



# Twin Personal Finder

## Device Presentation

Version 1.0

May, 2010



# Agenda



- Business case overview
- Area of application
- Properties of TPF device
- Technical properties of TPF device
- Special features of device
- Trace technology
- Communication flow



# Business case overview

- Twin Personal Finder (TPF) is a SMSD mobile solution for tracking of persons, assets and pets
- 2 independent, supplementary technologies of GSM and GPS make possible to track not only outdoor but also indoor as well
- TPF is a small, light device which is easy to carry
- Ideal for kids, older or mentally or physically challenged persons
- Device reports its position triggered by customer over internet
- Very long standby time
- Positioning accuracy is in case of GPS exact and a few hundred meters in case of GSM



# Fields of application

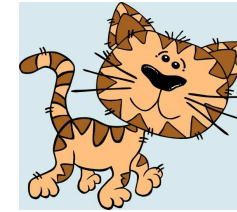
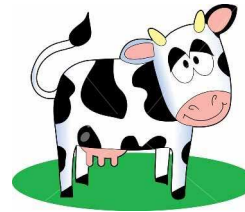
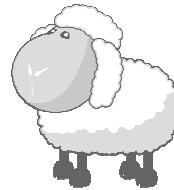
Person



Children



Pet

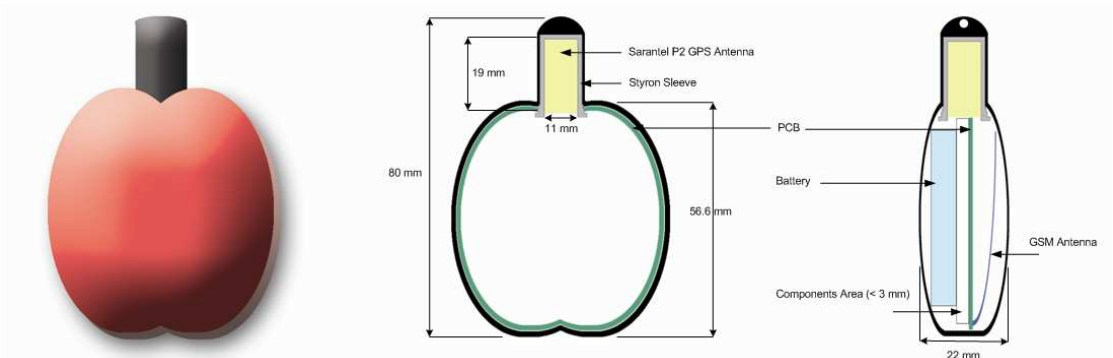


Car/Bus/Track



# Properties of TPF device

Properties	Values
Size (of the PCB)	48 x 58 x 22
Total weight	ca. 60 gram
Operational life of device – one full charge (in case of regular GPS fix every 10 minutes)	> 2 days
Device charging	Wallplug / Computer

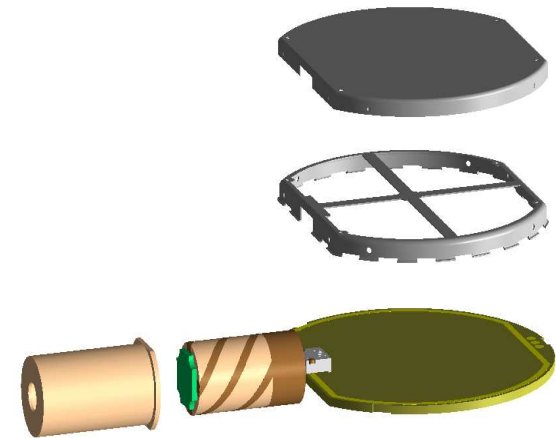


Housing example



# Technical properties of TPF device

Properties	Values
GSM/GPRS	ST-Ericsson 52xx Dual band: 900/1800, 850/1900 Sensitivity: - 110 dBm
GPS	SiRF Star III Acquisition: < - 144 dBm Tracking: < - 159 dBm
GPS Antenna	Sarantel P2
Battery	520mAh
Charging	Mini USB



# Special features of device

## Sophisticated properties

- Small size
- Light weight
- Out- and indoor localization due to 2 separate tracking technologies
- Flexibility of design
  - Customer can use same device in different housings



- Tracing other parameters possible
  - Battery status, temperature



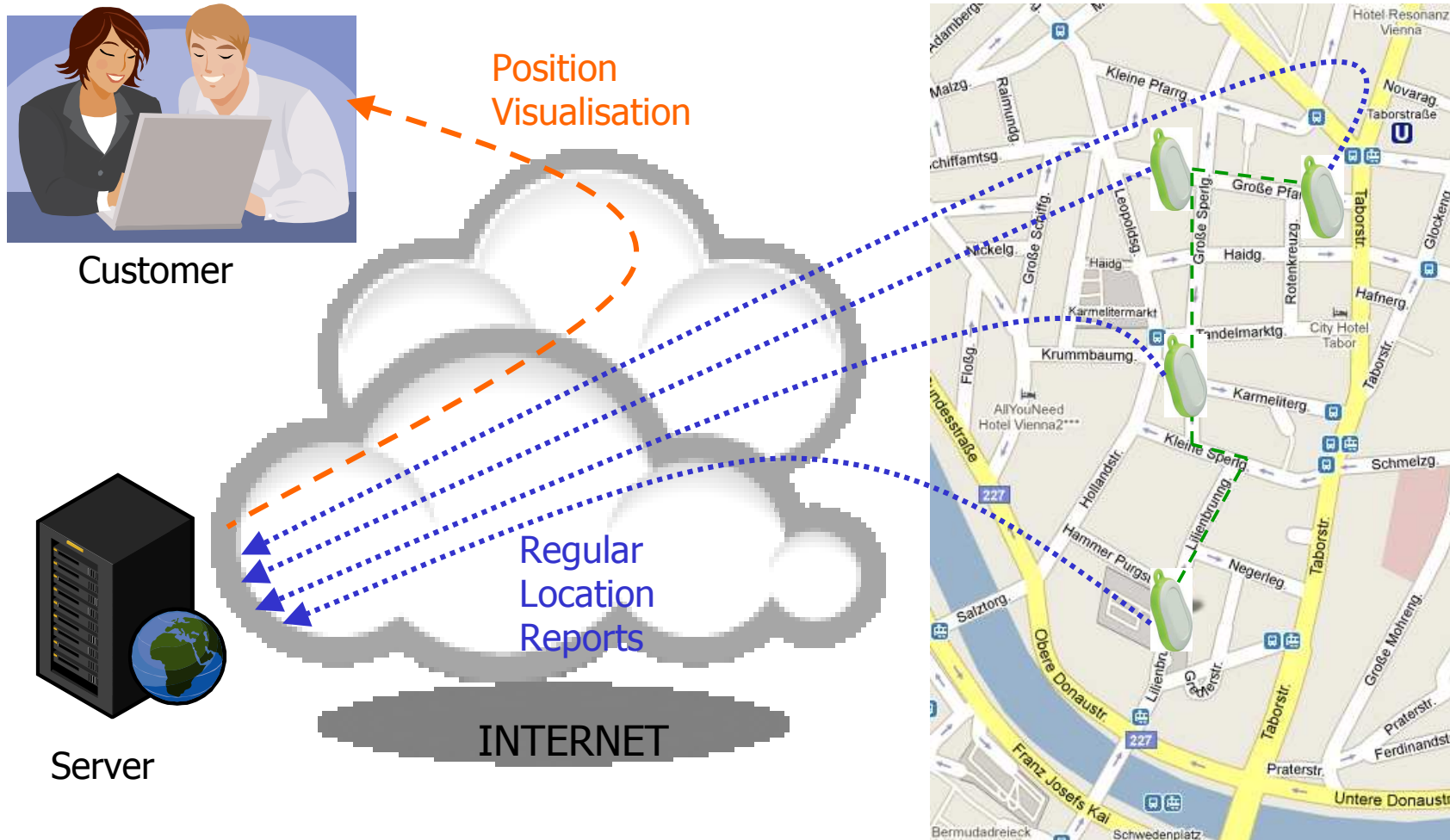
# Trace Technology

- TPF device can be configured to send regular reports (e.g. every 5 minutes) or only upon request.
- If GPS signal is available, TPF device reports its accurate GPS position.
- If GPS signal is not available (e.g. device is indoor), device reports its GSM environment and server transforms it into rough location (accuracy few hundred meters).
- Location request can be issued via SMS or through the website.
- Location report is transferred over GSM/GPRS or SMS and is visible through the website.





# Communication flow 1/3



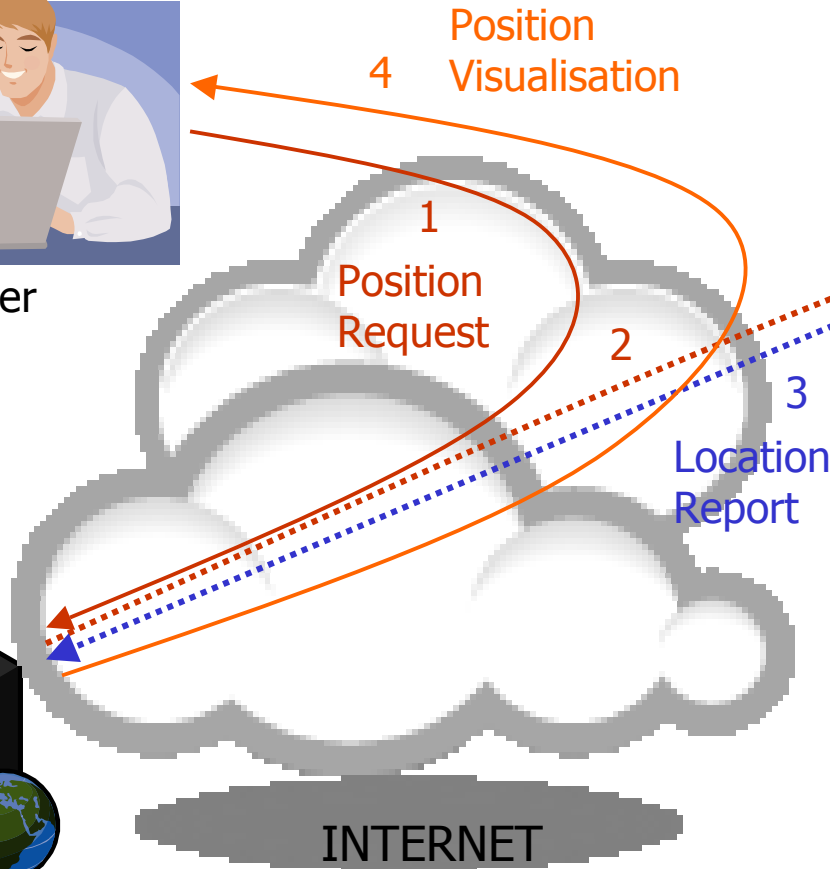
# Communication flow 2/3



Customer



Server



# Communication flow 3/3

