

# EUROPEAN RANKING INTRODUCTION

## Introduction

The ESC ranking allows a direct comparison of events and an objective identification of the european's best shooters.

## The ESC ranking system

The ESC ranking system is based on two key factors of the shooting performance. It includes beside the placing (rank) of the shooter also the result achieved by the shooters in the 15 Olympic shooting events at ISSF and ESC supervised championships and competitions.

The ESC rankings produce event rankings only. The event rankings evaluate the shooters competing in a single event and determine the european's best shooter in a specific event.

## The basics of the system

The rankings are determined by the performance score of the shooters. The higher the score, the higher the shooter is ranked. After each competition, the shooters obtain points for their performances. These performance points are awarded for the rank (category A) achieved and the result (category B) achieved by the shooter. The performance score is achieved by combining the points of category A and the points of category B.

## Performance score

(points of category A + points of category B)

Points achieved in category A:

The points for the ranking depend on the final rank a shooter achieves in a certain competition. Points can only be achieved in a final competition for rank 1 to 20. The number of points available for each competition varies according to the level and significance of the competition. The competitions are categorized, and the points achieved vary in each category as follows:

Table for points of ranking in category A

(K) the factor of the level of competition			
RANK	POINTS		(K)
1st rank	100	x	K
2nd rank	75	x	K
3rd rank	50	x	K
4th rank	35	x	K
5th rank	30	x	K
6th rank	25	x	K
7th rank	20	x	K
8th rank	15	x	K
9th rank	12	x	K
10th rank	11	x	K
11th rank	10	x	K
12thrank	9	x	K
13th rank	8	x	K
14th rank	7	x	K
15th rank	6	x	K
16th rank	5	x	K
17th rank	4	x	K
18th rank	3	x	K
19th rank	2	x	K
20th rank	1	x	K

**Table for the level of competition**

(K) the factor of the level of competition and (T), factor for the valid period in years				
No	CHAMPIONSHIPS	CODE	(T)	(K)
1	Olympic Games	OG	2	36
2	World Championships (rifle, pistol)	WCH	2	24
3	World Championships (rifle, pistol) Junior	WCH	2	
4	World Championships (shotgun)	WCH	1	24
5	World Championships (shotgun) Junior	WCH	1	
6	World Cup Final	WCF	1	12
7	World Cup 1	WC1	1	10
8	World Cup 2	WC2	1	10
9	World Cup 3	WC3	1	10
10	World Cup 4	WC4	1	10
11	World Cup Junior	JWC	1	
12	European Championships (cal.177)	ECH	1	16
13	European Championships (cal.22)	ECH	2	16
14	European Championships (Shotgun)	ECH	1	16
15	European Championships Junior	ECH	1	
16	European Games	EUG	2	18

**example for points in category A**

OLYMPIC GAMES 1st place: 100 x 36 = 3600 points.  
 WORLD CUP FINAL 1st place: 100 x 12 = 1200 points.

**Points achieved in category B:**

The points for the result achieved are calculated for a particular score depending on its relation to the current, valid world record score in the qualification round – not including the score of the final round. Consequently, a maximum of 100 points can be obtained in category B by tying the world record or setting a new world record in the qualification round.

To compare the scores of each event that fall between the maximum limit of the world record score (WR) and the minimum limit of the minimum qualification score (MQS), an ESC ranking and scoring table was developed.

This scoring table is based on the scores of the previous four years, in which the world record is the maximum score and the MQS the minimum. Between them, the average scores of all the 8th ranks and all the 20th ranks at all ISSF supervised championships are calculated.

**ESC ranking and scoring table for MEN**

EVENT	WORLD	AVERAGE	AVERAGE	MQS
CODE	RECORD	8 PLACE	20 PLACE	
FR3X40	1186	1166	1158	1135
FR60PR	633.0	621.2	618.6	615.0
AR60	633.5	622.7	620.1	595.0
FP	583	559	552	540
RFP	593	580	568	560
AP60	594	580	576	563
TR125	125	120	118	112
DT150	148	135	130	118
SK125	125	121	119	114

ESC ranking and scoring table for WOMEN

EVENT	WORLD	AVERAGE RESULT	AVERAGE RESULT	MQS
CODE	RECORD	8TH PLACE	20TH PLACE	
STR3X20	594	580	575	555
AR40	422.9	415.9	413.0	392.0
SP	594	581	574	555
AP40	393	383	378	365
TR75	75	69	66	58
SK75	75	69	67	60

Calculation for points of category B

according to the different GROUPS A - B - C

GROUP A - MQS to rank 20:

A maximum value for the result of the group A is calculated as follows:

$$(100 - (WR - MQS)) : 7 = 100 : 7 = 14,28...$$

According to this, the result between the MQS and the average score of rank 20 will be calculated for each concrete score as follows:

$$\frac{RANGE (WR - MQS) : 7}{AVERAGE RESULT OF RANK 20 - MQS RESULT} \times QUANTITY OF POINTS EXCEEDING MQS RESULT$$

Group A - Example:

In the 50 m Rifle 3 Positions Men, a score of 1150 is used in the following equation:

$$\frac{14,28}{(1158 - 1135)} \times (1150 - 1135) = 9,3167...$$

GROUP B - rank 20 to rank 8:

The maximum value for the group B:

$$RANGE (WR - MQS) : 7 + RANGE (WR - MQS) : 7 \times 2 = 14,28... + 28,57... = 42,85...$$

According to this, the result between the average score of rank 20 and the average score of rank 8 will be calculated for each concrete score as follows:

$$(WR - MQS) : 7 + \frac{(WR - MQS) : 7 \times 2}{AVERAGE RESULT OF RANK 8 - AVERAGE RESULT OF RANK 20} \times QUANTITY OF POINTS EXCEEDING THE AVERAGE RESULT OF RANK 20$$

Group B - Example:

In the 50 m Rifle 3 Positions Men, a score of 1164 is used in the following equation:

$$100 : 7 + \frac{(100 : 7) \times 2}{(1166 - 1158)} \times (1164 - 1158) = 35,7142 ...$$

GROUP C - rank 8 to world record

The equation for the group C:

$$(WR - MQS) : 7 \times 7 = 100$$

The result here is obtained by using the average score of rank 8 and the world record score in the following equation:

$$100 : 7 \times 3 + \frac{(WR - MQS) : 7 \times 4}{RESULT OF THE WORLD RECORD - AVERAGE RESULT OF RANK 8} \times NUMBER OF POINTS EXCEEDING AVERAGE RESULT OF RANK 8$$

Result of the World Record – Average Result of rank 8

Group C - Example:

In the 50 m Rifle 3 Positions Men, a score of 1178 is used in the following equation:

$$100 : 7 \times 3 + \frac{(100 : 7) \times 4}{(1186 - 1166)} \times (1178 - 1166) = 77,1428\dots$$

#### ESC rankings process

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The points from both A and B categories are then added together and show the performance score for the ESC rankings of each shooter achieved in a specific championship. This value changes with time and moves closer to zero with each passing day at a given rate depending on the valid period of a championship.

For example, the Olympic Games are integrated into the world ranking list for a period of two years, while other championships are only integrated for two or one year, as mentioned in the Table of the level of competition under (T).

Once a shooter has a performance score, the system produces the ESC ranking in a specific event, the Event rankings:

Event rankings are produced in the three different shooting disciplines (rifle, pistol and shotgun) in each of the 15 individual Olympic shooting events. ESC ranking points in each event count separately for the event rankings. Shooters can be ranked in all the different events, in which they have achieved ESC ranking points.