PLAYER LOAD GUIDELINES

Purpose and Status of the Guidelines

The purpose of the Player Load Guidelines (the Guidelines) is to contribute to World Rugby's commitment to mitigate the risks involved in playing rugby. Player Load is accepted to be a factor associated with a number of these risks including but not limited to, the length of the playing season, the number of matches played per season and the frequency and type of training sessions. The Guidelines present recommendations to address player load in order to mitigate these risks.

It is recognised that player load is best managed at a domestic or local level, where the subtleties and specifics of different competitions are best understood. Therefore, where Unions, Leagues and relevant Player Associations have already entered into agreements relating to player load (local agreements) these will remain in place and apply to all players playing in those competitions. For the avoidance of doubt, a hybrid approach should not be adopted, and Unions, Leagues and Player Associations should either use local agreements in their entirety or adopt global guidelines to develop a local agreement. Where local agreements reach the end of their tenure, revised or new agreements will be respected by extension.

World Rugby supports the individualised management of player load using best practice tools and concepts. This involves the measurement/monitoring of all aspects of player load using a variety of tools, with subsequent management of load based on a multitude of factors, while adhering to common principles. These principles include periods of complete absence from rugby activity during the calendar year, an understanding of match and training contribution to load, and a commitment to managing match appearances and contact weeks through the season, while providing adequate rest periods for recovery. Adherence to these principles will minimize the risks of injury, while enabling optimal preparation and performance.

An individualised approach such as this is recognised as the gold standard in load management and should be implemented where resources and capacity exist to do so. In the absence of such resources, and in order to support individualised load management strategies with specific applications of the principles introduced above, this document proposes a number of recommendations for load management that should be implemented where individual management processes within local agreements are not already in place.

Managing a players load optimally through the application of local agreements and/or these guidelines must respect a balance between Unions and Clubs according to the principle of "shared responsibility". "Shared responsibility" must apply to the formation and development of player management plans but must also consider the consequence of any rest. It is acknowledged that sharing responsibility ensures fairness between international and domestic competitions from a performance, competition integrity and commercial perspective. It is therefore accepted that any recommendations for future or evolved guidelines must consider this fair balance and World Rugby will commit to undertaking further work to review how this fundamental principle is applied.

¹ Quarrie, K. L., et al (2017) Managing player load in professional rugby union: a review of current knowledge and practices (bmj.com).

Within the global professional and elite rugby landscape, there are various Unions and Leagues where there are no local agreements, or where the local agreements do not apply to all players.² As the global governing body, World Rugby is working to ensure that recommendations relating to player load are in place for *all* players.

Where no local agreements currently exist, Unions, Leagues and Player Associations are encouraged to work together to develop local agreements and submit them for recognition. The recognition process is outlined in Appendix 1. As these local agreements become recognized, they will be listed in this live document in Appendix 2.

These Guidelines should therefore operate as a template for Unions, Leagues and relevant Player Associations to design appropriate local agreements where none currently exist, or to be applied directly if desired.

An integral part of the Guidelines is the continued operation of the Player Load Project Group (PLPG) which draws together experts across all stakeholder groups to monitor current practice, gather and analyse existing research, and provide recommendations for the evolution of these Guidelines as new competitions develop and existing models expand. In line with the principle agreed in Paris 2023, peer-reviewed research shall be sought to inform any specific changes to welfare standards. Where such research does not exist then expert opinion will be sought from relevant working groups e.g. The World Rugby Concussion Working Group. The PLPG will adopt a precautionary approach in the absence of evidence or expert opinion.

It is recognised that future changes to the template Player Load Guidelines having an impact on the availability of players for their club will require shared implementation by Unions and Clubs and shall be accompanied by amendments of Regulation 9 as a result (including approval of the Professional League Advisory Committee). For the avoidance of doubt, this shall not be interpreted as a veto right for the PLAC.

Where a Local Agreement applies, the implementation of such changes shall apply to the players evolving in the relevant country only if there is a modification within the terms of that Local Agreement and provided that the impact of the modification is shared between Unions and Clubs by agreement. Where no Local Agreement exists, implementation will occur by agreement between the relevant Unions, Clubs and Player Associations in a manner that balances the impact on Unions and Clubs.

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² Some local agreements apply only to local players and not players from outside the domestic Union of the competition.

The Guidelines

1. Off-season

Based on current practice and published research³, the recommendation is that player welfare is best served with a minimum of five consecutive weeks leave every year.⁵

Leave is defined as being free from any team assembly or obligations. Players can be given training schedules, but these are to be followed at the time and place of the player's choice and cannot be monitored. It is therefore the responsibility of the player to ensure that they manage their own fitness status during the off-season period as this may influence their risk of injury on return to pre-season training.

2. Match numbers / Sequence of matches in the season.

The increased risk of injury and the need to limit exposure to accumulated load, particularly Head Acceleration Events, demand that game involvements are limited across a season. This is, naturally, challenging given the match schedules and incentives of teams, players and investors, but is essential for player welfare.

In response, two alternative recommendations, A and B, are made. In each country it is up to Union, League, and relevant Player Association to decide to engage in one or the other or both.⁶

A program of monitoring and research by the PLPG will be implemented, to follow and evaluate the impact of the two recommendations.

Recommendation A:

Based on current practice and published research,⁷ recommendation A is to respect a maximum of thirty match involvements in any season. A match day involvement requires a player to take the field for at least 1 minute of play in line with the research upon which this recommendation is based.

It is accepted that this recommendation may create practical issues, where players reach match limits before a semi-final, final or international block. Ideally, advance planning should avoid such situations, but in exceptional circumstances, the recommended limit may be exceeded, provided that individual management principles are applied and additional recovery mechanisms, such as an additional weeks leave for each match involvement over 30, are applied while respecting the principle of "shared responsibility" outlined above.

³ Mellalieu S. D., Sellars, P. A., Arnold, R., Williams, S., Campo, M., & Lyons <u>D. (2023). Professional male rugby union players' perceived psychological recovery and physical regeneration during the off-season (bmj.com)</u> https://doi.org/10.1136/bmjsem-2022-001361

⁴ Mellalieu, S. D., Sellars, P. A., & Arnold, R. (2024). Elite rugby union women players' psychological and physical recovery during the off-season. Cardiff Metropolitan University, UK. https://doi.org/10.25401/cardiffmet.28227956.v1

⁵The IRPA position is that the non-competition period (which means a period free from competitive matches, but which should involve a progression of contact load and finish with pre-season/warmup fixtures) should be a minimum of 10 weeks, with 12 weeks as the optimal number, and further research and work is required in this area from the PLPG.

⁶ For the avoidance of doubt, where a player plays in a League outside of his National Union they will be bound by the recommendation of the League played in.

⁷ "The influence of match exposure on injury risk in elite men's rugby union" https://www.jsams.org/article/S1440-2440(22)00467-4/fulltext

Recommendation B:

Recommendation B is an approach based on consecutive match participations (involvement in match day 23) followed by one week without a match, to prevent accumulated fatique.

Recommendation B is:

- Sequence of six consecutive match involvements⁸, regardless of the team representation (i.e. six consecutive match weekends maximum); at the end of this sequence, the player should benefit from a weekend without a match but may train at the discretion of the Club.9
- Provide exemption conditions depending on situations making it necessary to select the player beyond the 6th match (example: lack of players in a position) and additional "recovery" mechanisms if this sequence of 6 matches is exceeded in exceptional circumstances (example: if the individual plays a 7th consecutive match, then the following week without a match must include a minimum number of days of complete rest – details of this mechanism have to be defined by the stakeholders locally, between League, Union and Player Association).
- Conditions need to include the importance of Club, Union and Player Association co-operation concerning international players and any sequences of matches involving international matches.
- In the above potential scenarios, Clubs and Unions are encouraged to plan ahead for each of these consecutive match blocks, and to seek agreements prior to invoking exemptions.

3. Rest post international blocks.

Players often face travel burdens as well as a significant increase in physical and mental load across blocks of international matches. Implementation of these recommendations must respect a balance between National teams and Clubs according to the principle of "shared responsibility."

Where Local Agreements do not exist, the recommendation is that every player who is selected in the match day 23 for three or more consecutive international matches, across consecutive weeks, should be provided with a week of "non-contact" following the completion of this block.

In the event of the Rugby World Cup, where the assembly period is longer and physical and mental load greater again, all players in the original squad selected for a Rugby World Cup, or players called into a squad for more than 4 weeks, should be provided with 1 week of "leave" and 1 further week of non-contact training at the completion of their Rugby World Cup.

⁸ Inclusion in the matchday squad of 23

⁹ "individualized" management of the weeks without a match, taking into account the time of the season, the specific situation of the player, sporting challenges, domestic agreements in force, and local labour law; thus these weeks without a match could be periods of complete rest (holidays), periods of light training, periods of training, or a mix between rest and training.

 $^{^{10}}$ Non-contact as referred to in recommendation #5, defined as free from contact training, explained Appendix 2

¹¹ Leave as defined in Recommendation 1 "free from any team assembly or obligations. Players can be given training schedules, but these are to be followed at the time and place of the player's choice and cannot be monitored."

4. Country-club communication enhancement

Enhanced communication will improve the decision-making capabilities of the coaching staff at both elite Club and National team, which will allow load to be managed more effectively in the transition between Clubs and National teams. This can be achieved by facilitating best-practice methods for documenting and then communicating load in both directions – from Club to National team, and vice-versa.

This communication should take three forms. First, in the lead up to an international block, where players will leave their Clubs, a performance schedule should be shared with the Club. This should contain details of the specific training sessions that the player will undertake, documenting their volume and intensity. It should also outline recovery modalities that will be used, and any other descriptions of activities that may affect player load during the preparation phase for an international match.

Second, and in response to this performance schedule, Clubs should share an overview of the player's recent training and match load with the National team coaching staff. This will include details regarding volume, intensity, and frequency of training and any relevant injury and illness data.

Third, after the international period is completed, the National team staff should submit a post-camp/match report to the player's Club team. As above, this should outline training load data, including distances run, high speed running, contact load, training duration, and the player's RPE and other subjective assessments of load. It should also include any relevant injury data.

Both reports, from Club to National team, and National team to Club, may be enhanced with available technology, such as GPS data for distances run and accelerations/decelerations completed, and using instrumented mouthguards which may be used to track contact load by means of head acceleration events. National Unions should be encouraged to develop open, productive data sharing agreements to support this feedback.

The post-camp report should also contain information pertaining to wellness monitoring. As is standard practice, regular feedback, including daily monitoring of levels of psychological readiness, rest, and recovery, alongside player mental health and wellbeing, should be shared from National teams with Club teams when players return to their Clubs. Specific details and templates for both these reports will be explored on a country-by-country basis, will evolve over time, and will be shared across the game.

The regular sharing of these performance schedules and post-camp/match reports will facilitate a better understanding of player load and will make the transitions from club environments to international environments, and back, more seamless, and effective, to the benefit of player welfare.

5. Minimising Contact Exposure

While objective data to precisely identify the optimal limit of exposure to contact is currently lacking, research has established contact training as having an elevated risk of injury, compared to non-contact training,¹² and a World Rugby working group previously concluded that "the focus of load management within rugby teams should primarily be directed towards training."¹³¹⁴ In addition to this, indirect scientific evidence suggests an association between cumulative head impacts over a career in contact sports (such as American Football and ice hockey) and later-life neurodegenerative diseases.

Therefore, the PLPG supports a commitment to gather more higher quality evidence from the elite game to inform decisions to minimise contact exposure during a player's career. This research should include an evaluation of the current season structure to better understand the feasibility and implications of law-change, training limits, non-contact periods/weeks, and qualitative assessments of coaching and conditioning practices in the elite game. In the longer term, contact training type, volume, density and frequency should be explored as a predictor of injury and illness risk.

In the interim, and as a precautionary measure within an intelligent risk management strategy, the number of non-contact weeks per calendar year should be maximized as far as reasonably possible, with a recommended minimum period advised by the PLPG in due course. The Concussion Working Group recommendation regarding non-contact periods is outlined for future consideration at Appendix 3.

The World Rugby Player Load Monitoring Tool will assist the group in estimating a reasonable limit of non-contact weeks contact as part of any new Guideline proposals in the future.

¹² England Professional Rugby Injury Surveillance (PRISP), Season Report 2022/23

¹³ Quarrie, K. L., et al (2017) Managing player load in professional rugby union: a review of current knowledge and practices (bmi.com).

¹⁴ "Contact training warrants attention because of higher overall injury and head impact risk" Starling, L. T., et al (2023) The World Rugby and International Rugby Players contact load guidelines: from conception to implementation and the future. South African Journal of Sports Medicine.

¹⁵ The recommendation of World Rugby's Concussion Working Group which is that this number should be set at 12 weeks, as explained in Appendix 3.

Appendix 1- Process for recognition & registration of local guidelines

As stated in the purpose section, Unions, Leagues, and Player Associations are encouraged to work together to develop local agreements and submit them for recognition. World Rugby and IRPA will provide support where required.

It is intended to put a recognition panel in place which will comprise representatives from the following agencies:

- World Rugby
- International Rugby Players Association
- Professional Leagues Advisory Committee
- Player Load Project Group

Existing and Future local agreements (and their future revisions) should be recognized and published provided they are signed by:

- The competition organizer, and
- The players' representative body, which must itself be recognized by the IRPA.

This process is designed to be supportive and educational, and for the avoidance of doubt, the recognition panel does not have any ability to amend or reject a local agreement. The questions below are designed to prompt consideration and reflect the PLPG key considerations. For the avoidance of doubt, not all themes below are required to be included in any agreement that has been made locally:

World Bughy/International Bughy Players: Player Load C	uidalina	s Losa	Agraamant
World Rugby/ International Rugby Players: Player Load G Recognition & Registration sche		S-LOCa	Agreement
Name of applicant:			
That is of applicant.			
Who are the signatories to this local agreement?			
Question	Yes	No	Supporting evidence
Is there a commitment to individualized load			
management?			
Does this agreement include all relevant domestic parties			
e.g. Unions, Leagues, and Player Associations?			
IF THE ANSWER TO QUESTIONS 1 & 2 IS YES, THEN TH	E REMA	INING C	UESTIONS
ARE PURELY FOR CONSIDERATI	ON		
Is there a defined off-season (free from any team or			
assembly obligations)?			
Is there a maximum match involvement per season?			
Is there provision for a week off after a sequence of			
consecutive matches?			
Do you have a clearly defined exemptions panel to deal with exceptional circumstances?			
Are there specific rest periods defined for players in the			
post international block window?			
Are there clear procedures for club: country			
communication in relation to load before, during and after			
an international window?			
Is there a defined number of non-contact weeks defined			
per calendar year?			
Is the agreement delivered with the principle of "shared			
responsibility" in mind?			
Are all elements of the Local Guideline applied equally to			
local and foreign players?			

The panel will provide support to the applicants and will register the local guidelines in Appendix 2.

Appendix 2 - Local Agreements

Below is a list of recognized local agreements agreed between Unions, Leagues and relevant Player Associations relating to player load.

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Appendix 3 - Accumulated Non-contact Periods during the season.

Principle

- Every player should be provided with an accumulated period of non-contact training, season by season.
- This accumulated period may be determined within an individualised player management strategy that documents a player's exposure to contact (match appearances, match minutes, contact involvements, HAEs measured by the IMG etc) and then manages contact in individuals deemed at risk. In the absence of such individualised management, a recommendation for 12 weeks of non-contact is suggested
- This non-contact period includes off-season, pre-season, injury breaks, bye weeks and travel periods.
- Non-contact weeks must be full weeks (i.e. 7 days), but do not all have to be consecutive, do not have to be observed by the whole team at once and can vary from player to player.
- Five of these weeks should be consecutive (as per Player Load Guidelines "off-season")
 - Example: a whole team may be given 5 weeks off-season, 2 weeks preseason (non-contact) and then individual players managed with different non-contact weeks depending on matches they are not playing, injuries they have or breaks in the season.
 - Player A has 5 weeks off-season, 2 weeks pre-season (non-contact), 2 bye weeks (non-contact) and is given 3 weeks non-contact ahead of matches she is not playing = 12 weeks non-contact.
 - Player B (in the same squad) has 5 weeks off season, 2 weeks pre-season (non-contact) and has a 7-week injury where she has no contact training = 14 weeks non-contact.
 - Player C (in the same squad) has 5 weeks off season, 2 weeks pre-season (non-contact) and later joins her international team, where she has a week (non-contact) of travel and assembly. She has another week (non-contact) after the international matches and has 4 more non-contact weeks before matches she is not playing = 13 weeks non-contact.
- A non-contact week **can** include strength sessions, gym work, cardio, non-contact field sessions, team planning, non-contact training drills, commercial commitments, team meetings, injury rehab etc.
- A non-contact week **cannot** include matches or training drills involving live tackling, cleanout, live set-piece or opposed set-piece. A smart mouthguard should not register any head acceleration events over 15g.
- Non-contact periods should be jointly monitored by the player and relevant member of the Performance or Medical department of the team.
- Non-contact periods for all professional players should be entered into SCRM.

Rationale

- "Non-contact" is already commonly understood by players and coaches, particularly relating to injured players and players following GRTP post-concussion.
- Non-contact periods are the simplest measure to limit exposure to Head Impact Events and all other contacts that are known to be injurious, particularly for concussion.
- Cross-border players would specifically benefit from such an intervention, where Club and International seasons do not provide sufficient leave periods.

- Implementation would require co-operation between Clubs and Unions regarding international players.
 - o Example: a Union may have a player for a 3-month period and provide 3 weeks "non-contact", which would be communicated with the Club to ensure the remaining 9 weeks are observed over the following 9 months.
- Similarly, where applicable, there should be appropriate communication between a player's Club, Union when a player transfers to another Club or Union.