



"Repeater Device" - Special communication solution for the field

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Introduction

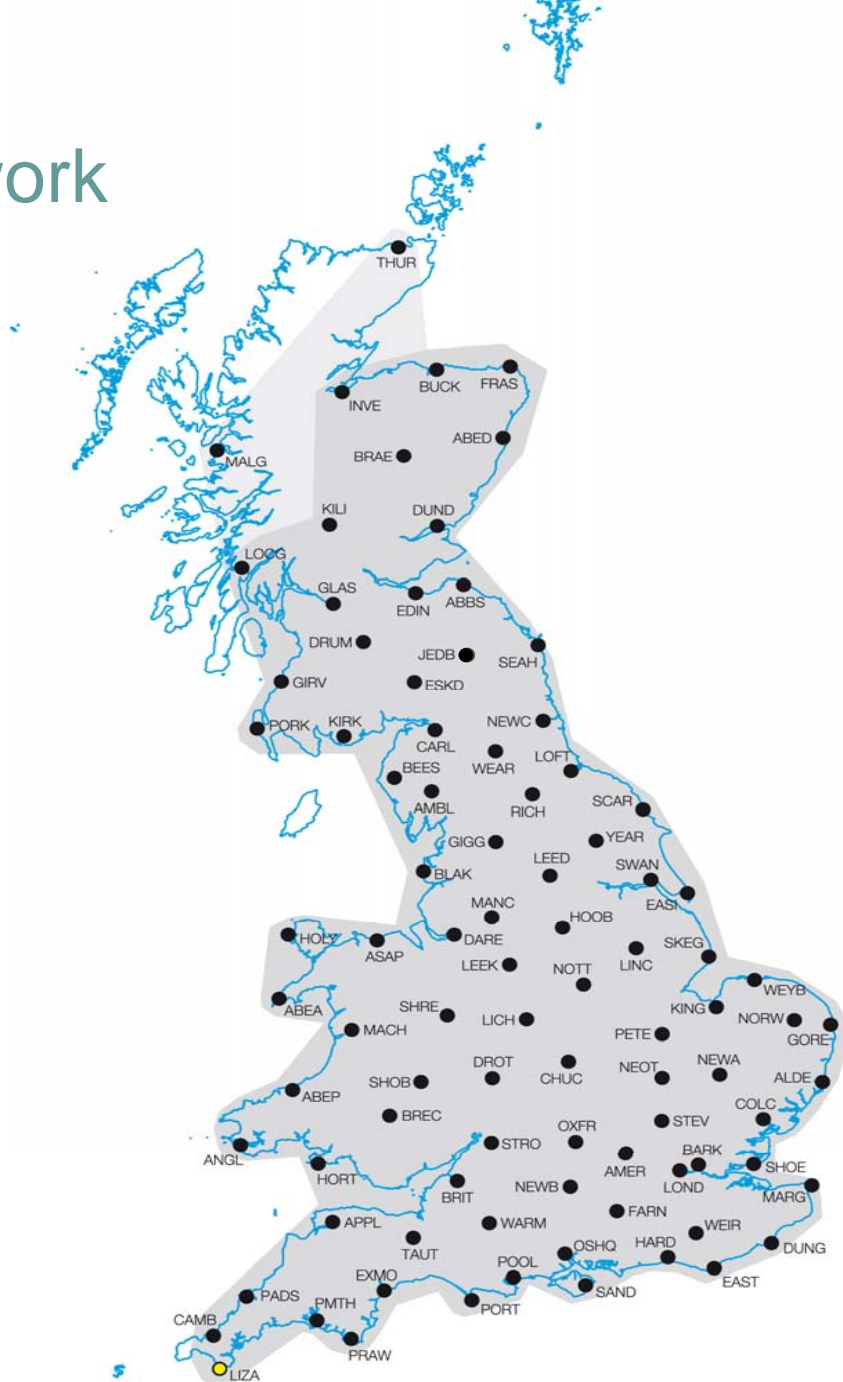
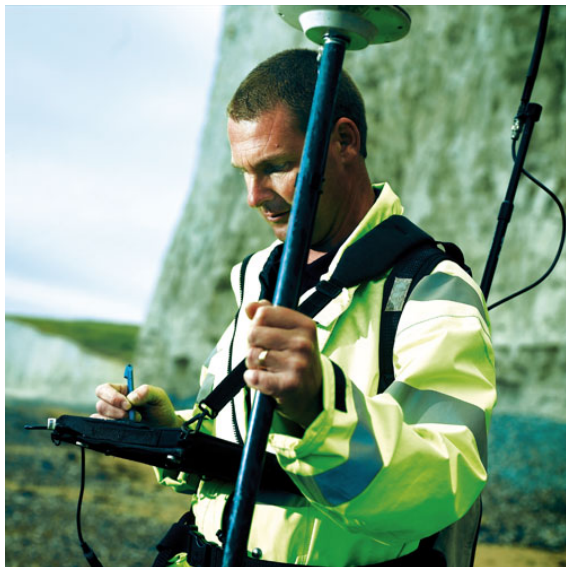
- Ordnance Survey's GPS network
- Repeater device



creating
the definitive
geographic database

The Current OS Net Network

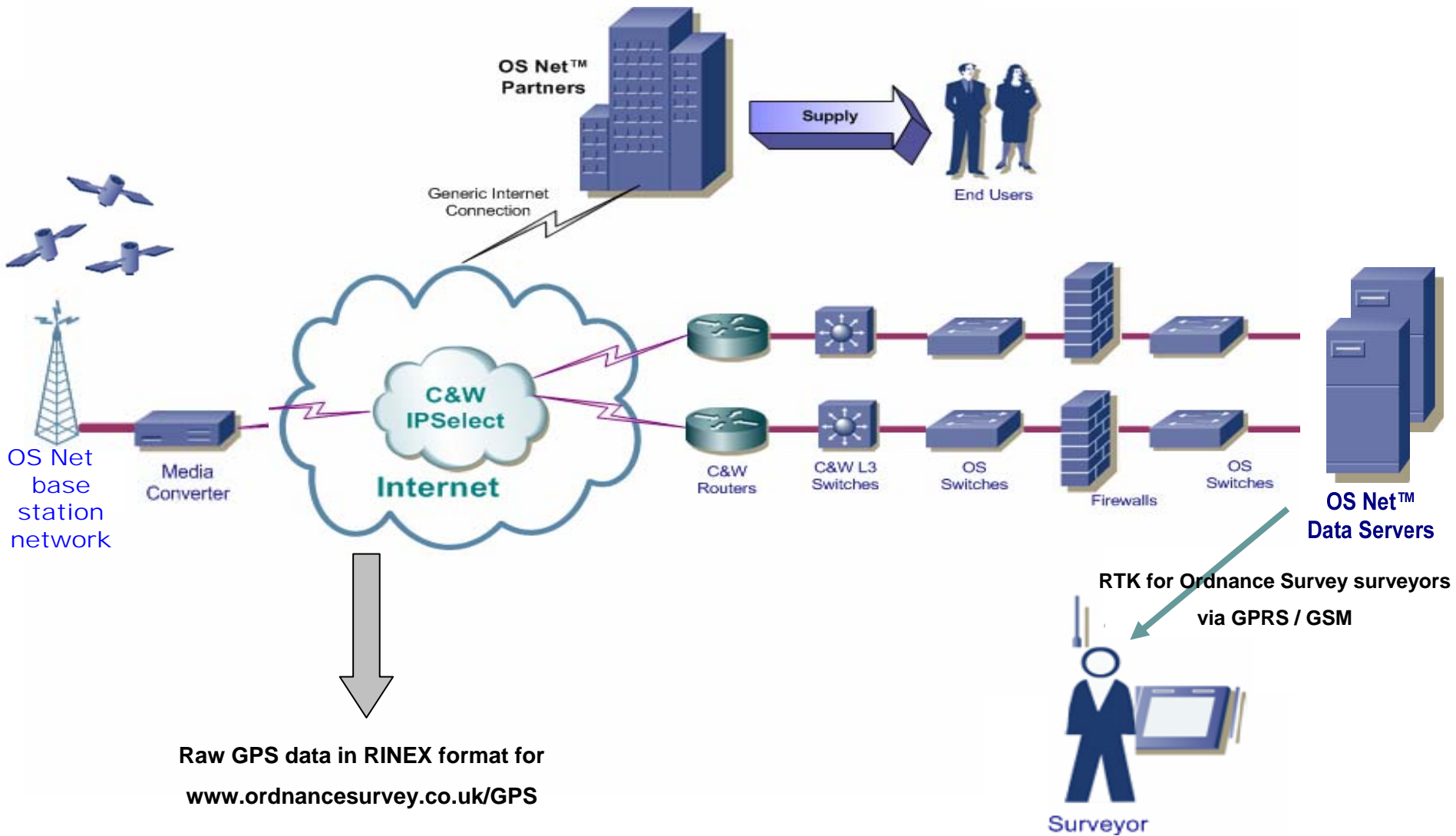
- 90 base stations in operation
- Density enables RTK positioning services across most of the country



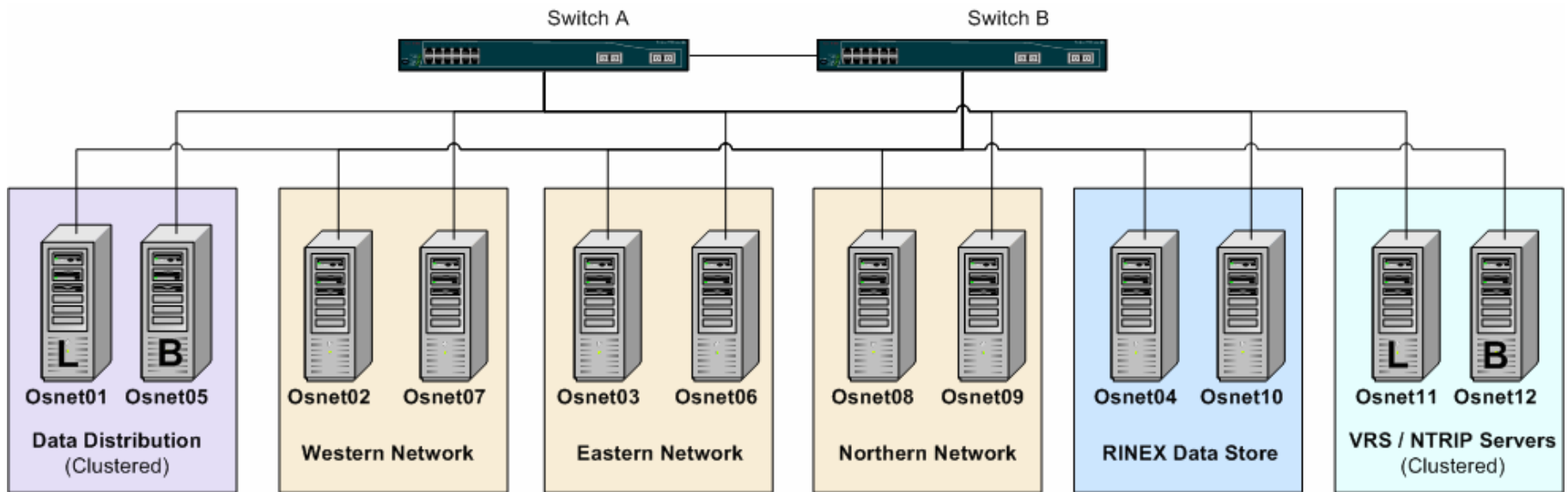




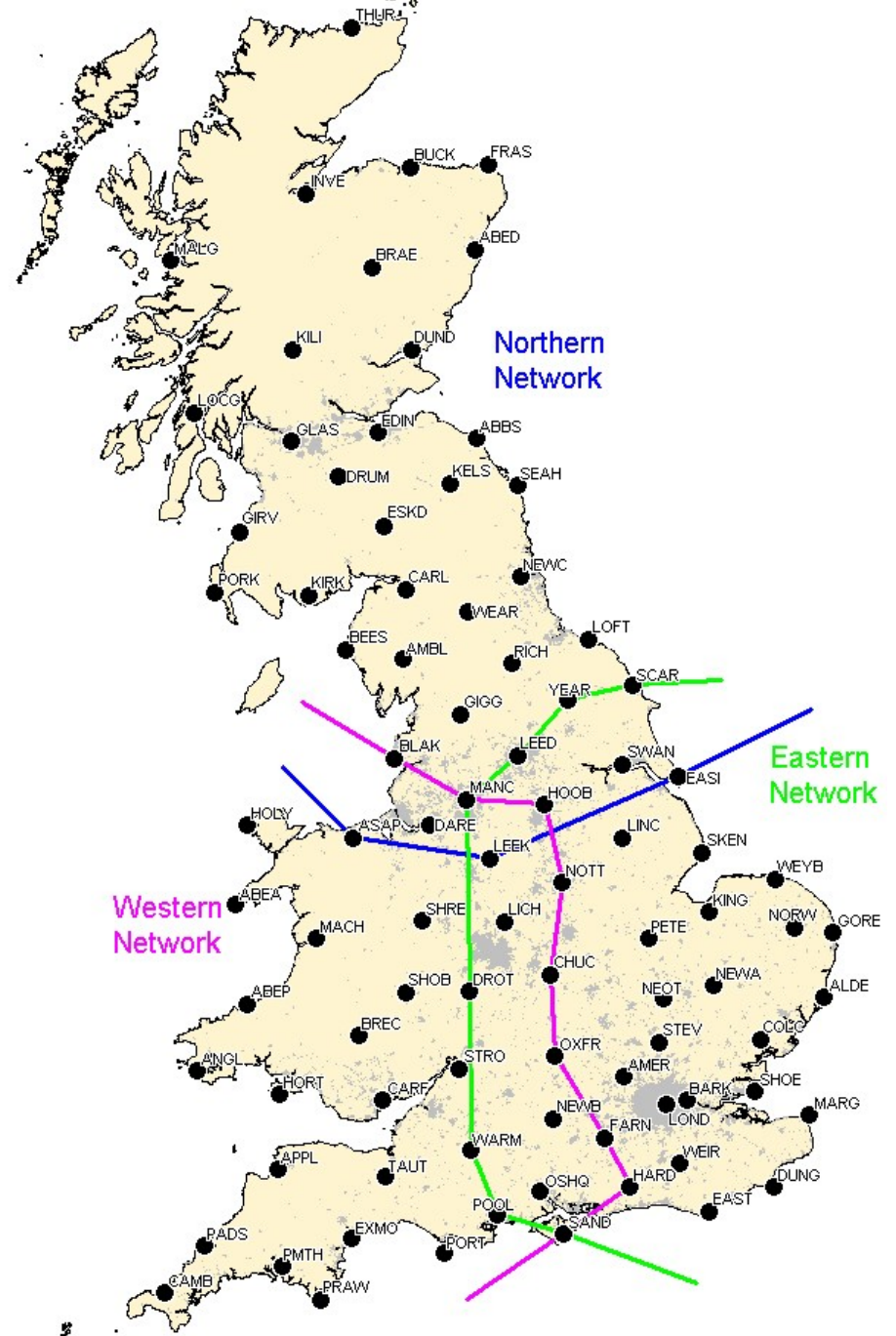
OS Net structure



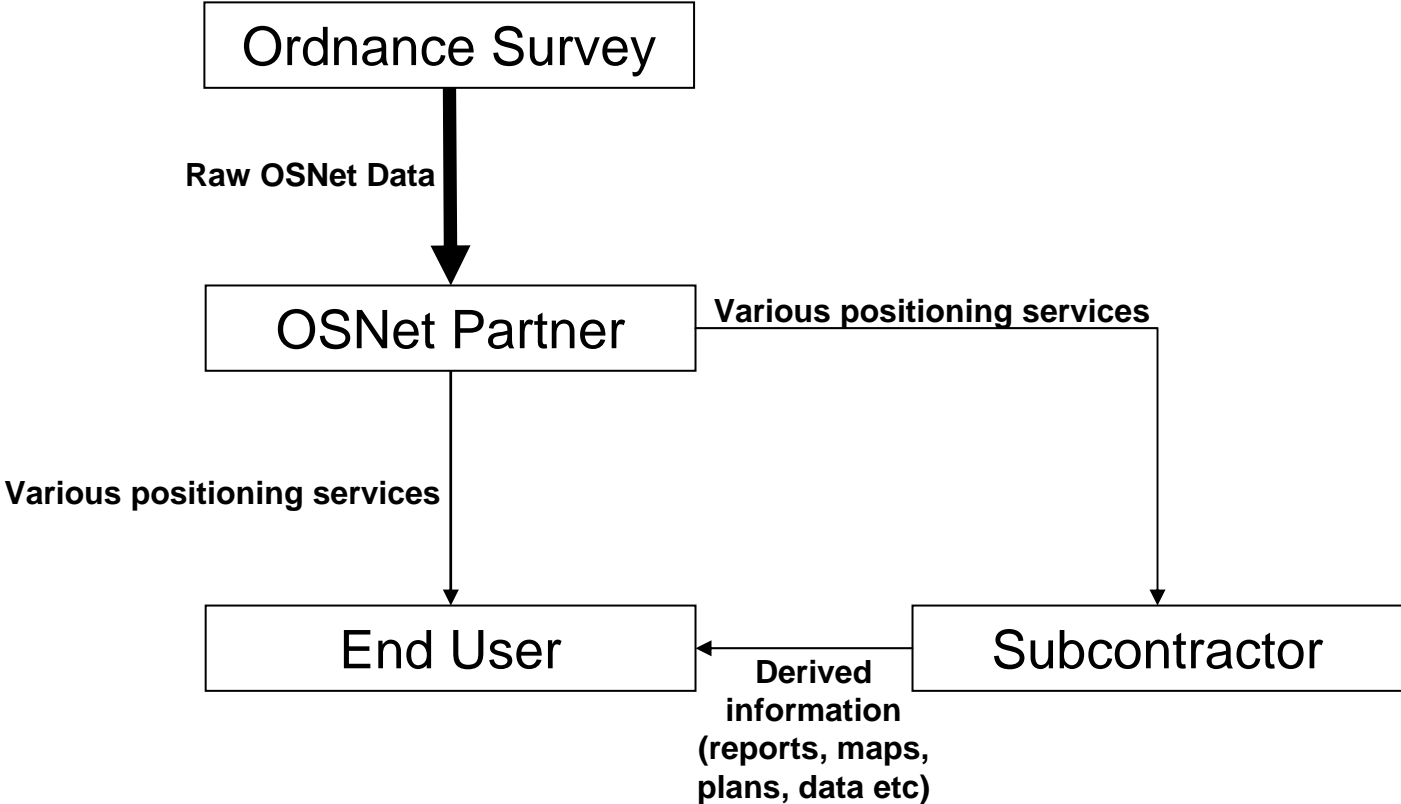
Server architecture



OS Net Sub-networks



OS Net route to market



The Repeater Device – The Why

- Technology solution to areas of poor GPRS/GSM coverage
- Provides a robust method of sending corrections to users
- Provides for a simple, standard method of operation

Repeater Unit



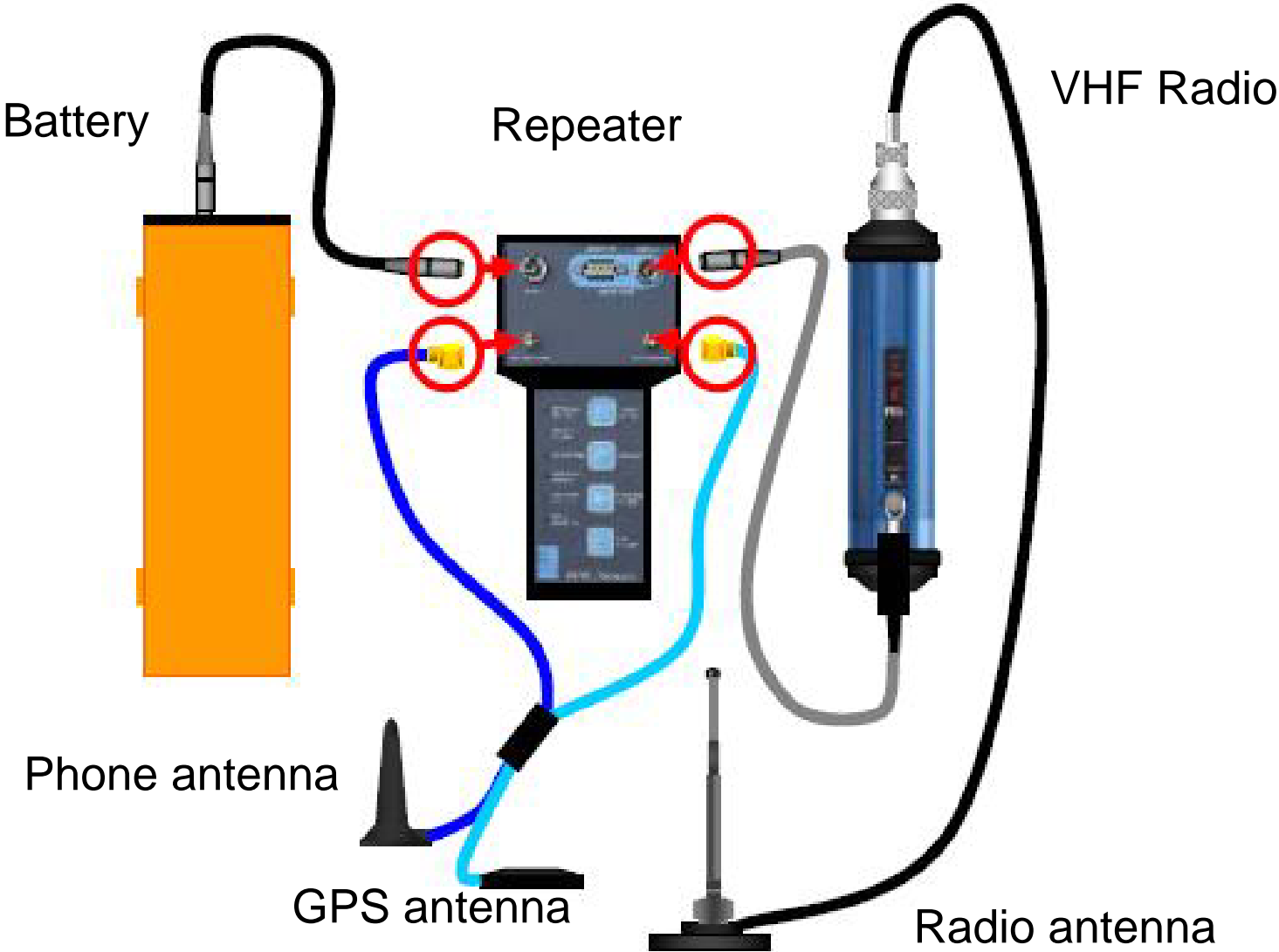
Key Features

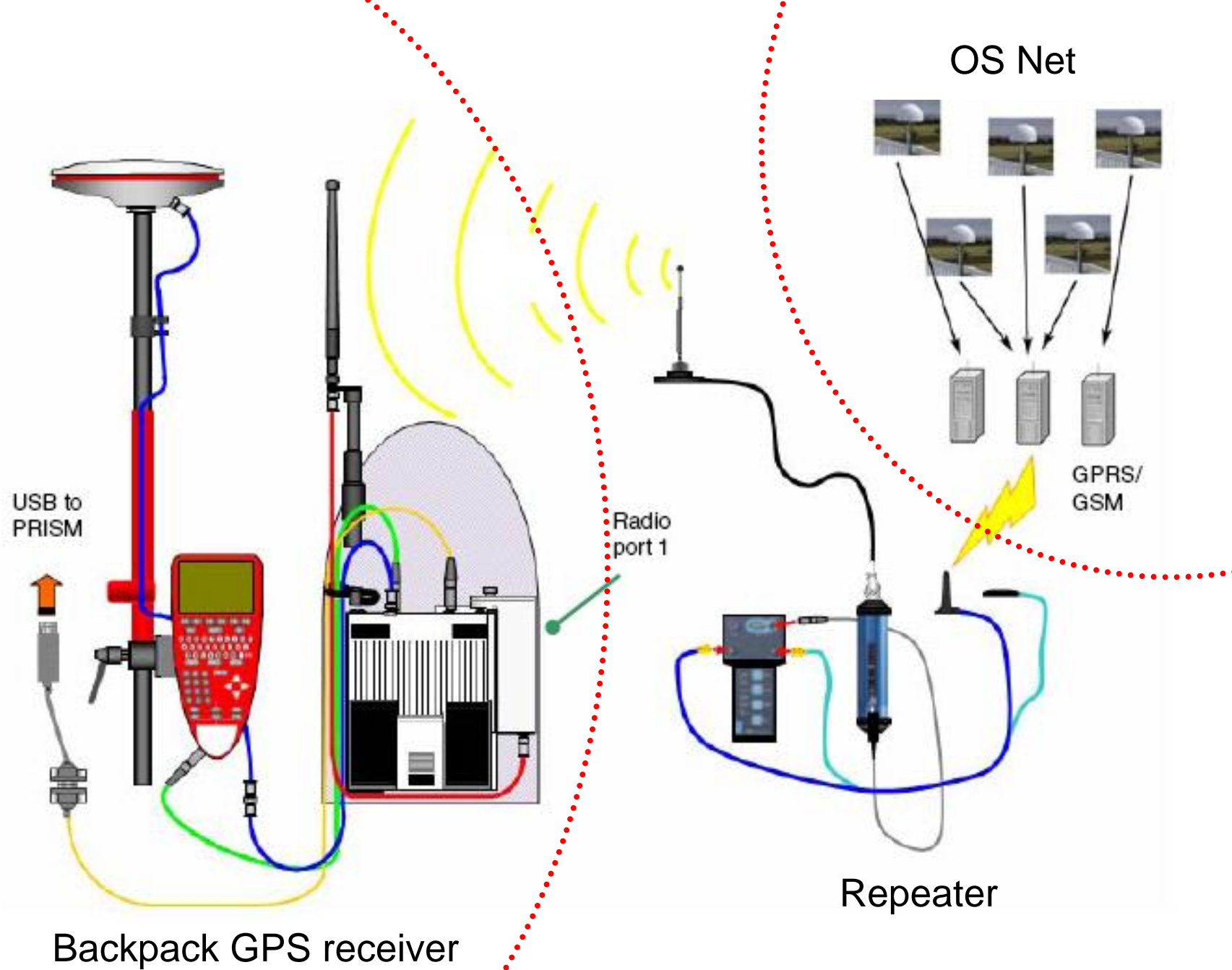
- Repeater consists of a cheap GPS receiver and phone and is connected to a VHF radio
- Audio and visual phone power guide
- Repeater stays in the car boot out of sight
- Powered through internal or external battery or car charger
- Biases to GPRS, but will use GSM (auto switching)
- Capacity to take two SIM cards

The Repeater Device – The How

- Designed internally, manufactured by Roke Manor Research (a Siemens company)
- In use by all Ordnance Survey's 130 GPS equipped surveyors

The Repeater Device – The What





Backpack GPS receiver

Repeater

OS Net

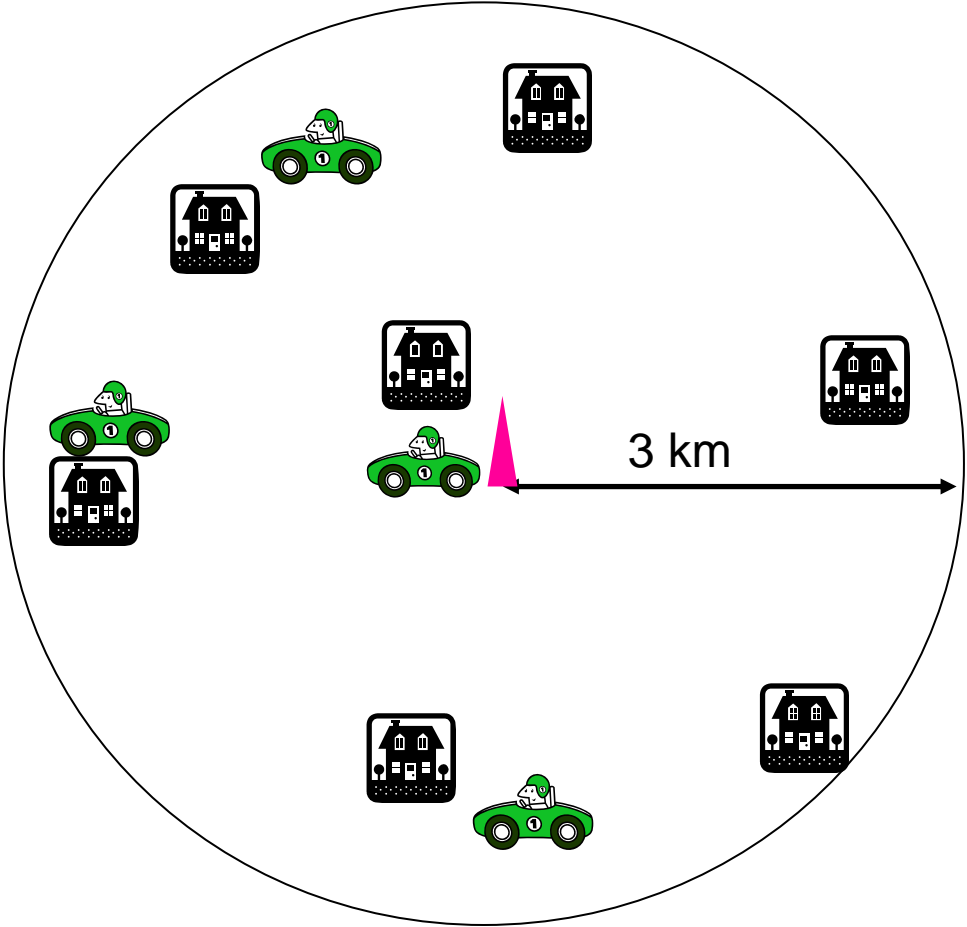
GPRS/
GSM

Radio
port 1

USB to
PRISM

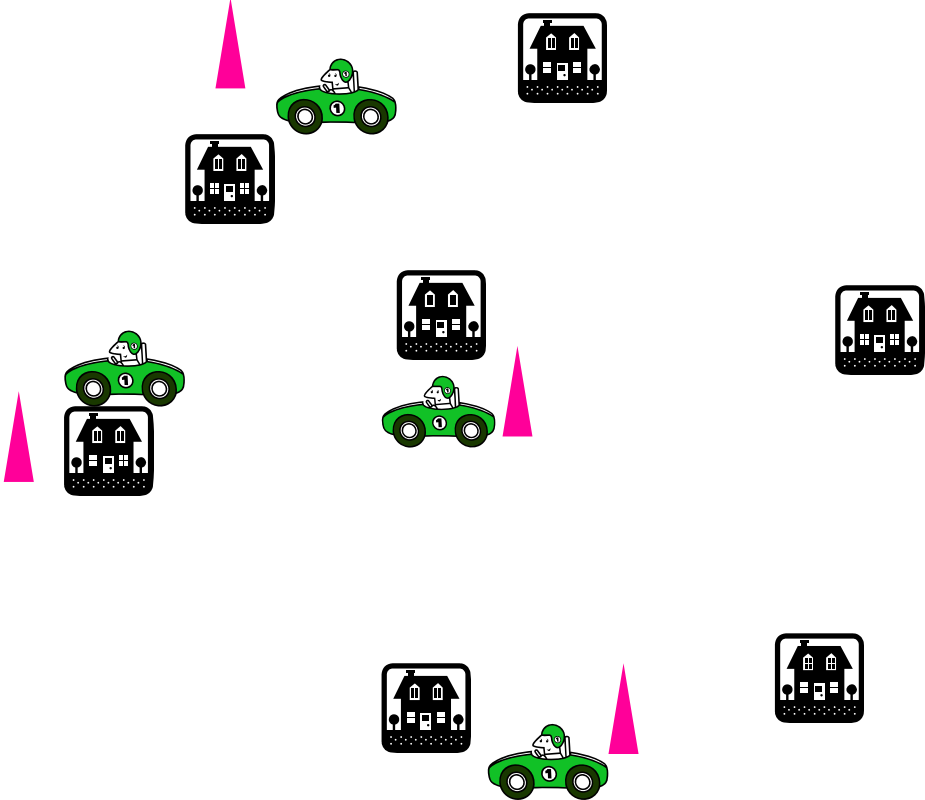
Close sites

(Leave Repeater connected)



Spaced sites

(Leave Repeater on but **not** connected)



For further information

- Contact paul.cruddace@ordnancesurvey.co.uk