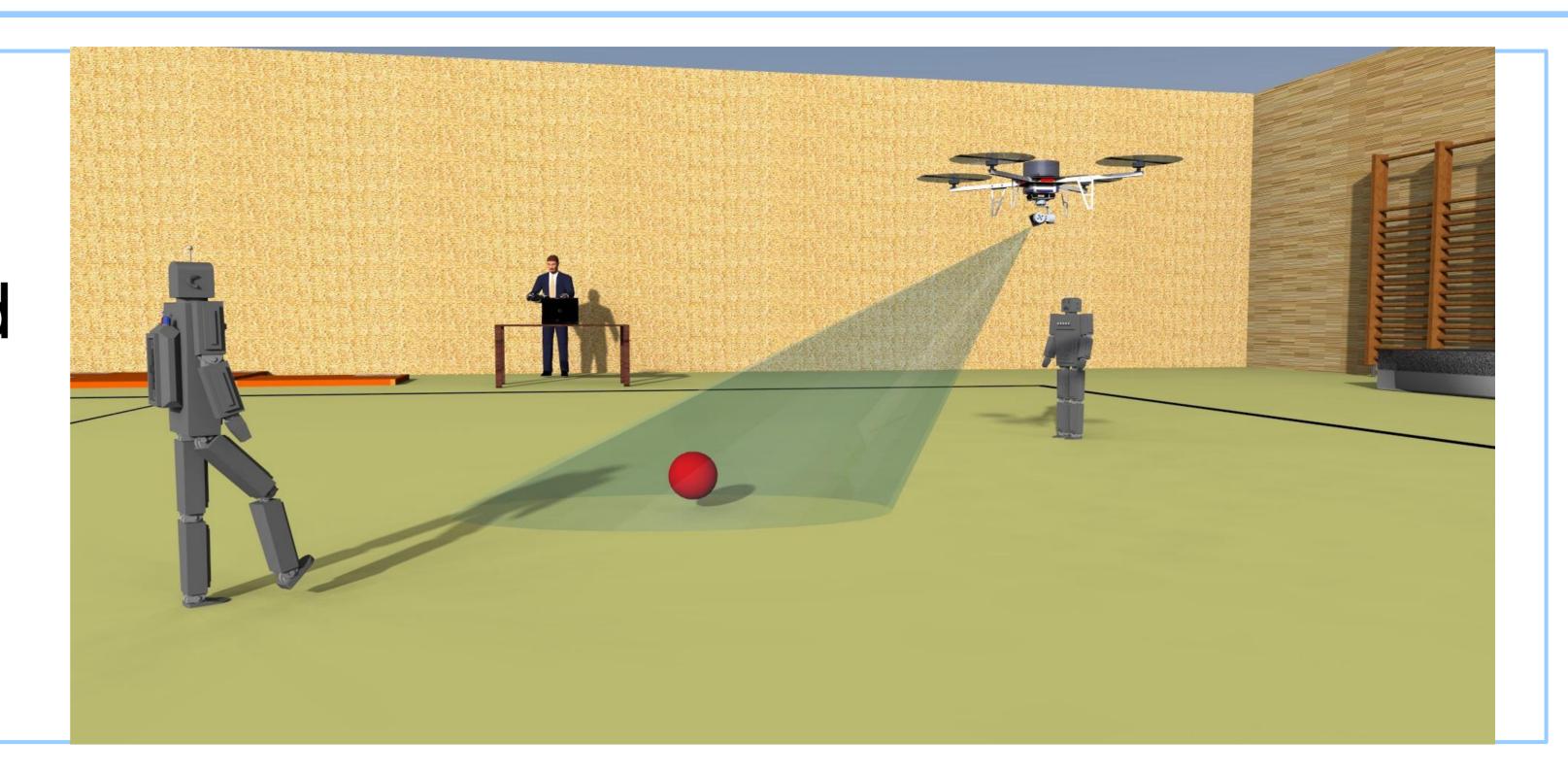


WP2 Demonstrator Application Scenario

Roboter Soccer Game

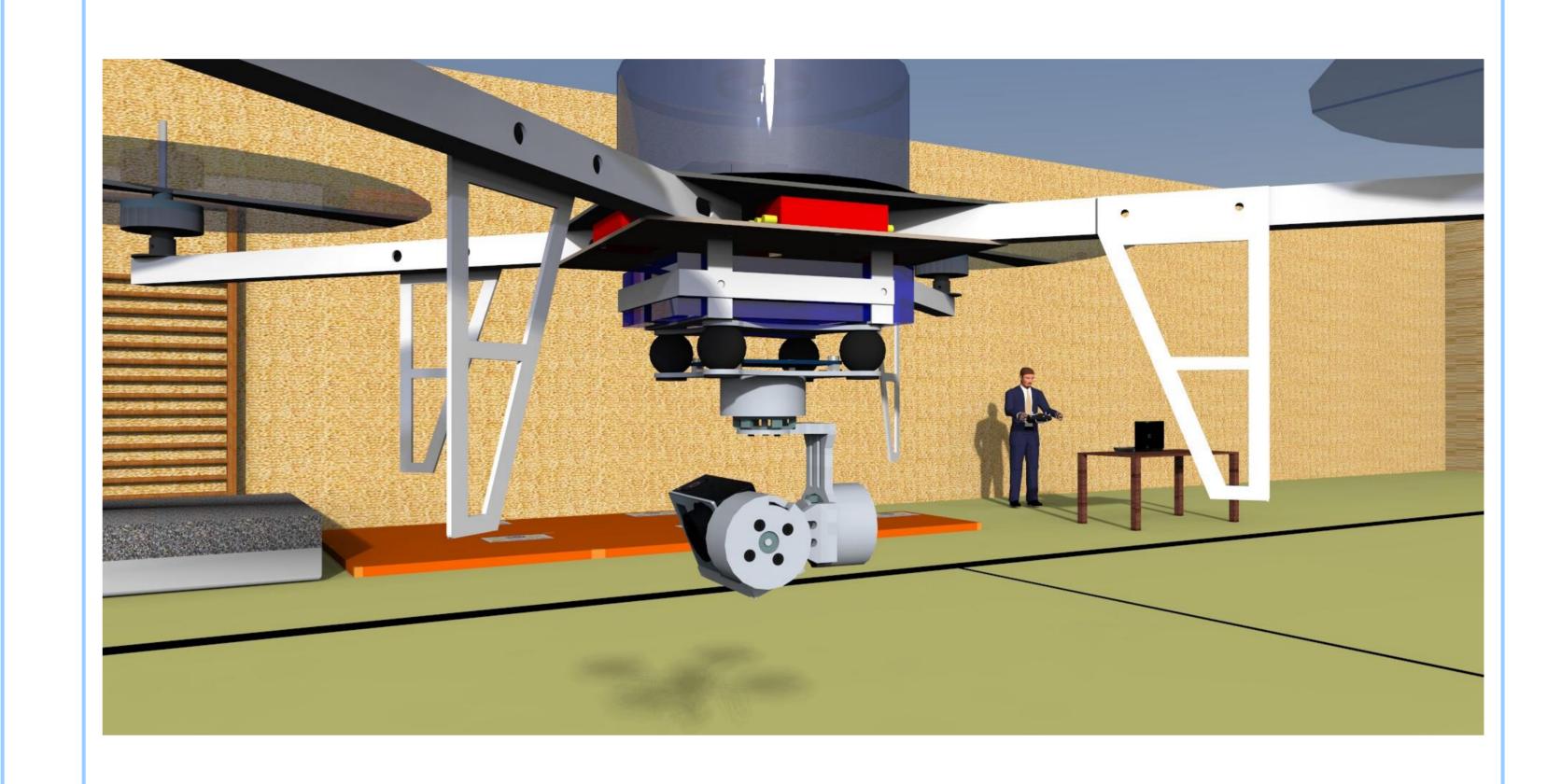
- Quadrocopter hoovers over playing field
- Tracks soccer ball
- New camera position
- Assistance for referee



Videostreaming & Tracking System

- 3-Axis Gimbal for flexible movements
- Searching Mode
- Tracking Mode
- Fixed-Mode
- Object tracking
- Gimbal control following objects
- Video streaming (compressed)
- Linux based OS

Video Camera Gimbal



Avionic Control System

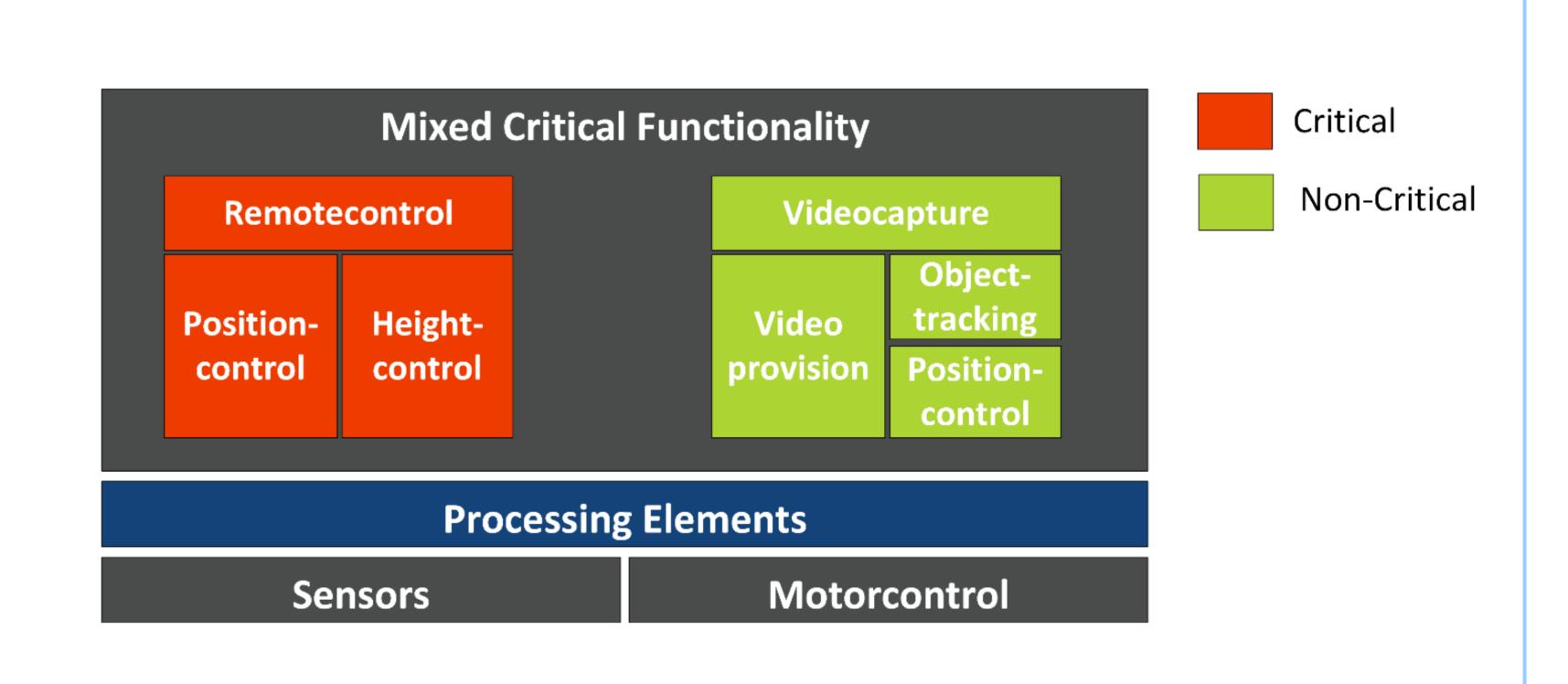
- Safety critical subsystem
- Hard Real-time constrains
- Freedom of interference
- Bare metal implementation

Main features

- Stable flight behavior
- Position based navigation control
- Altitude control
- Reading multiple position sensors
- High rate motor control
- Battery control

Mixed-critical application

- Safety critical ACS with real-time critical control components
- Mission critical VTS with performance critical
- Shared sensor data



Contributing Partners:



