

4th Substitute in Extra Time

Experimental Study Protocol

06.07.2016, v2.0

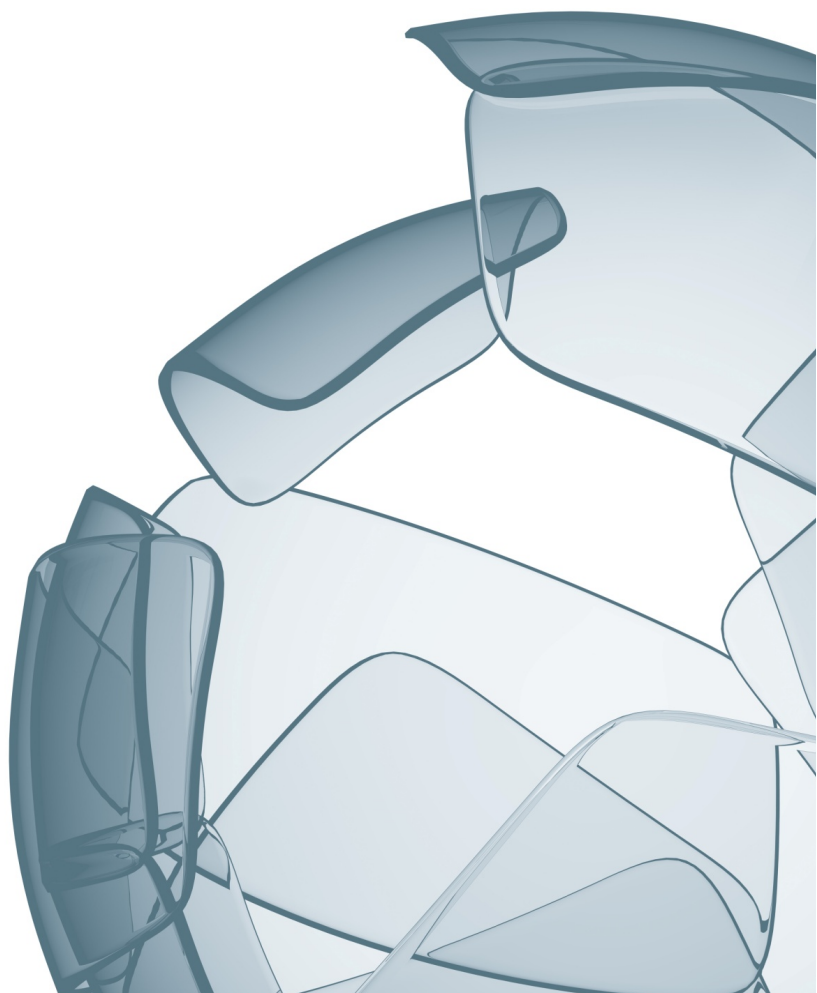


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I. Background and history

Following a number of requests from the global football community, The IFAB decided in 2016 to analyse what impact the use of 4th substitutions in matches with extra time would have on the match and its outcome. Based on discussions with its various bodies, The IFAB drafted the terms of reference for this experiment so that The IFAB can take a decision at the 2018 AGM.

At its AGM in March 2016, The IFAB agreed in principle that competitions interested in the introduction of 4th substitutions would be given permission by The IFAB to take part in the two-year experiment, provided that they fulfil the requirements for participation. For more information on the decision taken and the experiments see www.theifab.com.

This document serves as a guideline for the use of 4th Substitutions in extra time during the experimental phase as approved by The IFAB at its 130th Annual General Meeting on 5 March 2016 in Cardiff. Any amendments to this protocol must be sanctioned by the Board of Directors of The IFAB. Only findings from experiments which follow approved guidelines will be included in the subsequent discussions by The IFAB during and after the various experimental phases. These results will serve as a basis for discussions and final decisions by The IFAB on the implementation of 4th Substitutions in football.

II. Objective and Research Questions

The overall objective of this project is to establish whether the implementation of 4th substitutes in matches with extra time will benefit the game, and any other possible implications such as creating unwanted sporting advantages. Following deliberations with all bodies of The IFAB, and having received substantial feedback from different football stakeholders, The IFAB has analysed the different views to identify this study's main research questions. The research will therefore analyse:

1. What is the impact on the game itself? i.e. does the use of 4th subs lead to
 - a. more goals in extra time
 - b. fewer kicks from the penalty mark
2. Is there a player welfare benefit as a result of a 'tired' player being replaced and thus being less susceptible to injury?
3. Is the 4th substitute used tactically or genuinely for player welfare?
4. Does the potential to use all four substitutes during extra time (and thus change more than a third of the team) have an unfair impact on the match?
5. How often does a substitute (and especially a 4th substitute) score or become significantly involved in the scoring of a goal (s) in extra time?
6. What is the impact on the emotions of the game?

III. Existing findings

As part of this consultation, The IFAB received the results from a limited pre-study survey by FIFPro which suggested that allowing 4th substitutions would be favoured by players, coaches and football administrators. Nearly 85% of the persons consulted were in favour of 4th substitutions; in fact, almost half of those would welcome 4th substitutions, also during the regular playing time. (see Appendix B)

Based on these results, the Advisory Panels of The IFAB supported the 4th substitution in principle, but requested more data before making a final recommendation; this approach was approved at The IFAB's ABM in January 2016 and at the subsequent AGM.

IV. Conditions of the experiment and requirements for participation

It is important that the two underlying principles of the experiment and the conduct and analysis of the experiment are clearly and effectively communicated to the football world, namely:

- A 4th substitution is only permitted if a match goes to extra time
- The 4th substitute can be used whether or not the team has already used the maximum number of substitutes permitted (usually three substitutes)

Additionally, the following must be taken into consideration:

1. Substitution procedure (c.f. Laws of The Game, Law 3.3.)

For the 4th substitute, the same procedure applies as for the “normal” three substitutions, as described in Law 3.3., i.e.:

“The names of the substitutes must be given to the referee before the start of the match. Any substitute not named by this time may not take part in the match.

To replace a player with a substitute, the following must be observed:

- the referee must be informed before any substitution is made
- the player being substituted receives the referee's permission to leave the field of play, unless already off the field
- the substituted player is not obliged to leave on the halfway line and takes no further part in the match, except where return substitutions are permitted.
- if a player who is to be replaced refuses to leave, play continues

The substitute only enters:

- during a stoppage in play
- at the halfway line
- after the player being replaced has left
- after receiving a signal from the referee

The substitution is completed when a substitute enters the field of play; from that moment, the substitute becomes a player and the replaced player becomes a substituted player.

Substitutes can take any restart provided they first enter the field of play.

If a substitution is made during the half-time interval or before extra time, the procedure must be completed before the match restarts.

All substituted players and substitutes are subject to the referee’s authority whether they play or not.”

2. Required information

To enable a scientific analysis of the impact of 4th substitutions, The IFAB will require the following data from experiment participants:

- (1) Detailed statistics from previous competitions with extra time (last four years)
- (2) Feedback from directly involved stakeholders (coaches, medical staff etc.)

See appendices A1 and A2 for details of the exact data required.

3. Update meetings

IFAB Advisory Panels FAP/TAP 2016 (II)	Oct 2016	Phase 1
IFAB ABM 2016	Nov 2016	
IFAB AGM 2017	Mar 2017	
IFAB Advisory Panels FAP/TAP 2017 (I)	Apr 2017	Phase 2
IFAB Advisory Panels FAP/TAP 2017 (II)	Oct 2017	
IFAB ABM 2017	Nov 2017	
IFAB AGM 2018	Mar 2018	

The IFAB’s Technical Subcommittee and Board of Directors will receive regular updates on the experiments.

4. Timeline for experiments

a) Development of protocol (Mar-Jun 2016)

- (1) Meetings with stakeholders
- (2) Presentation of the developed protocol at the TSC, ABM and AGM

b) Preparation of experiments (May-July 2016)

- (1) Development of reporting procedures and documents
- (2) Education of stakeholders (teams, referees, media)
- (3) Implementation of reporting

c) Experiment Phase 1 (competitions in 2016)

- (1) Monitoring experiments and potential 'fine tuning'
- (2) Monthly feedback meeting/call with competition organisers
- (3) Monthly feedback from directly involved stakeholders
- (4) Regular updates/feedback from independent research body

d) Preparation Phase 2 (Jan-Mar 2017)

- (1) Debrief with all involved parties and finalising reports
- (2) Provision of all required information for IFAB meetings
- (3) Modifications of experiments based on the decision by The IFAB
- (4) Review of feedback from independent research body – potential modification of protocols/practices

e) Experiment Phase 2 (competitions in 2017)

- (1) Monitoring experiments and potential 'fine tuning'
- (2) Monthly feedback meeting/call with competition organisers
- (3) Monthly feedback from directly involved stakeholders
- (4) Regular updates/feedback from independent research body

f) Preparation of final reports for AGM 2018 (Jan-Mar 2018) or a Special Meeting after conclusion of phase 2

- (1) Debrief with all involved parties, including independent research body
- (2) Provision of all required information for IFAB meetings
- (3) Recommendation based on the findings of the experiments

Appendix A1

Data required from last 4 competitions

The following information should be provided on a spreadsheet for each relevant match in each competition for the last 4 years.

**Data is only required for those rounds of the competition where there is the provision for extra time to be played*

Competition	
Year/Season	
Round	
Date	
Team A	
Team B	

Score	Half time	
	Full time	
	Extra Time (HT)	
	Extra Time (FT)	
	Penalties (KFPM)	

Substitutions		1st	2nd	3rd
(Time and player number)	Team A			
(Time and player number)	Team B			

Goals scored by substitutes					
(Time and player number)	Team A				
(Time and player number)	Team B				

Appendix A2

Data required from current competitions

The following information should be provided on a spreadsheet for each relevant match*.

**Data is only required for those rounds of the competition where there is the provision for extra time to be played*

Competition	
Year/Season	
Round	
Date	
Team A	
Team B	

Score	Half time		Full time	
	Extra time (HT)		Extra time (FT)	
	Penalties (KFPM)			

Substitutions (Time and player number)		1st	2nd	3rd	4th
(Time and player number)	Team A				
	Team B				

Goals scored by substitutes (Time and player number)	Team A					
(Time and player number)	Team B					

Positional impact of 4th sub		Position of substitute	Position of substituted player
4th substitution	Team A		
4th substitution	Team B		

Goal scored by 4th sub					
4th substitution goals scored	Team A				
4th substitution goals scored	Team B				

Goal assists by 4th sub					
4th substitution goals assists	Team A				
4th substitution goals assists	Team B				

Performance by 4th sub in kicks from the penalty mark

Did 4th sub kick (yes/no) Team A
 Did 4th sub kick (yes/no) Team B
 Did 4th sub score (yes/no) Team A
 Did 4th sub score (yes/no) Team B

1 st round	2 nd round	3 rd round	4 th round	5 th round

Impact of 4th sub on the game in extra time

Coach rating (max 10) Team A
 Coach rating (max 10) Team B

Reason for using of 4th substitute

Coach reason for using 4th sub Team A
 Coach reason for using 4th sub Team B

Tactical	Player tired or injured	Combination of both

Reason for not using of 4th substitute

4th sub not used because Team A
 4th sub not used because Team B

Impact of 4th sub on coach tactics

none /limited/medium/strong Team A
 none /limited/medium/strong Team B

1 st half	2 nd half	extra time	penalties

Impact of 4th sub on player welfare

Opinion of medical staff Team A
 Opinion of medical staff Team B

none	limited	good	very good

Overall assessment of potential to use 4th sub

Team A
 Team B

negative	neutral	positive

Additional comments from coaches, medical staff etc.

Appendix B

FOURTH SUBSTITUTE: YES OR NO?

- A) No. The rule should stay like it is: maximum three substitutions.
- B) Yes. But only in matches with extra time, between minute 90-120.
- C) Yes. A fourth substitution should always be allowed, even in matches of 90 minutes.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
POL	FIN	ROM	HRV	BGR	BEL	NOR	CYP	GRC	CZE	ENG	AUT	NLD	RUS	IND	KAZ	SVN	USA	GTM	FRA	CIV	VEN	BOT	MLT	CAM	CH	MAR	CHE	IRE	COL	PRY	CHI	
A	1	0	3	1	0	3	2	0	2	3	1	2	2	0	0	4	3	0	2	3	0	1	1	1	5	2		1				
B	3	7	0	3	5	1	3	6	0	6	6	8	4	6	1	5	2	7	9	7	3	5	5	2	4	7		4			1	
C	5	2	10	4	2	3	4	2	10	0	1	1	2	4	5	4	0	1	1	4	5	4	4	2	1	1		5			1	
TOTAL	9	10	10	10	8	4	10	10	10	8	10	10	7	10	5	10	10	10	10	10	10	10	10	10	5	10	10	0	10	0	0	2