

# ANNEX G

## COMPETITION RULES FOR ARCHERY BIATHLON

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#### 1. GENERAL REGULATIONS

Archery Biathlon is a form of winter Biathlon which combines skiing and shooting with a bow and arrows. In principle, all IBU Event and Competition Rules apply unless other regulations are detailed in this Annex. Generally, as the bow is used for shooting instead of the rifle, most of the rules for rifle usage in the winter Biathlon rules are applicable to the bow in this Annex.

#### 2. COMPETITION SPECIFICATIONS

The following table details the competition specifications for Archery Biathlon.

**TABLE TO 2. COMPETITION SPECIFICATIONS – ARCHERY BIATHLON**

1	2	3	4	5
Class of Competitor	Course Length and Competition Type	Ski Loops	Shooting Ends 4 arrows per end	Shot Penalty
MEN	12.5 KM INDIVIDUAL	5 x 2.5 km	S, K, S, K	1 Minute
	7.5 KM SPRINT	3 x 2.5 km	S, K	150 m Penalty Loop
	10 KM PURSUIT	4 x 2.5 km	S, K, S	150 m Penalty Loop
	10 KM MASS START	5 x 2 km	S, S, K, K	150 m Penalty Loop
	4 x 6 KM RELAY	3 x 2 km each	S, K (each) + 1 spare arrow per end	150 m Penalty Loop
WOMEN	10 KM INDIVIDUAL	5 x 2km	S, K, S, K	1 Minute
	6 KM SPRINT	3 x 2 km	S, K	150 m Penalty Loop
	8 KM PURSUIT	4 x 2 km	S, K, S	150 m Penalty Loop
	7.5 KM MASS START	5 x 1.5 km	S, S, K, K	150 m Penalty Loop
	3 x 6 KM RELAY	3 x 2 km each	S, K (each) + 1 spare arrow per end	150 m Penalty Loop
JUNIOR MEN	10 KM INDIVIDUAL	5 x 2 km	S, K, S, S	1 Minute
	6 KM SPRINT	3 x 2 km	S, K	150 m Penalty Loop
	8 KM PURSUIT	4 x 2 km	S, K, S	150 m Penalty Loop
	7.5 KM MASS START	5 x 1.5 km	S, S, K, K	150 m Penalty Loop
	4 x 6 KM RELAY	3 x 2 km each	S, K (each) + 1 spare arrow per end	150 m Penalty Loop
JUNIOR WOMEN	8 KM INDIVIDUAL	4 x 2 km	S, K, S	1 Minute
	4 KM SPRINT	2 x 2 km	S	150 m Penalty Loop
	6 KM PURSUIT	3 x 2 km	S, K	150 m Penalty Loop
	6 KM MASS START	5 x 1.2 km	S, S, K, K	150 m Penalty Loop
	3 x 6 KM RELAY	3 x 2 km each	S, K (each) + 1 spare arrow per end	150 m Penalty Loop

Notes to Table at 2.

- Column 1: Class of Competitor: according to these Rules.  
Column 2: Course Length and Type of Competition: the required length of the course and the type of competition according to these Rules.  
Column 3: Number and Length of Ski Loops required for the competition.  
Column 4: Shooting Ends: the number and sequence of shooting ends and shooting positions  
Column 5: Shot Penalty: the automatically imposed penalty for each target not hit.

### 3. THE COMPETITION FACILITY

The competition facility for Archery Biathlon is basically the same as winter Biathlon with a rifle, with the following exceptions.

#### 3.1. Shooting Range

##### 3.1.1. Shooting Distance

The distance between the front edge of the shooting ramp and the line of targets must be 18m (+ / - 10 cm )

##### 3.1.2. Kneeling and Standing Division

Looking in the shooting direction ,the right half of the range is for shooting in standing position and the left half for shooting in the kneeling position. The division must be clearly indicated to the competitors by sign boards . An exception to the right and left configuration is made during Pursuit, Relay and Mass Start competitions when competitors shoot from all lanes in both kneeling and standing positions

##### 3.1.3 Arrow Stopper

Behind the targets there must be a white net or a similar device to stop the arrows which have missed the target. The height of both the net and of any similar device must be 2 m.

##### 3.1.4. Wind Flags

At competitions and official training ,wind flags must be installed at the side of every third shooting lane 5 m from the target . The flags must be placed between the targets, at 1 m height.

### 4. SKIING REGULATIONS

All normal Biathlon skiing regulations apply to Archery Biathlon. Additional specific rules are as follows.

#### 4.1. Carrying the Bow and Arrows

Each competitor must use a harness to carry the bow in the required position vertically on the back between the shoulders and with the sight window turned towards the back . Competitors may carry a small repair kit If the bow is damaged during the competition so that it is not possible to carry it in the required position, it is permitted to carry the bow in hand to the shooting range. All the arrows, included the spare arrows, must be carried by the competitor himself.

#### 4.2. Bow Repairs

The competitors may repair their bows during a competition all along the course provided they receive no assistance from any person.

### 5. SHOOTING REGULATIONS

All rifle shooting rules apply to the bow, including safety regulations, with the following differences.

#### 5.1. Shooting Positions

##### 5.1.1. Kneeling Position

Competitors, while shooting in the kneeling position, shall place one knee on the ground and the torso

remains upright.

#### 5.1.2. Standing Position

Competitors shall shoot from a standing position and without any support.

#### 5.1.3. Dispositions of Shot Arrows

The arrows shot by the competitors during the competition remain in the target or the ground until the end of the competition.

#### 5.1.4. Loading and Unloading

The bow may be loaded and unloaded only in the direction of the targets. When moving from one shooting point to another, the competitor must first unload his bow and place the bow on his back in the normal carrying position.

#### 5.1.5. Removal of Bow on the Range

A competitor may not remove a strap of his bow carrying harness from his shoulder before he has reached the shooting lane from which he will shoot. He must cross the lane marking line with both feet and place both ski poles horizontally on the ground prior to removing his bow from the carrying position.

### 6. DAMAGED BOWS AND ARROWS

#### 6.1. Damaged Bows

If a bow needs to be repaired, the competitor may do the repairs himself without any assistance and using only the repair kit carried by himself. If the bow cannot be made functional, it may be exchanged for his personal marked spare bow placed in the rack on the shooting range..

#### 6.2. Reserve Bows

A bow, which as been damaged during the competition or malfunctions for technical reasons to such an extent that it cannot be used to continue the competition may be exchanged for his personal reserve bow which has been inspected and marked at the equipment check and deposited in the designated reserve bow rack on the range before the competition by the competitor himself. The competitor must then continue the competition with the spare bow.

#### 6.3 Bow Exchange Procedure

To exchange a bow damaged while skiing on the course, the competitor himself may ski to his reserve bow in the rack on the range, prior to going to the shooting lane, exchange his bow and then continue to his shooting lane. During shooting the competitor shall indicate that his bow needs to be exchanged by raising his hand. When a Range Official responds, the competitor will point to his bow and say "Bow" and the name of his nation and his personal number, loudly. The Range Official will obtain the personal spare bow from the designated bow rack and bring it to the competitor.

#### 6.4. Damaged Arrows

A competitor who damages one or more arrows during a competition can replace them from the spare arrows in the rack at the entrance of the shooting range. If the competitor discovers a damaged arrow when on the shooting line, he may obtain replacement arrows from a Range Official by raising his hand and saying " Arrow" , the name of the nation and his personal number, loudly. The Range Official who responds will get the spare arrow from the competitor's personal marked reserve arrows placed behind the range and deliver it to the competitor.

### 7. EQUIPMENT CONTROL

#### 7.1. Specific Checks at Start Equipment Control

The following checks are made :

- a. The competitors is wearing his start number

- b. The bow must be correctly placed on the back between the shoulders and tightened in such away that it can neither fall or slide.
- c. The draw weight must comply with the fixed restrictions.
- d. The arrows must be correctly fixed at the bow or on the harness .
- e. Skis and poles are checked for correctness and the skis are marked.
- f. Clothing and other equipment is inspected for correctness, including advertising.
- g. Reserve bow, if provided, must be checked before it being carried to the shooting range.
- h. The arrows must comply with Article 8 of this Annex..

7.1.1. The carrying system must be suitable to give the greatest safety against any possible damage both to the competitor and to the equipment.

#### 7.2. Final Check Before Start

Between one to two minutes prior to the start ,a check shall be made of the competitor by the start assistants in order to ensure the following :

- a. The competitors is wearing a start number
- b. The skis and bow are properly marked
- c. Advertising regulations are not being violated

#### 7.3. Finish Control

After arriving at the finish and in Relay competitions after the hand-over zone, a check shall be made to confirm the following :

- a. the bow must be in the required position;
- b. competitors have finished with at least one ski marked for them and their marked bow, with the skis and poles in accordance with the Material Catalogue ;
- c. the bow draw weight is the same as stated on the control mark ;
- d. the advertising regulations were not violated.

### 8. COMPETITION EQUIPMENT REGULATIONS

The stipulations of Annex A, Material Catalogue, apply fully unless otherwise specified in this article.

#### 8.1. The Bow

The recurve bow is a tool consisting of a stiff central part and two peripheric flexible parts ending in a tip with a string nock. The bow shall be of a simple design, either take-apart ( with wooden or metal raiser ) or of one piece construction . The bow is braced for use by a single string attached directly between the two string nocks only, and in operation is held in one hand by its handle (grip) while the fingers of the other hand draw , hold back and release the string. Multi-colored bow risers and trademarks located on the inside of the upper limb are permitted. The length of the bow is not limited. The draw weight must no exceed 35 lbs.

##### 8.1.1. Draw Weight Measurement

The draw weight of the bow is measured by drawing all arrows to within 1.5” (3,8 cm) of the center of the cushion plunger. Each arrow is measured 1.5” back from the point, a black mark is made on the arrow and the arrow is drawn so that mark to the center of the cushion plunger and the bow weight is checked. All competitors arrows will be measured and recorded from the inside of the nock to the end of the point (full length).

#### 8.2. The Bowstring

A bowstring of any number of strands of the material chosen for the purpose with a center serving to accommodate the drawing fingers, a nocking point to which may be added serving(s) to fit the arrow nock as necessary, and to locate this point one or two nock locators may be positioned, and at each end of the bowstring a loop to be placed in the string nocks of the bow when braced. In addition one attachment is permitted on the string to serve as a lip or nose mark. The serving on the string must not end within the archer’s vision at full draw. It is possible to use a peep-hole.

### 8.3 The Arrowrest

An arrowrest , which can be adjustable , any moveable Pressure Button, Pressure Point or Arrowplate may all be used on the bow provided they are not electric or electronic and do not offer any additional aid in aiming . The Pressure Point shall be placed no further than 4 cm back (inside) from the throat of the handle (pivot point) of the bow.

### 8.4 Draw Check Device

A draw check device , audible and /or visual , other than electric or electronic, may be used.

### 8.5 Bowsight

A bowsight for aiming is permitted, but at no time may more than one such device be used. A bowsight attached to the bow for the purpose of aiming which may allow for windage adjustment as well as elevation setting is subject to the following provisions:

- a. it shall not incorporate a prism or lens or any other magnifying device, leveling or electric or electronic devices nor shall it provide for more than one sighting point.
- b. a bowsight extension is permitted
- c. a plate or tape with distance marking may be mounted on the bow as a guide for marking, but must not in any way offer any additional aid.
- d. if the bowsight is attached to the bow at the side horizontally the screw of the sight pin must not project from the body of the bowsight.
- e. if the bowsight is attached to the limb, the screw of the sight pin is vertical. In such a case there are no limits.

8.5.1. Bowsight, counter-weights or stabilizers are permitted provided that they do not project more than 5 cm from the most forward point of the back face of the bow.

8.5.2. The maximum projection allowed in horizontal direction is 5 cm to permit the use of a cushion plunger, a bowsight .

### 8.6 Arrows

An arrow consist of a shaft with head (point) , nock, fletching and if desired, cresting. The arrows of each competitor shall be marked on the shaft with the competitor's name or initials , and all arrows used by any competitor shall carry the same pattern and color(s) of fletching, nocks and cresting, if any. Only fully aluminum arrows are allowed. When shooting at dropping targets, the arrows must have points that are hemispherical, the diameter of the points may the same or maximum 5 % larger than the diameter of the arrow shaft.

### 8.7 Finger Protection

Finger protection in the form of finger stalls or tips, gloves, shooting tab or tape (plaster)to draw, hold back and release the string. A separator between the fingers to prevent pinching the arrow may be used. An anchor plate or similar device attached to the finger protection (tab) for the purpose of anchoring is permitted. A release aid that must not be attached in any way to the bow nor incorporate electric or electronic device must be used. On the bow hand an ordinary glove, mitten or similar item may be worn but shall not be attached to the grip.

### 8.8 Carrying Harness

There are two permitted ways to carry the bow and the arrows:

- a. straps attached directly to the bow and a container of the arrows also fixed to the bow.
- b. a stiff harness which must keep firmly the bow in such a way that it can not slip off even in case of a fall, with a container of the arrows which can be attached both to the bow or to the harness.

Both of the carrying methods must comply with the required position according to the rules, vertically on the back, between the shoulders, in such a way that its lower end of the bow do not exceed half the distance existing between the center of the knee and the rotation axis of the thigh-bone. When using

straps the bow must be carried with the sight window turned toward the back of the athlete. When using a stiff harness, the bow can be slipped into the harness at the discretion of the athlete.

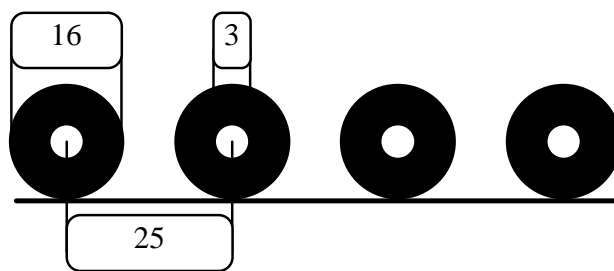
8.8.1. A soft harness must comply with the rule concerning the straps.

## 9. TARGETS

### 9.1. Types and General Specifications

There are two main types of targets used for Archery Biathlon competitions and training: paper and drop – down. The color of the faces must be black with a white spot. The shape and dimensions for both targets are shown in the following diagram:

ARCHERY BIATHLON TARGET DIAGRAM TO 9.1.



#### 9.1.1. Target Placement

The center of the target shall be at the height of one meter in reference to the level of the shooting line.

### 9.2 Drop-down Targets

The drop-down targets are made up of foldaway elements made of materials that do not cause any damage to the arrows, with the working mechanics must be made in such a way that they can not be damaged by the hit of the arrows. They must have a reset system that can be operated from the shooting line. Any metal element which could damage the arrows when hit during the shooting is not permitted. All of the target frame, except the drop-down faces, must be white. The protective devices must be made of materials that prevent the penetration of the arrows.

#### 9.2.1.. Drop-Down Target Operation

The release device of the dropping face must allow the fall of the face when hit on its lower end by a force of 1.10 kg, calculated on the basis of an arrow weight of 18 gm and a speed of 130 km/h.

### 9.3. Paper Targets

The paper targets must be fixed to a soft support fit for stopping the arrows. The faces must be arranged as shown in the above diagram.