## South Ring Mall, Sofia Building Management System

#### **Building Management System**

- □ 4500 Physical Data Points
- □ 2500 Integration Data Points
- □ 11 AHU's fresh air for tenants
- □ 20 AHU's for air conditioning of public area
- Control and monitoring of cooling and heating center with 3 water to water heat pumps and 3 boilers
- Control and monitoring of overpressure ventilation and smoke exhaust ventilation for public area and shops
- Monitoring of gas detection system (CO) and control of smoke exhaust ventilation for garage
- Control and monitoring of local extract ventilation for restaurants, toilets and technical rooms
- Monitoring of gas detection system (freon) and control of exhaust ventilation for chiller plant room
- □ Lighting automation
- □ ModBus integration of energy meters, multimeters and chillers
- □ Mbus integration of heat and cold meters
- □ Reading of impulse water and gas meters
- Monitoring of circuit breakers in low voltage panels and main distribution panels
- □ Monitoring of diesel generators, lifts and escalators
- □ Monitoring of drain, drill, sewage, sprinkler and hydrant pump
- □ Monitoring of waste water treatment plant



### Duration

2012 - 2014

### Scope of activities

- □ Supply and installation of
  - □ Field Equipment
  - □ DDC controllers and modules,
  - □ BACS operation station,
- DDC & BACS software, start up & commissioning, end user training and documentation
- MCC panels design, production, installation, start up and documentation
- Creating automatic reports from all measuring devices (water meters, energy meters, heat meters, cold meters and gas meters)



# **Project details**