



# Bandırma -Bursa-Yenişehir-Osmaneli High Standard Railway Line

Construction and Supply of Electromechanical Systems

# Project Brief

Name	: Bandırma-Bursa-Yenisehir-Osmaneli High Standard Railway Project
Employer	: The Ministry of Transport and Infrastructure of Turkey acting through the General Directorate of the Infrastructural Investment (“AYGM”)
Contractor	: Kalyon Insaat Sanayi ve Ticaret A.S.
Contract Period	: 1095 Days
Total Length	: 201 km
Maksimum Speed	: 250 km/hr



**Bandırma – Bursa Section:**

- Design
- Infrastructure
- Superstructure
- Electrification
- Signalization
- Telecommunication

**Bursa – Yenişehir Section:**

- Superstructure
- Electrification
- Signalization
- Telecommunication

**Yenişehir – Osmaneli Section:**

- Infrastructure
- Superstructure
- Electrification
- Signalization
- Telecommunication

# Tunnel Electromechanical Works

- 29 units / 73.1 km. Double Line Tunnel Electromechanical Works
- Emergency Lighting and Signage Systems
- Lighting and Lighting Control Systems
- Fire Detection System
- Fire Fighting System
- 16 Escape Tunnels
- 5 Open / Close Tunnels
- 146,2 km. Busbar
- 162.05 t. Copper
- 0.428 t. Steel Conductor
- 265 t. Cable Trays/Trunks





## Power Supply & Electrification System

- 154kV Power Supply Line
- 4 pcs. 154/25kV 25MVA Transformer Stations
- ~430 km. Catenary Line
- Control & Command System

# Transformer Station

- 4 pcs 2\*25MVA Transformer Station
- 8 km. 154kV Main Power Supply Line
- Scada Systems



# Catenary System

---

- 200 km/h operation speed
- ~6100 t. galvanized steel material
- ~1,505 km. length copper and aluminum wire
- ~11,300 pcs. cantilever



# Signaling and Telecommunication Support Systems

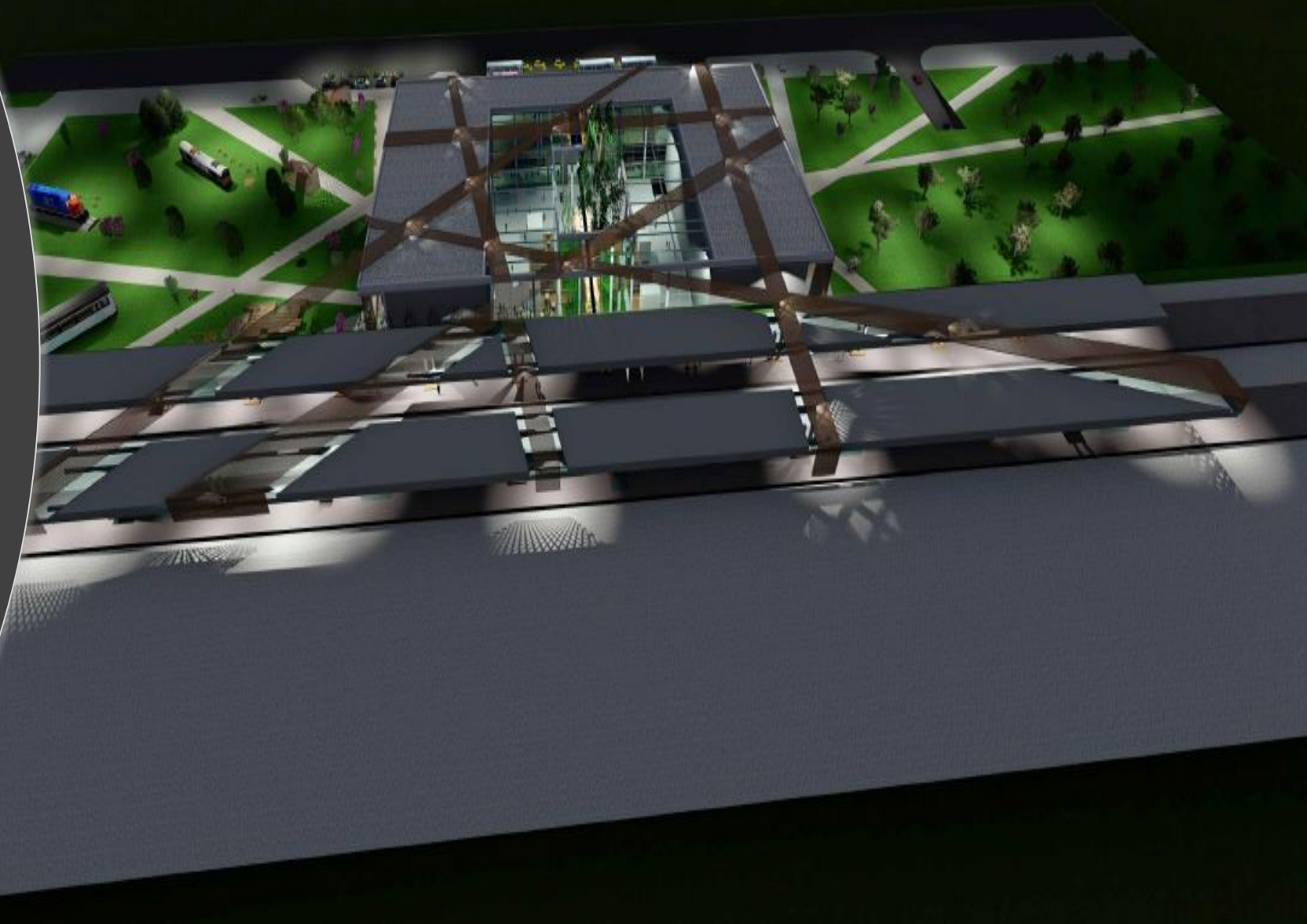
- 201 km. Signaling and Telecommunication Support Systems (GSM-R, CCTV, Network, Earthquake Early Warning System)
- Interlocking System
- CTC Control Center
- Automatic Train Stopping (ATS) and Control Systems (ERTMS/ETCS Level 1/2)
- ~631,43 km. Fiber Optic Cable
- 26 Pieces Construction of GSM-R Technical Building (Power, Battery, Signaling Equipment, Communication Equipment and Operator Rooms)
- ~ 2689 km. of Copper Conductor
- ~ 842,24 t Copper





# Stations EMP Works

- 7 Stations
- LV – ELV Works
- Fire Fighting Systems
- CHW Systems
- HVAC Systems
- Lightning and Earthing System



# Contact Details

Hasan Kutluhan Çevik – Strategy and Business Development Director

[hkcevik@kalyonholding.com](mailto:hkcevik@kalyonholding.com)

Emre Argalıođlu – MEP Manager

[eargalioglu@kalyonholding.com](mailto:eargalioglu@kalyonholding.com)

Halim Üzmez – Procurement Manager

[huzmez@kalyonholding.com](mailto:huzmez@kalyonholding.com)