



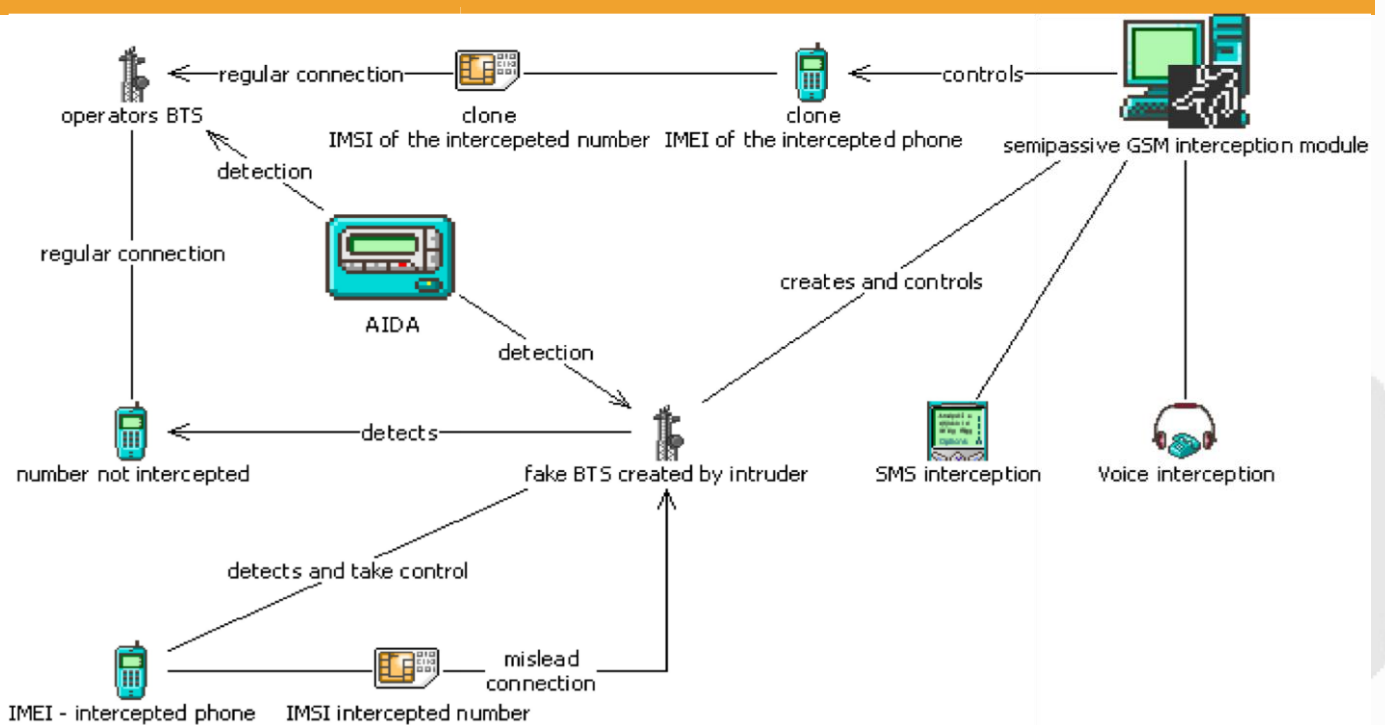
AIDA

THE RIGHT SOLUTION FOR A NEW THREAT - ILLEGAL SEMI-ACTIVE GSM INTERCEPTOR THE THREAT AND WHY AIDA

GSM networks are not safe anymore. On the contrary, the GSM phones are a security threat, endangering your personal security, your business and the safety of your information. The GSM encryption A5.2 and A5.1 have been deciphered and interception systems are available in the market.

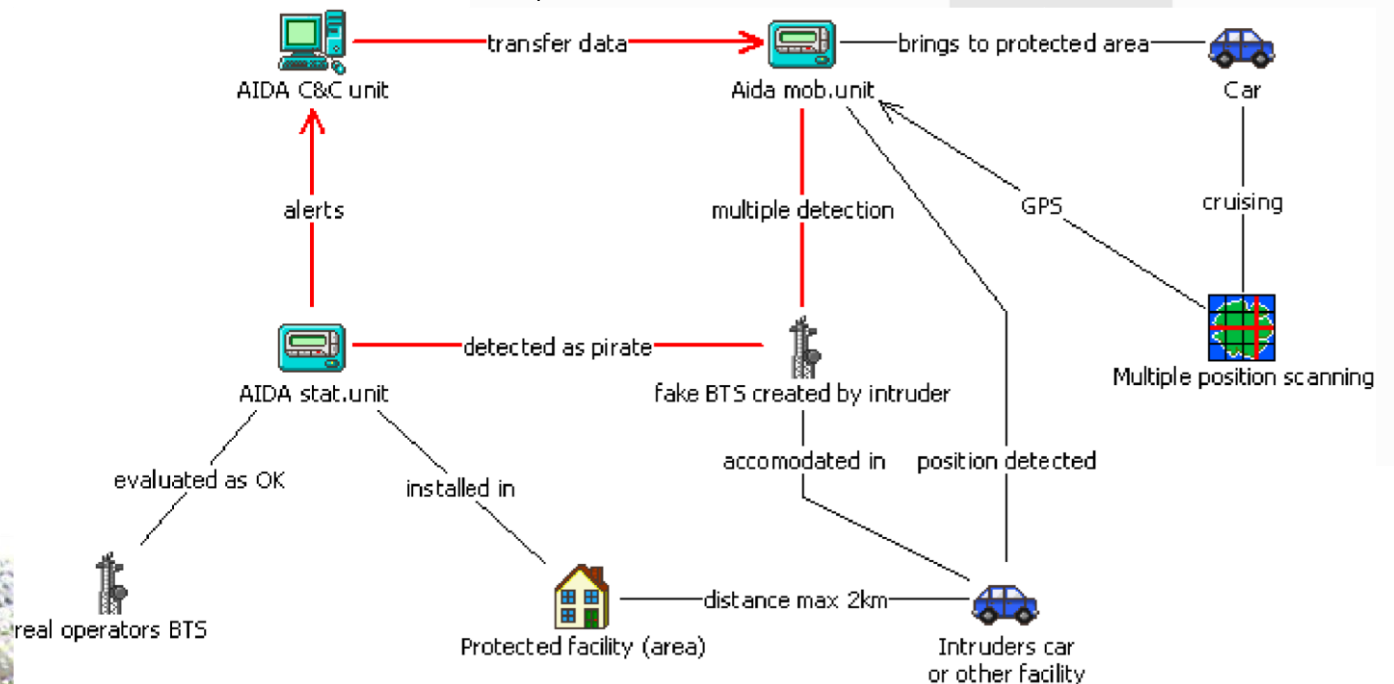
Imagine your office having only glass walls, where anybody can spot your activities – the same happens to your voice and data communication when a semi-active GSM off the air interception system is deployed in the vicinity of your premises. The intruder can intercept your GSM and even UMTS phones, spoof the SMS messages and last but not least identify any visitor or employee in the office, who is using a GSM phone. The standard scanner is of no use, the search for electronic bugs is useless because the intruder is outside of your premises using a device not larger than a suitcase, hidden in a car or any other facility. The activity of the intruder will be unnoticed and very difficult to detect. Aida is the answer to this problematic.

The following description shows how the mobile communication looks when interception is deployed and detected by AIDA:



Aida is detecting semi-active interception in GSM/UMTS band and thus identifying malicious BTS in the monitored location that are not part of the arsenal of legally authorised BTS. AIDA monitors the BTS of all the operators and detects any illegal device in the range.

C&C – command and control unit, stationary unit and mobile unit.



DETECTION



AIDA stationary unit monitors all BTS around any objects of interest like buildings, premises etc. The system is monitoring BTS occurrence, verifying the BTS positions and reporting to the C&C unit. No operator, no special treatment, no special maintenance is needed. The number of deployed units depends on dimensions and shape of the protected area. C&C unit can connect as much stationary units as required.

DETECTION AND LOCATION

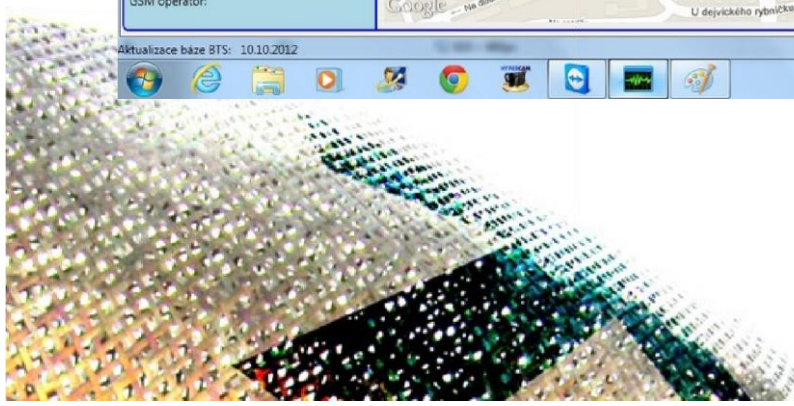


The mobile unit, is designated for monitoring and locating pirate BTS. It has the functionality of the stationary and C&C unit merged together. The BTS position is calculated upon own actual geographical position, gathered via GPS device. The mobile unit cruises nearby the locality where pirate BTS appearance has been detected and performs multiple scans of the area. The scanning is performed automatically by the change of the position. The mobile unit can be used in a car as well as on the desk.

A SCREENSHOT OF A SUCCESSFUL IDENTIFICATION OF AN INTERFERER

The screenshot shows the 'Scan BTS 1.0' software interface. The top bar displays the current location as 50°29'38.058"N 14°29'21.426"E and the logged user as Admin - Admin. The main window is divided into a left sidebar with navigation options (Scanning, Countries, GSM operators, Verified BTS, Users, Settings, GSM Moduly) and a main content area. The main content area features a 'Scanning' window with a table of detected BTS and a map below it. The table lists various BTS entries with columns for Device, Scan number, GSM operator, Country, BTS code, MNC, MCC, Channel, TA, Signal, LAC, Latitude, Longitude, Distance, IMEI, and IMSI. The map shows a street grid with a red dot labeled 'Fake BTS position' near the intersection of Evropská and Na přelomu.

| Device | Scan number | GSM operator | Country | BTS code | MNC | MCC | Channel | TA | Signal | LAC | Latitude | Longitude | Distance | IMEI | IMSI |
|------------|-------------|--------------|-----------------|---------------|-----|-----|---------|----|---------|------|----------------|----------------|----------|-----------------|---------------|
| BTSTEST-PC | 944 | Vodafone | Česká Republika | UMTS detected | 3 | 230 | 792 | 12 | -82 dBm | 238D | 50°05'55.698"N | 14°22'31.374"E | | 353234029934658 | 2300301557205 |
| BTSTEST-PC | 944 | Vodafone | Česká Republika | 11401 | 3 | 230 | 813 | 53 | -87 dBm | 238D | 50°05'55.698"N | 14°22'31.374"E | 50 m | 353234029934658 | 2300301557205 |
| BTSTEST-PC | 944 | T-Mobile | Česká Republika | 2543 | 1 | 230 | 35 | 46 | -75 dBm | 401E | 50°05'55.698"N | 14°22'31.374"E | | 357973041009884 | 2300143006504 |
| BTSTEST-PC | 944 | Vodafone | Česká Republika | 12961 | 3 | 230 | 823 | 10 | -74 dBm | 238D | 50°05'55.698"N | 14°22'31.374"E | 482 m | 353234029934658 | 2300301557205 |
| BTSTEST-PC | 944 | Vodafone | Česká Republika | 12602 | 3 | 230 | 788 | 54 | -89 dBm | 238D | 50°05'55.698"N | 14°22'31.374"E | 686 m | 353234029934658 | 2300301557205 |
| BTSTEST-PC | 944 | T-Mobile | Česká Republika | 2808 | 1 | 230 | 57 | 75 | -94 dBm | 401E | 50°05'55.698"N | 14°22'31.374"E | 192 m | 357973041009884 | 2300143006504 |
| BTSTEST-PC | 945 | O2 | Česká Republika | 11612 | 2 | 230 | 45 | 34 | -56 dBm | 047B | 50°05'53.214"N | 14°22'16.404"E | 298 m | 353234027329463 | 2300239008265 |
| BTSTEST-PC | 945 | O2 | Česká Republika | UMTS detected | 2 | 230 | 48 | 31 | -76 dBm | 047B | 50°05'53.214"N | 14°22'16.404"E | | 353234027329463 | 2300239008265 |



BASIC PARAMETERS OF THE UNITS

| Component | Mobile unit | Stationary unit and C&C |
|----------------------------|--|-------------------------------------|
| Bandwidth | GSM bandwidth | GSM bandwidth |
| Antenna | Standard (spec.options available upon request) | Standard |
| Hardware | PC based notebook approved by vendor | PC for permanent approved by vendor |
| Software/Operating systems | AIDA /MS Windows 7 and higher | AIDA /LINUX or ANDROID |
| HW AIDA | Provided by vendor | Provided by vendor |
| Connectivity | IP via GSM/UMTS | IP connectivity to C&C |

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