

PRIVACY HORIZONS: TERRA INCOGNITA

29th International Conference of
Data Protection and Privacy Commissioners

September 25 to 28, 2007
Montreal, Canada



LES HORIZONS DE LA PROTECTION DE LA VIE PRIVÉE : TERRA INCOGNITA

29^e Conférence internationale des commissaires
à la protection des données et de la vie privée

du 25 au 28 septembre 2007
Montréal, Canada

Überveillance: 24/7 x 365 People Tracking and Monitoring

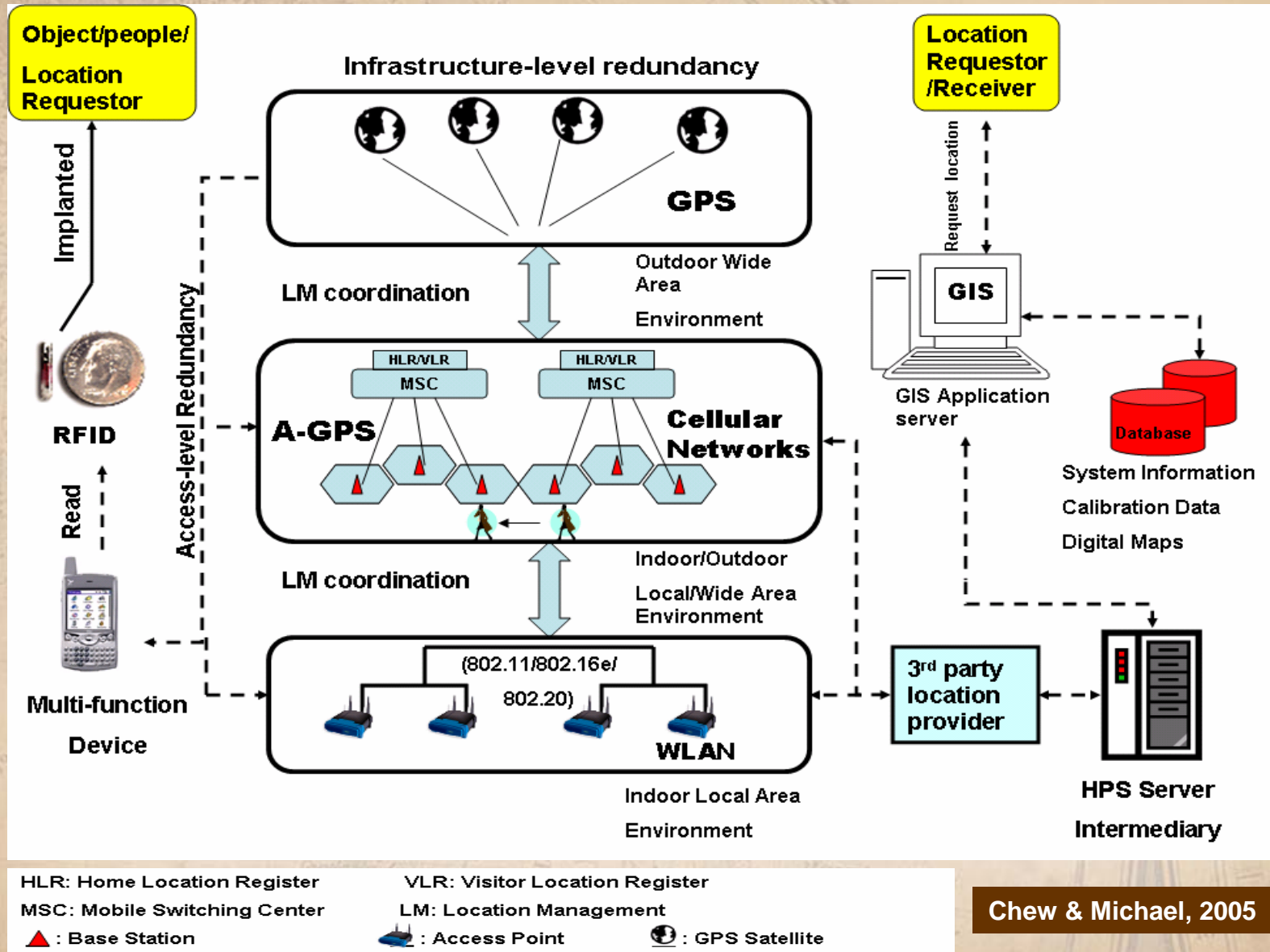
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Classifying Location Technologies and Services

- Network or device-based or hybrid
- Precise vs proximity positioning
- Indoors/outdoors, closed campus/global
- Consumer, business, government
- Used to track objects, animals, people
- Voluntary vs mandatory
- Push vs pull location services



Chew & Michael, 2005

Practical Approaches to Gauging Privacy Impacts

- **Before** widespread diffusion of an innovation
 - Discourse and debate
 - Citizen and public/private sector involvement
 - Scenario-based planning
 - Historical method; learning from the lessons of the past
 - Best case/worse case and deconstruction/interpretation
 - Technology assessment & forecasting
 - Ask a universal panel of experts with diverse backgrounds
- **After** widespread diffusion of an innovation
 - Case law-based analysis
 - Technical standards, guidelines, protocol review
 - Evidence-based practice can fine-tune regulation

Ubiquitous Tracking: Fact or Fiction?

- Ubiquitous tracking is here, **NOW**
 - E.g. Logistics providers tracking shipments
 - DHL-Asia claims 5 million daily parcel 'location fixes'
- Is **people tracking** ubiquitous?
 - Are you a criminal or terrorist suspect?
 - Law enforcement agencies can track anyone (warrant)
 - Are you a prison inmate or medical patient?
 - Minority groups are always early adopters (trialability)
- Balance needed between extreme viewpoints
 - Industry *is* promoting ubiquity to its customers
 - Civil libertarians are *not* always fully informed

The High-Profile Debate Over RFID Tags in Retail

- Learning from the bar code experience 1970s+
- Do we need a “kill function” in passive tags?
 - What information does an RFID tag reveal beyond that of our credit card history (spending patterns and trends)?
 - Future prospects: obtrusive vs unobtrusive readers
- Should we not be more concerned with RFID “anti-cloning” techniques?
- What is the value proposition of RFID to
 - Business: supply chain management, inventory control etc
 - Consumers: additional ‘convenience’ (yet to be proven)
- What about RFID tags in ePassports/eTollways?

Encouraging the Development of an Emerging Technology

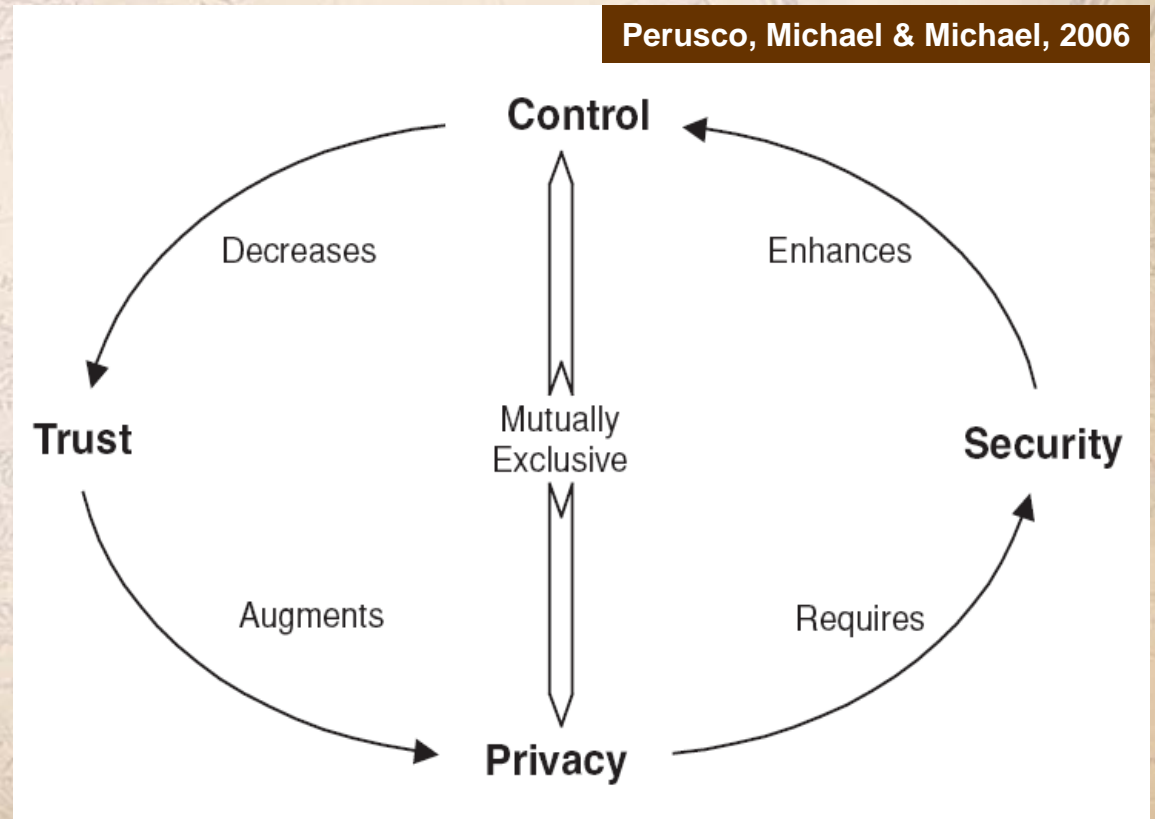
- **Consumer education** is important
 - In the case of RFID it *cannot* wait until after deployment
- Safeguards and support depend on **usability context**
 - One size does *not* fit all
 - E.g. tagging objects vs implanting people with transponders is different (even if voluntary subscription)
- The question **IS** whether RFID:
 - (A) Is a technology looking for a problem, pushed by vendors?
 - (B) Is a valuable e-business investment for the future?
 - (C) Is another *interim* technology serving perceived needs?
 - (D) Is a vehicle for global object-to-subject surveillance?

The Rights of the Individual to Opt-Out of Being Tracked

- Is the individual “being tracked”:
 - a minor, mentally ill or disabled, a citizen or alien, husband or wife, a leaseholder of a vehicle, a life insurance policy member, a medical patient, an employee of a company, a criminal etc.
- Informed personal **consent** vs third party (power of attorney)?
- Need to respect individual **philosophies/beliefs** held by citizens
- Required **accessibility** to services through multiple mechanisms
 - E.g. there are people who do not own a mobile phone, do not wish to have Internet access for banking, and do not believe in credit facilities (it is their right to do so; their right to be *let alone*)
- An individual should be aware of **location frequency reporting**
 - Daily, hourly, per minute/second, based on custom requirements
- Polling “transactions” must be **transparent** to the subscriber

Location Tracking Dilemmas

- Accuracy
- Accessibility
- Privacy
- Property
- Control
- Security
- Trust
- Cost



Concluding Remarks

- **Location intelligence** can reveal a great deal about one's relationships, traits, likes and dislikes, mobility behaviour etc.
- Problem of any location service is the potential for:
 - **Misinformation**
 - **Misinterpretation**
 - **Information Manipulation**
- Location services can enhance national and personal security
 - But how much privacy are we willing to trade to increase security?
- **Überveillance** is here now- the *above* and *beyond* almost omnipresent 24/7 x 365 surveillance
- We must consider the **trajectory** of location services
 - Hierarchical positioning systems (converging services)
 - IP-based location services (location-aware devices)
 - The rise of the Electrophorus (the 'human' as a wireless node)