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RFID: Government Use + Privacy Issues

I. Government is moving into RFID in a big way

- A. Active RFID tags used by Defense Dep't (DoD) since early '80s: Joint Total Asset Visibility (JTAV) network uses tags and GPS locators to globally track military supplies.
- B. Now government adopting or considering passive RFID tags
 - 1. Logistics and property management
 - a) DoD has set Jan 2005 deadline for its suppliers to tag each individual part, case or pallet packaging (applies to all items except bulk commodities like sand, gravel and liquids)
 - (1) 43,000 DoD suppliers
 - (2) 45 million separate line items
 - b) U.S. General Services Administration has mandated RFIDs for buildings, fleets of cars, etc. that it oversees
 - 2. Transportation systems (toll transponders, tires, smart cards, DSRC [Dedicated Short-Range Communications])
 - 3. Border control and security
 - a) Dep't of Homeland Security (DHS) "Nexus" program uses RFID in "low-risk traveler" cards for U.S – Canada border crossing (50,000 enrollees)
 - b) DHS: US-VISIT "next-generation travel documents" (funding for RFID sensors), boarding passes, luggage handling
 - c) TSA: RFID-equipped boarding passes?
 - d) Int'l Civil Aviation Organization standard incorporates RFIDs and biometrics
 - e) Malaysia's new E-passport (Dec. 2002) is based on IRIS smart card technologies, combining microchip, RFID, and biometrics to secure passports.
 - 4. Schools: Enterprise Charter School in Buffalo, NY, has begun to record the time of day students arrive in the morning. Eventually plans to use RFID to track library loans, disciplinary records, cafeteria purchases and



visits to the nurse's office; hopes to expand system to track students' punctuality for every class and to verify when they get on and off school buses.

5. Money
 - a) European Union has been talking about embedding RFIDs into fibers of European currency
 - b) U.S. Internal Revenue Service looking at RFIDs as anti-counterfeiting

C. So far no hint of public policy debate that takes account of individuals' privacy – gov't simply wants to exploit RFIDs

II. Different threat than purely commercial/retail RFID use because likely designed/intended to be:

- A. Promiscuous: likely readable by many RFID sensors
- B. Persistent: gov't won't want them killed or blocked (ID cards)
- C. Pervasive: both tags and sensors/readers
- D. Not either/or – think in terms of alliance of gov't and commerce

III. Policy perspective

- A. "Privacy pollution"
 1. General idea: individually rational to pollute because you don't bear the costs of pollution yourself ("externalities" or "external costs") BUT not socially or collectively rational – everyone does it, then air quality terrible
 2. Same applies to many technologies that either invade privacy or enable others to do so
 - a) EFF seeing this in library context
 - b) Libraries don't want to invade privacy, but they'll make it easier for others to
- B. Not a pure market problem – gov't is subsidizing RFIDs
 1. We worry about Wal-Mart's push for RFIDs
 2. But DoD has enormous budget, 43,000 suppliers and wants RFIDs for 45 million separate line items!
 3. No surprise that RFIDs big in transportation sector – cost of tag is trivial relative to cost of cars and assorted systems
 4. Even if solely for internal gov't use, still creates enormous subsidies for RFID generally
 - a) Economies of scale in tag and reader production will drive down cost and legitimize RFID use



- b) Likely to mean more embedding of RFID sensors into social environment
 - C. Technologies and policy issues converge.
 - 1. Not just about ability of RFIDs to track people in real time in fine detail
 - 2. Must consider other tracking technologies: biometrics, GPS, public video-surveillance
 - 3. As well as huge overarching problem of privacy in records or databases
- IV. Some recommendations for government RFID use.**
 - A. *Specific legislative authorization with meaningful privacy safeguards (not merely appropriations) must be required before governments use RFIDs.*
 - B. *RFID should never be used to eliminate or reduce anonymity, such as in driver's licenses, passports, ID cards, or cash.*
 - C. *RFID must not be used to track individuals absent stringent constitutionally grounded safeguards.*
 - D. *Public-sector entities should not be able to gather information from private sector RFIDs, and vice versa, without stringent constitutional safeguards.*