Alert Service Police
Location based services for police officers in the field

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About Geodan

> “Who” is Geodan?
  - 20+ years specialist in GIS
  - Independent (lots of partners)
  - Innovation

> “What” is Geodan?
  - One-Stop-Shop in GIS:
    • Consultancy
    • System development / System integration
    • Reseller & producer of geo-data and software
    • Training & Education
    • Hosting

> 110 employees

> www.geodan.com
The project

> Groningen Alert Service police (GRAS)

> Client
  – Dutch police region Groningen
  &
  – the Board Research and Innovation of the Police Information Management Cooperative (CIP)

> Technology Used
  – Mobile GIS
  – Location Based Services (LBS)
Business Needs

- Lower the number of non-paid fines
- Effective law enforcement
- Increase in operational safety
- Better response to actual safety situation
- Better exploitation of P-Info information (available on-line)
Requirements

> Functional
  - Present user location and locations of his/her colleagues
  - Show notifications when a POA is nearby
  - Respond (explicitly) and report the result

> Technical
  - GPS technology
  - Windows Mobile
  - Integration with P-Info
  - Compliant to highest safety standards
  - Outstanding performance & stability
Alert Service Police – the Movie
Mobile GIS

Then ...... and nowadays
Location Based Services (LBS)

LBS = getting information based on your current position

Outdoor and Indoor positioning

Technology behind

Outdoor

Indoor

www.geodan.com
Geofence = Geographic demarcation (2D/3D/4D)

Geofence stored in spatial database

GPS locations

Geographic Equation (Point in Polygon)

LBS Service

Trigger
Examples of LBS projects

> Indoor
  - AMC Hospital
  - Detention Center Lelystad

Technology behind

Hotspots
(tags within sensor reach)

Chokepoints
(last known location)

Coordinates
(signal triangulation)
Examples of LBS projects

Outdoor

Alert Service Police

WebPark

BP Refinery Cherry Point
Movida: components

Location Centre
Rich, Thin and Mobile
clients

Health care

Detention centers

Industrial safety

Third party applications

Application API

Report

Map and Visualization

Zones

Alerts

Location

Management

Connector API

GPS
A-GPS
Car Bus
Tramways

Vodafone
Orange
T-Mobile

Active RFID
Passive RFID
Ultrasonic

Temperature
Pressure
Accelerometer

Any Sensor

Any GPS

Any Telecom

Any RFID

Communication API

SMS, MMS
Voice
Email
Application

Content interfaces

Assets
Maps
CAD
People
Conclusions

> Complex Project
  - Multiple systems & stakeholders
  - Security
  - Testing procedures
  - Windows Mobile 2003
  - Network stability
  - External pressure
Results so far

Conclusions

very positive

except for
External pressure??

Minister: "Alle agenten een zakcomputer"

Source: AD newspaper, April 20, 2007
Thank you!
Questions?
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