Phantom Technologies - IMSI Monitoring and Interception System

MODEL IMSI400

1. The operational threat

Cellular devices are used for various nefarious activities including terrorism, criminal activity, Search and rescue operations and much more. Prisons all over the world are faced with the problem of hidden cellular phones used by the inmates illegally.

2. The Solution

2.1 **Key operational benefits to the customer**:

Phantom's Technologies active cellular system, also known as the IMSI Catcher 400, provides the operators with the capability to extract cellular identities in a designated area of interest.

The system provides three main operational advantages:

1. Independency from Cellular service Providers – the operator does not need to connect with the Cellular Providers systems.
2. Covert operations – the system can be deployed in a discrete manner allowing the operating forces the much needed covertness.
3. The system is portable and can be handled in a suitcase.
4. All SW and HW are manufactured by the company

The system's main purpose is to provide a low cost – high affective active cellular system that enables operators to control the cellular communications.

2.2 Solution description:

The IMSI400 is our IMSI catcher monitoring system, designed to detect the IMSIs and the IMEIs present and active in the designated area for both 2G and 3G Phones. This capability enables the device's operators to identify possible threats.

The IMSI 400 was specifically designed to provide maximum capacity flexibility as the BTS number can vary from 1 BTS – 8 BTS (8 BTS is the current maximum design) in a single drawer (several drawers can be supplied) as each BTS is Software Defined Radio BTS in the technology in which it is working. This means that once a

technology has been chosen, GSM or UMTS, the BTS in the defined technology is SDR.

2.2.1 Main capabilities:

- Extraction of IMSI, IMEI and TMSI in 2G, 3G and 4G
- Target selection and automatic alert
- Silent call in 2G and 3G and 4G
- 4000 phone calls capacity
- Highly configurable BTS drawers
- Backup power – 3 hours
- Internal antennas for 2G, 3G, 4G
- The system can work simultaneously on all networks
- Showing consumption, running time and phones captured
- SW – configurable, scalable, adaptable as customer will receive user manual
- Scalability – the system can easily add features, technologies, BTS's and more.
- Homing device for DF operations
- Selective targeting of IMSI/IMEI
- DOS of all cellular subscribers
- And more…

Annex A - Technical Specifications

RF Characteristics	
Power Supply	28VDC
Current	2A Max.
Modules Per Unit	Configurable
Antenna	External – Omni-Directional or High Gain Directional
Power Amplifier Protectors	Isolator. Full VSWR protector Over Heat – Thermal protector Over Current protector
Receivers Sensitivity	-92 - -110dBm
SNR	141-143.5 dB /Hz
TX PWR	47dBm with internal PA
BW	10-75 MHz
Memory SDRAM	128 MB/Band
Frequency Range	
Frequency Band	RX Bands GSM 824-894 MHz GSM 890-915 MHz DCS 1710-1785 MHz PCS 1850-1910 MHz 3G 1920-1980 MHz TX Bands GSM 865-894 MHz GSM 935-960 MHz DCS 1805-1880 MHz PCS 1930-1990 MHz 3G 2110-2170 MHz
Air Interface Standards	GSM/UMTS
Physical Data	
Dimensions	Pelican 1610
Weight	Approximately 25kg
Environment of operation	
Operating Temp	-10ºC - +55ºC
Humidity	5% - 90%

*Specifications are subject to change without prior notice