

Operation of the DLS method (30 September 2018)

The DLSMM and their duties

1. A person competent in the way DLS calculations are performed should be appointed for each match. That person should be responsible for all DLS calculations and for the communication of such information to all relevant parties. The person appointed will here be referred to as the DLSMM (DLS match manager).
2. The DLSMM will ensure that the current version of the DLS software is available and can be operated in a location where there is instant communication with the scorers.
3. If there is an interruption during the Team 1's innings which is long enough to result in a loss of overs, as soon as the number of overs lost is known, the stoppage details should be entered into the DLS software and the possible Targets table should be produced and provided to both teams and other officials as necessary to indicate the likely size of the eventual target adjustment for Team 2.
4. When Team 1's innings has been completed:

If Team 2's innings is delayed and it seems likely that they will be allocated a reduced number of overs, a print-out of the schedule of Team 2 targets for any number of initial overs should be produced and circulated to match officials, both team camps and the PA announcer, and to other parties from the list below at the DLSMM's discretion.

If overs have been lost during Team 1's innings or before Team 2's innings can start, as soon as Team 2's allocation of overs is known, the DLSMM will confirm Team 2's revised target and communicate this to the match officials, the PA announcer and the scoreboard operator.

In all matches, they will run the DLS software and produce both an over-by-over and a ball-by-ball print-out of the par score schedule and make as many copies as are needed. The over-by-over print-out should be distributed to:

- match officials
- both team camps
- PA announcer
- scoreboard operator
- each broadcasting team (at the DLSMM's discretion)
- press box (at the DLSMM's discretion)

If they judges that it may be required, the DLSMM will also distribute the ball-by-ball print-out to:

- match officials
- both team camps
- scoreboard operator (only where electronic scoreboards displaying ball-by-ball par scores are in use – the DLSMM will advise the scoreboard operator when this information should be displayed [see item 12])

5. If there is a suspension in play during Team 2's innings, the DLS software should be run as soon as it is known that there will be a loss of overs and the situation at the stoppage should be entered. Then a print-out should be produced giving the full schedule of revised Team 2 targets for any number of overs lost. This should be copied and distributed to
 - match officials
 - both team camps
 - PA announcer
6. When play is about to restart, the DLSMM should run the DLS software and confirm Team 2's revised target to the match officials, PA announcer and scoreboard operator. They will then produce over-by-over and ball-

by-ball print-outs of the par scores, make copies and distribute the over-by-over table (and the ball-by-ball table at their discretion) as quickly as possible to the same parties as in item 3 above, ensuring that both team camps and the scoreboard operator receive their copies immediately.

7. If, during Team 2's innings, Team 2 incur a penalty for which 5 runs are awarded to Team 1, the DLSMM should ensure that the scoreboard operator adds these 5 runs to Team 2's target and to all par scores. They should enter the penalty runs in the DLS software but not produce revised par score print-outs until these would be required in any case by virtue of a further loss of overs. After such an interruption, they should maintain a check that the correct revised target and par scores are displayed on the scoreboard.
8. At the end of the game, the DLSMM should enter the final match information into the DLS software and confirm that the winning margin is correctly recorded and announced.
9. If a DLS revised target has been set, even if the match is subsequently declared 'no result', the DLS report produced by the software should be created (see the software operating instructions) and sent to Steven Stern using the facilities provided within the software. This should also be copied to the host country's cricket board (as per procedure agreed by that nation's board) and to ICC (in the case of an international match). If the facility to produce and email this report as directed is not available, then the form given in Appendix I should be completed and sent to the host country's cricket board (as required) and to ICC (if an international match). For ICC, the report may be emailed to clive.hitchcock@icc-cricket.com.

Duties of scoreboard operator

10. Any revised target should be displayed as soon as it has been communicated. (On scoreboards where there is insufficient room to display both the score actually made by Team 1 and Team 2's revised target, the scoreboard should show the score that Team 2 must beat in order to win the match. This should be displayed in the area of the scoreboard where Team 1's score would normally be displayed; a PA announcement should explain this).

From the time when half the minimum number of overs required for the game to be viable have been received by Team 2 (or earlier if desired), the DLS par score should be displayed. As a minimum requirement this should be the figure relating to the *end* of the over in progress and it should be updated just as each new over is about to commence. (For example, for matches where 20 overs/side would constitute a valid match, the par score should be displayed no later than the start of the 11th over.) It should also be updated upon the fall of a wicket and before the new batsman has walked out to bat.

It should be the figure as printed in the par score print-out for the *end* of that over (remembering to add any penalty runs incurred as described in item 7 above). Do *not* add one run to this par score and then refer to this as a 'target'. [Note: Because it provides information to spectators on the progress of Team 2 towards their target, the par score should be displayed as described in this paragraph whether or not there is a reserve day and regardless of the current weather conditions.]

11. If an interruption of play may be imminent, the DLSMM, after liaising with scorers and match officials as appropriate, may require that the par score instead be updated after each ball. (See Appendix II – PA Announcement)
12. As an enhancement to the above minimum requirement, a Member Board may instead permit the electronic scoreboards at its venues to display either:
 - The par score for the next ball to be bowled, provided the scoreboard states that it relates to the next ball, displays elsewhere the number of deliveries bowled in the over and that the par score is updated at the same time as the number of deliveries bowled; or
 - If space permits, the six par scores for each ball of the over in progress or about to start.In each case the par scores should be clearly labelled as those which would result in a tied match in the event of the match being abandoned.
13. When play is suspended during Team 2's innings the scoreboard should display the par score for the exact number of overs and balls bowled and retain this display for the duration of the stoppage. When play resumes the display should revert to the par score display in use prior to the interruption.

Duties of the PA (public address) announcer

14. Whenever a revised target is set, they should announce this just before play is about to restart and, as appropriate, explain the scoreboard display.
15. When the DLS par score display first appears on the scoreboard, and at several other times during Team 2's innings, they should make the announcement given in Appendix II.
16. If play is suspended during Team 2's innings and the par score displayed on the scoreboard has changed to that for the exact number of overs and balls bowled, as in item 11, they should make an announcement to this effect

Provision for computer malfunction

17. The home cricket authority responsible for the match should ensure where possible that provision is in place to be able to operate the DLS method if computer malfunction should occur. Such provision might comprise having a reserve computer available or establishing a telephone link to someone with computing facilities to operate the DLS software. (If computer malfunction occurs after Team 2's initial par score schedule has been produced and printed, this sheet should be used for future DLS calculations.) If such provisions are not available, the D/L Standard Edition should be used in the event of computer malfunction. The home authority is responsible for ensuring that the methodology and tables in respect of the D/L Standard Edition are available.

Steven Stern
3 September 2018

Appendix I – DLS report form

(Note: The DLS report produced from the DLS software may be used instead of this form)

Calculation of target score in an interrupted limited-overs match by the Duckworth/Lewis/Stern (DLS) method

This form (or equivalent documentation or online procedure as required by the relevant home board) should be completed within 48 hours by the scorers or DLSMM for every match where a DLS target is set. For an ODI, if email is not available (clive.hitchcock@icc-cricket.com), it should be faxed to the ICC at +9714 382 8600. Items in bold should be completed for every such match.

Tournament **MATCH** v

Venue (ground + town/ city) **Date**

Side batting first (Team 1) **No. of overs per side at start of match**

TEAM 1's innings: In the event of suspension in play during Team 1's innings which causes a reduction in overs, complete the following

Score at suspension 1: runs for the loss of wickets inovers.balls
Number of overs lost to Team 1's innings [if innings terminated write 'terminated']

Score at suspension 2: runs for the loss of wickets inovers.balls
Number of overs lost to Team 1's innings [if innings terminated write 'terminated']

Score at suspension 3: runs for the loss of wickets inovers.balls
Number of overs lost to Team 1's innings [if innings terminated write 'terminated']

(if more than 3 suspensions, use a second sheet and label suspensions 4 etc)

Team 1's final score runs for wks in overs.balls

Number of overs allocated to Team 2's innings at its start overs

Team 2's target at start of their innings (revised target if applicable) runs

TEAM 2's innings: In the event of suspension in play during Team 2's innings which causes a reduction in overs, complete the following

Score at suspension 1: runs for the loss of wickets inovers.balls
Number of overs lost to Team 2's innings [if innings terminated see below]
Revised target = runs from overs (revised total number of overs for innings)

Score at suspension 2: runs for the loss of wickets inovers.balls
Number of overs lost to Team 2's innings [if innings terminated see below]
Revised target = runs from overs (revised total number of overs for innings)

Score at suspension 3: runs for the loss of wickets inovers.balls
Number of overs lost to Team 2's innings [if innings terminated see below]
Revised target = runs from overs (revised total number of overs for innings)

(if more than 3 suspensions, use a second sheet and label suspensions 4 etc)

If innings terminated prematurely:

Score at termination runs for the loss of wickets inovers.balls
Par score = runs

Team 2's final score runs for wks in overs.balls

Match result: (give winning team and margin of victory)

Home Scorer **Away Scorer** (print names)

Appendix II

PA announcement to be made when DLS ‘par score’ is first shown on scoreboard and at several further instances during Team 2’s innings.

The figure shown on the scoreboard as ‘DLS’ [replace by how it is labelled] is the Duckworth/Lewis/Stern par score for the end of the over in progress. This is the score which [name of Team 2] would have to beat to win if the match were to be terminated for any reason. It also provides a useful guide as to whether or not [name of Team 2] are on course to make their target. [PA announcer may adjust the wording of this last sentence as they wish]

Note:

Where electronic scoreboards are in operation and able to display ball-by-ball par scores in accordance with the procedure outlined in item 11, the PA announcer will provide an appropriate explanation as soon as such information is displayed. They should ensure that this makes it clear that these par scores are the scores that [Team 2] need to *tie* the match if it is abandoned. The word ‘target’ should *not* be used.