

# Rules for Biathlon Orienteering



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Appendix 1 Approved targets

(These rules must be used for all IBOF sanctioned international Biathlon Orienteering events and should be used for all Biathlon Orienteering competitions.)

## 1 General

### 1.1 *Steering regulations*

For details not defined by these regulations apply the competition rules and stipulations regarding the orienteering events of the International Orienteering Federation (IOF) and the rules regarding the shooting event of the International Biathlon Union (IBU).

### 1.2 *Scope*

These regulations apply in:

- Classic Biathlon Orienteering
- Sprint Biathlon Orienteering
- Mass Start Biathlon Orienteering
- Biathlon Orienteering Relay

Classic Biathlon Orienteering comprises the events location orienteering (map reading), free orienteering and shooting.

Sprint Biathlon Orienteering comprises the events free orienteering and shooting.

Mass Start Biathlon Orienteering comprises the events free orienteering and shooting.

In Biathlon Orienteering Relay each team participant runs a sprint competition.

### 1.3 *Athlete responsibility*

During competitions encouraged the athlete to complete the race, although there may be a suspicion that something is not right along the course.

The organizers normally do their utmost to everything to be correct, but external factors and human error can cause problems. Since international championships are normally difficult to arrange again at any errors, try the jury as long to find solutions so that fair results can be presented. This may mean that parts of the course are deleted and the results based on the parts of the course that is not affected by the error.

It is therefore important that the athlete will continue in his race pace even after suspicion that there is an error along the path.

### 1.4 *Classification*

The competitor (orienteer) belongs to a certain class from the respective calendar year to the end of the year he or she reaches the age given below. Women may participate in a class for men.

Age	Class M/W								
	16	20	21	35	40	45	50	55	60
-16	X	A	A						
17-20		X	A						
21-34			X						
35-39			A	X					
40-44			A	A	X				
45-49			A	A	A	X			
50-54			A	A	A	A	X		
55-59			A	A	A	A	A	X	

Age	Class M/W								
60-			A	A	A	A	A	A	X

NB

X = Belongs to a class

A = It is possible to compete in a class

## **1.5 Equipment**

### **1.5.1 General**

The use of binoculars while accomplishing the shooting element is not allowed.

### **1.5.2 Clothing**

Fully covering clothing must be worn. However, the use of short-sleeved shirt is allowed. The same clothing should be used during the whole competition.

A contest number must be worn and fastened so that it is visible.

The following rules apply in shooting:

Only one strap stop - hook, loop, button or something alike - may be fastened on the outer side of the arm or in the shoulder seam of the arm carrying the strap to prevent the strap from slipping.

### **1.5.3 Rifles**

The type of the rifle to be used is similar to the weapon used in the biathlon. The specifications of the rifle are the same told in the rules of the biathlon. In biathlon orienteering competitions biathlon harness is not allowed.

### **1.5.4 Ammunition**

Only international standard .22 in. long rifle (calibre 5.6 mm) rimfire ammunition may be used. The bullets must be made of a uniform substance, lead or a similar soft material such as lead alloy. The muzzle velocity must not exceed 380 m/s, measured 1 m after leaving the muzzle.

### **1.5.5 Control of equipment**

It shall be possible to control the equipment before the start.

## **1.6 Anti doping**

Leaders and competitors have to follow the World Anti-Doping Code made by the World Anti-Doping Agency (WADA).

If an official from WADA attends, every competitor selected by the official has to report for control. If the result is positive, the competitor is disqualified.

## **1.7 Safety**

The organiser explains all safety rules to the competitors and takes all necessary steps to guarantee the safety. A competitor violating these rules can be disqualified.

## 2 Classic Biathlon Orienteering Competition

Classic Biathlon Orienteering comprises the events location orienteering (map reading), free orienteering and shooting. It is recommendable to carry out the events in the order mentioned and without interruption.

Co-operation between the competitors is not allowed during the events.

### 2.1 Shooting

#### 2.1.1 Adjustment shooting

The participants have to be offered adjustment shooting in the competition site where the shooting element in the prone position will take place.

Adjustment shooting shall be carried out on the day of competition before the competition. Before the adjustment shooting the targets shall be divided between the teams.

In adjustment shooting board targets shall be used.

#### 2.1.2 Shooting elements, shooting positions, number of shots and place of shooting

The shooting is carried out in two (2) elements according to the table below

Class	1st element		2nd element	
	Position	No of shots	Position	No of shots
M/W -16	Prone	10	Prone	10
M/W 18 -	Prone	10	Standing	10

Shooting targets as stated in Annex 1 shall be used. The shooting distance shall be 50 m (+/- 3 m).

There shall be wind flags at the shooting elements. These flags should be placed at a distance 10 m and 30 m from the shooting ground and in the same height as the targets.

#### 2.1.3 Accomplishment

The shooting element is always carried out after running. The shooting is carried out as follows:

- 1) The participants shall run at least 300 m before the first shooting element and between the first and the second shooting element at least 100 m. The total running distance during the shooting must not exceed 1000 m.
- 2) The time of shooting is unlimited (is a part of the total running time).
- 3) The weapon must be kept at the shooting range all the time. When the runners pick up his weapon from the weapon-storage the weapon must be carried in the barrel and ammunition are brought along. The weapons breech-block has two alternatives 1) with breech-block in the front and slacked percussion spring or 2) with open breechblock). The loading is done at the place of shooting before the shooting.



The only way of carrying the weapon at the shooting range

4) If the shooter does not fire ten (10) rounds, in each position, this will result in disqualification of the shooter from the competition.

#### 2.1.4 Faults

The shooter shall correct functional faults - concerning weapon or ammunition - and it does not give the right for reshooting. It is, however, allowed to change a round that fails to go off.

#### 2.1.5 Evaluation

	Additional time in minutes	
	Prone	Standing
Ring1 (40mm)	0	0
Ring 2 (110 mm)	2	0
Hit outside ring 2	2	2

The following is in force when shooting on a paper target:

The evaluation must take place before the target is taken down.

The evaluation must be done with the calibre used.

Closed marking. The result is shown to the competitor by distributing the shooter's target after the finish line has been crossed at the end of the competition.

Two (2) hits at the most are counted for a bull's eye. If there are too many hits, the best ones are counted.

The result of the shooting (running time + addition of time in shooting) is included in the total competition time.

#### 2.1.6 Penalty

If the competitor doesn't handle the weapon correctly a penalty of at least one minute shall be adjudged by the competition leader.

## **2.2            *Location orienteering***

### **2.2.1            Map**

The map must be protected from moist and glued on soft flexible board.

The starting point must be marked and the north of the map given.

The backside of the map must be marked with figures (1-10) in a suitable order for signing.

Sample map with the right positions shall be posted at the competition centre when all the competitors have started.

Location orienteering maps shall be distributed later as inspected, but not before everyone has started.

### **2.2.2            Course distances, marking of course**

The course distance should be about 3 km.

The course shall be marked with orange/white strips or red/white and a third colour-strips. The strips should be at least 4.5 cm wide.

The runners have to follow the marking and not leave it more than five meter. The runners are only allowed to go forward on the course.

### **2.2.3            Positions and checkpoints**

The number of positions shall be 10. The positions shall be partly placed in and partly outside the course. The distribution shall be 5-5.

Positions in and outside the course shall be chosen among terrain objects marked on the map. It must be possible to read the terrain objects chosen.

Position in the course is marked with a blue flag (or equivalent) placed in a square marked by blue strips in the station place.

For a position outside the course, the station place is marked with a yellow flag placed in a square marked by yellow strips and a direction indicator pointing towards the position. The indicator is completed with an IOF symbol. Positions outside the course should be marked with an orienteering flag. If it's physical or legal impossible to put an orienteering flag at the object and it's a clear object it's not necessary to put an orienteering flag on it.

There shall be pins and pens for signing in every station place.

Positions outside the course shall be located not more than 400 m from the station place.

### 2.2.4 Accomplishment

The map is provided to the competitors at the starting moment.

In every station place, the competitors shall mark the position in question on the map with a pinprick and sign on the back. The signing is done so that the competitor draws a line from the pinprick to the corresponding number on the backside of the map with the signing pen hung up in the station place. The competitor may not draw a circle at the pinprick. For every circle drawn around a pinprick a penalty of 10 min is added.

When the competitor has entered the station place, he or she shall not leave it before the pinpricking and signing have taken place.

### 2.2.5 Evaluation

Every whole mm incorrect = additional time of 1 min. Parts of mm are not counted. At the most 10 mm per position is counted.

The correction measurement shall start from the map symbol (map sign) if a part of the terrain object has not been stated in the control definition. If part of the terrain object has been provided, the correction measurement shall be started from it.

Only signed pinpricks are counted. If the signed pinprick is missing, an additional time of 10 min is added to the position in question.

Competitors who break the rules in item 2.2.4, and which is not regulated elsewhere, are charged with an additional time of 10 min for each mistake made.

The result of the location orienteering (running time + additional time) is included in the total competition time.

## 2.3 *Free orienteering*

### 2.3.1 Control cards and control descriptions

Control cards or back-up labels and control descriptions shall be distributed to the competitors two (2) minutes before the start.

After the location orienteering (or the free orienteering) there is a map-change. The competitor drops his location-map (or free orienteering map) and takes a new map out of the box for his/her category. The competitor is responsible for taking the correct map. The start of the free orienteering is at the map-change.

The organiser may print the control descriptions on the map.

### 2.3.2 Course distances

Class	Winning time
M/W 21	45 - 60 min
M/W 20	40 - 55 min
M/W 35	40 - 55 min
M/W 40	35 - 50 min
M/W 45	35 - 50 min
M/W 50	35 - 50 min
M/W 55	30 - 45 min

Class	Winning time
M/W 60	30 - 40 min
M/W 16	30 - 40 min

The winning time in women's classes must be in the lower part of the time interval according to the above table.

Separate courses must be the aim.

### 2.3.3 Liquid

There must be liquid available at the change between location orienteering and free orienteering and at least one additional refreshment point for the longer courses.

## **2.4 Final results**

Winner in the respective class is the competitor who has the lowest total time charge (total running time + additional time at the shooting + additional time at the location orienteering (incl. mistakes)).

## **2.5 Flexibility in the distances**

It is also possible to organise the classic biathlon orienteering with shorter free orienteering course distances. This shall be mentioned in the competition invitation.

### **3 Biathlon Orienteering Sprint Competition**

Biathlon Orienteering Sprint Competition consists of the events free orienteering and shooting. The events are possible to be carried out in order shooting prone – free orienteering – shooting standing. The events must be carried out without interruption.

The organiser may change the order of events.

#### **3.1 Shooting**

##### **3.1.1 Adjustment shooting**

All participating competitors shall have a possibility to accomplish adjustment shooting according to item 2.1.1

##### **5.1.3 Shooting elements, shooting positions, number of shots, place of shooting and penalty course**

Each participant shall accomplish two (2) shooting elements. The first element takes place in a prone position and the second one in a standing position.

The competitor has in each element at his or her disposal five (5) rounds to hit five (5) targets.

All five shots have to be fired of.

In connection with the place of shooting, there must be a penalty course. The running time on the course should be between 30 – 45 seconds and the organizers should strive to have the same time for female and male runners.

Self-marking targets according to Annex 1 must be used.

In other matters, see item 2.1.2

##### **5.1.3 Accomplishment**

If it is not possible that the first part of the competition is free orienteering, the competitor shall run at least 300 m before the first shooting.

The competitors are responsible for the weapon ammunition and other equipment. The organiser provides space for handling and storing during the competition.

For every target that has not been hit after five (5) fired rounds, the shooter shall run one (1) penalty course lap.

If the shooter does not fire five (5) rounds, in each position, this will result in disqualification of the shooter from the competition.

##### **3.1.4 Other regulations**

Otherwise the rules for Biathlon Orienteering Individual apply

## **3.2            *Free orienteering***

### **3.2.1            Course distance**

In all classes, the orienteering course distance shall be applied so that the winning time is 18 – 20 min.

The possible running distance for the shooting element is not included in the course.

## **4 Biathlon Orienteering Mass Start Competition**

Biathlon Orienteering Mass Start Competition consists of the events free orienteering and shooting. The events must be carried out without interruption.

### **4.1 Shooting**

#### **4.1.1 Adjustment shooting**

All participating competitors shall have a possibility to accomplish adjustment shooting according to item 2.1.1

#### **5.1.3 Shooting elements, shooting positions, number of shots, place of shooting and penalty course**

Each participant shall accomplish two (2) – four (4) shooting elements. The first element takes place in a prone position and the second one in a standing position. If there are four shooting element the two first takes place in prone position and the third and fourth in standing position.

The competitor has in prone respective standing element at his or her disposal ten (10) rounds to hit ten (10) targets. All shots have to be fired of.

In connection with the place of shooting, there must be a penalty course. The running time on the course should be between 50 – 60 seconds and the organizers should strive to have the same time for female and male runners.

Self-marking targets according to Annex 1 must be used.

In other matters, see item 2.1.2

#### **5.1.3 Accomplishment**

If it is not possible that the first part of the competition is free orienteering, the competitor shall run at least 300 m before the first shooting.

The competitors are responsible for the weapon ammunition and other equipment. The organiser provides space for handling and storing it during the competition.

For every missed target that has not been hit, the shooter shall run one (1) penalty course lap.

If the shooter does not fire all rounds, in each position, this will result in disqualification of the shooter from the competition.

#### **4.1.4 Other regulations**

Otherwise the rules for Biathlon Orienteering Individual apply

## 4.2 **Free orienteering**

### 4.2.1 Course distance

The possible running distance for the shooting element is not included in the course.

Class	Winning time
M/W 21	60 – 80 min
M/W 20	50 – 70 min
M/W 35	50 – 70 min
M/W 40	45 – 60 min
M/W 45	40 – 55 min
M/W 50	35 – 50 min
M/W 55	30 – 45 min
M/W 60	30 – 40 min
M/W 16	30 – 40 min

The winning time in women's classes must be in the lower part of the time interval according to the above table.

The organiser should strive for five orienteering laps and it has to be at least three orienteering laps. A spreading system should be used. The last orienteering lap can be common for all runners in the same class.

## 5 Biathlon Orienteering Relay

Biathlon Orienteering Relay consists of the events shooting and free orienteering. The relay is composed of a number of distances accomplished by the teams in a succession.

The relay teams consist of three (3) competitors who all accomplish their own leg. The organiser may decide, if it is appropriate, that a class consist of two (2) competitors of whom both accomplish their leg. Women relay consist of two competitors.

If there are few registered teams in a class, the organisers have the right to combine classes.

### 5.1 *Shooting*

#### 5.1.1 Adjustment shooting

All participating competitors should have a possibility to accomplish adjustment shooting according to item 2.1.1

#### 5.1.3 Shooting elements, shooting positions, number of shots, place of shooting and penalty course

Each participant shall accomplish two (2) shooting elements. The first element takes place in a prone position and the second one in a standing position.

The competitor has in each element at his or her disposal 8 rounds to hit 5 targets.

In connection with the place of shooting, there must be a penalty course. The running time on the course should be between 60 – 90 seconds and the organizers should strive to have the same time for female and male runners.

Self-marking targets according to Annex 1 must be used.

In other matters, see item 2.1.2

#### 5.1.3 Accomplishment

The start shall be the same for all teams competing in the same class.

Before the first firing, the competitor shall run at least 300 m, or a part of the free orienteering. The second element of shooting can be accomplished after the orienteering, in the middle of it or before it.

The competitors are responsible for the weapon ammunition and other equipment. The organiser provides space for handling and storing during the competition.

At the beginning of the shooting element, it is allowed to load the weapon with five (5) rounds. If all targets are not hit with five (5) rounds, there are still three (3) spare rounds available for the shooter. These may be loaded and fired one at a time until all targets have been hit or eight (8) rounds have been fired.

The organiser has to put up a place for spare rounds. The competitor decides if she/he will use the place for spare rounds.

For every target that has not been hit after eight (8) fired rounds, the shooter shall run one (1) penalty course lap.

If the shooter does not fire eight (8) rounds, when there are targets that have not been hit, this will result in disqualification of the shooter and thereby the team from the competition.

If the shooter does not fire five (5) rounds, in each position, this will result in disqualification of the shooter from the competition.

#### 5.1.4 Other regulations

Otherwise the rules for Classic Biathlon Orienteering apply.

### **5.2 *Free orienteering***

#### 5.2.1 Course distance

The running distance for the shooting element is not included in the course.

In all classes, the course distance shall be applied so that the winning time per lap is 30 - 40 min.

#### 5.2.2 Spreading system

In relay competitions, the controls shall be combined differently for the teams, but all teams shall run the same overall course

#### 5.2.3 Changing between legs

Change of the competitor between legs is done by "bodily contact".

### **5.3 *Final results***

The order, in which the finish line is crossed during the last distance, is also the final result for the respective class. Time is taken from the start of the teams to the moment the runner of the last leg crosses the finish line.

## **6 World Biathlon Orienteering Championships**

### **6.1 General**

It is possible to win a World Biathlon Orienteering Championship title only in the M21 and W21 classes. All other winners are champions of their own class. Only runners entered by national federations (associations) are allowed to run in M 21 A and W 21 A. Each country is allowed to enter maximum ten (10) female and ten (10) male competitors in World Championships classes M 21 and W 21. The organizer is allowed to increase the number of participants in M 21 and W 21 after decision of IBOF council. There is also a Junior (M/W 20) and Master (M/W 35 →M/W 70) World Biathlon Orienteering Championship.

The organiser can also invite to "B" classes for learners. These classes have not the status of World Championships.

There shall be a technical advisor to the competition leader accepted by IBOF.

An international jury must be pointed out before start off the competition. The jury consists of one representative from IBOF council and two team leaders. The two team leaders shall be elected at the first team leader meeting during the WBOC.

### **6.2 Disciplines**

The disciplines at World Biathlon Orienteering Championships are sprint distance, classic distance and relay. It's up to the organizer to decide in what order the disciplines shall take place

### **6.3 Invitation**

The preliminary invitation for the World Biathlon Orienteering Championships should be sent at least six months before the event.

### **6.4 Drawing the start list**

The drawing of the starting list should be executed latest at the team leader meeting.

In W 21 and M 21 there should be ten start groups. The team leaders decide, latest at the team leader meeting, in which group his/her runners participate in. Start group 1 starts first and start group 10 start last. The drawing performs in each start group if there are two or more runners in the group.

If there during the drawing the last runner in one start group and the first runner in next start group are from the same nation the runner in the next start group should start as number two in the start group

If there are only runners from one country in two or more start groups in a row they start after each other with the same start interval as in the rest of the class.

### **6.5 Protests**

Any mistake by the organiser or a competitor shall be handling by the competition leader. If any nation is not satisfied with the competition leader decision it can make a protest. The jury shall handle any protest. The jury is the highest instance for protests

## **7 Rules for World Cup competitions**

Invitation and Instruction must be in English language.

There shall be a technical advisor accepted by IBOF.

An international jury must be pointed out before start off the competition. The jury consists of one representative from IBOF council and two team leaders.

If IBOF rules are not followed, it shall be accepted by the technical advisor, and announced in the instructions.

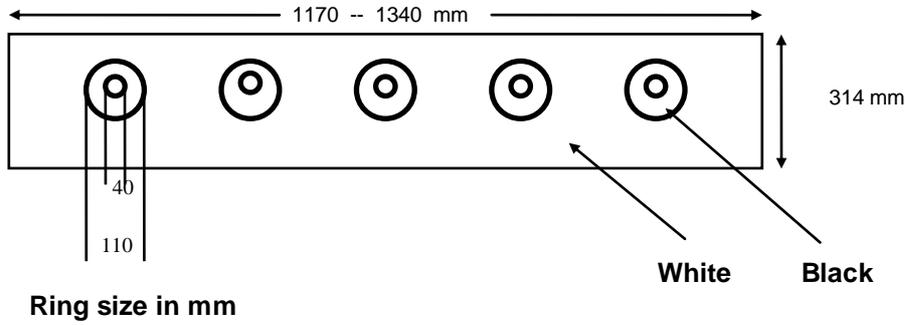
Results must be sent to IBOF the day after the competition.

New ranking list must be published not later than 3 days after the competition.

Appendix 1

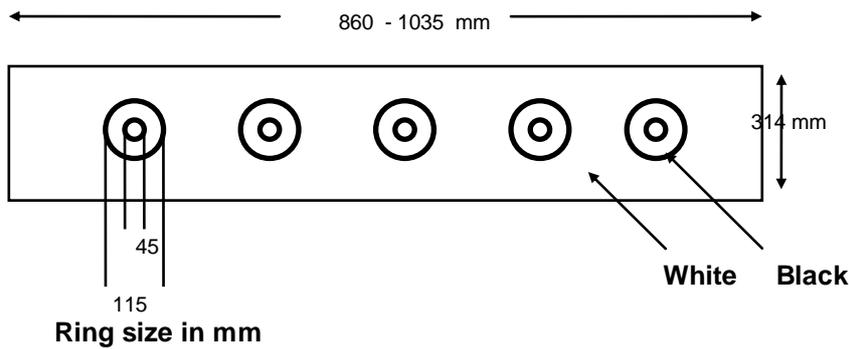
**APPROVED TARGETS**

**1. Board target**



Other board targets with white background, black bull's eyes and the same rings size may be used

**2. Self-marking metal targets**



Standard measures at mechanical and flap discs for approved targets types Kurvinen and Torsby

Other mechanical targets with same performance may be used