

WIDE AREA NETWORK FOR OFFENDER TRACKING

ABSTRACT

Electronic Monitoring System uses a pair of tracking tag and home monitoring unit to monitor the present of the offender during home detention night-time curfew. If the tracking tag is detected by the home monitoring unit, the offender is assumed to be at home. If the offender try to take off the tracking tag by cutting the strap, an alert will be sent to control center through the home monitoring unit. However, once the tracking tag moves out of the home, it becomes offline hence there is risk where tampering is not alerted. With the use of multichannel long range radio communication, all the installed home monitoring units can form a wide area network that can keep the tracking tag online even though it has moved out from the home.