

Adopting the RFID Technologies

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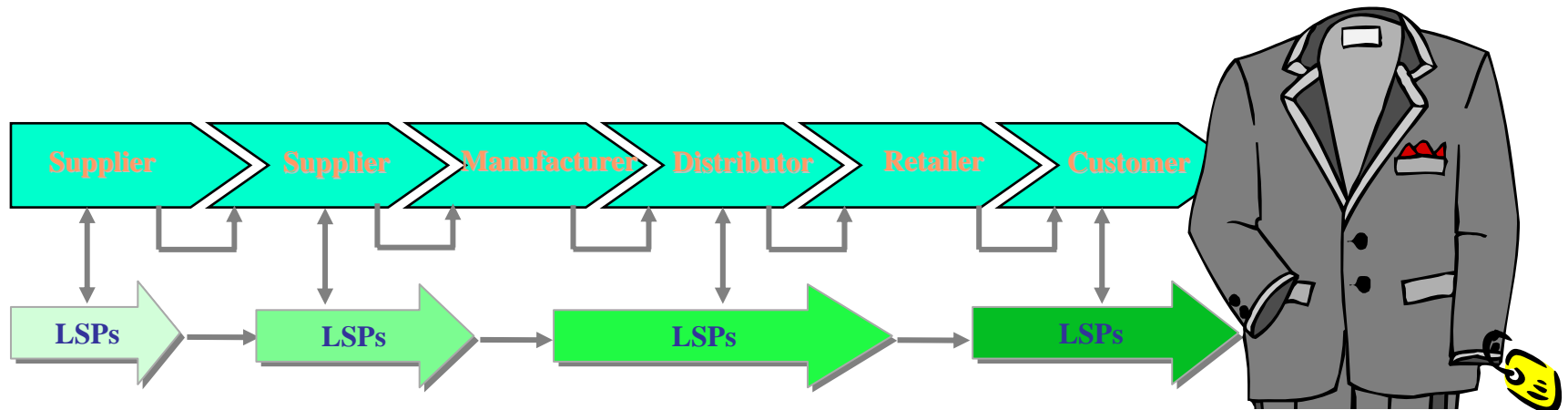
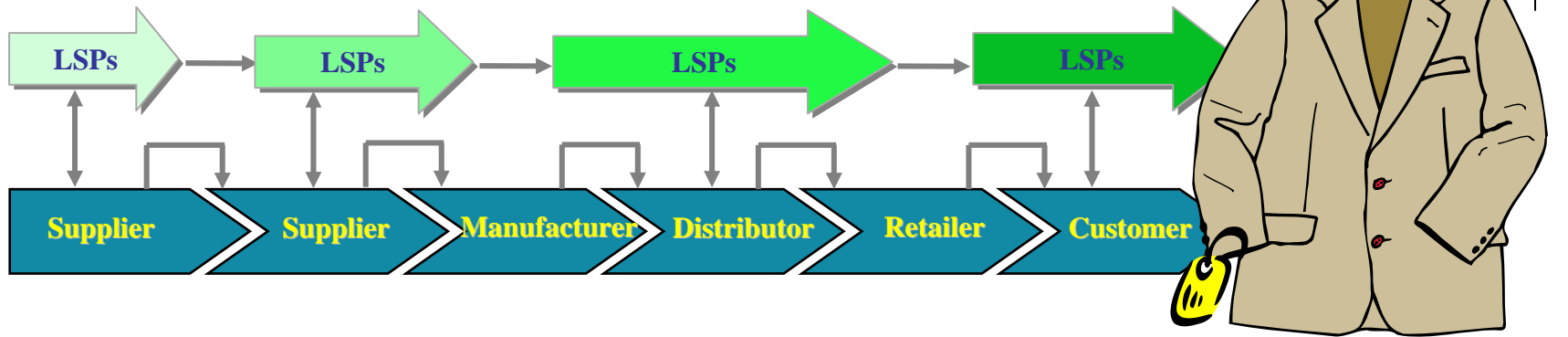
The Chinese University of Hong Kong

Product vs. Product Competition

(in the old days)

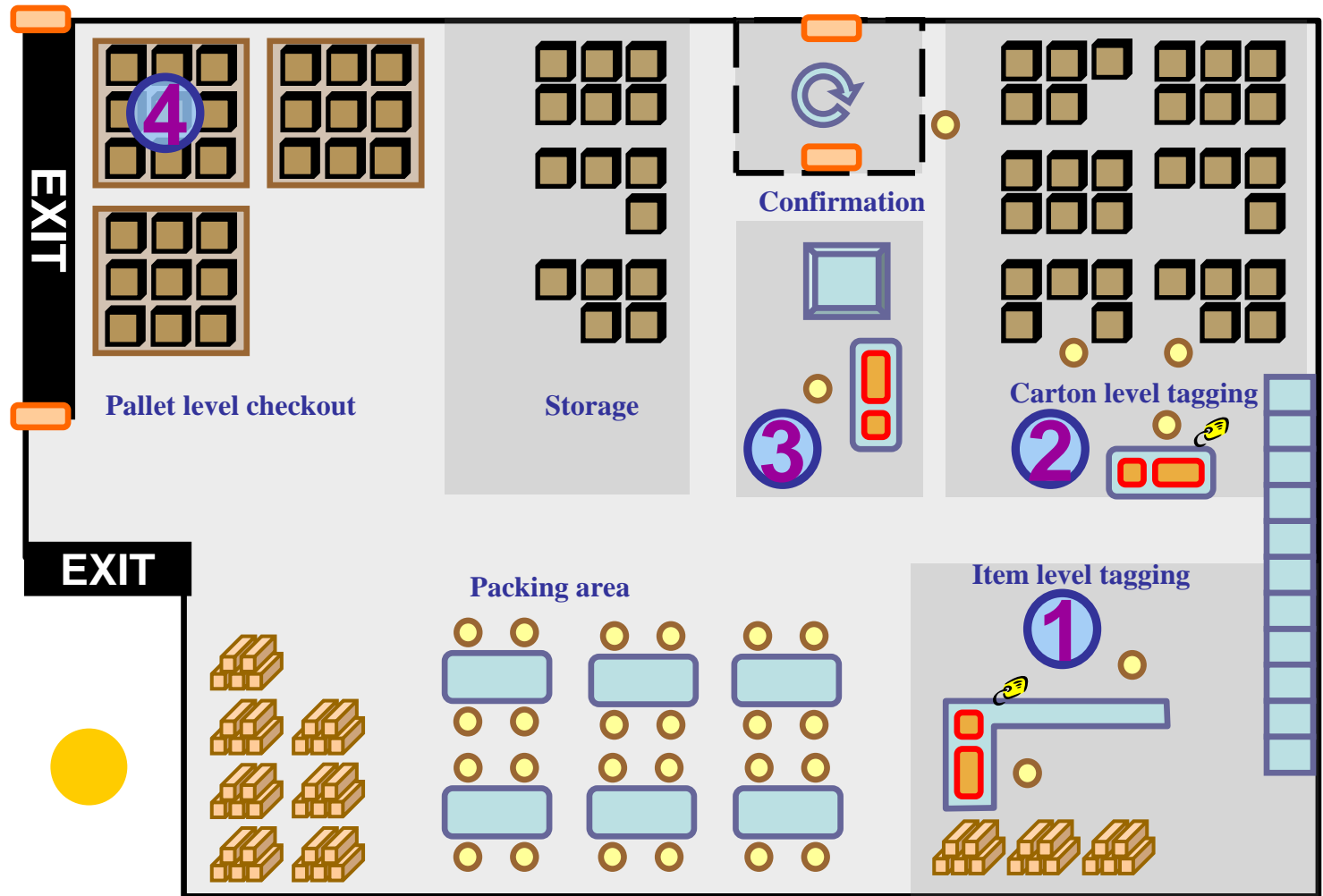


Supply Chain vs. Supply Chain



Phase 1: Stand Alone Adoption

Shipping & Logistics



Phase 1: Stand Alone Adoption

Asset Management/
Inventory Control



Retail & Market
Information



Phase 1: Stand Alone Adoption

Advantages:

- Automatic identification and data capture
- Reliability, accuracy, responsive, and flexible

IT involved:

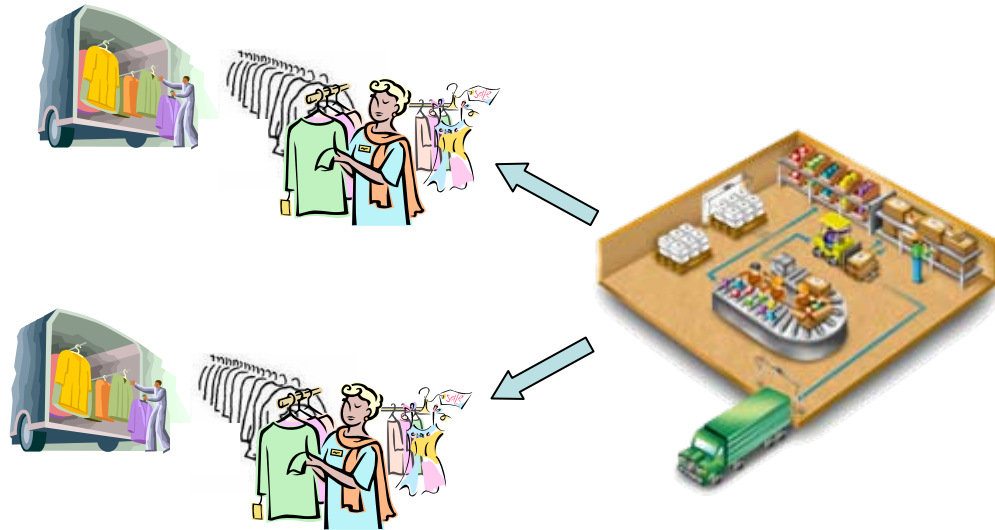
- Interfaces with the readers
- Modifications to database & ERP
- Data make available through intranet

Issues:

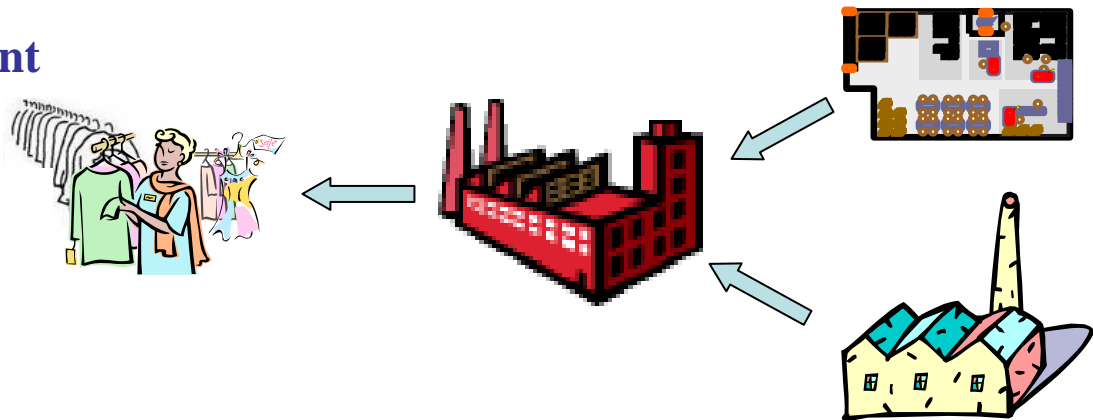
- Costs
- Reading accuracy
- Water & metal

Phase 2: Among Partners Adoption

Regional Distribution



Supply Chain Management



Phase 2: Among Partners Adoption

Advantages:

- Real-time information sharing
- Synchronize physical flow and information flow
- On-demand services

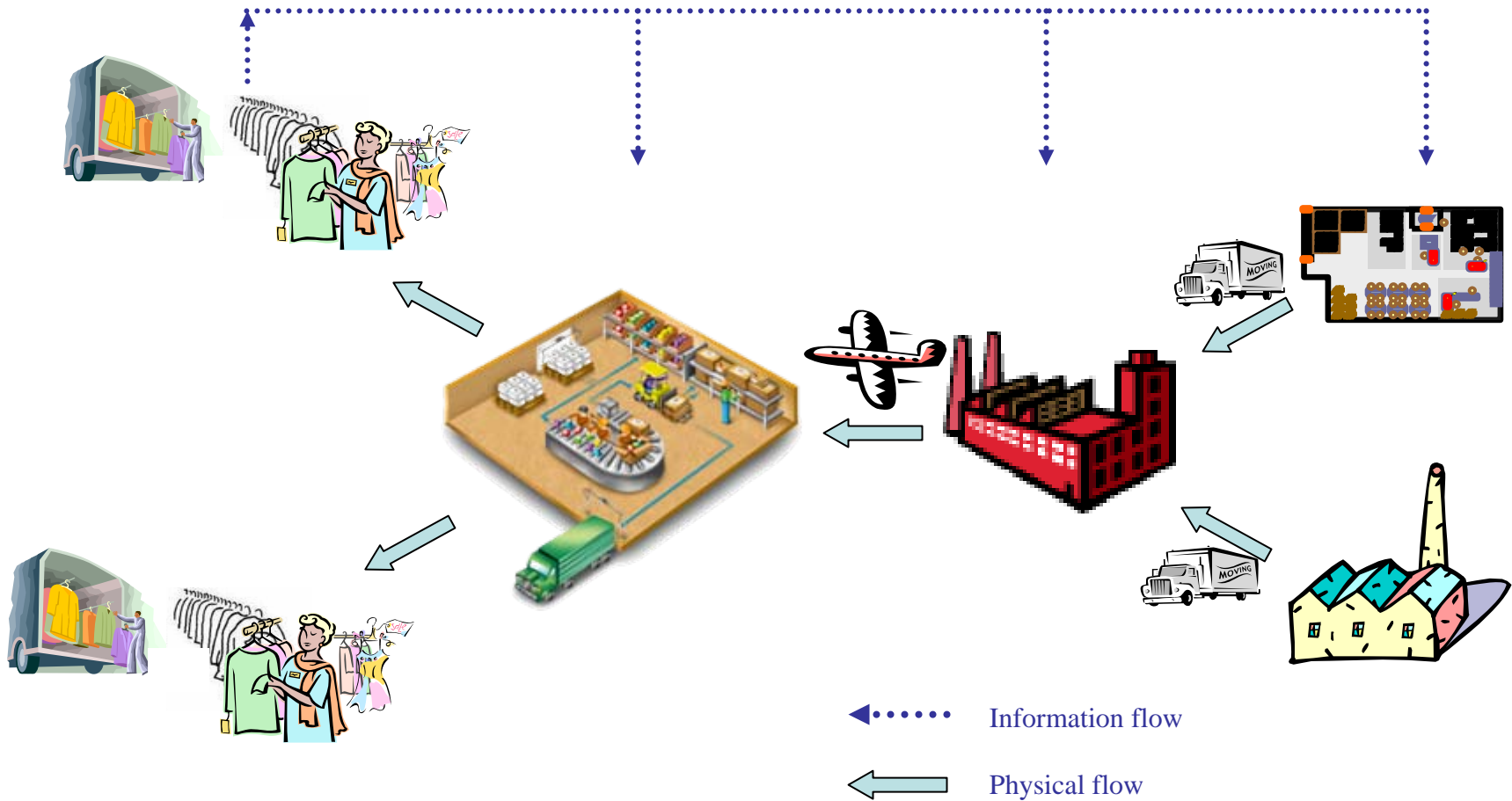
IT involved:

- Event Manager
- Web-base extranet information integration

Issues:

- Shared standards (Regional or industrial-based)
- Security and access control

Phase 3: Global Adoption



Phase 3: Global Adoption

Advantages:

- Scalable, visible supply chain
- Global connection of things

IT involved:

- Web services
- 3-party intelligent services

Issues:

- Privacy and security issues
- Global standard
- Connections between EPC network and 3-party agents

Standards

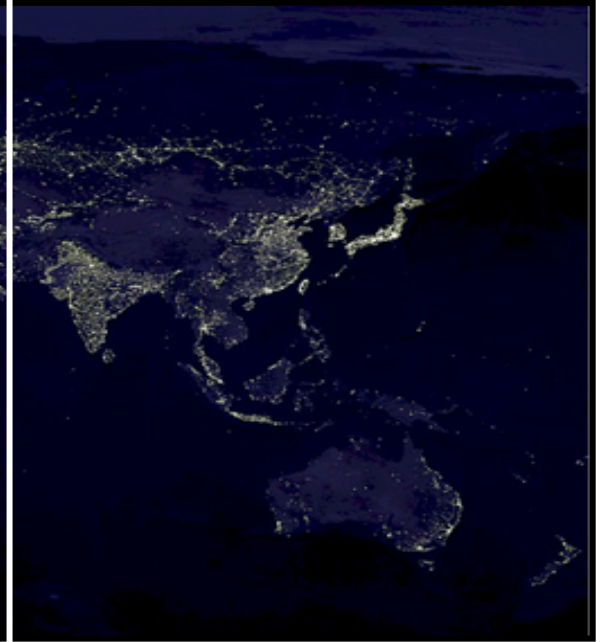
Cross-border Issue



US, Canada
125KHz
13.56MHz
902-928MHz

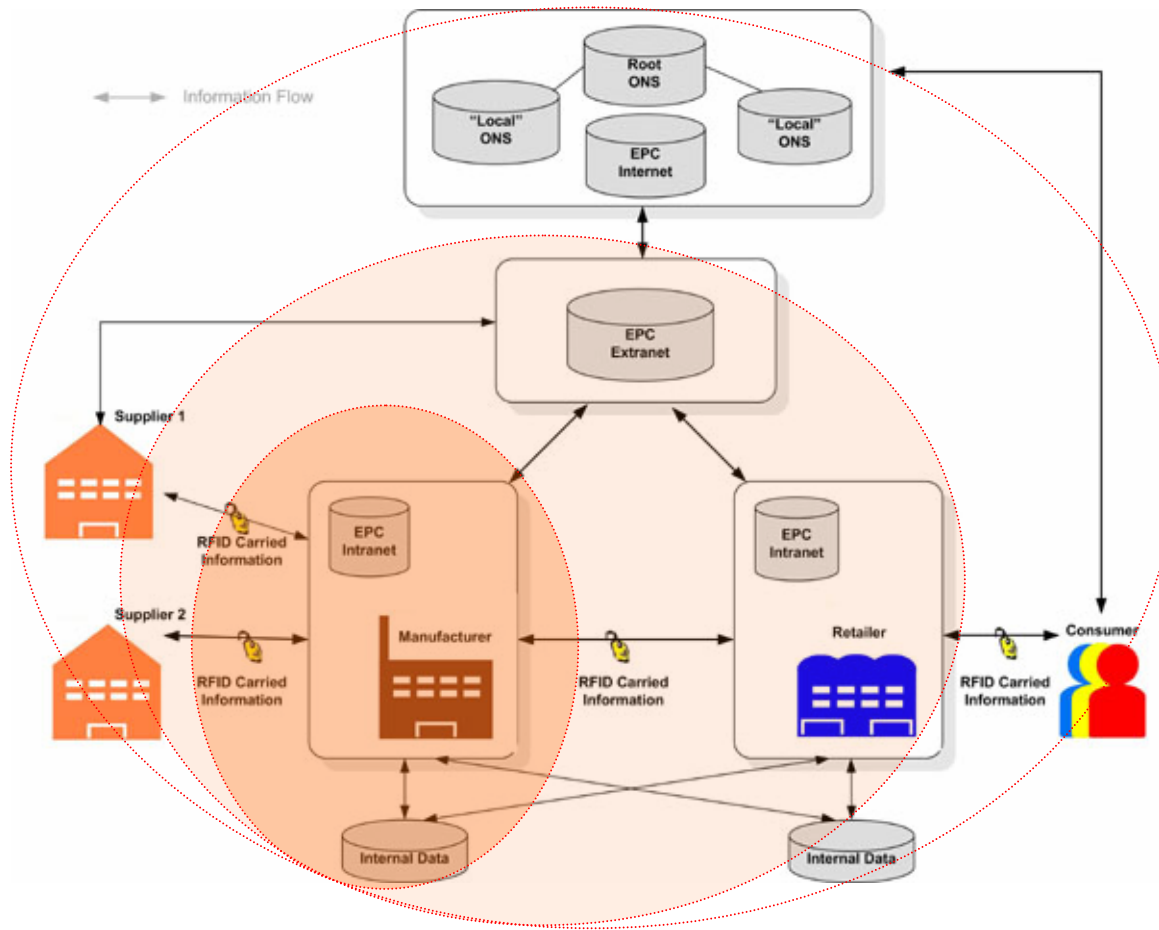


EU Countries
125KHz
13.56MHz
868-870MHz

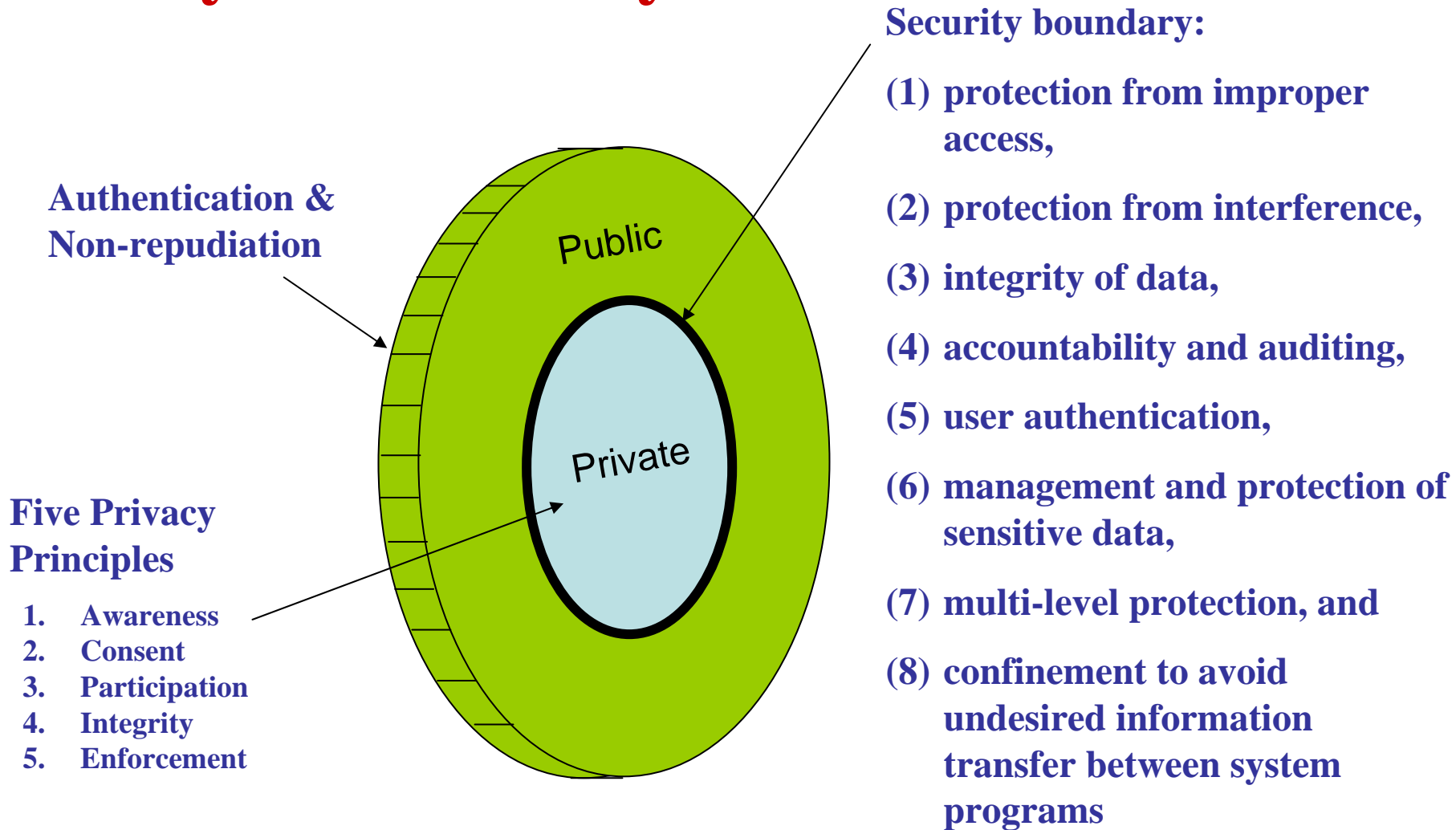


Japan
125KHz
13.56MHz
950-956MHz

The IT Architecture



Privacy and Security Issues



Connection to 3-party Agents

