



# LONG RANGE, LOW POWER CONSUMPTION COMMUNICATION

*Data exchange network protocol for mobile instrumentation*

## Technological advantages

### Low power consumption

Proximity communication reduces the distance covered by the signal. Power requirements are thus limited.

### Robust and light

Adapts to unexpected modifications in network topology.

### Easy to use

Data processing is easier.

### Efficiency and traceability

Data is transmitted rapidly, with the least possible duplications.



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Example of application for tracking birds

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## Summary of the invention

Software protocol enabling proximity transmission of data for mobile objects requiring identification. This is done within a dynamic structure, by automatic-numbering of objects according to their position in the network and their distance from the data collection device. This technique makes it possible for the collecting device to retrieve information from different elements.

## Potential applications

### Machine to machine

Retrieval of data from mobile sensors

### Geolocation (with or without GPS)

Tracking of animals

### Monitoring of parameters

Sensors for weather forecasting, animal tracking, monitoring of natural events

## Commercial advantages

### Economic

Reduced power requirements  
Low costs  
Suitable for sensors with low power autonomy

### Fast implementation

Prototype available and operational

TRL 6

*Patented invention available under licence*