

BANCA D'ITALIA BUILDINGS - FRASCATI

Project Automation has realized an advanced system of Building Automation meant to provide a full integration between the latest software tools and the several installation situations present which serve the buildings making up the complex of the Banca d'Italia in the town of Frascati.

The objective of the project is to allow the operators to manage in real time the technological installation status (intrusion, fire and gas detection, CCTV, electrical installations, ...) and to make use of advanced automatic tools to support the decision making, for the performance optimisation and the consumption reduction.

The project is based on the use of the digital platform PACIS®, a suite of software products developed and constantly updated by Project Automation, which allows the virtual making of every kind of installation, providing the operators with a simple and intuitive graphical interface for the centralized and homogeneous management of all types of facilities installed.



Specifically, the facilities managed are subdivided into two main categories:

- centralized supervision of the security installations (S.I.S. = Supervisione degli Impianti di Sicurezza): this includes equipment for the people and property protection (intrusion, smoke and gas detection, automatic fire extinguishing)
- centralized supervision of the electrical technological installations (S.I.T. - I.E.).

From one central room the S.I.S. system makes possible the supervision of eleven different types of system (Anti-intrusion, Fire Detection, Gas Detection, Automatic Fire extinguisher, Compulsory Evacuation, Against step-over 1 and 2, CCTV, control of external gates, Radio alarms, Pager) for a total of more than 18,000 single supervised points. From a unique operations room the S.I.T. - I.E. system allows the supervision and control of the full chain of the electrical power production and distribution within the complex, starting from High Voltage Panels up to the single Low Voltage Breakers, for a total of over 60,000 points.

Through a graphic interface arranged to reproduce the complex's topography, it is possible to monitor and manage in real time digital values (about the operational status of the elements making up the distribution chain), analogical values (reporting the actual voltage and consumption levels), and finally logics and sequences to enable/disable automatic procedures of the complex's ordinary and extraordinary management (for example, normal sequences for turning on/off the lights, or for protecting the elevators in case of fire).

The software interfaces with an Expert System, to which it provides in real time the power consumption trends in the various district's sections, and from which it receives help for the activation of coordination schemes meant to reduce power consumption.