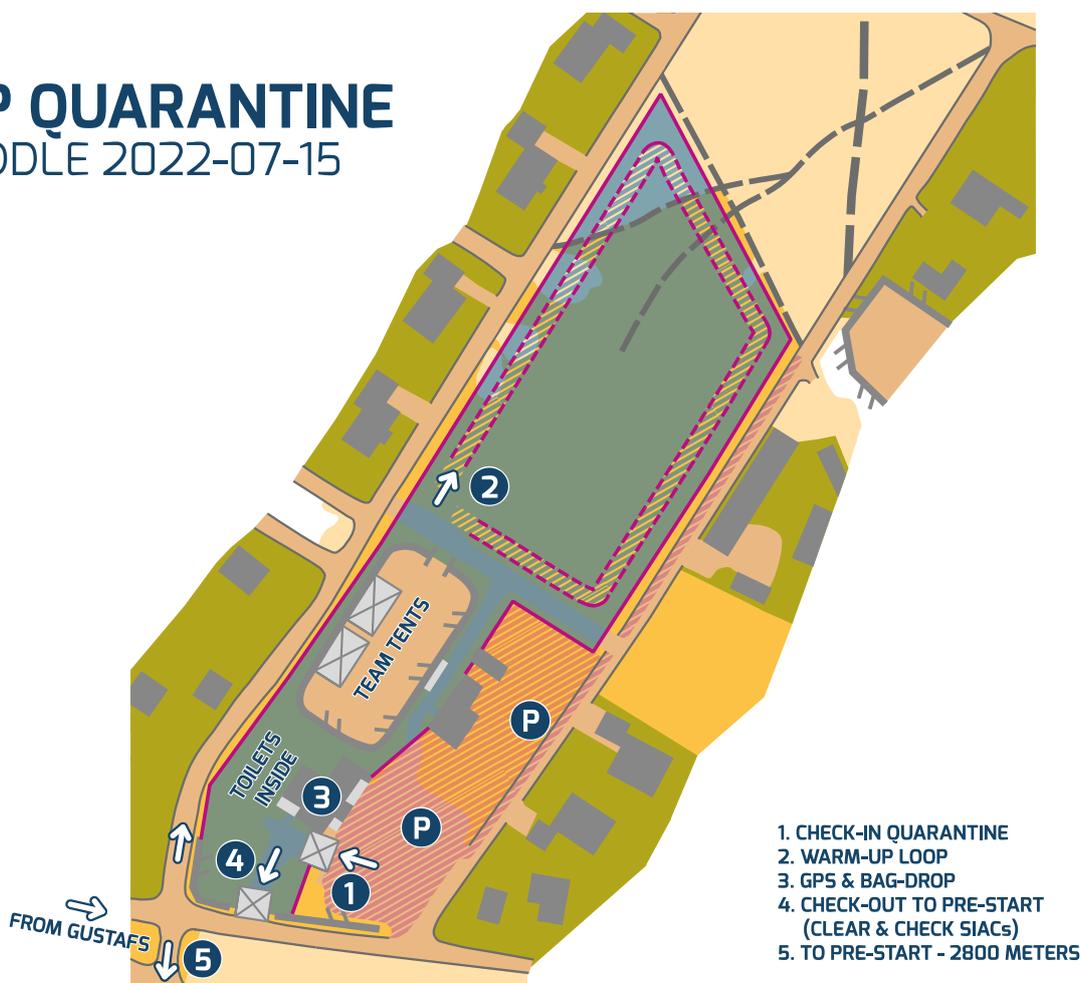


All classes have a double sided map. After turning the map the course continues with a startpoint and numbers of controls continue in order. Part 1 scale 1:10 000, part 2 scale 1:7 500.

Quarantine and start procedure

Quarantine in Solvarbo Bystuga, Ljusterbrovägen 5, 781 62 Gustafs. Coordinates: [60.391168, 15.664065](https://www.google.com/maps/place/60.391168,15.664065). Event Centre to quarantine 43 km via highway E16 and road 70. Use the exit to Enbacka from road 70. Quarantine opens at 8:00 and all competitors must be in the quarantine by 9:30. All clocks at quarantine, pre-start and start will show call-up time.

MAP QUARANTINE MIDDLE 2022-07-15



Pick up GPS at the quarantine. Competitors leave quarantine CLEAR and CHECK primary and backup SIAC at -20 minutes heading to pre-start. Leave bags at bag-drop and they will be transported to the finish. The route from quarantine to pre-start is 2,8 km on roads and marked with tapes and signs that must be followed. It is not allowed to return after leaving quarantine.

On the way to pre-start a railway has to be crossed by all competitors using a level crossing. Trains might come and the rider must stop! Barriers and red signals will show if there is an approaching train. A marshal will take the numbers of riders that have to stop for the train. The train passes in under 2 minutes and will not cause a competitor to be late to pre-start. There will be no toilets at the pre-start or start.

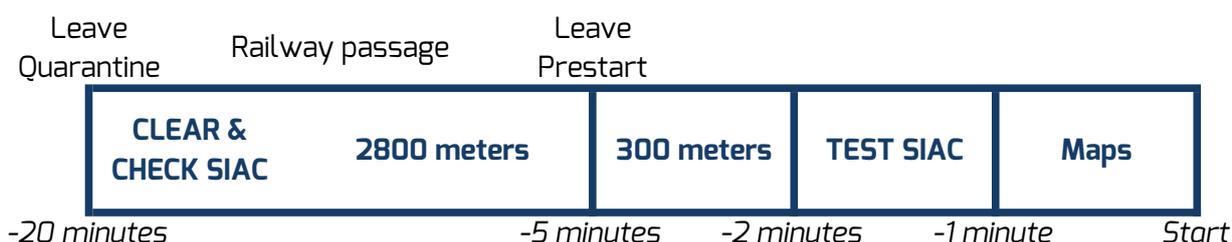
Warm-up clothes can be left at pre-start and will be transported to the finish. Competitors leave pre-start at -5 minutes. The route from pre-start to start is 300 metres on road and marked with tapes and signs that must be followed. It is not allowed to return after leaving pre-start.

Enter start at -2 minutes TEST primary and backup SIAC, go forward and take the map at -1 minutes. Officials will put each map on a table where the rider can take it. Side of "Part 1" is put up. It is the riders responsibility to make sure it has taken the right map.

Start interval 2 minutes for all classes.

First start:

M20: 9:30, W20, 09:31, MEN: 11:00, WOMEN: 11:01



Relay 16/7

Competition		MEN	WOMEN	M20	W20
Relay	Length (Leg)	16,8-17,2 km	14,3-14,6 km	12,3-12,5 km	10,9-11,1 km
	Climb	100-110 m	80-90 m	80-90 m	65-75 m
	Controls	29-30	26-27	21	20
	Refreshments	0	0	0	0
	Winning times	145 min (48 / leg)	145 min (48 / leg)	115 (38 / leg)	115 (38 / leg)
	Map size	30x42 cm	30x42 cm	30x42 cm	30x42 cm

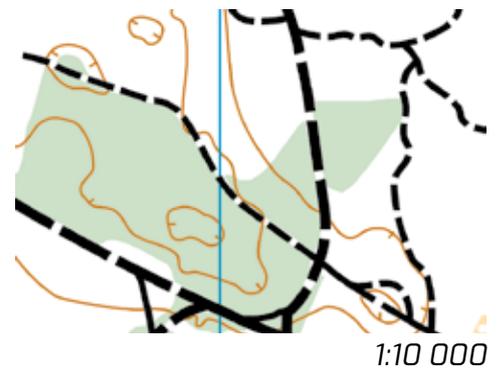
Mapper: Oskar Sandberg

Scale: 1:10 000

Contour interval: 5m

Course setter: Oskar Sandberg & Kjell Klaar

Terrain description: A rather flat area with some moderately hilly slopes and valleys. Pine forest with a dense network of good rideable paths, tracks and forest roads. Some areas with a very dense path network occur. Mainly good visibility, but some parts with younger forest where the visibility is lower.



- There are a lot of controls close to each other. Read to the right control. Control numbers are reduced from 6 mm to 5 mm to fit on the map.
- MEN and WOMEN's courses have controls close to the edge of the map.

Quarantine, start and change over procedure

Quarantine at Morbyvallen, Förgyllarvägen 2, 781 60 Gustafs. Coordinates: [60.396353, 15.589683](#).

Event Centre to quarantine 37 km via highway E16 and road 70. Use the exit to Enbacka from road 70.

Quarantine opens at 8:30 and all competitors must be in the quarantine at 10:00.



GPS is picked up at the quarantine. Leave warm-up clothes and bags at bag-drop in quarantine and they will be taken to finish. There are no opportunities for warm-up after leaving quarantine.

First leg riders leave quarantine CLEAR, CHECK and TEST primary and backup SIAC 8 minutes before their start and head to the starting area. 3 minutes before start all first leg riders must stand on their starting position. Maps will be given out 2 minutes before start and placed face down on the map holder. Signal given 15 seconds before start to turn over maps. Starting signal will be used. A false start will result in a time penalty. The start will not be recalled. It's a narrow passage close to the startpoint. Show respect for other riders.

Starting times: MEN: 10:00, M20 10:10, WOMEN: 10:20, W20: 10:30

Leave
Quarantine



Second and third leg riders are allowed to enter the change-over area CLEAR, CHECK and TEST primary and backup SIAC when their teammate is passing the arena. The passage will be visible from the quarantine and approx 5 minutes before change-over. Watch out for outgoing riders when entering the change-over area.

First and second leg riders keep to the left at the finish and change over by handclap (body contact). Outgoing riders take their map from the map plank 150 metres after change-over and then head to the startpoint.

Second leg riders take the highest map and third leg riders the lowest. It is the riders responsibility to make sure it has taken the correct map. All maps are marked with leg and startnumber on the back of the map. If map is missing the rider shall notify official next to map plank. An extra map will then be handed out. All classes will be forked.

Third leg riders keep to the right at finish. The finish judge will rule on the final placings.



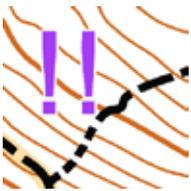
Map plank

General Notes on Races in Falun (17/7, 19/7 & 20/7)

The arena for all three races in Falun (long, sprint and mass start) will be at the Event Centre, Lugnet.

Map and terrain

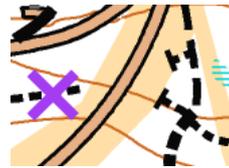
- Boulders are not shown on the map.
- The dangerous section symbol is used on paths that are very steep, very rocky (sometimes both) and also for sections with drops or ditch crossings.



- Some of the races will enter a military training area. These signs warn you not to enter when there are exercises with live ammunition. There will not be any exercises during the World Championships. If you see any ammunition do not touch it.



- Symbols “forbidden to pass” and “track end point” are used to indicate that cycling is not permitted.



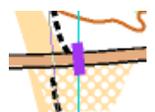
- It is not permitted to cross either high or low fences. In general low fences are omitted from the 1:15 000 and 1:10 000 maps, but shown at scale 1:5 000.



- Some parking areas of gravel or asphalt have 30-50 cm high dividers. These are shown with the distinct boundary symbol and it is permitted to cross them.



- Fallen trees, drops or road barriers are shown using the obstacle across track symbol:





Barriers designed to allow free passage by bike are not shown on the map

Asphalt cycle paths >2m wide are shown using the paved road symbol 0.30 mm (1:15 000). All roads have a 0,18 mm (1:15 000) black border for clarity.



Traffic

Main roads through the competition area must only be crossed at the tunnel or bridge crossing points which are shown on the map.



Minor roads are not closed to traffic. There will be marshalls at strategic places but it is each competitor's responsibility to cycle safely and follow the traffic regulations. All areas are open to the public and competitors should be prepared to encounter pedestrians and other cyclists.

Quarantine

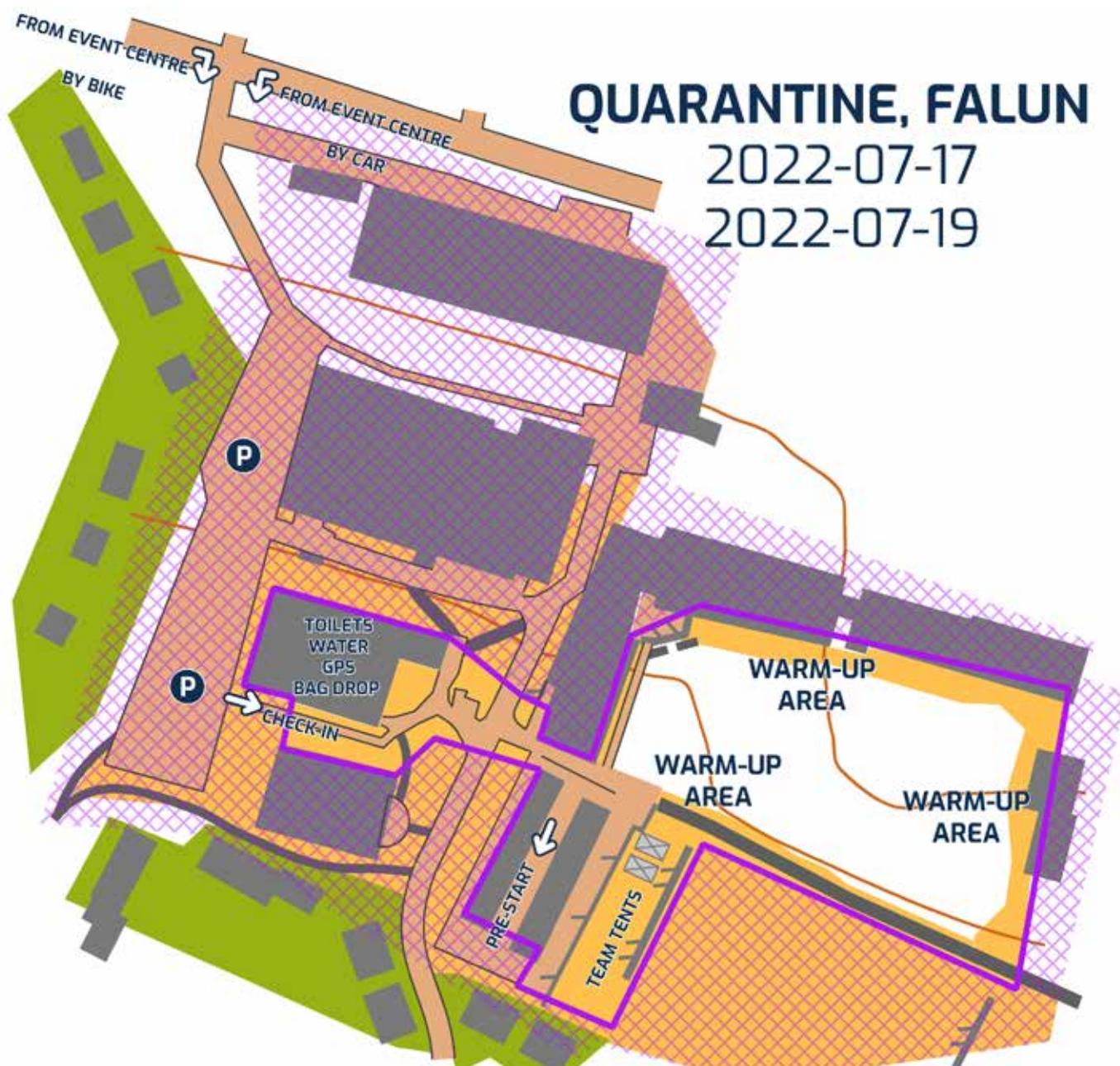
The quarantine for Long Distance and Sprint is at Hälsinggårdsskolan, Kopparvägen 1, Falun, coordinates: 60.592387, 15.680299, approximately 5 km from the Event Centre. It is absolutely forbidden to enter the embargoed areas en route to quarantine.



Recommended routes by bike and car from the Event Centre to quarantine

There will be access to toilets, indoor shelter and drinking water in the quarantine zone. Bags left at the quarantine will be transported to the finish.

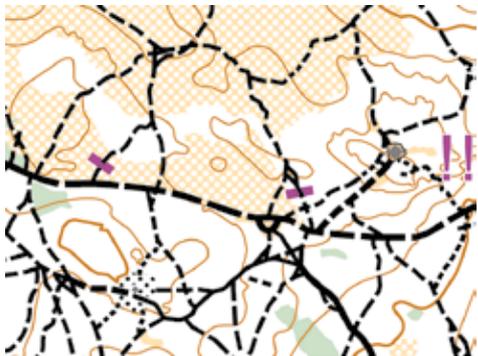
Pick up GPS at the quarantine. Call-up time will be shown on the pre-start clock. The route to both long and sprint starts is approx 2,5 km (max 40 m ascent) on lightly trafficked roads and cycle paths. Each competitor will receive a map (1:15 000 ISMTBOM) at pre-start showing the route which must be followed to the start. There are no tapes marking this route.



Long Distance 17/7

Competition		MEN	WOMEN	M20	W20
Long	Length	41 km	30,4 km	27,3 km	23,1 km
	Climb	1050 m	735 m	725 m	555 m
	Controls	29	20	20	16
	Refreshments	0	0	0	0
	Winning times	110-115 min	110-115	90 min	90 min
	Map turn	1 turn	1 turn	1 turn	1 turn
	Map size	30x42 cm	30x42 cm	30x42 cm	30x42 cm

Mapper: Steven Hale
 Scale: 1:15 000
 Contour interval: 5m
 Course setter: Stefan Johansson



1:15 000

Terrain description: Moderate to very hilly mainly pine forest with an extensive network of paths, tracks and forest roads. Some areas with a very dense path network occur. Paths and tracks are of a wide variety of speeds. On the slower paths it is often rocks and roots which reduce the speed.

Event Centre to quarantine is 5 km. The quarantine will open at 8:00 and all competitors must be in the quarantine by 9:30. Quarantine to start is 2,5 km. Pre-start is on exit from quarantine CLEAR and CHECK SIAC primary and backup SIAC at -15 minutes. Enter the start at -2 minutes TEST primary and backup SIAC. Go forward at -1 minute and take the map. Start interval 3 minutes for WOMEN, M20 and W20, 2 minutes for MEN. The MEN's course will be forked. A manned first aid point will be shown on the map with a red cross.

First start: MEN 9:00, WOMEN 9:00, H20 9:01, D20 9:02



Warm-up clothes can be left at the start and will be transported to the finish. There will be no toilets at the start.

ARENA MAP

2022-07-17

2022-07-19



- 1. FINISH LINE
- 2. READ OUT, RETURN GPS
- 3. MEDAL CEREMONY
- 4. LAST CONTROL
- 5. FOOD AND REFRESHMENTS
- 6. FLOWER CEREMONY
- 7. TECHNICAL SERVICES
- 8. ENTRY ON THE DAY, SPECTATOR RACE
- 9. FIRST AID
- 10. SPEAKER

Sprint 19/7

Competition		MEN	WOMEN	M20	W20
Sprint	Length	9,3 km	7,6 km	6,9 km	5,8 km
	Climb	225	180	160	130
	Controls	29	26	24	19
	Refreshments	0	0	0	-
	Winning times	20-25 min	20-25 min	16-20 min	16-20 min
	Map turn	1 turn	1 turn	1 turn	1 turn
	Map size	30x42 cm	30x42 cm	30x42 cm	30x42 cm

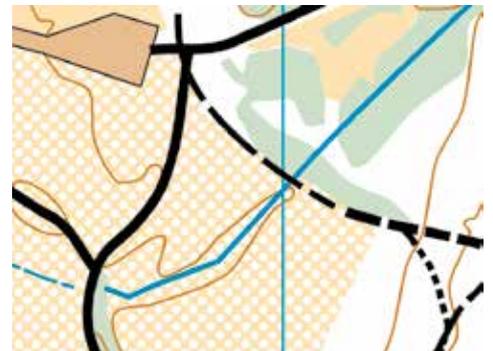
Mapper: Steven Hale

Scale: 1:5 000

Contour interval: 5m

Course setter: Christer Morell, Stefan Johansson

Terrain description: A very varied area with urban, forest and parkland terrain. Mainly flat with some steep slopes and an area with a very dense path network.



1:5 000

Event Centre to quarantine is 5 km. The quarantine will open at 8:00 and all competitors must be in the quarantine by 9:00. Quarantine to start is 2,5 km. Pre-start is on exit from quarantine CLEAR and CHECK primary and backup SIAC at -15 minutes. Enter the start at -2 minutes TEST primary and backup SIAC. Go forward at -1 minute and take the map. Start interval is 2 minutes for WOMEN, M20 and W20, 1 minute for MEN.

First start: M20 10:00, D20 10:01, WOMEN 10:51, MEN 11:30



Warm-up clothes can be left at the start and will be transported to the finish. There will be limited toilet facilities at the start.

Mass start 20/7

Competition		MEN	WOMEN	M20	W20
Mass start	Length	28,4 km	22,1 km	20,6 km	17,1 km
	Climb	725 m	620 m	580 m	500 m
	Controls	36	29	26	24
	Refreshments	0	0	0	0
	Winning times	75-80 min	75-80 min	60-68 min	60-68 min
	Map turn	1 turn +1 change			
	Map size	30x34+30x34 cm	30x34+30x34 cm	30x34+30x34 cm	21x30+21x30 cm

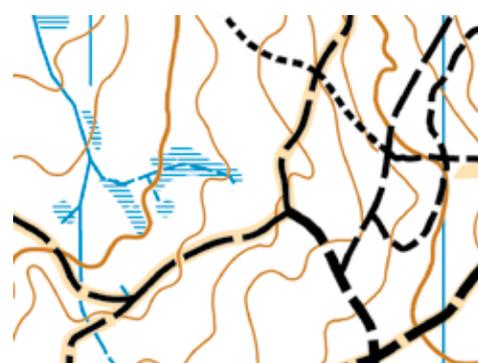
Mapper: Steven Hale

Scale: 1:10 000 and 1:5 000

Contour interval: 5m

Course setter: Christer Morell

Terrain description: Moderate to very hilly mainly pine forest with an extensive network of paths, tracks and forest roads. Some areas with a very dense path network occur. Paths and tracks are of a wide variety of speeds.



1:10 000

Start and finish at Lugnet Arena, Event Centre. Quarantine at the arena will open at 9:00 and all competitors must be in the quarantine by 10:00.

Start times: 10:00 MEN, 10:10 WOMEN, 10:45 M20, 10:51 W20.

The route from the start line to the start triangle will be marked by vee boards. Riders not following this route or not passing the starting point will be disqualified. A false start will result in a time penalty. The start will not be recalled.

All classes will have part 1 and part 2 on a double sided map. Part 3 will be printed on a second sheet. The maps will be stapled together and clearly marked with (1), (2) and (3). The maps will be handed out with (1) face down. When continuing to parts 2 and 3 the start triangle will be at the last control or, where relevant at the end of the mandatory route. Control numbering will continue in sequence. All classes will be forked.

Start procedure:

1. CLEAR, CHECK and TEST primary and backup SIAC after entry to quarantine.
2. -5 minutes: Competitors in top 10 are called forward to the start line. Competitors ranked 11-20, 21-30, 31-40 etc. are then called to their respective start lines.
3. -2 minutes: maps issued, face down, to all competitors
4. -1 minute: 1 minute signal given
5. -15 seconds: Signal given to turn over maps
6. Start signal

20	18	16	14	12	11	13	15	17	19
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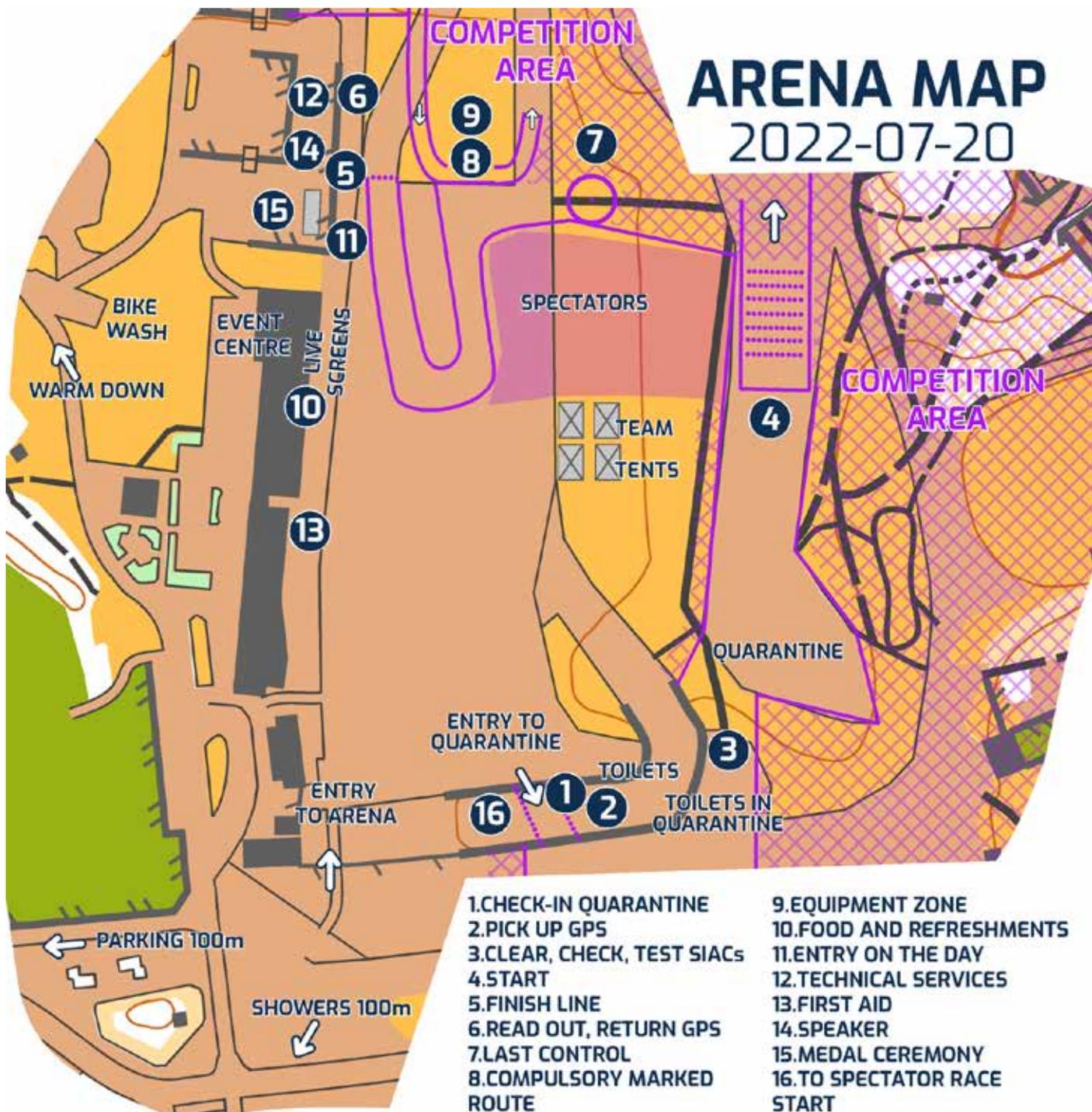
10	8	6	4	2	1	3	5	7	9
----	---	---	---	---	---	---	---	---	---

The line up order for the first two start rows for MEN and WOMEN.

MEN and WOMEN will pass the arena twice following a mandatory marked route. The map scale for the first two laps is 1:10 000 and for the final lap 1:5 000.

M20 and W20 will pass the arena once following a mandatory marked route. The map scale for the first lap is 1:10 000 and for the final lap 1:5 000. The finish judge will rule on the final placings.

There will be an equipment zone where teams may place equipment such as spare parts and tools before the first start. No assistance from a coach or anybody else is permitted in the equipment zone during the competition.



11. Competition Rules

General Rules

The [event/s] will be organised in accordance with the following rules valid at the time of the event:

- IOF MTBO Competition Rules
- Special Rules MTBO World Cup
- All the rules can be found at <https://orienteering.sport/mtbo/competition-rules>

In particular note the following general MTBO rules:

- The bicycle must be with the competitor at all times.
- Wearing a rigid cycle helmet is compulsory during competition and training.
- It is forbidden to use roads or tracks which are marked with the purple zigzag symbols or pass through areas marked as out of bounds on the map (purple hatching).
- A purple cross symbol on a track or path must not be crossed
- Riding outside the mapped area is not allowed.
- Competitors must wear the team clothing of their federation during all official events.

Off-track Riding

Off-track riding (including running and walking with the bike) is generally forbidden, but is permitted in areas specifically marked as rideable on the map.

The following symbols (ISMTBOM 2022) will be used to show where off-track riding is permitted.

501 Paved area (tarmac or gravel)		827 Narrow ride, permitted to ride: fast riding	
824 Open land, permitted to ride		829 Narrow ride, permitted to ride: slow riding	
825 Forested area, permitted to ride		830 Narrow ride, permitted to ride: very slow riding	
826 Rough open land, permitted to ride		All other off-track areas are forbidden!	

Positioning of Controls

All controls will be positioned on paths, tracks, roads and in a very small number of cases on other rideable areas.

Quarantine

Competitors must not use or carry devices that can transmit or receive information from entering the quarantine zone until reaching the finish of the race. This includes not only mobile phones, tablets and laptops but also watches, cycle computers etc. which have communication ability.

Personal GPS-enabled devices (watches, cycle computers etc.) can only be carried if they have no map display, no communication ability other than receiving GPS data and are not used for navigation purposes.

Only key officials authorised by the organiser may possess a telecommunication device in the quarantine zone. For all other people (competitors, team officials etc.) this is strictly forbidden. It is allowed to leave the quarantine zone via the check-in point, e.g. to go to the car park and back. Those doing so must re-enter the quarantine zone before the check-in deadline. After the check-in deadline anyone leaving the quarantine is not allowed to return.

Permitted Deviations from Rules

The organisers have been granted the following deviations from rules:

- The number of competitors who may enter the Long distance competition is not limited. Every Federation may enter up to 6 women and 6 men (WMTBOC 6.8)
- A start interval of 2 minutes may be used for Long distance, Men (WMTBOC 12.10)
- A start interval of 1 minute may be used for Sprint, Women and Men (WMTBOC 12.10)

Complaints and Protests

Complaints may only be made by accredited team officials or competitors. A complaint must be made in writing to the Competition Director or other representative from the organising committee at the finish as soon as possible after the incident or at the latest within 15 minutes of the publication of the full preliminary results for the class (this includes on-line results). Complaints received after this time limit will only be considered, if there are valid exceptional circumstances, which must be explained in the complaint. There is no fee for a complaint.

A protest may be made against the organiser's decision about a complaint and may only be made by team officials or competitors. Any protest must be made in writing to the organiser no later than 15 minutes after the organiser has informed the complainant of the decision about the complaint. Protests received after this time limit may be considered at the discretion of the jury if there are valid exceptional circumstances which must be explained in the protest.

A protest fee of 500 SEK must be paid to the IOF Senior Event Adviser in cash when making a protest. The fee will be returned if the protest is accepted by the jury.

Allocation of Start Slots Long Distance

The number of competitors will not be limited in the Long Distance so there will be no qualification procedure for allocation of start slots.

Wild Cards

The IOF MTBO Commission has decided to give a Wild Card to Group 4 for all individual competitions at the WMTBOC 2022 to Emily Benham Kvale, GBR and Nadia Larsson, SWE

For the Mass start race, the position in the start row has been determined as follows for the Emily position 1, Nadia position 8.

The MTBO Commission has also decided to give a Wild Card to Group 4 to the reigning World Champions Samuel Pokala, FIN (for Middle distance), Andre Haga, FIN (for Long distance) and Marika Hara, FIN (for Sprint).

12. Jury

The IOF Council ESB and the Swedish Orienteering Federation have approved the following jury for the event:

- Ursula Häusermann (SUI)
- Jiri Vraný, (CZE)
- Malin Ågren (SWE)
- Reserve: Anke Dannowski, (GER)

13. Model Events

Two small areas will be used for the model events. These areas have been selected to illustrate relevant terrain for the various distances. They are mapped according to ISMTBOM 2022 by the WMTBOC mappers. It is strictly forbidden to go outside the model event map areas.

Model "Havtrollet" for middle distance and relay

The model map will be available at scales 1:10 000 and 1:7 500, mapped by Oskar Sandberg. This area is 25 km from the Event Centre and it will be open all day Wednesday 13th July and Thursday 14th July. Controls with flag and control code will be displayed. No SI punching.

Parking along the road at following coordinates [60.522351, 15.352543](#) Entrance from Norr Amsberg.

Model "Event Centre" for sprint, long distance and mass start

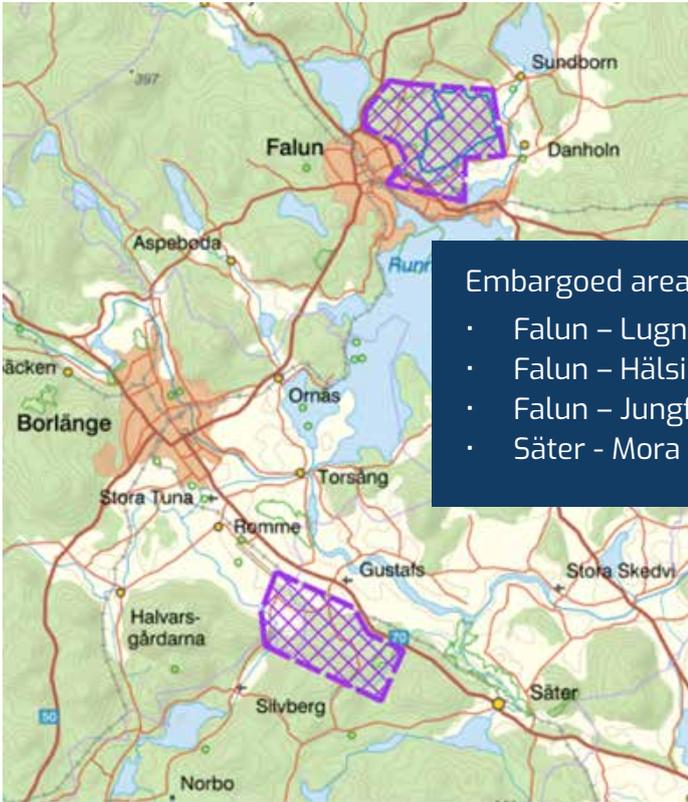
The model map for this area will be available at scales 1:15 000, 1:10 000 and 1:5 000, mapped by Steven Hale. This area is adjacent to the Event Centre and will be open from Wednesday 13th July to Tuesday 19th July. Controls will be marked with flag only (no code or SI punching).

Parking at the public parking Lugnet arena.

Technical model

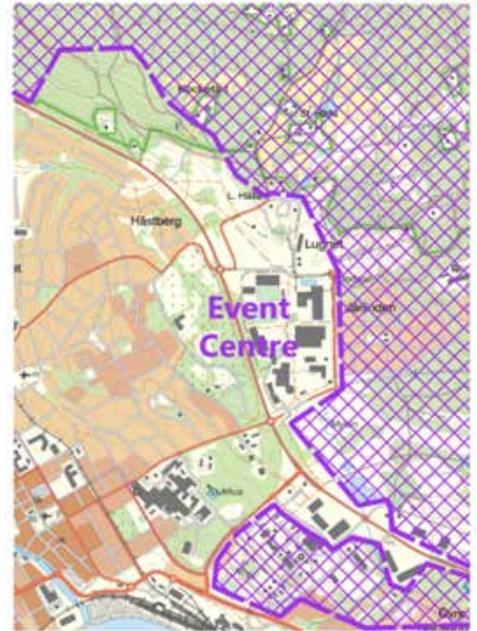
Examples of control site construction (flag, control code, SI station, reserve punching station) will be displayed on Thursday 14th July 18.00 - 19.00 at the Event Centre.

14. Embargoed areas

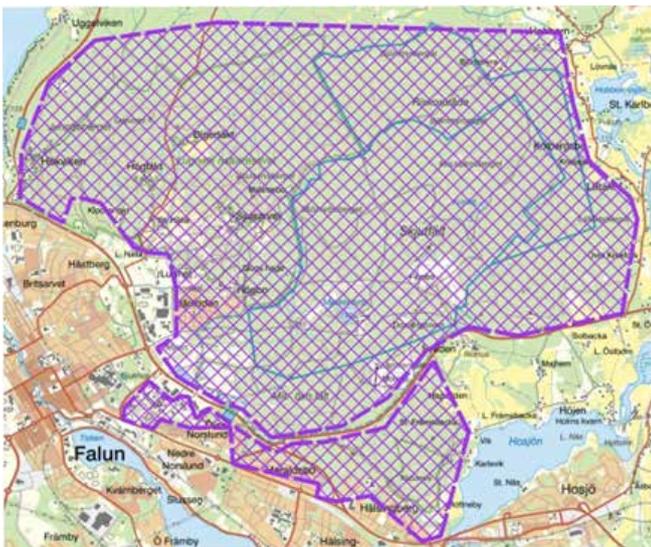


Embargoed areas are:

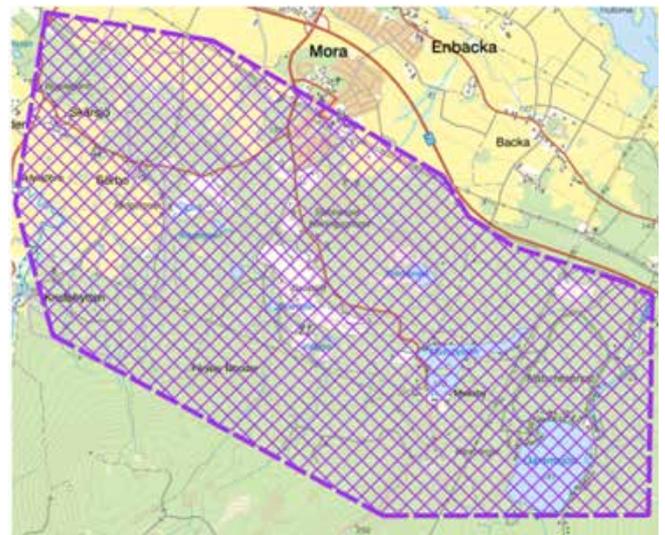
- Falun – Lugnet
- Falun – Hälsingberg
- Falun – Jungfruberget
- Säter - Mora by



Falun – Lugnet, Event Centre



Falun – Lugnet, Hälsingberg, Jungfruberget



Säter – Mora by

Any attempt to survey or train in the competition terrain is forbidden, unless explicitly permitted by the organiser. The embargoed areas are out of bounds for all potential participants and team members, including competitors, team leaders, coaches, doctors, and any other person who through their knowledge of the terrain may influence the result of the competitions.

Any permission for other access to embargoed areas must be requested, before access, from the organisers. This includes any MTB events taking place in the embargoed areas in which potential competitors wish to participate. The embargo includes the use of drones in or about the terrain.

Previous maps

- Säter Mora by, 2018 1:15 000 https://bit.ly/sater_mora_by
- Falun Hälsingberg 1:10 000 https://bit.ly/falun_halsingberg
- Falun Lugnet S 2018 1:10 000 https://bit.ly/falun_lugnet_s
- Falun Lugnet NE 2018 1:15 000 https://bit.ly/falun_lugnet_ne
- Falun Lugnet NW 2018 1:10 000 https://bit.ly/falun_lugnet_nw

Changes Since Bulletin 2

The following changes have been made since bulletin 2:

1. Falun Stadspark, Falu Gruva and Djupdalarna are no longer embargoed.
2. Some adjustments have been made to the remaining embargoed areas, in particular in the vicinity of the Event Centre.
3. There are no longer any exceptions. The embargoed areas are strictly out of bounds.

15. Local Weather Conditions

July	Average	Minimum	Maximum
Temperature	19	16	27
Rainfall	3 mm per day		
Sunshine	8 hrs per day		

16. Antidoping

Doping is strictly forbidden, and the organisers of the WMTBOC2022 are dedicated to supporting the anti-doping authorities in their work. Doping controls may be carried out at any time during the competition period. Doping tests are carried out in accordance with the procedures described in the WADA International Standard for Testing.

17. COVID-19

There are no longer any specific recommendations in connection with entry to Sweden.

Recommendations that apply in Sweden:

- Take responsibility for preventing the spread of infection
- Get vaccinated to protect yourself and others
- Stay home when you are ill. Stay home and avoid close contact with others if you are ill and have symptoms of Covid-19. This also applies if you have taken a self-test that was negative. Call telephone number 1177 if you need help assessing your symptoms or advice on where to seek medical advice.
- Special recommendations for those who are unvaccinated. Adults who are not vaccinated should be particularly careful. This means that they should avoid crowding and indoor environments where many people gather. Those who are not vaccinated and belong to a medical risk group, run a higher risk of getting seriously ill with Covid-19. The risk of serious illness increases with age.

Updated recommendations and further information about Covid-19 can be found at The Public Health Agency of Sweden.

18. Team Officials' Meeting

The Team Officials' meeting will be held at 19:00 on the evening prior to each race.

The meeting will take place at the Event Centre. The Technical Director will run the meeting, while the IOF Senior Event Adviser will supervise the meeting. The agenda will follow IOF rules, appendix 5.

Each federation is entitled to participate with up to two persons according to the rules.

After the meeting, the information from the meeting will be uploaded on the website

<https://wmtboc2022.se/>

Start numbers, start lists, and other information will be handed out before the meeting at the Event Centre from 18:30.

19. Media Services

Media services and facilities are provided at the Event Centre. All media representatives are welcome to cover all the WMTBOC2022 events and Spectator races.

All media accreditations should be made by e-mail at media@wmtboc2022.se by 23rd June 2022 at the latest.

Media representatives and team officials are encouraged to bring their own computers. WIFI services will be offered at the Event Centre Lugnet and at competition venue Mora by, Säter.

20. Summary of Deadlines and Important Dates

3rd June 2022	Payment WMTBOC2022
4th July 2022	Team NAME deadline
8th July 2022	Entry Spectator races
11th July 2022	Bulletin 4
12th July 2022	Event Centre opens
14th July 2022 at 12.00	Name change deadline

21. Spectator races

For more information and entry follow the link to Swedish Eventor (eventor.orientering.se) for each day:

Date	Time	Events (Link to Swedish Eventor)	
15/7 Friday	16:00	Middle distance, Säter	
16/7 Saturday	15:00	Middle distance, Säter	World Masters Series
17/7 Sunday	15:30	Middle distance, Falun	Young Guns World Series
19/7 Tuesday	14:30	Sprint, Falun	World Masters Series, Young Guns World Series
20/7 Wednesday	14:00	Mass start, Falun	

Note! All timing are subject for change.

22. Sustainable event

Together with Säter and Falun municipalities WMTBOC, JWMTBOC and the spectator races 2022 take environmental responsibility.

We therefore need assistance from all participants, leaders and spectators to manage to keep the arenas clean, to sort the rubbish correctly and to not harm the nature.

23. Culture

Falu Mine a World Heritage

Take an interactive guided tour with a lot of exciting stories around the Great Pit, check out the historical buildings and explore a thousand years of history in the Mine Museum. You will get a 20% discount of ticket for Above-ground Package. Show your accreditation or a map from one of our competitions to get the discount. Read more about Falu mine:

<https://www.falugruva.se/en/>

24. More information

Webpage: <https://wmtboc2022.se/>

Live: <https://orienteering.sport/event/world-mtb-orienteering-championships>

Facebook: <https://www.facebook.com/wmtboc2022/>

Instagram: <https://www.instagram.com/wmtboc2022/>

25. More MTBO-competitions

After the WMTBOC it is possible to go on to the Swedish O-Ringen in Uppsala, which includes five days of MTBO. It is about two hours drive from Falun to Uppsala. See more on:

<https://oringen.se/en/occasions/uppsala-2022.html>

You can also take part in two competitions and one model event in MTBO in Uppsala the 22-24th July. [See more here.](#)



We are looking forward hosting the World MTBO Championships and Junior World MTBO Championships 2022

See you in Falun/Säter Sweden!

26. Document history

Date	Version	Comments	Changed by
2022-07-11	1.0	First version of Bulletin 4	Anki Svärdby-Bergman

