

## HAVE RECENT LAW CHANGES IN RUGBY UNION ACHIEVED THEIR DESIRED OUTCOMES?

In recent years various rugby union governing bodies of rugby union competitions around the world including World Rugby, SANZAAR (South Africa, New Zealand, Australia & Argentina Rugby), RFU (Rugby Football Union) and Ligue Nationale de Rugby (LNR) have made significant law changes to achieve four main outcomes:

1. Speed Up The Game
2. Reduce Time Wasting
3. Enhance Fan Engagement
4. Increase Player Welfare

The changes have been brought about to promote rugby as a more enjoyable game to play and watch as the game has evolved. Collisions have increased intensity and importance, defensive systems have become very efficient at shutting down opposition attacks and lifestyle changes mean the way fans consume rugby as a product has changed. The fourth outcome above, player welfare, is a very important issue in the game but will not be focused on in this paper.

In 2022 World Rugby led the way for several significant changes across various rugby competitions including 50:22 kicks, goal line dropouts, protection of the jackler, limiting ball carriers to one prebound support player as well as restrictions on water carriers / medics entering the field. Further changes were implemented in 2024 through an initiative called the 'Shape of the Game' including play on for uncontested lineouts, the scrum option being removed from free kicks, time limits on conversions (60sec), scrum and lineout set up (30sec), bans on crocodile rules, scrum half protection and 20minute red cards.

*Former World Rugby chairman Sir Bill Beaumont commented, "This is another important step for the shape of the game programme" "as a package, these trials demonstrate our commitment to making rugby as enjoyable as possible for audience, while maintaining the integrity and competitive nature of the game."*

This paper analyses whether the rule changes implemented in the last four years have sped up the game, reduced time wasting and enhanced fan engagement drawing data from several major competitions across the world including Super Rugby, English Premiership, Top 14, Rugby World Cups, Six Nations and The Rugby Championship.

The following metrics were analysed to determine the success of the rule changes:

1. Speed Up the Game
  - a. Ball in Play Minutes
  - b. Tries Scored
  - c. Linebreaks Created
  - d. Average Ruck Speed
2. Reduce Time Wasting
  - a. Total Duration of Games
  - b. Stoppage Times
3. Enhance the Fan Experience
  - a. Crowd Figures
  - b. TV Audience Figures
  - c. Social Media Engagement

## SPEED UP THE GAME

In October 2024, The New Zealand Rugby Union (NRU) reported ball in play numbers had increased by over 2.5 minutes to more than 33minutes total per match in the Rugby Championship. Fewer lineout infringements have occurred while scrum, lineout and goal kick time restrictions have sped up these processes by an average of 15 seconds each time.

Average ball in play figures at Rugby World Cup tournaments have remained stable over time with no significant changes from the 2011 to 2023 World Cups however total points and tries per game increased significantly (see table below). At the time of the 2023 World Cup rule changes had begun to be implemented however the 'Shape of the Game' initiative changes had not commenced. The 2027 RWC will provide further important data on the effectiveness of the more recent changes.

Rugby World Cup				
Year	2011	2015	2019	2023
Ball in Play (mins)	35:26	34:55	35:44	34:18
Points Per Game	47	51	40	54.4
Tries per game	5.5	5.6	6.3	6.78

World Rugby

Across three major domestic competitions, Super Rugby, Top 14 and English Premiership, from 2023 to 2025 Ball in Play numbers did not correlate to a faster game (see table below). Super Rugby recorded a 1.5 minute increase however the English Premiership and Top 14 reported 1.6 and 0.95 second decreases. Average linebreaks and tries per game increased and average points per game increased by 6.02 points per game in the English premiership and 6.88 points in Top 14 however reduced slightly in Super Rugby by 2.34 points (Opta Stats Perform).

The English Premiership and French Top 14 also recorded ruck speed, a metric often used to analyse the speed of the attacking teams play, improvements from 2023 to 2025 from 4.2seconds to 3.91seconds and 3.87seconds to 3.44seconds. Not all figures point to a faster game, In Super Rugby the average ruck speed, was 3.11 in 2023 and 3.42 seconds in 2025 (Opta Stats Perform).

Competition	Super Rugby		English Premiership		Top 14	
Metric / Year	2023	2025	2023/24	2025/26	2023/24	2025/26
Ave Ruck Speed (sec)	3.12	3.42	4.2	3.91	3.87	3.44
Ball in Play (mins)	35.3	36.81	37.89	36.29	34.54	33.59
Points Per Game	58.6	56.26	51.66	57.68	48	54.88
Tries per game	4	4	3.48	4.06	2.77	3.36
Linebreaks	5.9	6.18	5.94	6.58	4.65	4.79

Opta Stats Perform

Average figures display trends in the game but do not always paint the full picture. One example includes large fluctuations in ball in play figures between games in the same competitions. The table below shows a difference of 12 minutes 46 seconds between the highest and lowest ball in play games in the 2024 Autumn Nations Series. Interestingly both games involved Australia whose game at the time suited higher ball in play time as indicated in the results of the two games. Clearly other factors effect these statistics e.g. weather conditions, referees etc but the inconsistency from game to game is one of the major frustrations of the current form of the game.

AUTUMN NATIONS SERIES 2024		
Top 5 Ball-in-Play times		
1	Wales 20-52 Australia	42m 19s
2=	Italy 18-50 Argentina	41m 14s
2=	France 52-12 Japan	41m 14s
4	Scotland 57-17 Fiji	41m 02s
5	Ireland 22-19 Argentina	40m 45s

AUTUMN NATIONS SERIES 2024		
Bottom 5 Ball-in-Play times		
1	Scotland 27-13 Australia	29m 33s
2	England 59-14 Japan	30m 39s
3	Ireland 13-23 New Zealand	31m 54s
4	England 20-29 South Africa	33m 17s
5	Ireland 52-17 Fiji	34m 16s

Rugby Pass

Whilst there are some positive correlations in the statistics indicating the law changes have sped up the game, the reality is that these are yet to initiate substantial improvements in this area to create a better game that is as enjoyable as possible for spectators. Increased ball in play minutes do not always lead to more tries, linebreaks, faster ruck speed and a better overall spectacle but the chances are you are going to get more bang for your buck as a spectator than stop start matches. Expectedly some of the most memorable matches correlate to the highest ball in play statistics including the 2023 RWC Quarter Final between New Zealand and Ireland where the ball was in play for 41:54 (Opta Stats Perform). The youth of today watch sport in a completely different light to past generations. Modern social media is designed for instant engagement with content that is often short and visually driven, the average attention spans of social media users has dropped from 12 seconds in 8 seconds in 2025 (SQ Magazine). If the product is boring with no flow, people will lose interest.

### REDUCE TIME WASTING

The second outcome of rugby law reforms is to reduce time wasting from scrum and lineout set up, Television Match Official (TMO) referrals, injury breaks, substitutions and water / medical runners. Teams have learnt to manipulate these areas of the game to suit their game style with the obvious example being South Africa who's power game centred around collisions, linespeed defence, set piece dominance, tactical kicking and use of forward dominant benches has suited short high intensity periods of play followed by long breaks.

Scrum resets contribute to large percentages of wasted time in games. Scrums are also frequently seen as an opportunity to win penalties with over 50% of scrums resulting in a sanction at the 2023 six nations. Scrums took 25 seconds to complete in the amateur era but now take 70 seconds on average with 2019 Rugby World Cup statistical data indicating the average scrum took 80 seconds (World Rugby).

TMO referrals are another major contributor to stoppages in the game that lead to longer total times to complete games. The two tables below show how the role of the TMO has evolved into a prominent part of the current game with interventions for foul play and multiple phases in the lead up to tries not just try scoring interventions. At the 2003 Rugby World Cup there was just 36 TMO referrals compared to 132 in 2015, the number thankfully declined to 101 in 2019. In the 6 nations the number has grown from 7 in 2004 to 32 in 2023. The average time taken in the 6 nations for each referral was 102 seconds. Part of the issue is that the game has too many 'grey' areas which do not allow quick decisions to be made. Simplification of the rules and having two referees on the field are two suggestions to be sped up this process and enhance the efficiency of referee decision making.

Rugby World Cup				
Metric / Year	2003	2011	2015	2019
TMO Referrals (total)	36	56	132	101
TMO Time Taken (sec)	n/a	n/a	70	68

World Rugby

6 Nations				
Metric / Year	2004	2015	2019	2023
TMO Referrals (total)	7	24	30	32
TMO Time Taken (sec)	n/a	90	81	102

World Rugby

Substitutions are another major contributor to time wasting in games. At the 2019 RWC there was an average of 15.6 substitutions per game, almost 60% of these were made in the last 25minutes of games (World Rugby). South Africa's famed 'Bomb Squad' at the 2019 and 2023 RWC's being the obvious example with 7 forward 1 back bench splits being used with multiple substitutions, particularly in the second half creating breaks in play thus allowing their game style where pressure not possession is the main objective to flourish.

Positively, the 'Shape of the Game' reforms seem to have had a positive impact in reducing time wasting. In October 2024, The New Zealand Rugby Union (NRU) reported Rugby Championship games being completed 3-5 minutes faster due to fewer stoppages. The average duration of Super Rugby Pacific games in 2025 was 1 hour 44 minute & 28 seconds. Of that time there is only 36 minutes & 15 seconds of live action. Taking away half time there is 54 minutes and 51 seconds of static time where play could potentially be occurring. These numbers have improved from 2024 - 2025 with total game duration reducing by 1 minute 39 seconds however it is clear that more needs to be done to reduce the total length of rugby games (Super Rugby). The game must aim to have more than 50% of ball in play and eliminate further wasted time from the game.

### ENHANCED FAN ENGAGEMENT

One of the major justifications by governing bodies driving changes to speed up the game and reduce time wasting is to increase crowds and tv viewership's. It is important to note that there are several other factors that lead to an enhanced product for the fan including a team's position on the ladder, broadcast deals, marketing, marquee players etc. In Super Rugby, the past season has witnessed growth in numbers that measure fan engagement.

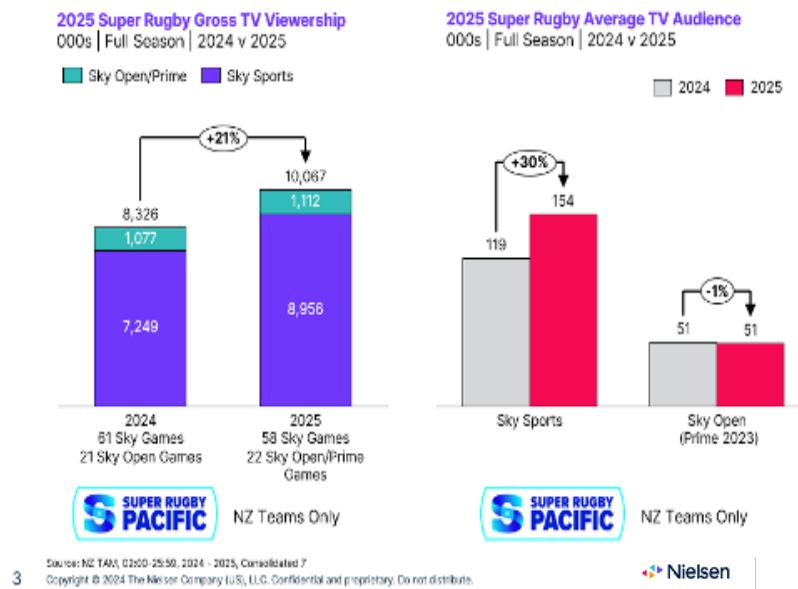
Historical Super Rugby crowd data from Austadiums (see table right) indicates growth in crowd numbers for the Waratahs, Reds and Brumbies from 2024-2025. Overall Super Rugby gross crowd numbers have also increased over 6% from 2024 to 2025 despite a reduction in the number of games from 84 to 77. Despite this growth, the table clearly indicates crowd numbers are substantially smaller than peak figures for each franchise by an average of 14,351. Compared to the National Rugby League (NRL), average crowd numbers at Australian Super Rugby games are also substantially lower, 12k to 21k, and total annual crowd numbers paint a telling story, 260k for Super Rugby, compared to 4.3 million for NRL games.

Year / Team	Waratahs	Reds	Brumbies
2003	30,521	18,425	21,536
2009	22,430	18,647	17,160
2010	20,204	22,826	15,520
2011	20,493	33,253	13,303
2012	20,936	34,479	14,419
2013	16,949	31,836	14,247
2014	19,500	28,489	12,410
2015	22,415	21,780	12,445
2016	20,322	16,605	12,135
2017	14,499	15,115	9,886
2018	13,511	12,101	8,391
2019	13,690	11,351	8,798
2020*	5,265	9,075	4,716
2021	5,170	18,699	7,396
2022	8,265	13,712	7,568
2023	n/a	12,582	9,213
2024	12,615	14,527	8,025
2025	16,211	15,679	9,593

\* Covid Pandemic

Austadiums

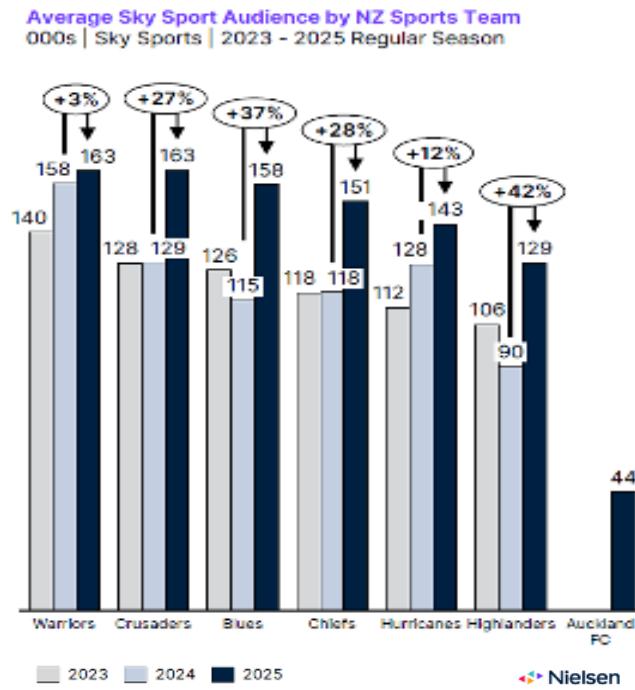
Unsurprisingly peak crowd figures correlate to successful periods for each franchise with the Waratahs first time making the semi finals in 2002 leading to big crowds in 2003. The reds two biggest averages occurred when the team won Super Rugby in 2011 and the year following and the Brumbies peak average crowd occurred in the middle of a golden period for the Brumbies where the team won 2 super rugby competitions in 4 years.



Super Rugby viewership's are also trending in the right direction. In Australia Stan Sport reported a 27% increase in average tv audiences and free to air audiences on channel 9 rose 13%. In New Zealand gross viewership has increased by 21% and digital viewership grew by 19% (see Nielsen graph left). From a social media engagement perspective Super Rugby Pacific became the first domestic rugby competition in the world to achieve 2.5million followers on social media (a 25% year on year growth).

The Nielsen table on the right compares sporting codes tv audiences in New Zealand. For the past 3 years the NZ warriors average television audiences have led the way however the Crusaders have drawn level on the back of the teams championship winning season. Average growth across all 5 New Zealand Super Rugby franchises, Crusaders 27%, Blues 37%, Chiefs 28%, Hurricanes 12%, Highlanders 42%, was significantly higher than the Warriors 3%. Similarly to crowd figures seen for Australian Super Rugby teams, audiences have correlation to season results with the Warriors finishing 4<sup>th</sup> in 2023 driving strong audiences for the following 2 years and the Crusaders winning the title correlating to strong growth.

In Australia the numbers have a much greater disparity. The average NRL broadcast audience across Channel 9, 9 Now and Foxtel/Kayo is 1.08million with the Grand Final drawing 4.4million sets of eyes (Nielsen). Stan Sport doesn't release tv audience data to the public but estimates from Nielson Sports Insights believe that average audiences sit between 150-225k across Stan Sport and Channel 9. Although there are many factors involved that arguably favour the NRL, what cannot be argued is that rugby union as a product in its current form is not as entertaining as rugby league and more needs to be done by the sport's governing bodies to close the gap.



## WHAT HAS THE NRL DONE WELL

In 2021 the NRL announced several rule changes that ARL Chairman Peter V'landys stated would lead to “less stoppages, more unpredictability and increased excitement for our fans”. The changes included six-again to be called for 10m infringements, play the ball restarts if the ball or player goes over the sideline instead of a scrum and injured players being substituted if a trainer asks for play to be stopped. These rule changes meaningfully improved rugby league with 2020 to 2021 data indicating more tries, run metres, post contact metres, tackles, play the balls and interestingly no significant increase in errors (see table below). The only metric to notably decrease was tackle breaks which indicates that players are likely more fatigued and therefore slightly less powerful in collisions.

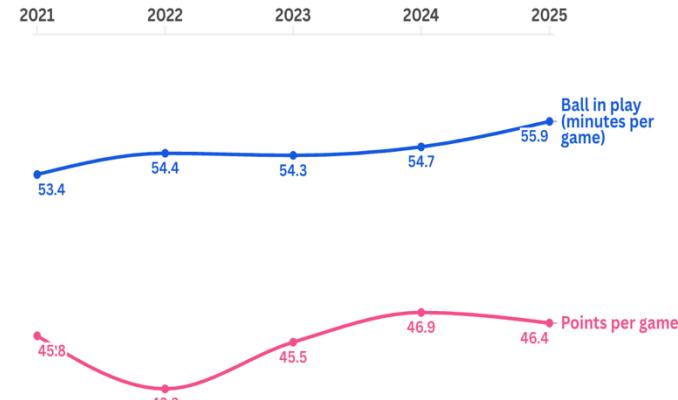
Six-again rule change	Before (n=217)	After (n=354)	Effect size (Cohen's d)
Tries	3.17 (2.76 to 3.65)	3.79*** (3.32 to 4.34)	0.32 (0.21 to 0.44)
All-run metres	1581 (1518 to 1644)	1660*** (1598 to 1722)	0.37 (0.25 to 0.49)
Post-contact metres	452 (430 to 474)	553*** (531 to 575)	1.02 (0.89 to 1.14)
Tackles	336 (326 to 346)	344*** (335 to 354)	0.22 (0.10 to 0.34)
Tackle breaks	30.9 (28.7 to 33.1)	29.4** (27.3 to 31.5)	0.17 (-0.29 to -0.05)
Play the balls	135 (132 to 138)	141*** (138 to 144)	0.39 (0.27 to 0.51)
Errors	10.5 (10.1 to 10.8)	10.7 (10.4 to 11.1)	0.09 (-0.03 to 0.21)

D Ferris, T Gabbett, T Newmans, R Simmons, C Minahan

In 2025, ball in play minutes in the NRL were at an all time high of 55.9 and the last two seasons recorded the two highest average points per game in the last 20 years. *NRL CEO Andrew Abdo recently commented “The 2025 NRL premiership regular season produced unmissable entertainment for fans.”* When comparing Super Rugby 2025, a rugby union competition with one of the highest ball in averages in the world, the NRL average 19 minutes more ball in play time per game for fans to enjoy. The challenge for rugby union is to close this gap to create a product that is more exciting to play and watch.

## Stats snapshot

Stoppages down, points up in recent seasons



Sydney Morning Herald

Whilst the two rugby codes have many different rules which largely dictate these differences in ball in play figures it is clear that rugby union needs to continue to evolve to remain attractive to the modern audience, particularly in Australia and New Zealand. Rugby must keep its own identity but replicating some of the NRL rule changes could help achieve World Rugby’s ‘Shape of the Game’ goals. Quick tap options for minor offside infringements where the opposition must retreat 10 metres and looser rules on quick throw ins to lineouts would contribute to a faster game. Players being substituted when a medic / water runner calls for play to be stopped would further reduce time wasting. Reducing the value of penalty goals from 3 points to 2 points meaning tries are of greater equivalent value, removing the ability for teams to extend the length of the ruck to set up box kick protection i.e. only 4 attacking players per ruck and red cards only for malicious play would enhance the game from a fan perspective.

## WHAT GAME MODEL IS BEST SUITED TO THE RULE CHANGES

In the 2023 Six Nations tournament the team with the most possession only won 4 out of 15 games (World Rugby). South Africa have won the last two world cups with a game model built on low possession and low ball in play averages. At the 2019 Rugby World Cup, World Rugby statistics on South Africa exemplified this:

- Less possession than 18 teams in the pool stages, less possession in the semi final and final.
- Won the most penalties on their own scrum and won the most turnovers and penalties on their opponents' scrums
- In the Quarter Final vs Wales there was a kick every 22 seconds in the game with the halves pass to kick ration 2:1
- Most penalty goals kicked
- Tapped only one penalty

The 'Shape of the Game' rule changes have been implemented to shift the dial towards rewarding fast paced high ball in play game styles which suits teams like New Zealand and Ireland. Intriguingly in Super Rugby Pacific 2025, 5 of the top 6 sides on the table held the highest average time in possession statistics with 4 of those 5 teams averaging over 50% possession per game (Opta Stats Perform). This indicates the new rules have played a part in rewarding the attacking team. However it is clear more needs to be done to reward teams with possession of the ball particularly at the international level. Despite their recent dominance at the international level, South Africa have adapted to the rule changes brilliantly, employing ex All Black and highly regarded attack coach Tony Brown to add new dimensions to the teams attack to take advantage of the new rules.

## CONCLUSION

The evidence presented in this paper indicates the rule changes that have been implemented over the past 5 years have had a positive impact in speeding up the game, reducing time wasting and increasing fan engagement. The four metrics used to determine if the game has been sped up (ball in play, tries, linebreaks and ruck speed) revealed improvements across Super Rugby, English Premiership and Top 14 with more tries and linebreaks across the board however ball in play minutes only improved in Super Rugby. Rugby Championship and Super Rugby data confirm a reduction in time wasting in games driven by shorter time frames to set scrums, lineouts and take shots at goal. TMO referrals and substitutions are major contributors to time wasting that need to be further scrutinised to provide greater flow in games and reduce the total time taken to play a rugby game as well as static time in games. Crowd and television audience figures have revealed growth in New Zealand, Australia, England and France however the Australia Super Rugby historical crowd figures highlight the game's popularity is still quite a way off historical peaks.

It is important to note that the rule adaptations are not the only factors that have led to the changes in these numbers however it is clear to see they have made some impact. The lack of alignment between domestic competitions around the world and World Rugby is a major hurdle that rugby as a global game needs to overcome. This is where the NRL has a huge advantage over rugby with a monopoly over the governance of the game and therefore the ability to make changes quickly without having to be approved by multiple boards around the world.

At the professional level coaches are judged by wins and losses and although there are certainly coaches in charge of professional teams with philosophies that run much deeper than just winning, the reality is that the vast majority of coaches prepare their teams in a way that gives them the greatest chance of victory even if that isn't in line with the 'Shape of the Game's' vision for rugby. Whilst it is evident that the recent rule changes have made a small positive impact on the game, this paper demonstrates that more rules need to be adapted to entice teams to play a faster, high skilled game where possession is rewarded to achieve World Rugby's desired 'Shape of the Game' outcomes.

## REFERENCES

World Rugby RWC Game Analysis - <https://www.world.rugby/the-game/game-analysis/reports/rwc>

- Rugby World Cup Statistical Reports 2011, 2015, 2019

World Rugby International Game Analysis - <https://www.world.rugby/the-game/game-analysis/reports/internationals-men>

- Six Nations Statistical Reports 2004, 2015, 2019, 2023

Opta Pro Rugby Hub by Stats Perform - <https://www.optaprорugby.com/home.php>

- Trend Reports Super Rugby Pacific 2023, 2024, 2025
- Trend Reports Gallagher Premiership 2024, 2025, 2026
- Trend Reports Top 14 2024, 2025, 2026
- Trend Reports International Rugby 2023, 2024, 2025

Nielsen Sports Insights - <https://nielsensports.com/insights/>

Rugby Pass Super Rugby Stats - <https://www.rugbypass.com/super-rugby/stats/>

World rugby Laws of the Game - <https://passport.world.rugby/laws-of-the-game/laws-news/2025-01-global-law-trials/>

SQ Magazine - social media screen time statistics 2022: How much time are we spending online?

<https://sqmagazine.co.uk/social-media-screen-time-statistics/>

Journal of Athletic Enhancement: Impact of New Rules Changes on Australian Professional Rugby League

Matchplay and Wellbeing Statistics-Implications for Training Program Design. D Ferris, T Gabbett, T Newmans, R Simmons, C Minahan 2024 - [https://www.scitechnol.com/peer-review/impact-of-new-rule-changes-on-australian-professional-rugby-league-matchplay-and-wellbeing-statistics-implications-for-training-Cl53.php?article\\_id=26726&utm](https://www.scitechnol.com/peer-review/impact-of-new-rule-changes-on-australian-professional-rugby-league-matchplay-and-wellbeing-statistics-implications-for-training-Cl53.php?article_id=26726&utm)

<https://www.world.rugby/news/990784/shape-of-the-game-2025-reinforces-collaborative-approach-to-sustaining-rugbys-long-term-vitality>

<https://www.world.rugby/news/778344/world-rugby-looks-to-enhance-the-flow-of-the-game-with-law-application-guidelines>

<https://www.rugby.com.au/news/world-rugby-brings-in-more-law-trials-to-speed-up-game-20241115>

<https://super.rugby/superrugby/news/shape-of-game-refinement-a-focus-for-super-rugby-pacific-in-2025/>

<https://www.allblacks.com/news/world-rugby-law-trials-aim-to-boost-speed-and-entertainment-in-2025>

<https://www.rugby.com.au/news/super-rugby-pacific-reaches-new-heights-in-2025-202563>

<https://www.rugbypass.com/news/world-rugby-measures-produce-more-bang-for-your-buck>

<https://www.nine.com.au/sport/rugby/super-pacific-2025-australia-success-tv-ratings-crowd-numbers-exclusive-analysis-news-20250324-p5lm4r.html>

<https://www.abc.net.au/news/2020-07-01/super-rugby-rule-changes-to-shape-games-future-bring-back-crowds/12404934>

<https://premiershiprugby.com/content/law-changes-how-tweaks-could-impact-gallagher-premiership-rugby>

<https://www.ruck.co.uk/gallagher-prem-enacts-law-change-that-has-nigel-owens-fuming/>

<https://www.austadiums.com/sport/comp/super-rugby/crowds>

<https://www.smh.com.au/sport/nrl/nrl-ball-in-play-numbers-at-all-time-high-as-key-2025-stats-revealed-20250910-p5mtsu.html>