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FEATURES OF USING VIDEO SUPPORT IN SPORT GAME FUTSAL

Annotation. *Futsal is a sport that is progressing extremely well. There are a lot of dynamic moments and difficult situations in which the referee needs to make decisions. Video support is a modern technology that is designed to help the referee with this. The use of video support is completely new for such a sports game as futsal.*

In the sports game of futsal, many tricky situations occur that can significantly affect its outcome. The referee is a person who can also make a mistake. However, all participants in any sports game always strive for maximum objectivity. The demand for objectivity is also relevant in modern futsal.

Therefore, the issue of ensuring maximum compliance with the Laws of the Game in important situations, such as scoring goals, assigning penalties, removing players or accurately recording net playing time, is extremely relevant.

Own experience is used by authors which they had during the competitions: Final Eight Ukrainian Futsal Cup 2024/2025, World Cup Futsal 2024, Final Four Champions League UEFA Futsal 2024/2025.

Analyzed features about video support, protocol how to use it and methodical topics of important situations.

Keywords: sport game futsal, referee, video support, technology in sport, futsal Laws of the Game.

Проць Р., Матковіч Д., Кузьмін А. Особливості використання відео підтримки у спортивній грі футзал. *Футзал вид спорту, який надзвичайно прогресує. Дуже багато динамічних моментів і складних ситуацій, в яких арбітру потрібно приймати рішення. Відео підтримка – це сучасна технологія, яка покликана допомогти рефері у цьому. Використання відео підтримки є абсолютно новим для такої спортивної гри як футзал.*

У спортивній грі футзал відбувається багато каверзних ситуацій, які можуть суттєво вплинути на її результат. Арбітр – людина, яка теж може помилитися. Проте, усі учасники будь якої спортивної гри завжди прагнуть максимальної об'єктивності. Запит на об'єктивність є актуальним і в сучасному футзалі.

Тому проблематика забезпечення максимальної відповідності Правилам гри у важливих ситуаціях, як наприклад зарахування голів, призначення пенальті, вилучення гравців чи точного обліку чистого ігрового часу, є надзвичайно актуальною.

Авторами використано власний досвід здобутий при використанні технології відео підтримки під час проведення Фіналу Восьми Favbet Кубка України з футзалу сезону 2024/25, Чемпіонату Світу з футзалу 2024, Фіналу Чотирьох Ліги Чемпіонів УЄФА з футзалу 2024/25.

У даному дослідженні проаналізовано особливості відео підтримки, протокол її використання та методичні аспекти важливих ситуацій.

Ключові слова. *Спортивна гра футзал, арбітр, відео підтримка, технології в спорті, Правила гри у футзал.*

Formulation of the problem. There are a lot of tricky situations in futsal, which can make an impact on the result of the game. The referee is a human, who also can make a mistake. Objectivity is a very important thing in any kind of sport [1]. Due to that request, video support (VS) was also implemented in futsal and always made progress in using that. Video support is used in the best clubs and national team competitions and in each country who has the possibility to use it. The referee's work with that is an interesting topic also, so we will see how it should be as usual [2; 3; 4].

Results of the research and discussion. The referees make use of video support when a team's head coach (or, in the head coach's absence, a designated team official as stipulated on the team list) challenges a decision in relation to the next situations: goal/no goal, penalty/no penalty, direct red cards (not second cautions), mistaken identify. Of course, all of that is the most important decision in the game. In addition, video support can be used at the referees' discretion when there is a disagreement between the two referees regarding an incident in one of the above-mentioned categories.

There are some situations, when video support can also be used at the referees' discretion: if the chronometer malfunctions, if the chronometer is incorrectly (re)started/stopped by the timekeeper pursuant to the provisions of the Laws 6 and 7, to verify whether goal can be scored, to verify whether the ball entered the goal before the acoustic signal at the end of a period (notwithstanding the exception of periods extended to allow the completion of penalty kicks or direct free kicks beginning with the sixth accumulated foul (DFKSAFs) [5, 6, 7].

Video support also is a good option for the teams, not only referees. But using video support to check any kick-in or foul/no foul situations can make the game boring for players and spectators. In that way, Federation Internationale de Football Association (FIFA) decided to make some inputs about challenges. There is no limit on the number of successful challenges available to each team. A successful challenge means that the referees' initial decision is changed, while an unsuccessful challenge means that the initial decision is confirmed. The initial decision does not change unless the replay footage shows that a "clear and obvious error" was committed or a "serious missed incident" occurred. In addition, each team is allowed one unsuccessful challenge in each half of the match. Challenges not used during the first half of the match cannot be carried forward into the second half. If extra-time is played to determine the winners of the match, each team is allowed an additional unsuccessful challenge during extra time. Challenges not used during the second half of the match cannot be carried forward into extra time. If penalties (penalty shoot-out) are taken to determine the winners of the match, each team is allowed an additional unsuccessful challenge during penalties (penalty shoot-out). Challenges not used during the match cannot be carried forward into penalties (penalty shoot-out) [5, 6, 7]. Video support is the request for objectivity, so some interesting moments are written for the referees also.The referees must remain "visible" during the referees' review to ensure transparency..The referees will review the replay footage directly (referees' review - RR) and the referee will make the final decision. If play continues after an incident that is then reviewed, any disciplinary action taken/required during the post-incident period is not cancelled, even if the initial decision is changed (except a caution for stopping or interfering, with a promising attack or a sending-off for denial of an obvious goalscoring opportunity (DOGSO) [5, 6, 7].

The period of play before and after an incident that can be reviewed is determined by this protocol.

The categories of decision/incident that can be reviewed through a challenge are: 1) Goals (attacking team offence in the build-up to or scoring of the goal (e.g., handball, foul, etc.); ball out of play prior to the goal; goal/no goal situations);2) Penalty-area incidents (penalty-kick offence not penalised; penalty kick is incorrectly awarded; attacking-team offence in the build-up to the penalty incident (e.g. handball, foul, etc); location of the offence (inside or outside the penalty area); ball out of play prior to the incident; 3) Direct red cards (not second cautions) for denial of an obvious goalscoring opportunity (DOGSO); serious foul play; violent conduct, biting or spitting at another person; offensive, insulting or abusive action(s); 4) Mistaken identity (red or yellow cards).

If the referees penalise an offence and then give the wrong player from the offending (penalised) team a yellow or red cards, the identity of the offender can be reviewed; the offence itself cannot be reviewed unless it relates to a goal, penalty incident or direct red card.

Video support can be also used at the referees' discretion when there is a disagreement between the two referees regarding an incident in one of the above-mentioned categories and in relation to the following incidents:

- if the chronometer malfunctions, to determine how the time should be corrected;
- if the chronometer is incorrectly (re)started/stopped by the timekeeper pursuant to the provisions of the Laws 6 and 7;
- to verify whether a goal has been scored;
- to verify whether the ball entered the goal before the acoustic signal at the end of a period (notwithstanding the exception of periods extended to allow the completion of penalty kicks or direct free kicks beginning with the sixth accumulated fouls).

The using of Video support during a futsal match involves the following practical arrangements: in principle, the cameras to be used should be able to cover the whole pitch, the main clock, the goals and both penalty areas. This means that at least four cameras are needed: one for each penalty area (including the goal line), one for the main clock and one for the whole pitch; the replay operator (RO) has independent access to, and replay control of, all TV broadcast footage; the referees review area (RRA) is where the referees review the replay footage before the final decision is made. It must be located close to the pitch and its location must be clearly identified; two monitors must be available within the referees review area: one monitor for the replay operator, who assists the referees during the review of the replay footage, one monitor facing the pitch for the referees to review the replay footage; the replay operator assists the referees during the review by showing the footage as requested by the referees (e.g. different camera angles, adjusting the replay speed, etc.) on the referee's monitor; the replay operator must undergo special training, including familiarisation with the Futsal Laws of the Game, and obtain the necessary certification; if the technology malfunctions and there is no approved spare equipment available, video support cannot be used. Both teams must be informed

immediately; -as certification is required to serve as an replay operator, an replay operator RO who is unable to start or continue the match may only be replaced by someone who is qualified for the role. If no qualified replacement can be found, the match must be played/continue without the use of video support and both teams must be informed immediately. Video support is the technology to be used as well, but the referee should make their own decision on the pitch. The referees must always make an initial decision (including taking any disciplinary action needed) as if there were no video support (except for serious missed incidents).

To challenge a decision, the head coach (or, in their absence, a designated team official as stipulated on the team list) must immediately:

- twirl their finger in the air; and
- inform the third or fourth referee of their request for a review.

The third of fourth referee will inform the referees of the challenge via the communication system and by a raising a "paddle" / Alternatively, where applicable, the referees may decide to perform a review at their own discretion.

If play has already stopped, the referees delay the restart to perform the review.

If play has not already stopped, the referees stop play when the ball is in a neutral zone/situation, i.e. when neither team has a good attacking opportunity.

In all cases, the referees must indicate that a review will take place by clearly showing the "TV signal" (outline of a TV screen). After that, the review procedure should be. It is a strict procedure, but the important things to make the correct decision, in spite of are all points of the procedure being complied [7].

The referees go to the referees review area to view replay footage. The review will be performed by both referees, but the referee will make the final decision. During the RR, the other match officials will supervise what is happening on the pitch and within the technical area. Players, substitutes or team officials who enter the referees review area or try to influence the RR or the final decision will be cautioned. The referees can request different camera angles/replay speeds but, in general, slow-motion replays should only be used for facts, e.g. the position of an offence or player, the point of contact for physical offences and handball, or whether the ball was out of play (including in goal/no goal situations); normal speed should be used for the intensity of an offence or to decide if it was a handball offence.For decisions/incidents relating to goals, penalty/no penalty and red cards for denial of an obvious goalscoring opportunity, it may be necessary to review the attacking phase of play (APP) that led directly to the decisions/incident; this may include how the attacking team gained possession of the ball in open play.For other red-card offences (serious foul play or violent conduct), chronometer incidents and mistaken identity, only the incident is reviewed. The Futsal Laws of the Game do not allow restart decisions to be changed if play has restarted. However, for the purposes of the video support system, following an immediate challenge, an incident can still be reviewed, and the initial decision changed, even if play has already started.The review process should be completed as efficiently as possible, but the accuracy of the final decision is more important than speed. For this reason, and because some situations are complex, with several reviewable decisions/incidents, there is no time limit for the review process. Final decisions and restarts [5, 6, 7].

Conclusions. The referee is the only person who can make the final decision. When the referees' review is completed, the referee must show the TV signal and communicate the final decision in front of the timekeeper's table and, if necessary, to both teams' head coaches. The referee will then take/change/rescind any disciplinary action (where appropriate) and restart play in accordance with the Futsal Laws of the Game.

If the initial decision is overturned, or the serious missed incident is identified, play will restart in accordance with the Futsal Laws of the Game.

If the initial decision is not overturned, play will restart according to the initial decision if play had already stopped or with the dropped ball if play was stopped by the referees to perform the referees' review.

If the initial decision is overturned, or a serious missed incident is identified, the time when the incident occurred is relevant. The referee must inform the timekeeper of the correct time so that the chronometer can be adjusted.

If the referees' review relates to a chronometer incident, the referee must inform the timekeeper of the correct time so that the chronometer can be adjusted. Once the referees are ready to restart the match, the timekeeper can restart the chronometer from the newly adjusted time.

Future research prospects. In principle, a match is not invalidated because of one or more: malfunctions of the technologies; wrong decisions involving video support; decisions not to review an incident, or reviews of non-reviewable situation. Therefore, we will analyze how to act in such situations in a future study.

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