

# Provincial Council of Barcelona EIB for sustainable development



View of the inner courtyard of the banking centre

The provincial council of Barcelona was constituted in 1836. For many periods in the history of Catalonia, The Provincial Council of Barcelona has been one of the main political-administrative bodies in the country and the most important platform for the political interests of the different social groups in Catalonia.

The system implantation has been realised in three buildings of the centre of Barcelona and with a different geographic ubication. The political representation of the corporation, its official office of the president and the departments depending on this office are ubicated on a modernist building, that was constructed in 1900-1907 by the architect Puig i Cadafalch, follower of Gaudí. It was later sold to the religious congregation of Santa Teresa de Jesús, who adapted it for teaching and social purposes.

Since 1962 the building has formed part of the range of buildings and monuments of artistic and cultural interests. Between 1986 and 1987 a new building was constructed on the land behind Can Serra to house the central administration services.

## Benefits offered by EIB

- Standardization and flexibility of the installations
- Automatic functions, supervision and remote operating buildings
- To rationalize the consumers use adapting the users real necessities
- Monitoring of each building associated to a maintenance program, that permits to manage and optimise this activity

Projectnumber: Z5/02/E

Country: Spain

Year of Construction: 2001 (EIB)

## Area of Application

- Residential buildings
- Single-family homes
- Housing estates
- Senior citizen housing
- Housing for people with disabilities
- Functional buildings**
- Office buildings / public administration offices**
- Commercial premises
- Wholesale / retail premises
- Restaurants and hotels
- Places of cultural interest (cinemas, theatres, museums, etc.)**
- Health facilities
- Education (schools, colleges, etc.)
- Leisure centres (sports, wellness, etc.)
- Industrial construction
- Miscellaneous

## Facilities

- Lighting**
- Shading / light direction
- Ventilation, air-conditioning**
- Alarm systems
- Technical monitoring**
- Energy management
- EIB visualization
- Remote operating and monitoring**
- Other applications**

## Scope

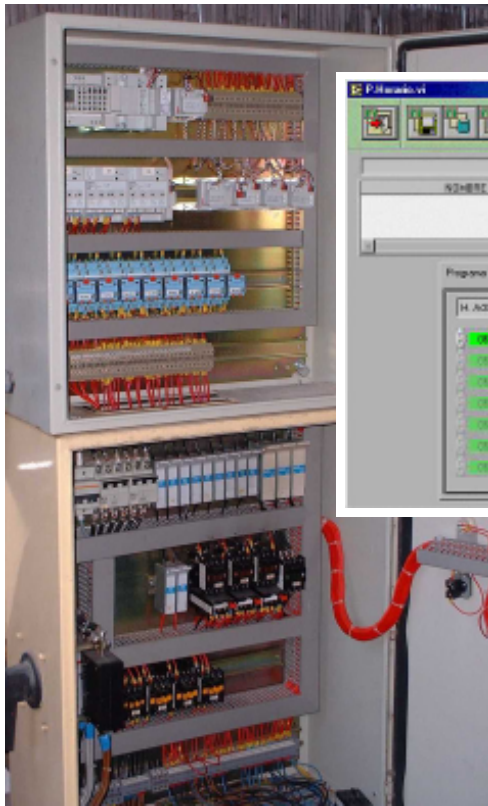
- Number of areas/lines:**  
2-5 / 1-12 / 1-4 (3 EIB systems)
- Number of EIB devices:**  
685 / 2996 / 197 (3 EIB systems)



**Winner:**  
**1. Prize EIBA Award 2002**

# Optimized installation in the buildings depending on logistics service

Projectnumber: Z5/02/E



## Keyvisual of the central timemanagement

- Start-up, control of the selectors state, protections and state of the cycle, protection and alarm to associate each machine and each pump
- Incorporation of the temporary algorithm for the Start-up and stoppage of the entire installations
- Once each of the areas on the floor has been revised by security staff, the general lighting is out by the security centre
- Visualization and monitoring centralized in each building from the control room using the EIBA OPC server interchanging the information associated to a maintenance program (GMAO) which permits to optimize it, adapting it to the equipment use ▲▲

▼ The implantation of the EIB system has been adapted to the characteristics of the activity developed in each one of them and to the topology of the

constructions and installations without losing references of commitments and obligations, acquired by the different countries at a global level in favour of sustainable development that compels the public authorities to limit CO<sub>2</sub> emissions by improving the efficiency of energy and the application of renewable energies. The less and/or high capacity which is disposed from our responsibility as buildings manager is to reduce and to adequate the consumptions to its utility. It conditionate the adequation of the installations and has permitted us:

- To centralize the installations
- Adequation of the lighting holding a suitable level in each job place
- Control and adequation of the velocity, if the air treatment equipment and ventilation
- Motoring and control system
- Independation of lighting.
- Replacement of reactances by electronic ones and incorporation of adjustable ones near front areas
- Incorporation of presence and light detection elements

## Tableau with EIB elements

### Technical "specialities"

It's important to say, that the system permits us to control each element from the buildings net by a visualization program which is based on a server/customer philosophy and of the OPC server of EIBA.

Through the Oracle data base system and the maintenance software (GMAO), permits to adequate the preventive maintenance to the real utility of operation and optimize resorts destined to this functions.

## Beteiligte Unternehmen

### Architect:

Javier Garrido i Lagunilla

### Building owner:

Diputación de Barcelona, E-08037 Barcelona

### Design and EIB project's direction:

Pedro Rodríguez Bello

Jefe de Grupo de Mantenimiento,  
Diputación de Barcelona, E-08037 Barcelona

### EIB system integrator:

Distribución Sistemas Inteligentes  
E-08037 Barcelona

### Monitoring:

Mirelec Ingeniería. S.L. , E-43002 Tarragona

### Software Maintenance (GMAO):

TCMAN S.L. Tecnología aplicada en sus manos  
E- 08042 Barcelona