

SITUATION

In preparation of EURO 2012, UEFA tasked Professor Werner Helsen (TopSportsLab) to develop a structured plan to prepare the selected elite referees for the 2012 Championship “and beyond”. The “excellence” plan included physical preparation, injury prevention and concentration training. Helsen has been involved in 4 FIFA World Cups and 4 European Championships. Today referees are prepared as “6-man referee teams”. They undergo an intensive, structured preparation plan.

THE CHALLENGE

Football has become a global industry with ever growing (economic and socio political) impact. In parallel to industry, governance standards are to be developed and aligned. The game is becoming increasingly demanding for referees, as speed increases and recovery times decrease; the right decisions are to be taken within split seconds. Increased alert is required towards the end of a match. Unlike other sports, football referees have little high-tech assistance. Therefore today’s elite referees require excellent physical and mental skills.

THE VISION

- Apply cutting edge performance management techniques tailored to each individual referee.
- Implement continuous monitoring using heart rate measurement equipment (V800 Polar watch has been standardised).
- Standardise on a world-wide level aspects such as referee performance requirements, championship preparation and uniform and consistent decision making.
- Standardise and globalise training approaches. The UEFA referee training approach are used throughout Europe and most of the other FIFA confederations.

PROJECT HIGHLIGHTS

In 2010 TopSportsLab were selected as preferred long term operational excellence partner for UEFA. Periodic performance screenings (and other training) are being organised with UEFA elite referees. Meetings are held with medical staff, national physical coaches and the elite referees to develop and agree individualised training schedules for the period ahead. Subsequently, daily training load data are being monitored and synchronised to TopSportsLab. The TopSportsLab application provides training prescriptions and injury risk profiles using its proprietary algorithms for performance and injury prediction. The following steps are proposed to other global and national elite referee organisation:

5-stage Implementation Plan

- **Step 1:** Establish a fitness baseline screening for each referee by carrying out physical assessments during periodical UEFA referee workshops.
- **Step 2:** Introduce an injury prevention plan based upon an injury risk profile for each athlete. Medical staff are then able to make adjustments to each referee’s training plans focusing on the elimination of injury prone body zones.
- **Step 3:** Implement continuous HR-monitoring using V800 Polar watches. All trainings and games data is analysed. Intensity and recovery are appraised as these are key for fitness.
- **Step 4:** Introduce individual and continuous improvement plans based on the findings in Step 3. This will iron out weaknesses and maintain strengths.
- **Step 5:** Scientific knowledge about workload monitoring (HR&GPS) was implemented during tournaments and competition.

These new strategies are introduced to other global and national elite referee organisations.

ACHIEVEMENTS 2012-14



Refereeing

- *Euro 2012 was a successful championship for refereeing; fit referees with sharp, consistent decision making.*
- *Best practices are currently being institutionalised, e.g. dedicated pre-game warm-up areas for referee team.*
- *An increasing number of countries introduce pass/no pass physical screenings for elite referees.*
- *An increasing number of countries have promoted the status of elite referees; they become professionals, are well paid and professionally monitored.*

Sports Science

- Over the past decade the physical constraints have changed dramatically:
 - HI runs have increased from 700 to 1000 per game.
 - Number of sprints have doubled, from <20 to >50.
 - Recovery times have halved, from >65” to <35”.
- Standard “5x5minutes” pre-game warm-up procedures have been introduced for referees incl. mobilisation joint mobility and visual concentration exercises, dynamic stretching, accelerations, sprints.
- Development of the “Helsen Referee Performance Training Plans” distributed by UEFA’s portal and through the library of the TopSportsLab application.

Other significant notes

- UEFA’s elite referees are exposed to perception and decision-making trainings using purpose designed software with real life game situations.
- TopSportsLab has been implemented by an increasing number of *national* referee organisations e.g. Qatar, Croatia, Belgium, Turkey, Greece, Portugal etc.
- In preparation of the FIFA Women’s World Cup Canada 2015, TopSportsLab will be monitoring the elite referees selected from CAF, CONCACAF, CONMEBOL, AFC, OFC, and UEFA.