

ICC T20 INTERNATIONAL CRICKET: DECISION REVIEW SYSTEM (DRS) AND UMPIRING

1. OVERVIEW OF THE DECISION REVIEW SYSTEM

The Decision Review System (DRS) is a technology-based process that assists match officials in making accurate decisions. It was first used in a T20 International during the 2014 ICC World Twenty20, and the ICC made DRS mandatory for all T20I matches in 2017.

The DRS serves two primary functions:

- **Umpire Reviews:** On-field umpires may voluntarily refer decisions to the third umpire for verification.
- **Player Reviews:** Players may challenge an on-field umpire's decision by requesting the third umpire to review it.

2. NUMBER OF REVIEWS PER TEAM

In T20 International cricket, each team is currently allowed two unsuccessful player reviews per innings. If a review is successful (i.e., the on-field decision is overturned), the team retains that review and it is not counted against their allocation.

Originally, teams were given only one review per innings when DRS was first introduced in T20Is. The allocation was increased to two per innings following adjustments made during the COVID-19 period, and this has remained in effect since.

If a review results in an "umpire's call" verdict (meaning the on-field decision stands but is within an acceptable margin of uncertainty), the reviewing team does not lose that review. This was an important change introduced in October 2017 to prevent teams from being penalized for borderline decisions.

3. WHO CAN REQUEST A REVIEW

Only specific individuals are permitted to initiate a player review:

- The batter at the crease can request a review if they have been given out by the on-field umpire.
- The fielding captain can request a review if the on-field umpire has given a not-out decision that the fielding team wishes to challenge.

No other player may initiate the review. Additionally, no external input from the dressing room, coaching staff, or any other source is permitted during the review decision process. The decision to review must be made independently by the players on the field.

4. THE DRS TIMER (15-SECOND RULE)

Teams must decide whether to use a review within 15 seconds of the umpire's original decision. This is known as the DRS timer rule. The 15-second window begins immediately after the umpire signals their decision.

To formally request a review, the player makes a "T" sign with both forearms held at head height. This signal must be made clearly and within the 15-second window. If the signal is not made within this timeframe, the right to review that particular decision is forfeited.

5. WHAT DECISIONS CAN BE REVIEWED

Player reviews in T20 International cricket are limited to specific types of decisions:

- LBW (Leg Before Wicket) decisions — both out and not-out calls
- Caught decisions — including catches by fielders and the wicketkeeper
- Any "out" or "not out" decision

Player reviews CANNOT be used to challenge:

- Wide ball calls
- No-ball calls
- Run-out decisions (these are handled by umpire reviews)
- Boundary check decisions (also handled by umpire reviews)

Note: In some domestic T20 leagues like the IPL, players can review wide ball calls, but this is not permitted in international T20 cricket under ICC rules.

6. UMPIRE'S CALL

"Umpire's call" is a critical concept in the DRS framework. It applies when the technology shows a result that is within an acceptable margin of uncertainty, meaning the evidence is not conclusive enough to overturn the original decision.

For LBW reviews, the umpire's call comes into play in two scenarios:

- Ball tracking shows the ball hitting the stumps but with less than 50% of the ball projected to be hitting the stumps. In this case, the on-field decision stands.
- The point of impact (where the ball hits the pad) is shown to be marginally in line with the stumps but is within the acceptable zone of uncertainty.

The rationale behind umpire's call is that DRS is designed to correct clear and obvious errors, not to second-guess marginal decisions. Since ball-tracking technology has inherent margins of error, decisions that fall within this zone of uncertainty are left to the on-field umpire's original judgment.

Crucially, if the result of a review is "umpire's call," the reviewing team does NOT lose their review. This encourages teams to review decisions they genuinely believe are wrong without being penalized for borderline outcomes.

7. TECHNOLOGIES USED IN DRS

The DRS employs several sophisticated technologies:

7.1 Ball Tracking (Hawk-Eye / Virtual Eye)

Ball-tracking systems like Hawk-Eye use multiple high-speed cameras positioned around the ground to track the ball's trajectory from the moment it leaves the bowler's hand. For LBW decisions, the system projects the ball's path forward to determine whether it would have gone on to hit the stumps. The system calculates the point of pitching (where the ball bounced), the point of impact (where it hit the pad), and the projected path to the stumps.

7.2 Ultra-Edge (Snickometer)

Ultra-Edge, an evolution of the original Snickometer, uses highly sensitive microphones placed in the stumps to detect faint sounds when the ball makes contact with the bat or pad. It displays a real-time waveform synchronized with ultra-slow-motion video footage. This technology is primarily used for caught-behind appeals and thin edges. A spike on the waveform at the exact moment the ball passes the bat indicates an edge has been made.

7.3 Hot Spot (Thermal Imaging)

Hot Spot uses infrared cameras to detect heat generated by friction when the ball contacts the bat, pad, or any other object. Contact shows up as a bright white mark on the thermal image. This technology helps determine whether the ball hit the bat before the pad in LBW appeals or to confirm faint edges in caught decisions.

7.4 Ultra-Motion Cameras

Ultra-slow-motion cameras capture footage at extremely high frame rates, allowing the third umpire to examine the moment of contact in fine detail. These cameras are essential for determining clean catches (whether the ball touched the ground), close run-outs, and stumpings.

8. UMPIRE REVIEWS (NO LIMIT)

On-field umpires have the authority to refer certain decisions to the third umpire at any time, without any limit on the number of such referrals. This is called an "umpire review" and is distinct from player reviews.

Umpire reviews are commonly used for:

- Run-out decisions
- Stumping decisions
- Boundary checks (whether the ball or fielder touched or crossed the boundary)
- Catch verification (whether a catch was taken cleanly)
- Hit wicket decisions
- Bump ball determinations (whether the ball bounced off the pitch before being caught)

The on-field umpire signals a referral to the TV umpire by making a rectangular "TV screen" shape with their hands. The third umpire then reviews the available footage and communicates the decision back to the on-field umpire.

9. THIRD UMPIRE PROTOCOL

When a review is initiated (either by a player or the on-field umpire), the third umpire follows a specific protocol:

For LBW reviews, the third umpire checks: 1. Whether the ball pitched in line with or outside off stump (a ball pitching outside leg stump cannot result in an LBW dismissal). 2. Whether the point of impact is in line with the stumps (or outside off stump, which may still be out if the batter was not offering a shot). 3. Whether the ball was projected to hit the stumps based on ball tracking.

For caught decisions, the third umpire checks: 1. Whether the bowler delivered a legal delivery (no-ball check). 2. Whether there was an edge using Ultra-Edge and/or Hot Spot technology. 3. Whether the catch was taken cleanly without the ball touching the ground.

The third umpire communicates their findings to the on-field umpire via radio, and the final decision is displayed on the stadium's big screen for players and spectators.

10. DRS IN SUPER OVERS

The Decision Review System remains fully active during Super Overs. Each team retains any remaining reviews from their regular innings for use during the Super Over. DRS technology and protocols operate identically in the Super Over as during the main match.