

Location data – in the quest for protecting the citizen

Spatialist Workshop

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Overview

1

Location data

2

Mining of location data

3

Processing of location data/traffic data

4

Processing of location data other than traffic data

European ePrivacy Directive

Directive 2002/58/EC, as amended by Directive 2009/136/EC (Citizens' Rights Directive)

concerning the processing of personal data and the protection of privacy in the **electronic communications sector**



Location data

“**Location data** means any data processed in an electronic communications network or by an electronic communications service, indicating the **geographic position of the terminal equipment** of a **user** of a publicly available electronic communications service”

Location data

Location data is limited to the information that relates to the **geographic position of the terminal equipment** of a **user** of a publicly available electronic communications service

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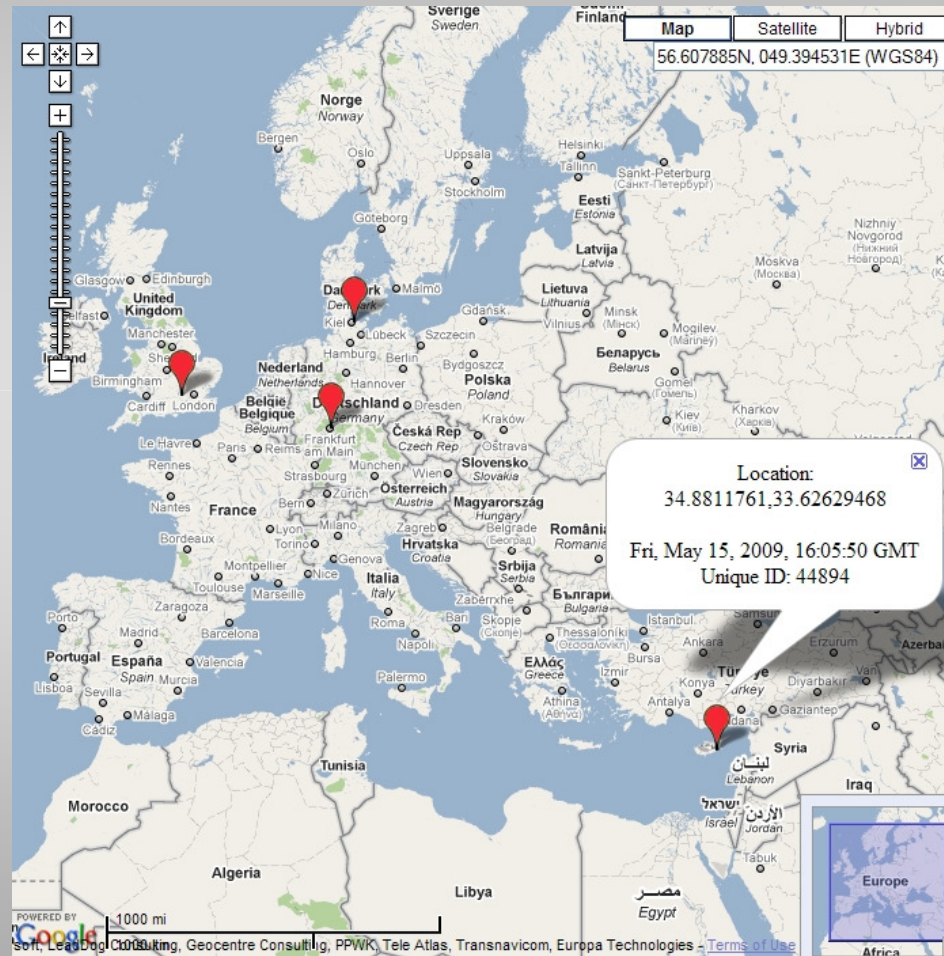
Location Mining Case Study

Short case study tracking four people, in three European member states, persistently for six weeks using mobile handsets.



FIDIS NoE (www.fidi.net)

Location Mining Case Study



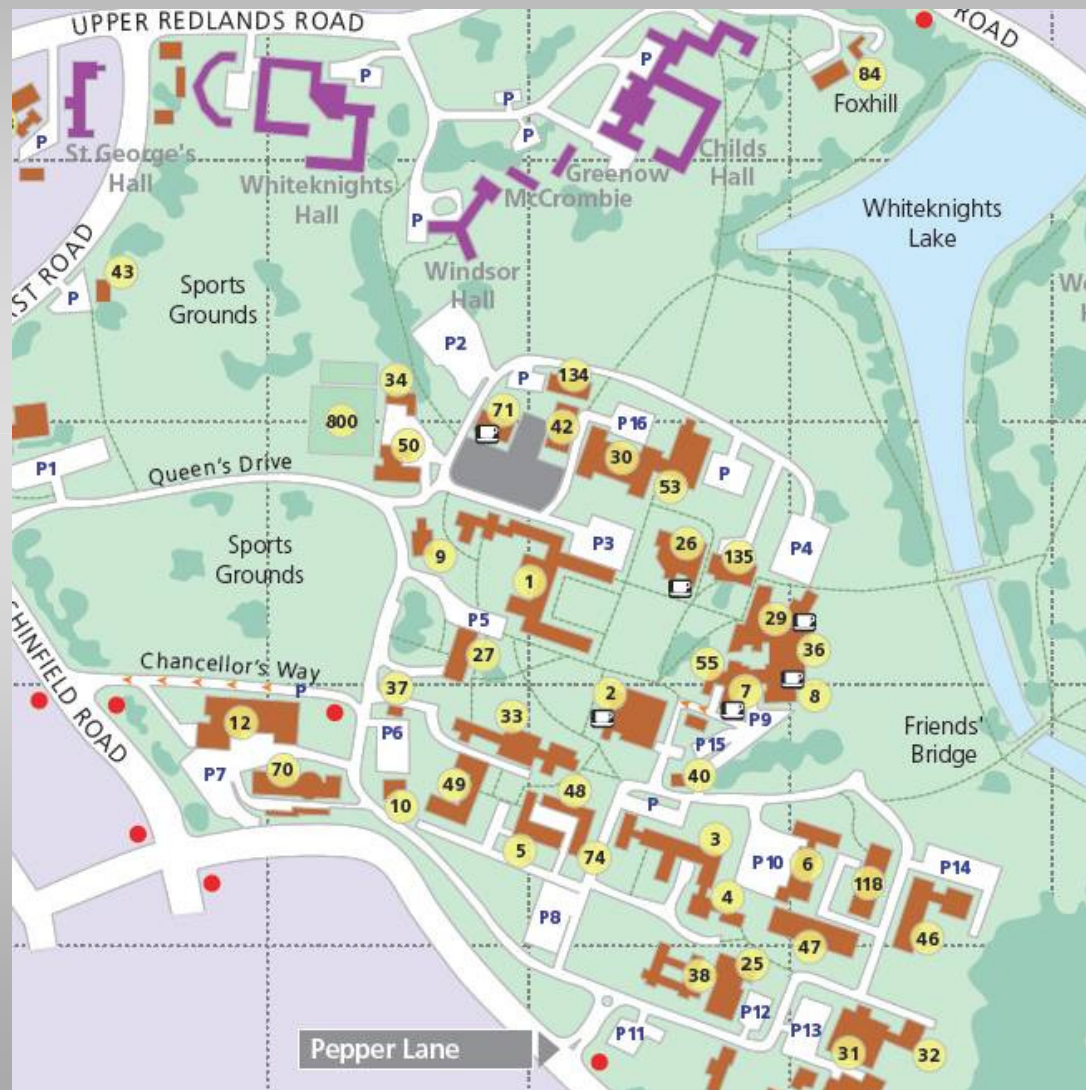
Location Mining Case Study

- The GPS locations of these people have been mined to reveal places of interest and to create simple profiles.
- One of the key tools for initial mining is the generation of 'Points of Interest' (PoI) from the data

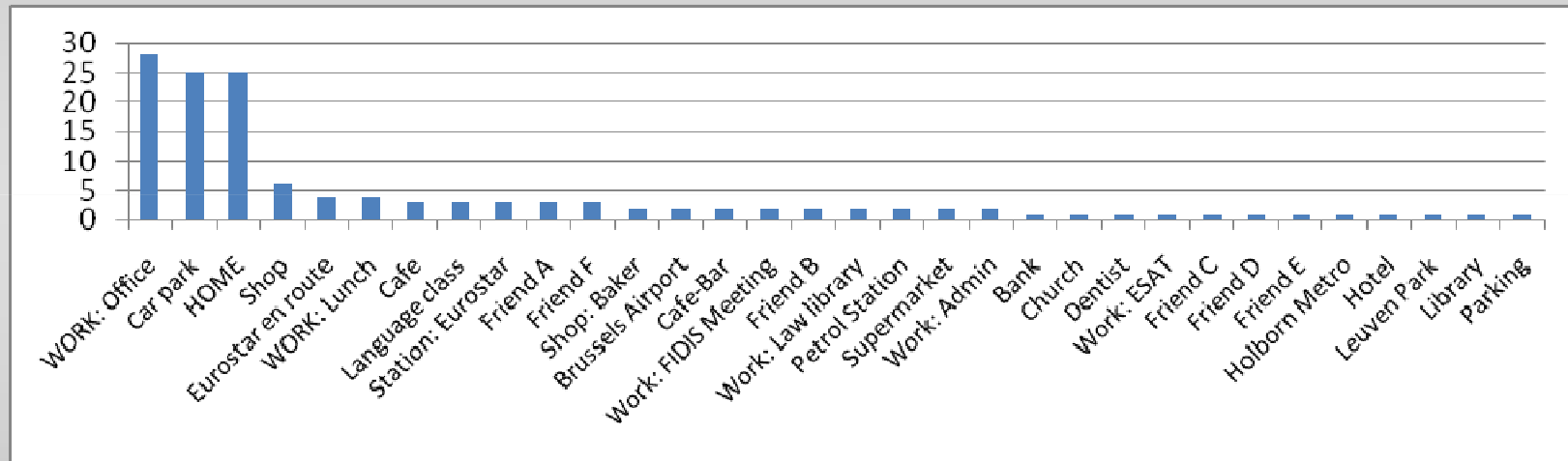
FIDIS NoE (www.fidi.net)



Points of Interest (PoI)



PoIs at identified locations collected from each user

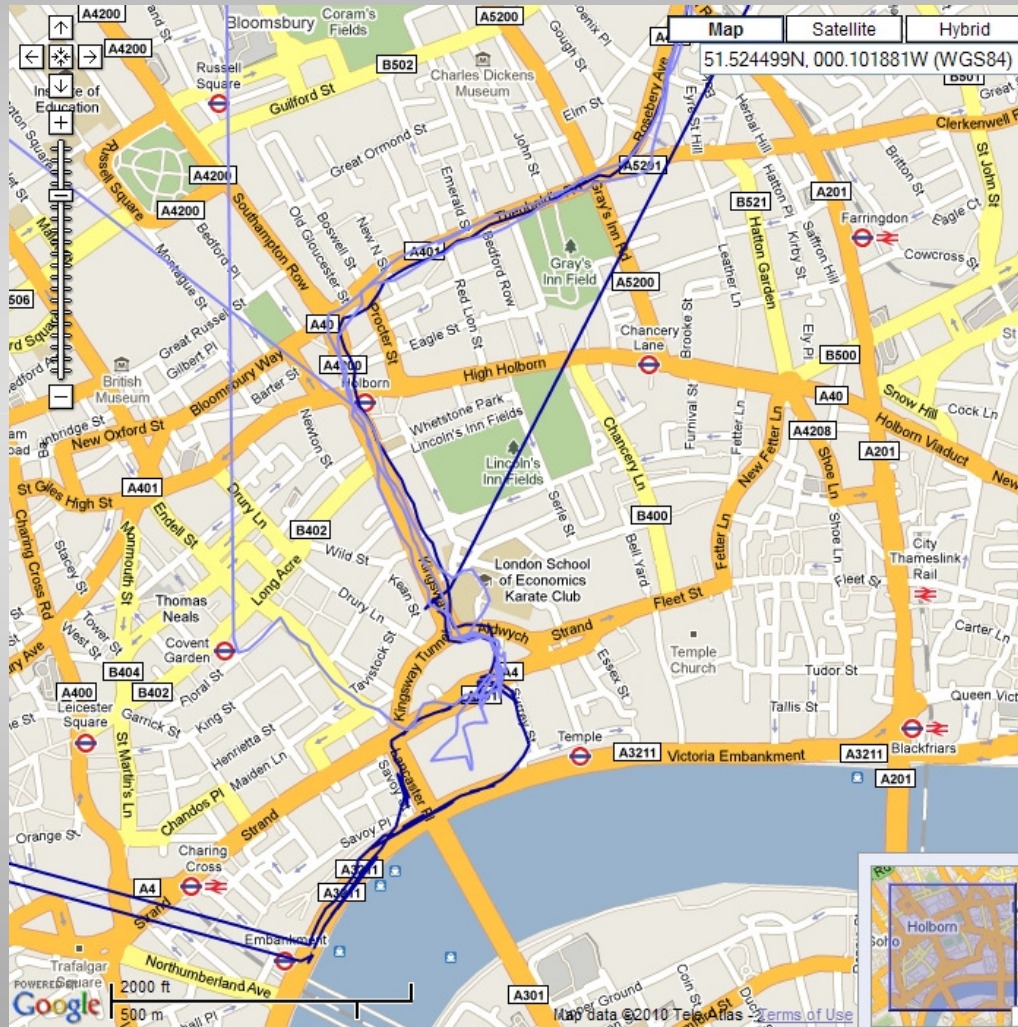


Frequency of PoIs





Inferring relation



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Traffic data

“**Traffic data** means any data processed for the purpose of the conveyance of a communication on an electronic communications network or for the billing thereof”

▶▶ Location data that are processed for the purpose of the conveyance of an electronic communications network are also traffic data !



Processing of location/traffic data

Traffic data must be

- erased or
- made anonymous

when they are no longer needed for the purpose of the transmission of a communication



Processing of location/traffic data

Prior Consent of subscriber or user for

- purpose of marketing electronic communications services or
- for the provision of value added services

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Location data other than traffic data

Location data other than traffic data that are not processed for the purpose of the conveyance of a communication on an electronic communications network or for the billing thereof

►► for the provision of a value added service



Value added service

“**Value added service** means any service which requires the processing of traffic data or location data other than traffic data beyond what is necessary for the transmission of a communication or the billing thereof”

▶▶ “Location Based Services” broad term going beyond the ePrivacy Directive



Value added service

Location data other than traffic data may only be processed

- when they are made anonymous, or
- with the consent of the users or subscribers

to the extent and for the duration necessary for the provision of a value added service.

Technologies for offering LBS

- Cell-based mobile communication networks such as GSM and UMTS;
- Satellite-based positioning systems such as the Global Positioning System (GPS);
- WiFi or Bluetooth;
- Wireless technologies, such as Radio Frequency Identification (RFID),
- Sensor-based systems such as face recognition systems and license-plate scanners for vehicles;
- Chip-card-based systems, such as credit cards

Challenge...

Which of the technologies that offer
Location Based Services are covered by
the ePrivacy Directive?

Thank you for your attention!

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