

# RoboCup 2016 - Rulebook changes

## Referee box

We'll use a new refbox in 2016! It supports standardized logging, can connect to a handheld referee device and has a visualization interface suitable for communication towards spectators. A big thanks to the CAMBADA team for making this great new tool, with support of the RoboCup Federation.

Updates in: - Competition Rule 5 ([page 76](#))

- Refbox section on wiki:

[http://wiki.robocup.org/wiki/Middle\\_Size\\_League#Refbox](http://wiki.robocup.org/wiki/Middle_Size_League#Refbox)

## Standardized logging

Starting in 2016, participating in standardized data logging via the refbox pc will be rewarded with additional points for the scientific challenge.

Updates in: - Competition Rule 6 ([page 76-77](#))

- Challenge 2 ([page 81](#))

- WM Data Structure document on wiki:

[http://wiki.robocup.org/wiki/Middle\\_Size\\_League#Standardization](http://wiki.robocup.org/wiki/Middle_Size_League#Standardization)

## Faster game flow

To speed up the flow of the game, referees will be instructed to allow less time for positioning before a refbox task (seven instead of ten seconds). In this context, please also be aware of an existing rule (RC-13.1.3) which penalizes obstructing other teams robots while positioning.

After the start command is given, we also reduced the time the defending team has to wait before it can intercept the ball when the offensive team does not manage to kick it (seven instead of ten second).

Updates in: - RC-Decision 2.1 ([page 12](#), in-game coaching rule)

- RC-8.3, RC-8.4.1, RC-8.6, RC-13.4.1, RC-15.1, RC-16.1, RC-17.1 (game restarts)

## In-game penalties

For 2016 and after, we introduce in-game penalty kicks whenever a “pushing” offense (defined in RC-12.3.2) is committed inside the penalty area. Please note that the rules for positioning for an in-game penalty are different from the rules for an end-of-game penalty sequence to determine a winner in case a game ended in a draw.

Updates in: - RC-12.2 ([page 39](#))

- RC-14.1 ([page 53](#))

- RC-14.3 ([page 55](#))

- RC-14.4 ( [page 56](#) )

- RC-14.5 ( [page 57](#) )

## Technical challenge

We did not make changes to the challenge itself (making passes and swapping positions on an artificial grass field without using a centralized wifi network). The field however, will be located within a large glass hall which is part of the venue in Leipzig. Hence the robots will have to deal with natural lighting.

Glass hall: <http://goo.gl/M67odr>

Updates in: - Challenge 1 ( [page 79-80](#) )

## Compensate for time lost

To reduce the incentive for stalling, referees will be instructed to add additional playtime at the end of each half in case of time lost because of substitutions or any other unforeseen event. The refbox shows the actual `clean` playtime of the match, which can be used by the referee as a guideline.

Additional playtime only takes place when explicitly approved by the OC, in charge of the tournament schedule.

Updates in: - RC-7.3 ( [page 26](#) )