

Dial Tech



Patrol Clock Point (PCP)

Overview

The Patrol Clock Point (PCP) is part of the Dial tech security system. Its function is to facilitate monitoring the activity of business or residential site patrols. The system can be used wherever there is GSM (cell phone) coverage.

One of the principle aims of the PCP approach is low cost and reliability. On site the only pieces of equipment necessary are the PCP modules themselves and the cell phones of the guards. There are no radio transmitters/repeaters required or download points. There are no batons, nor are there clocking points that require a card or token. In fact, there are no pieces of equipment that require physical contact, which ensures the system's reliability.

While the Patrol Clock Point is targeted at the guarding industry, it applies to other areas where people are employed to provide a service to clients on a regular basis (e.g. cleaners).

Operation

Each PCP module can best be described as a clock. Instead of displaying the time, however, it displays a cell phone number called an ACN (Active Channel Number). This number changes every 5 minutes and changes in a "random" manner.

Two secret "keys" inside the PCP module control the sequence of numbers. Without knowing these keys it is not possible to predict the numbers that will be displayed. The sequence repeats after 150 years, so it is not practical to keep a record of numbers in the hope that a pattern will appear.

In the standard system there are eight possible ACN numbers that can be displayed. These could be entered as speed dial or voice tag numbers.

When a guard "clocks" in at a PCP point, he dials the number displayed on the PCP unit. He must be able to see the unit to obtain the number. The Dial tech system recognizes the guard from the incoming CLI (the calling number) and notes the ACN number called. The system then consults the databases to ascertain if the guard called at the required time, and if he called the right ACN number.

If the guard calls the right number at the right time, the system records the event as a correct clock action.

If the guard calls the wrong number, calls at the wrong time or fails to call when it is required, an exception is reported to the Control Room and/or the supervisor.



Statistics

An immediate question arises: What if the guard guesses the number displayed without seeing the PCP module? A guard has a 1-in-8 chance of guessing the right number, or 7-in-8 chances of getting it wrong. To guess correctly four times in a row his chances are 1-in-4096.

If he were required to clock a point every 30 minutes on a 12-hour shift, he would have to guess correctly 24 times. In South Africa he would have a greater chance of winning the Lotto Jackpot three times in a row!

Configuration

To administer the system, the company sets up the Dial tech database over the Internet. The system appearance is tailored to the company's needs and requires account names and passwords. Briefly, the process is as follows:

- 1) The company gives the client's contact information.
- 2) The company enters the address of the client's site where the patrol is to take place.
- 3) The company specifies the individual posts that are scheduled.
- 4) The company enters the time and sequence of PCP clock events for each post.
- 5) The company assigns a guard to each post.

Once this information is provided the system reports patrol exceptions as they occur. The system can also generate other reports such as site patrol effectiveness and individual guard performance.

Exceptions can be reported over the Internet, by SMS or by fax.

Specification

Enclosure: Sealed Polycarbonate case with transparent lid

Size: 82mm X 80mm X 55mm

Batteries: 2 off C size (MN1400 – LR14) Alkaline Cells

Expected Battery Life: 2 years

Summary

Dial tech is an Internet technology based system. It comprises dedicated computers, secure servers and custom electronics. It is designed to transparently integrate with existing services. The concept is to provide comprehensive security services without requiring significant equipment investment by the client. The system interface is best categorized as a Data-Driven Web Site.



Behind the simplicity of Dial tech is a complex system that facilitates registration, validation, administration, reporting, communication and customized look-and-feel.

Dial tech is a cost-effective system with which a company or organization can supply its clients to add significant value to its service. Although targeted at the Security market, the system has many applications in other areas.