

FIFA Innovation Programme Project Summary

FIFA Innovation Challenge:	Innovative EPTS (see details below)
Project Title:	Lower-limb IoT wearable for football
Company/product:	Humanox
Supporting club:	Cadiz C.F.
Project period:	01.08.2021-31.07.2023

FIFA Innovation Challenge Details

Challenge 2: Innovative Electronic Performance & Tracking Systems

Category: Football equipment & playing surfaces

The most common type of EPTS in football is the wearable worn in a vest on the player’s upper back. FIFA’s impact assessment testing and Quality Programme for EPTS have created a recognised framework for these systems to be tested and approved in accordance with the Laws of the Game. As technology develops, FIFA is keen to explore systems that currently do not conform to this definition but add value to the performance or medical aspects of the game by offering new data sources that are currently not available or simpler and more cost-efficient solutions for the football world. Any devices must be able to demonstrate this added value as well as show that they do not pose any risk to both the player wearing the EPTS and any potential opposing player.

Executive Summary of the Innovation Project

Humanox has developed an IoT device integrating, inter alia, IMUs, heart-rate monitors and temperature sensors into shin guards allowing for a very comprehensive collection of physical and physiological data for any football player. As a smart piece of equipment, it offers a low-cost solution for individuals and teams to generate insights into the personal performance as well as team tactics. The core aim of this Innovation Project is a validation of the EPTS components within the Humanox device to allow for certification under the FIFA Quality Programme for EPTS. Additional research will be carried out to identify the particular benefits of lower-limb devices with multiple sensors in order to assess whether new test requirements are meaningful in the future.

Results & additional documentation