



The KA Equilibrium 2.0 system is a complete system that includes solutions that maximally exclude discretionary scoring of leagues and clubs. The rules and algorithms implemented in the system, in a more adequate and objective way, reflect the reputation of football leagues and clubs. They also increase positioning stability and take greater account of the continental reputation relative to the global perspective. The new system allow to adopt rating rules to the changing league environment.

The Equilibrium 2.0 system includes new solutions as well as systematizes changes introduced to the LFC 1.0 system (2017-2019), which was created on the basis of the SELECT 0.0 system (2010-2017).

Amendments in the Equilibrium 2.0 system, including changes made to the original version of the LFC 1.0 system

Leagues Ranking (the KA Football League Global Rating) and Continental Indexes

- 1) new comprehensive Rules for Milestone Tables, including those regarding the setting of the End Table for a competition system in which there is a play-off round after the regular season, as well as surrogate setting of tables for December 31 and June 30 - *in the KA System it is very important to determine national league final tables and mid-season tables; on their basis, DC2 (Domestic Club Coefficient) is determined, which is a component of tKC2 (the KA Club Coefficient); due to the diversity of league system forms (the process of creating new forms of league competitions is still progressing), it was necessary to develop new principles that optimally allowed the application of universal rules to the changing league environment;*
- 2) (a) the new definition of international competitions covered by the KA system, including enlarging with competitions sanctioned by continental Federations (Confederations) that meet specific representativeness requirements; (b) the new definitions of "horizontal" and "vertical" competition systems, as well as, "satellite competitions"; (c) the introduction category of the second-class competition with higher reputation - *the amendment is adaptive and responds to the emergence of a new type of international club competition, and also anticipates future changes in the football environment;*
- 3) setting the standard duration of the KA Season from July 16 to July 15 - *previously the season was set from July 1 to June 30, however with the proviso that if key international competitions ended in July, the last day of the season was determined on the last day of these competitions; in practice, the season ended around mid-July; the change is adaptive;*
- 4) introduction of semi-seasonal rankings in January (Opening of the Year Ranking) and naming existing rankings as Start of the Season Ranking - *a developmental change;*
- 5) introduction of the Country Football Reputability Index (CFRI) as a component of the League Ranking (instead of NT Points) - *an adjustment introduced due to the change of the FIFA Ranking formula from the reputation model to the ELO model; CFRI was introduced as part of the LFC 1.0 system. and has already undergone slight changes;*
- 6) ability to assign leagues to several countries - *the change anticipating the possibility of introducing inter-country league competitions;*
- 7) explicitly regulated awarding of points in the AIF procedure in the event that a player does not play in any football club - *the adjustment defining clearly how points are assigned to players in the AIF procedure who do not belong to any football club;*

- 8) update of the PIF and other continental indexes in the year in which the FWC is not played (based on the results of the continental championships) - *the change preventing the petrification of continental coefficients, which are primarily based on the results of the FWC;*
- 9) change in the Virtual Performance Index Federation (VIF) formula, including the VIF update in a year in which FWC does not take place - *the change that allows better assessment of the continent's potential; the VIF ratio is one of the key coefficients used in the Leagues Ranking;*
- 10) introduction of the Yard Table - *a developmental change that allows you to compare the ratings of low-ranked leagues (Elementary Class) and enables you to compare almost all top-level divisions from all football countries;*
- 11) comprehensive universal League Standard Score formula (LS2), together with special cases, likes of covering the calculation of points for lower-class divisions and rules qualifications of these leagues to the Ranking - *in connection with the introduction of the Yard Table, there was a need to create a universal basic point algorithm for all countries; in the process, the issue of awarding points to lower-level divisions was sorted out also - making their score more dependent on self-contained reputation (calculated on the basis of the AIF procedure); this amendment has been fully applied for the first time in the Opening of the Year Ranking 2020¹; it caused change of the arrangement of the second level divisions by changing their order, which until now was dependent on points awarded as derived from points belonging to the highest league division from the same country;*
- 12) introducing the status of Qualified League of Lower Level (QL3) - *an amendment that allows a more adequate assessment of lower level league divisions which global reputation is significant;*
- 13) limited points rule (of CF12) for a specific leagues in a case when the national team takes part in the championships of another continent - *the change prevents the incorrect increase in the point value of leagues from countries whose representations are largely based on players from the national leagues, and the same time representations of these countries play at the continental championships of another continent (casus: Copa America);*
- 14) change of the FI2 formula $[FI2 = (GFI2 \times 2 + CF12) / 3]$ and the introduction of the Universal Global Index (to determine the maximum FI2 point threshold) - *as the average of points obtained on List A (list of leagues represented on FWC), as well as removal of the lower point threshold for FI2 - a comprehensive change that allows you to assess the league's reputation in a more balanced and adequate way;*
- 15) new ICLP formula for lower class divisions, based on the GFI2 and on the CF12 calculated separately for these leagues (Proportionality Index) - *a change related to the introduction of new solutions in the field of LS2 for lower classes and QL3;*
- 16) correction in the Deviation Index formula (for calculating League Points) - *a mathematical change that gives a better effect in determining the League Coefficient value;*
- 17) providing precision of the Fall & Stay rule (using the LS2_BIF point formula) - *ordering change in the field of Fall & Stay (FAS) procedure;*
- 18) changing the FAS rule for leagues that keep their place in the Chamber (despite no pre-qualification); a condition was introduced that such league would have to meet the conditions required for qualifying for the Intermediate class - *the change to organize and clarify system;*
- 19) introduction of the Drop & Hold (DHO) procedure - *the new regulation similar to FAS, applied in connection with the introduction of semi-seasonal leagues rankings;*

Club Ranking (the KA Football Club Global Rating)

- 20) introducing qualifications to the Chamber for national cup winners, if the club plays matches in a league which the League Threshold index contains the "+" sign (previously such rule only applied to clubs that won the national cup in a country where there is no league) as well as introducing qualifications to the Scarf, if the winner of the national cup plays matches in a league that have been classified in the Chamber classes, even if the competitions in a national cup relate to the country whose league is classified in the Secondary or below (previously it concerned only the countries classified above Secondary) - *the change allowing for clubs with*

¹ as at the date of the first version of this document, the change is planned

a noticeable reputation to qualify the ranking, that have not had previously the chance to be included in the ranking yet;

- 21) the IC3 - a change in the formula, resulting primarily in increasing the Club Coefficient for clubs with a high reputation from continents other than Europe - *this is a key systemic change; after years of observation of the rating results, it was considered that the importance of the continental reputation should be taken into account more; the decision to change has been also influenced by the increase in financial outlays observed in some non-European clubs, as well as the increase in viewership of matches of these clubs;*
- 22) setting that the PS status (regulation regarding the so-called "post-status clubs", which prevents rating downgrade in the event of a temporary reduction in the club's form) applies to three consecutive quarterly rankings (rather than the next 11 months) - *an amendment aimed at clarifying related to the quarterly ranking system;*
- 23) introduction of an additional condition for qualifying to the Intermediate class, in the case of leagues that were both on List A (list of league represented on FWC) and on List C (primary list of qualified leagues) consisting in the fact that the number of players (from the league) had been playing in the last FWC should be at least equal to the number denoting the number of annual rankings determined, after the end of FWC - *the change causing of increasing requirements for some low-ranked leagues, preventing accidental overstatement of their positions;*
- 24) change in the formula for the value required for the Master Standard class (median instead of average) - *a mathematical change that gives a better effect in determining the Club Coefficient value;*
- 25) *the introduction of the AIF club procedure, resulting in an increase in IC3 and allowing additional qualification for clubs - the AIF procedure is the basic procedure used in the League Ranking (it calculates the value of the league's reputation, regardless of the present results achieved by the clubs of a particular league); the change consisting in the implementation of this procedure in the Club Ranking allows to qualify to the ranking clubs with a noticeable reputation whose current results are poor;*
- 26) the Journeyman Procedure - *a change aimed at stabilizing positioning;*
- 27) the principle of removing from the ranking of non-existent clubs (even if the club has points obtained in previous ranking periods) - *sanctioning the practice;*
- 28) the new universal formula for the FIFA Club World Cup Index based on the ELO method - *due to planned changes in the organization of FCWC, a universal formula has been introduced that can be used for various FCWC organizational models;*

Continental Rankings (the KA Continental Competitions Rankings)

- 29) explicit determination of the quarterly ranking period - *sanctioning the practice;*
- 30) introduction of a new quotient formula for the determination of Continental League Points (CLP) - *if the league is represented by a small number of clubs, then the denominator of the quotient is greater than the number of clubs; in case the league is represented by a significant number of clubs - then the denominator of the quotient is equal to the number of these clubs - the change aims to prevent accidental point increases for leagues which are constantly represented in international competitions by a small number of clubs (change for Leagues Ranking);*
- 31) the rule of recognizing the preliminary stages of competition as one phase - *the change allows for a better use of the universal scoring model for competition systems in which the number of phases significantly exceeds the number of phases usually occurring in other international club competitions;*
- 32) introduction of the replacement club category - *the change allows for ensuring the ranking stability and applies to situations when a berth in international club competitions has not yet been filled by a specific club;*
- 33) introducing additional points for winning the competition - *a system change allowing a more adequate assessment of the league or club status;*
- 34) introducing additional points for victory and participation in the final phase of a competition that play the role of qualifiers for other competition - *a system change allowing a more adequate assessment of the league or club reputation;*

- 35) increasing points for participation in the main phase and in the bonus phase of top-class competition, if the system also includes second-class competition - *an adapting change ensuring the consistency of the point system*;
- 36) introduction of correction increasing the number of points when there are no matches of elimination phases - used when qualifiers are played in the other competition of the same continent, as well as changing the correction mechanism in a case of smaller number of matches - *an adapting change ensuring the consistency of the point system* (change for Leagues Ranking);
- 37) disabling corrections, in a case of different numbers of matches in similar phases in two competitions within one continent - if the competitions do not form a system and the number of matches is smaller in second-class competitions - *an amendment simplifying the system; the previous procedure complicated the calculations and did not give any significant added value* (change for Leagues Ranking);
- 38) entering points for the phases preceding the R16 phase (in the Club Ranking for top-class competitions) or the QF phase (in the Club Ranking for second-class competitions) - *a system change allowing a more adequate assessment of the club's reputation*;
- 39) increasing the guaranteed point score for clubs from the second-class competition when they reach the main phase - *an adapting change ensuring the coherence of the point system* (change for Club Ranking);
- 40) introduction of a conflict rule regarding the case when the club obtaining points for participation in the main and bonus stages, and then this club is passing through to the second-class competition - *an adapting change ensuring the coherence of the point system* (change for Club Ranking);
- 41) change in the regulation regarding points for elimination phases - if there are more than 4 elimination phases (unless they have been merged) - *an adapting change ensuring consistency of the point system* (change for Club Ranking);
- 42) introduction of rules adjusting the points for the elimination phases - if in one competition within the continent there are less than 4 elimination phases and in the second competition there are more elimination phases - *an adapting change ensuring consistency of the point system* (change for Club Ranking);
- 43) Introducing in the Leagues Ranking the formula of the minimum number of points for the league, until the season is over - *the change ensuring stabilization of scoring*;
- 44) introducing points for winning the continental Super Cup - *a system change allowing a more adequate assessment of the club's reputation* (change for Club Ranking);
- 45) extension of the rule of „Continental Qualification by the Zero Degree” to the Global Club Rating - *a stabilizing change, allowing, above all, qualification to the main global rating to the Chamber classes, for the clubs with the highest scores within the continents - even if their league will lose (or doesn't have) the status of the Chamber* (change for Club Ranking);

Country Football Reputability Index (CFRI)

- 46) including in the LTRC (Long-Term Reputation Index) the victory in Olympic football tournaments - *a system change allowing a more adequate assessment of the country's reputation*;
- 47) proportional distribution of points for hosting the tournament in a case of more than one host (as part of the LTRC) - *a minor system change allowing a more adequate assessment of the country's reputation*;
- 48) slight change in the scope of Differentiation Value and Differentiation Principles - *a mathematical changes giving a better effect in determining CFRI values*;
- 49) stabilization rule blocking an increase in the index of over 50% and a decrease in the index by 50% - *a change ensuring positioning stabilization*.