



# ASSA SAR

Mobile Search and Rescue System



Presented by :

AUSTECH  
SECURITY SYSTEMS SOLUTIONS

# Mission

Our mobile SAR System has been **developed in order to solve two critical issues** faced by SAR specialists worldwide:

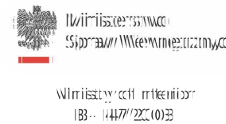
- 1 Ability to accurately **locate** the victim in difficult terrain
- 2 **Communication** between rescue crews and victims in areas without GSM network coverage

**Our tests have shown that search time can be significantly reduced using our System**

# About ASSA SAR

## Experience

- **15 years of experience** producing GSM Systems sold worldwide and quality proven by certificates including:



## Proven technology

- Based on a System that was used globally by security services for over a decade
- **Numerous tests** with Tatra Mountain Rescue Service on land (SUV, walking) and Air (SAR Helicopter), both in the most demanding conditions

## Professional team

International team of:

- **Researchers** providing most advanced technology on the market
- **Specialists** with extensive field experience to demonstrate the equipment and conduct training sessions



# Functions



**LOCATE** mobile phones within 0.5 meter accuracy

The range is up to:

- 1,400 m while operating from the ground
- 3,000 m while operating from a helicopter



**CALL** the victim even in areas without GSM network coverage

- Maintain up to 3 simultaneous calls between:
  - Rescue teams and people who have gone missing
  - Rescue professionals to communicate with each other



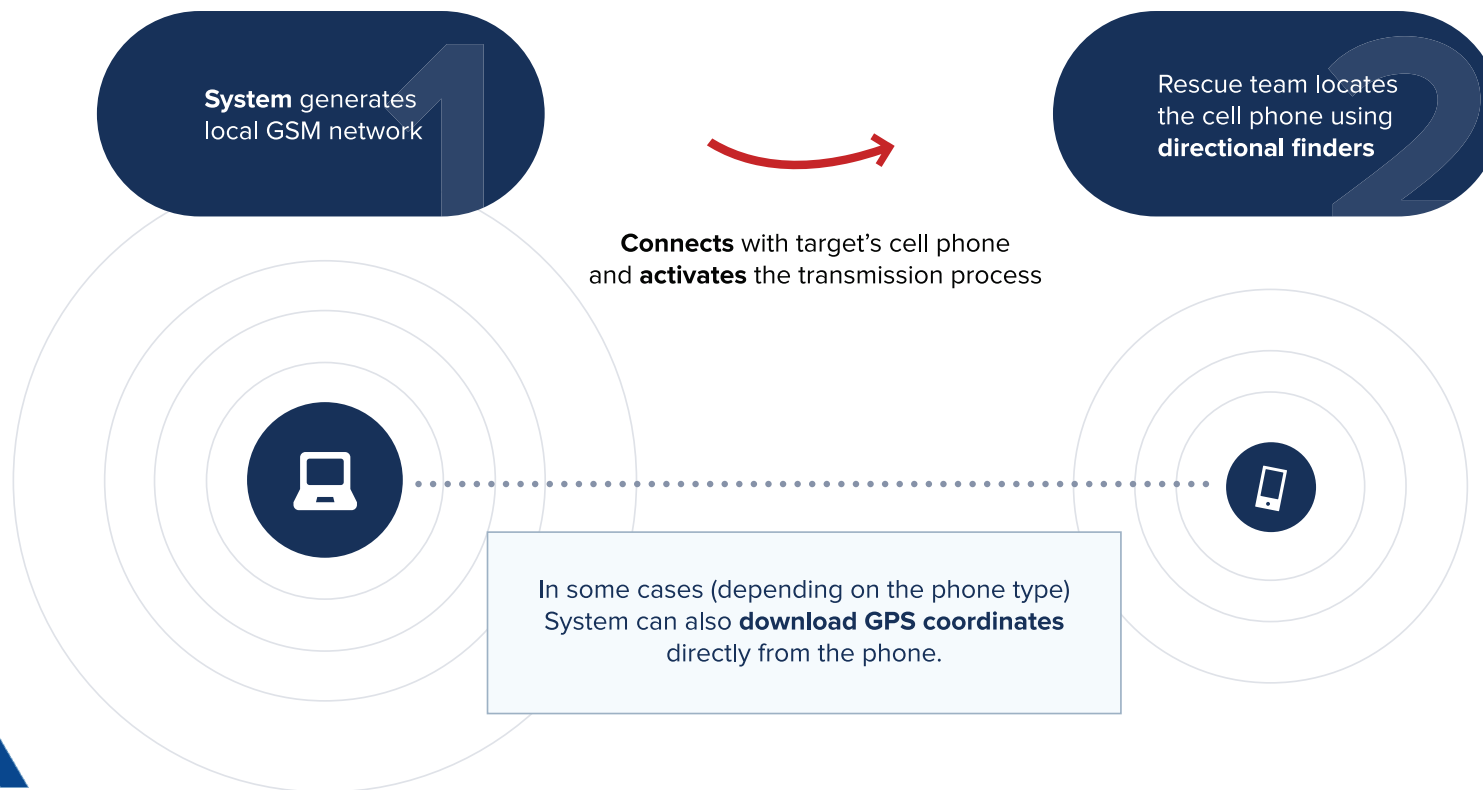
Send text **MESSAGE**

- Text messages can either be selected from previously composed standard messages or customized and sent to:
  - Every cell phone within the operating range simultaneously
  - Individual cell phones selected from the list



# How does it work?

## How does ASSA MobileSweep® Technology Work?



# Operating modes

Our System offers **two operating modes**



**Target mode**



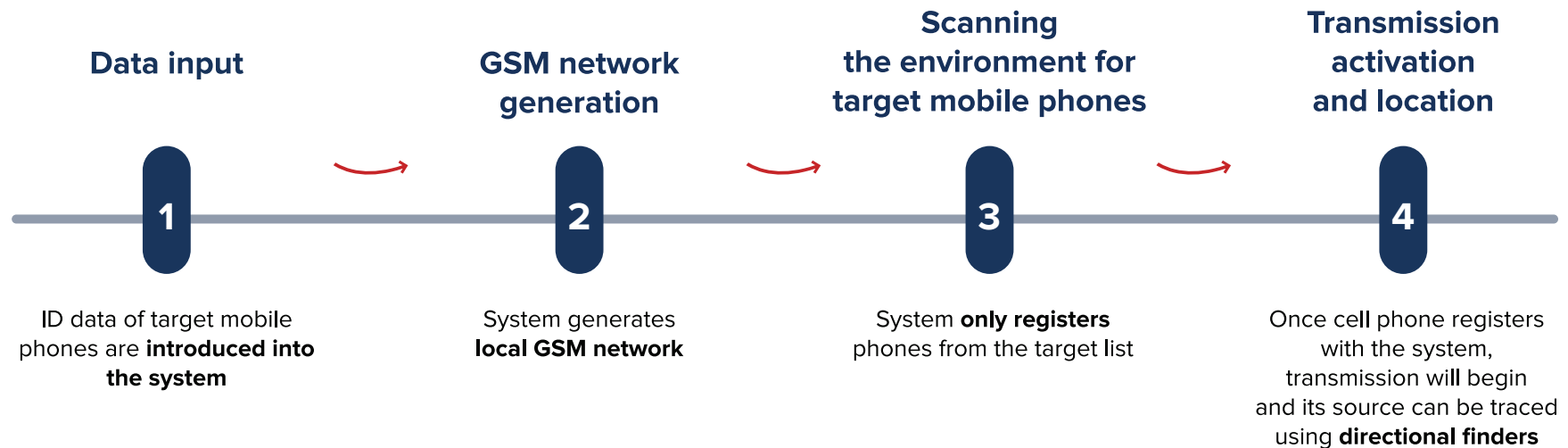
**Area mode**

Their use largely depends on the type of rescue mission and environment in which the System will be used.

# Operating modes

## Target Mode

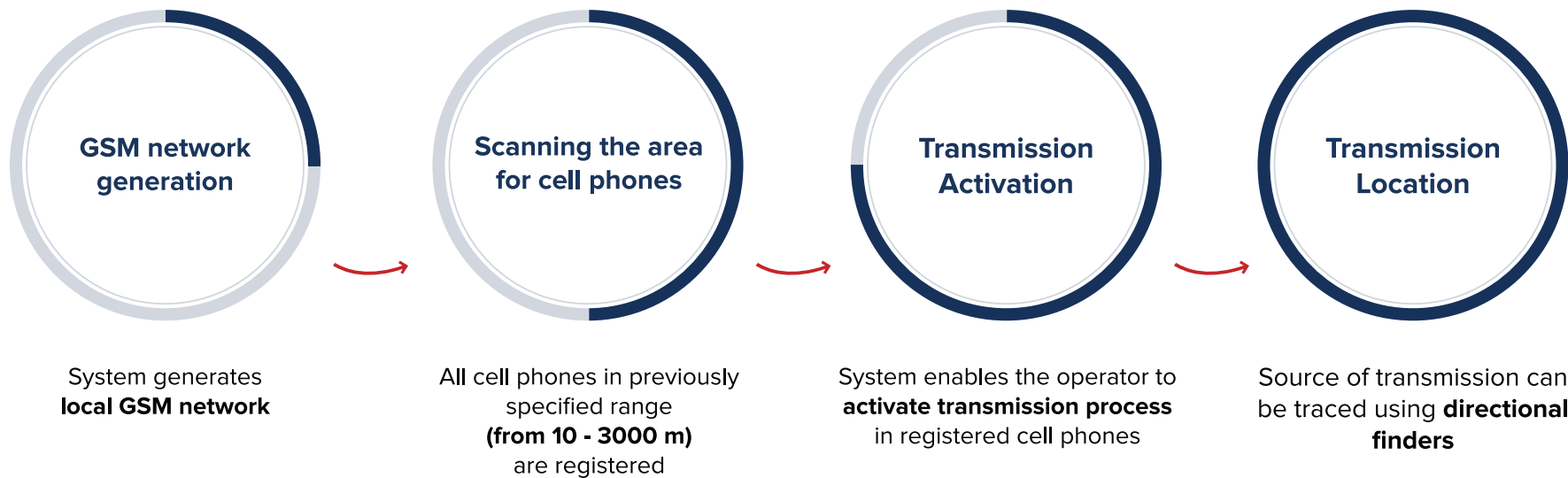
Target mode enables search for **specific mobile phones**



# Operating modes

## Area Mode

Allows search of **all mobile phones in the area** specified by the operator from (10 up to 3,000m)



# Possible applications for search modes

## Target Mode

Searching for a **specific person** or a group of people after receiving a report that they have gone missing.

**Basic information about the victim is required:**

- Phone number (MSISDN) or IMSI/IMEI

## Area Mode

Quickly determining the number of people that might still be present in the **area** and locating them (avalanche/natural disaster site)

- Avalanche SAR
- Patrolling tourist trails

**No information about the victim is required**

# Features

Our mobile System was **designed specifically for SAR use** and numerous trials with Tatra Mountain Rescue Service enabled us **to find a balance between:**

**Resistance**

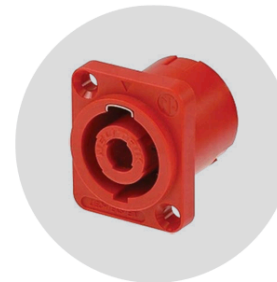
**Comfort**



## Resistance



- Solid water and ash proof B&W case
- Rigid custom-made aluminum frame with additional vibroisolation – Further shock proofing
- Highest quality connectors that fulfill IP67 waterproof standards produced



# Comfort

### Custom made:

- Construction of antenna mount
- Design of directional finders
- Backpack System



Battery type and configuration as well as many other components selected to achieve **high performance while maintaining weight of only 16.8kg**



# Applications

Extremely durable construction of the System enables it to be used from:



**AIR**



**SAR helicopter**

**LAND**



**Backpack**



**Car**



**Snowmobile**

# Key Parameters



## Range

Up to 3000m with  
standard directional  
antennas



## Up to 90 minutes

Performance on  
built in battery



## External power source inputs

From 9 to 36V DC or  
110/240V AC

The system does not interfere with functioning of local GSM network

# Battery life

**Battery life can be significantly extended using external battery pack provided by our partner – Husqvarna**



ergonomic and durable battery packs come in two versions and enable the system to continuously operate for:

- **Up to 4 hours 50 minutes** – BLi520x 36V 14,4 Ah
- **Up to 8 hours 40 minutes** – BLi940x 36V 26,1 Ah

# Summary

- 1 • Works on the following frequencies: GSM850, EGSM900, DCS 1800, PCS 1900
- 2 • Operating range up to **1400m** (open space while the System is on the ground) or up to **3000m** when used from a helicopter
- 3 • Send SMS to one mobile phone or all mobiles located within System's range
- 4 • Make calls between phones within the range of the system, even if there is no actual GSM network coverage
- 5 • Durable construction based on shock resistant, water and ash proof B&W case
- 6 • Full data storage that includes: IMSI, IMEI, and phone type

# Contact Information

For more information and live demo please contact :

**AUS.TECH S.r.l.**

**Via Angelo Bargoni 78**

**00153 Roma**

**Tel. +39-06-44231776**

**Fax +39-06-45552616**

**Email : [sar@austech-italy.com](mailto:sar@austech-italy.com)**



**THANK YOU**

