MONUMENTS, THE "UNDISCOVERED" TARGETS - AN OVERVIEW OF SECURITY MEASURES IN THE MONASTERY OF ALCOBAÇA

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INTRODUCTION

A monument is part of a country's National Critical Infrastructures (Commission of the European Communities 2004), and must be protected and intact for future generations. Further, being a place of public access, all actions concerning the building and its staff and visitors, should strive for an appropriate balance between security, ease of public access, and aesthetics.

OBJECTIVE

Given the importance of a monument's architectural characteristics, adaptation of modern surveillance and hazard detection instrumentation to existing monument is an ongoing challenge for security system specialists, being the aim of this work to make an overview of the current situation in Monastery of Alcobaça.

CURRENT SITUATION

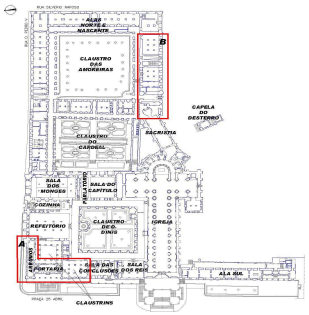
Existing methods of fire detection, CCTV control and public access include radio signal transmission fire and intrusion detectors, CCTV system with Day / Night IP Outdoor Camera Kit and personal control of public access to areas inside the Monument.

MAIN FACADE AND SOUTH VIEW OF THE MONUMENT

INTERIOR CLOISTER - NORTH VIEW

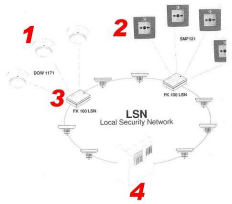
BACK AREAS AND ASSORTED GARDENS

FIRE DETECTION SYSTEM



FIRE DETECTION ZONES

A - Administrative and storage areas
B - Library and Relicar



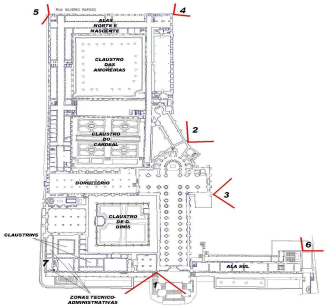
FIRE DETECTION SYSTEM LAYOUT

1 - Radio frequency fire smoke detector
2 - Radio frequency alarm button transmitter
3 - Radio signal receptor/transmit or device
4 - Radio frequency receptor and transfer processor

1 -Acoustic alarm sounder
2 - Fire control processor
3 - Access detector input module
4 - Repeater terminal with security module for remote access and GSM transmission

FIRE DETECTION CENTRAL

CCTV CONTROL SYSTEM



PLAN OF CCTV CAMERAS

1 - 5 - CCTV conventional outdoor high resolution day & night cameras
6 - Wireless CCTV camera with radio frequency signal transmission and solar power supply
7 - Control system interface

CCTV OUTDOOR HIGH RESOLUTION DAY/NIGHT CAMERAS

WIRELESS CCTV CAMERA WITH DIRECTIONAL ANTENNA AND SOLAR POWER SUPLY

SYSTEM ACCESS AND CONTROL DISPLAY WITH BUILT IN RECORDER AND MODEM INTERFACE

CONCLUSIONS

- Existing methods of fire detection and CCTV control have proved reliable and accurate
- There is a constant need of expansion to new zones, after restoration works are carried out
- Integration of different systems are sometimes difficult due to different suppliers

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