



National Player Rating System Framework

THE NATIONAL PLAYER RATING INDICATES YOUR SKILL LEVEL AND WILL HELP YOU FIND THE RIGHT LEAGUE FOR YOU. IT ALSO MAKES LEAGUE ADMINISTRATION EASIER.

The aim of the new player rating system is to eventually provide every player across Australia with an accurate indicator of their skill level so that they can play in the most suitable league available.

The new rating system also gives league administrators a tool to grade players more efficiently and with less subjectivity. Ultimately, administrators will be able to clearly promote the playing standard of their competition, allowing a player to select a league that best suits their skill level.

How it works

The system predicts the result and score of every match you play based on your and your opponent's ratings. How you perform against this prediction determines your future rating.

For example, if you were playing Roger Federer, the system would predict that you would lose in straight sets. However, if you ended up losing the match 5-7 7-5 4-6, your rating would improve as you performed better than predicted, whereas Roger Federer's rating would move in the opposite direction.

Rating levels

There are 10 rating bands with plus (+) ratings between each. A player will progress from 8 to 8+ to 7 for example. The top rating is 1+.

Ratings v Rankings

It's important to note that the new rating system is **DIFFERENT** to a ranking system.

A player's **rating** can improve even if they lose every match, as long as the player performs better in the match than the system predicts.

A player's **ranking** rises when they win matches and ranking points are accumulated based on how far they progress in a tournament – the more matches you win, the more points you gain.

For example, while ATP rankings might have Djokovic, Murray, Federer and Nadal ranked 1, 2, 3 and 4 in the world, the rating system would place all of these players (and many more) at the same rating level.

Provisional ratings

Under the new player rating system, there are provisional ratings which protect the more experienced player in a league, as well as helping new players find the appropriate league for their skill level.

There was no provisional rating system previously and players were given a live rating after their very first match. This meant that if you were incorrectly graded in the first instance, both your and your opponent's ratings would be adversely affected.

How a provisional rating is calculated

A player's first nine matches are considered provisional and the rating importance grows by 10% with each match played.



To ensure that your opponent's rating is not adversely affected, the system gives your first match a 10% weighting. By your ninth match, we are confident that your rating will be almost accurate so it is weighted at 90% when calculating your opponent's rating.

By the tenth match, a player's rating is no longer considered provisional.

In-season recalculation

Under the old system, a player's rating would fluctuate whenever new information was received. This would lead to frequent deviations and inaccuracies due to "one-off" wins or losses.

The old system didn't take into account the player's opponents or the actual match score. Previously when a player won a certain number of matches in a higher division, that player was automatically adjusted to that division's rating. It also automatically downgraded a player's rating each year for a maximum of three years.

The new system will adjust a player's rating during the season only after an abnormal pattern is detected. It will not recalculate their opponents' rating until the end of season.

In-season recalculation will now only take place in the following two scenarios:

1. Provisional to live period

A player's rating is continually recalculated, during their provisional matches, based on new information and match results. After their tenth match, the player will receive a live rating.

2. Significant patterns

A player's rating will now be recalculated in-season when that player experiences either three unexpected wins or three unexpected losses. This protects against "one-off" wins or losses significantly affecting a player's rating.

This also covers players returning from a long-term break who will only have their rating recalculated after three unexpected wins or losses.

Outcomes compared to predictions

The new system is NOT a ranking system. It is designed to compare what happens in a match against the predicted outcome.

A player might win a match, but this does not necessarily mean that their rating will improve, sometimes their ranking will weaken despite the win.

For example: If the rating system predicts that you should win a match comprehensively and you only win following a tight battle, your rating will weaken.

In the previous system, a player was awarded with a set minimum amount of points as a base if they won a match. This happened regardless of whether they were expected to win or lose the match. The impact of awarding points this way was that when multiplied across every match, every week in the entire system, it dramatically inflated the overall rating system.

The new rating system is designed to help a player easily find a standard so it is important to analyse the actual score, rather than simply the result.



Weekly processing

As competitions often allow a couple of days enter and confirm results, ratings will be processed weekly, rather than daily. All results over the course of the week are collated, and then processed in one batch. If a player plays in more than one competition per week, their rating can only possibly change once per week.

The previous system calculated a player's rating on a daily basis and if it changed, for whatever reason during the week, it would only update the player and their opponent's ratings.

If they played more than one match in the week, the other opponents' ratings were calculated against an incorrect player rating which would have a broad detrimental effect on the system.

Less fluctuation

Due to the consolidation of bandwidths, players will notice much less movement in their rating. This might mean that a junior player's rating will progress and improve at a much faster rate than an adult, who might find that their rating plateaus because their standard does not deviate all that greatly.

In the previous system, players saw constant change with their ratings which did not give the player or the competition any consistency in terms of their standard. For example, a small change of +/- 0.1 could affect the order of merit of the entire team, despite one player obviously being better.

Two full recalculations per year

The entire rating system will be recalculated twice per year at non-peak competition periods (eg. school holidays).

Although a player's rating is processed weekly it has no effect on their opponent's, or the opponents' of their opponent (snowball effect) at the time of processing.

The full recalculations will take into account any snowball effect changes to ensure that the system is aligned which will improve its accuracy across the country.

The previous system only used the last 40 matches of a player's history which meant the rating was constantly fluctuating. If a player's ratings changed, their opponent's, or twice removed opponents' ratings were never adjusted accordingly. This meant that the system became more and more out of sync as time progressed.

Rating levels

The rating system is a measuring tool that lets players easily identify their skill level. The system has been developed with 10 levels. A half level (displayed as a '+' symbol) has also been implemented to help players understand that they are progressing and getting closer to the next bandwidth. The best rating in the system is 1+.

The previous system had 93 different rating bandwidths. This meant that the rating system was being used more like a ranking system. It also meant that people would see constant fluctuation in their rating which made it difficult to identify the appropriate level of play.

Dynamic bandwidths

Bandwidths will be defined by what percentile a player fits into relative to all other players in the system. For example, 0.05% of all players could make up the best rating, whereas 9.5% of all players make up the



last bandwidth. This means that regardless of what your rating is, it is always relative to every other player across Australia.

The previous system essentially worked in blocks of 1,000 points which created a very disparate rating system with no consistency or structure around the number of players within each bandwidth.

To aid in the transition to the new system a similar (but more structured) bandwidth breakdown has been developed. Over time, however this will start to even out as more matches and data are entered into the system.