

Early Warning Notification

The use of Bluetooth trackers for geolocation in organised crime

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Operational and Analysis Centre

Background

Bluetooth trackers are small devices designed to help people find personal objects, such as keys and bags, as well as vehicles at risk of theft. They can be attached to an item one does not want to lose and wirelessly connected to the owner's mobile phone or tablet. The tracker emits a Bluetooth signal, which is detected by the paired device and its location is shown on a map in a mobile app (or via a web browser). The range of the Bluetooth signal varies from approximately 10 to 120 metres radius.

A key feature of these trackers is that they support crowdsourced locating: their Bluetooth signal can be detected by nearby mobile devices that are also connected to a tracker from the same manufacturer. These nearby devices send the location of the tracker to the owner's mobile application. Bluetooth trackers can therefore be geolocated even when far removed from their owner, as long as owners of the same type of tracker are in the tracker's vicinity.

To find an item at close proximity, Bluetooth trackers can emit a noise. As these trackers may also emit a noise after being away from their owner's mobile device for an extended period, criminal owners may opt to disable this functionality – instructional videos are easy to find online. Some trackers also support precision finding at close proximity via ultra wideband technology.¹

There are various other technologies employed for location tracking, including those that use radio signals, the Global Positioning System (GPS), mobile phone triangulation or a combination of these, as in geofencing. The most well-known is GPS, which relies on a network of satellites and offers highly accurate real-time geolocation across the globe. However, signals may be obstructed by solid structures and GPS trackers tend to have a battery life of 3-6 months and need charging at intervals.

Although Bluetooth trackers are not effective when out of range of devices paired with the same type of tracker, they tend to be smaller, cheaper and have a longer battery life (of approximately one to two years) compared to GPS trackers. They are also waterproof. This means that Bluetooth trackers offer an attractive solution for criminals wishing to track and locate illicit commodities.

¹ In response to concerns about Bluetooth trackers being used for property crime and stalking, most major tracker manufacturers have built-in security features intended to prevent unwanted tracking.

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How are Bluetooth trackers used in organised crime?

Bluetooth trackers have most often been found in relation to drug trafficking. In a select few cases known to Europol, trackers have been used to locate vehicles targeted in organised property crime and vessels used in migrant smuggling.

Although Bluetooth trackers have been used to track shipments of other illicit narcotics, the vast majority of cases relate to cocaine smuggling. These trackers have been used to locate cargo, often over 100 kg. These shipments originate in South America and are bound for ports and markets throughout the EU. Bluetooth trackers were most often discovered alongside cocaine in container shipments of food products, but were also found hidden in sea chests within sea vessels. Cocaine seizures including such trackers have also taken place at commercial premises in Europe.

Based on the technological capabilities of Bluetooth trackers and the information shared with Europol, it is confirmed that drugs traffickers use them to track the transit of illicit cargo after arrival in ports and onward by road towards storage locations in European markets. They are probably also used for locating illicit shipments upon arrival in port.

So far, there are no indications that Bluetooth trackers are used to geolocate shipments at sea as, given the present technological limits, it is improbable that a tracker would come within range of a mobile device paired with the same type of tracker. For this purpose, GPS technology is more suitable. GPS devices and Bluetooth trackers may be used in combination for more reliable geolocation.



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