



**WORLD  
AQUATICS**

# **WATER POLO WORLD RANKING**

In force as from 1 January 2025

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Version	Comments
1.0	Initial version
2.0	Changed after external feedback. Matches classified by Tiers. Time Decay formula shown in days. Removed weight for final tournament, qualifier and pre-qualifier.
2.1	Fixed event list

## 1. DEFINITION, GOAL & PURPOSES

The purpose of creating the World Aquatics Water Polo World Ranking is to establish a fair and transparent world ranking system. The Water Polo World Ranking will be a numerical and decimal representation (Numeric value #O.OO) of national teams, rolling after every competition with a life cycle of eight (8) years. In total, there will be four (4) World Aquatics Water Polo World Rankings:

- Elite:
  - Men
  - Women
- All age groups:
  - Boys
  - Girls

An objective merit-based method has been defined to ensure equality, fairness and competitiveness. Some of the purposes of the WPO World Ranking are the following:

- To give ranking between all the World Aquatics member federations who have water polo program and activities.
- Show the development of nations year by year comparing to other countries and teams.
- Encourage countries to participate in World Aquatics activities and measure their performances with a precise method.
- In case of any vacancy at any World Aquatics event, the World Ranking will qualify for the unfilled spot(s) instead of unfair rotation systems to provide the highest level of competition and praise the efforts of a nation regardless of the continent she represents. This helps federation to plan their activities and not depends on one event but on cumulative results.
- Considers all international matches on national team level, which are registered and approved by World Aquatics in both genders.

World Aquatics Water Polo World Ranking can increase or create VIK for any existing or potential new partners, for example, Mikasa World Aquatics Water Polo World Ranking. At the same time, content can be created during our events trying to engage and increase the water polo community.

## 2. ELIGIBILITY

Each World Aquatics Water Polo World Ranking will accordingly list national teams that have played a match in any competition imported in the World Aquatics database. Tiers, event level and type, gender, region, round, match score, opponent's position in the world ranking vs team's position in the world ranking and venue support are the main data points collected to classify every match in the proper ranking.

All World Aquatics Water Polo World Rankings will be updated at the end of every competition, or stop within a series of events, meaning all matches have been played and all match results are official.

Events are classified in two groups, elite vs age group, to score points to the specific ranking. See the list below:

- Elite:
  - AQUA events: World Championships (WCH), Olympic Games (OG), Men's Water Polo Challengers Cup (WPMDC), Men's Water Polo Olympic Games Qualification Tournament (WPMOQ), Men's Water Polo World Cup (WPMWC), Men's Water Polo World League European Preliminaries (WPMEP), Men's Water Polo World League Intercontinental Tournament (WPMIT), Men's Water Polo World League Preliminary Round (MWPWLPR), Men's Water Polo World League Semifinal Round (MWPWLSF), Water Polo World League Super Final Men (WPWLSM), Water Polo World League Super Final Women (WPWLSW), Women's Water Polo Challengers Cup (WPWDC), Women's Water Polo Olympic Games Qualification Tournament (WPWOQ), Women's Water Polo World Cup (WPWWC), Women's Water Polo World League European Preliminaries (WPWEP), Women's Water Polo World League Intercontinental Tournament (WPWIT), Women's Water Polo World League Preliminary Round (WWPWLPR) and Women's Water Polo World League Semifinal Round (WWPWLSF).
  - Non-AQUA events: Continental Championships
- Age Groups:
  - AQUA events: World Men's U20 Water Polo Championships (WPMJWC), World Men's U16 Water Polo Championships (WPMUWC), World Men's U18 Water Polo Championships (WPMYWC), World Women's U20 Water Polo Championships (WPWJWC), World Women's U16 Water Polo Championships (WPWUWC) and World Women's U18 Water Polo Championships (WPWYWC).
  - Non-AQUA events: Continental Age Group Championships.

### 3. RANKING METHOD

Two stages are required to calculate the World Aquatics Water Polo World Ranking:

- Stage 1 - Calculate the Rating Points (RP) for each match to each team
- Stage 2 - Calculate the match weight (MW) for each match

Rating Points (RP) and Match Weight (MW) for every match are accumulated to get Total Points (TP) that will rank all teams. Final formula:

$$TP = \sum_i RP_i MW_i$$

Where:

**TP:** Total Points.

**RP<sub>i</sub>:** Rating Points for each game

**MW<sub>i</sub>:** Match Weight for each game.

#### 3.1. Stage 1 - Rating Points (RP)

**Rating Points (RP)** for the match for a team are given by the following formula:

$$RP = BP + HAP + ORP$$

Where:

**RP:** Rating Points

**BP:** Basis Points

**HAP:** Home, Away and Neutral matches Points

**ORP:** Opposition Ranking Points

**Basis Points (BP)** are awarded in each match according to the following principles:

- Win by a margin of 1-4 goals-> receive 65 basis points
- Win by a margin of 5-10 goals-> receive 70 basis points
- Win by a margin of 11 or more goals-> receive 75 basis points
- Win after penalty shoot-out -> receive 60 basis points
- Lose after penalty shoot-out -> receive 40 basis points
- Lose by a margin of 1-4 goals-> receive 35 basis points
- Lose by a margin of 5-10 goals-> receive 30 basis points
- Lose by a margin of 11 or more goals-> receive 25 basis points
- In the event of a match being forfeited, the winning team receives 70 points (for a victory by a margin of 5 goals) and the losing team gets 0 basis points

**Home, Away and Neutral matches Points (HAP)** are in effect only for hosts and their opposing team on the given day, all other matches are considered played on neutral ground.

Home, away and neutral (HAP) points:

- Match at Home: -3 points
- Match away (opponents are home): +3 points
- Match at neutral venue: 0 points

**Opposition Ranking Points (ORP)** reward teams for facing opponents ranked higher than them. The higher the opposition is ranked, the more points the team stands to get. As the best teams are naturally ranked high, playing strong opponents means their ranking will be lower numerically than the average all-team pre-match ranking. Therefore, this contribution will be positive. Conversely, the weaker teams have higher than average rankings so this contribution will be negative. For more information, see the following formula:

$$ORP = 1.5 \cdot (WPWR - OR)$$

Where:

**WPWR:** rank of the last team in the World Aquatics Water Polo World Ranking

**OR:** Opponent ranking

### 3.2. Stage 2 - Match Weight (MW)

Several factors are taken in consideration to calculate the **Match Weight (MW)**:

$$MW = TD \cdot C \cdot R$$

Where:

**TD:** Time of the match (TD)

**C:** Competition weight (C)

**R:** Round weight (R)

**Time decay (TD)** rewards teams for most recent performances and prevent all matches over the 8-year period from carrying the same weight and receiving the exact same value. It's the age of the tournament where the game took place as every world ranking is updated at the end of the tournament. Scores loose value every two (2) years following a world championships cycle. The following formula applies:

$$TD = \left(1 - \frac{t}{T}\right) = \left(1 - \frac{t}{2922}\right)$$

Where:

**TD:** Time Decay

**t:** scoring age, this variable has different values depending on the actual age of the event:

- t=0, actual age of the event < 730
- t=730.5, 730 ≤ actual age of the event < 1461
- t=1461, 1461 ≤ actual age of the event < 2191
- t=2191, 2191 ≤ actual age of the event < 2922
- t=2922, actual age of the event ≥ 2922

**T:** full cycle, 8 years in days = 2922 days (365.25 days per year)

**Competition weight (C)** weights are given to different competitions to reflect the prestige of the tournament and to ensure that ratings are comparable across regions.

Competition weight (C)		Weight
Tier 1	Olympic Games	3
	World Aquatics World Championships	2
	Other events	1.5
Tier 2		1
Tier 3	Africa	0.35
	Americas	0.75
	Asia	0.75
	Europe	1
	Oceania	0.5
Tiers 4 and 5	Africa	0.2
	Americas	0.5
	Asia	0.5
	Europe	0.75
	Oceania	0.2

**Competition Stage (R)** factor increases as a team progresses through the tournament.

<b>Competition Stage (R)</b>		<b>Weight</b>
Tier 1, 2 and 3	Preliminaries	0.2
	Crossovers	0.3
	Quarterfinals	0.6
	Classification	0.4
	Semifinals	0.8
	Bronze Medal Match	0.8
	Gold Medal Match	1
Tier 4 and 5		0.2

### 3.3. Other considerations

If a team is disqualified (DSQ) from a match or from a tournament:

- Previous results are kept, no further actions
- Games to be played, only applicable in the group phase, are calculated as zero (O) points for the DSQ team and 70 basis points for the opponent with the added weight.

World Ranking will start in 2023 onwards.s

## 4. EXAMPLES

**Example 1**, Paris 2024 Olympic Games, match number 5, ESP vs FRA. Spain beat France by 8:10. see below all variables for Spain:

- **Basis Points (BP)**: win by a margin of 1-4 goals -> 65 points
- **Home. Away and Neutral matches Points (HAP)**: + 3 points (against FRA in a competition hosted in France)
- **Time of the match (TD)**: games was played in 2024, and the current year is 2024 -> 1
- Competition and Region (C): Olympic Games -> 3
- Competition Stage (R): preliminaries -> 0.2

### Stage 1 - Rating Points (RP)

$$RP = BP + HAP + ORP$$

$$RP_i = 65 + 3 = 68$$

### Stage 2 - Match Weight (MW)

$$MW = TD \cdot C \cdot R$$

$$MW_i = 0.2 \cdot 3 \cdot 1 = 0.6$$

**Final Calculation**

Previous total points = 0

*Match points* =  $RP \cdot MW = 68 \cdot 0.6 = 40.8$  match points

$$TP = \sum_i RPi MWi$$

$TP = 0 + 40.8 = 40.8$  total points

**Example 2**, Paris 2024 Olympic Games, quarterfinals, CRO vs ESP. Spain lost against Croatia by 10:8. see below all variables for Spain:

- **Basis Points (BP)**: lost by a margin of 1-4 goals -> 35 points
- Home. Away and Neutral matches Points (HAP): 0 points (neutral venue)
- **Time of the match (TD)**: games was played in 2024, and the current year is 2024 -> 1
- Competition and Region (C): Olympic Games -> 3
- Competition Stage (R): quarterfinals -> 0.6

**Stage 1 - Rating Points (RP)**

$$RP = BP + HAP + ORP$$

$$RPi = 35 = 35$$

**Stage 2 - Match Weight (MW)**

$$MW = TD \cdot C \cdot R$$

$$MWi = 0.6 \cdot 3 \cdot 1 = 1.8$$

**Final Calculation**

Total points achieved in preliminary matches = 205.8 total points

*Match points* =  $RP \cdot MW = 35 \cdot 1.8 = 63$  match points

$$TP = \sum_i RPi MWi$$

$TP = 205.8 + 63 = 268.8$  total points