



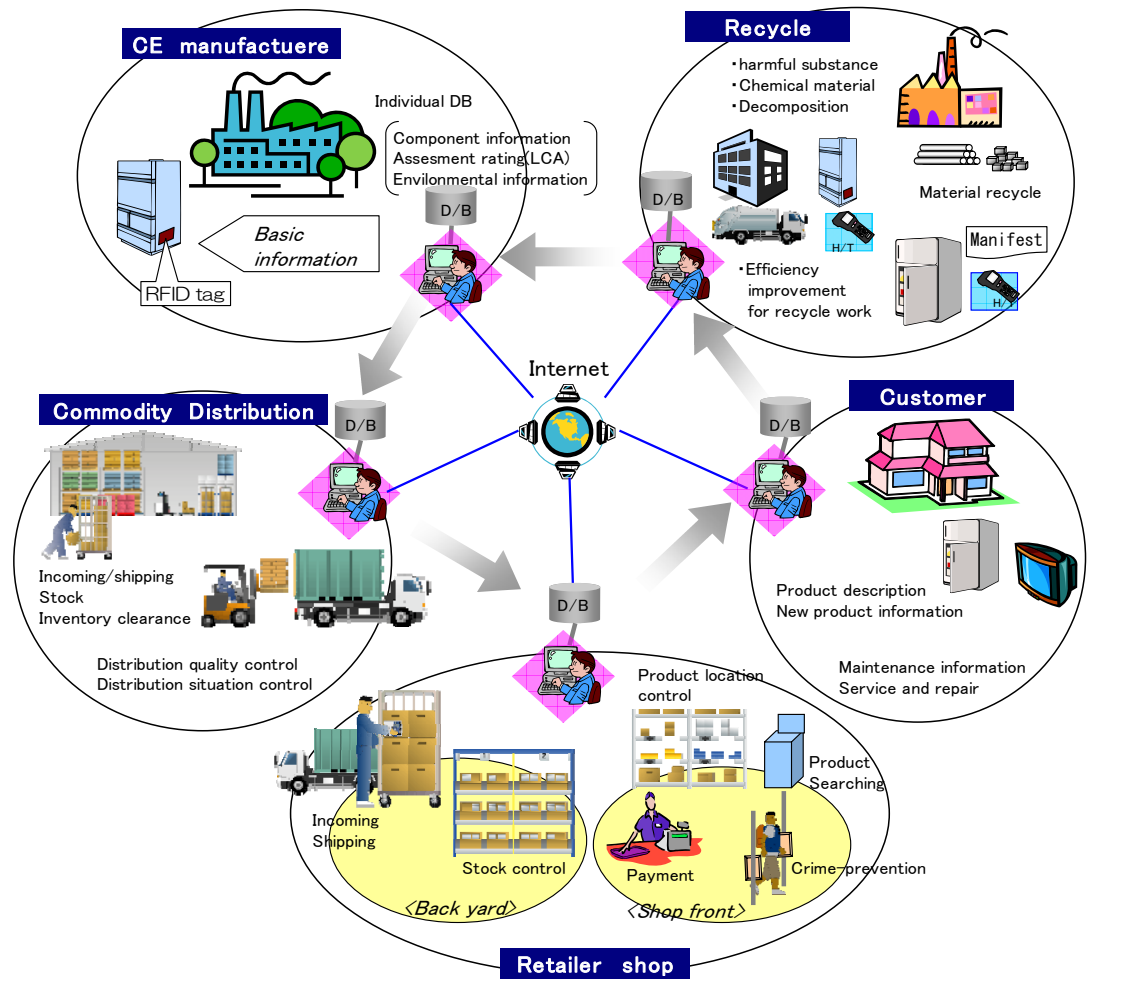
RFID Pilot Plan by JRCCE (& CEIAG)

EU↔Asia(Japan) International Pilot for Maintenance/Repair and Product safety

Japan RFID Consortium for Consumer Electronics
(JRCCE)

The EPCglobal Consumer Electronics Industrial
Action Group(CEIAG)

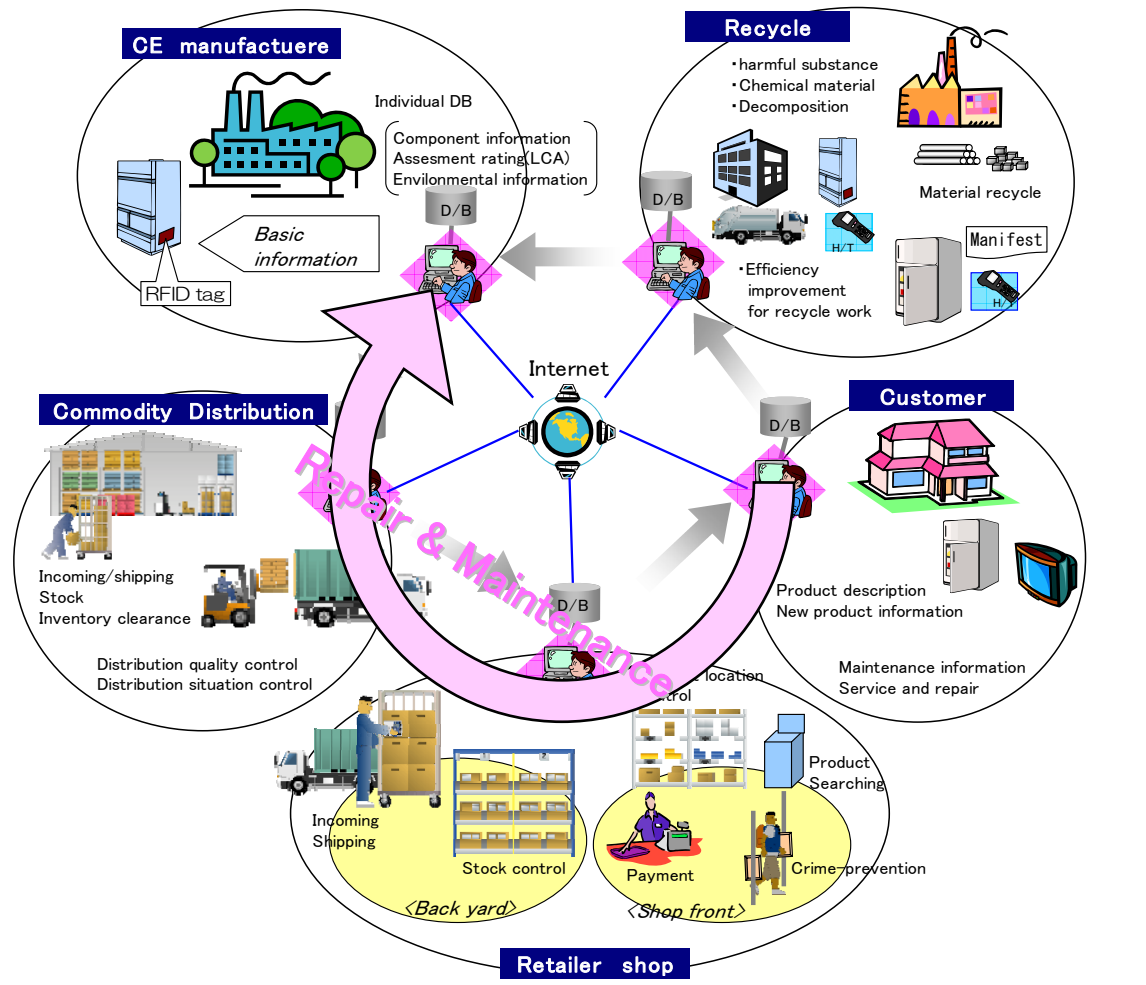
Lifecycle Management for CE Products



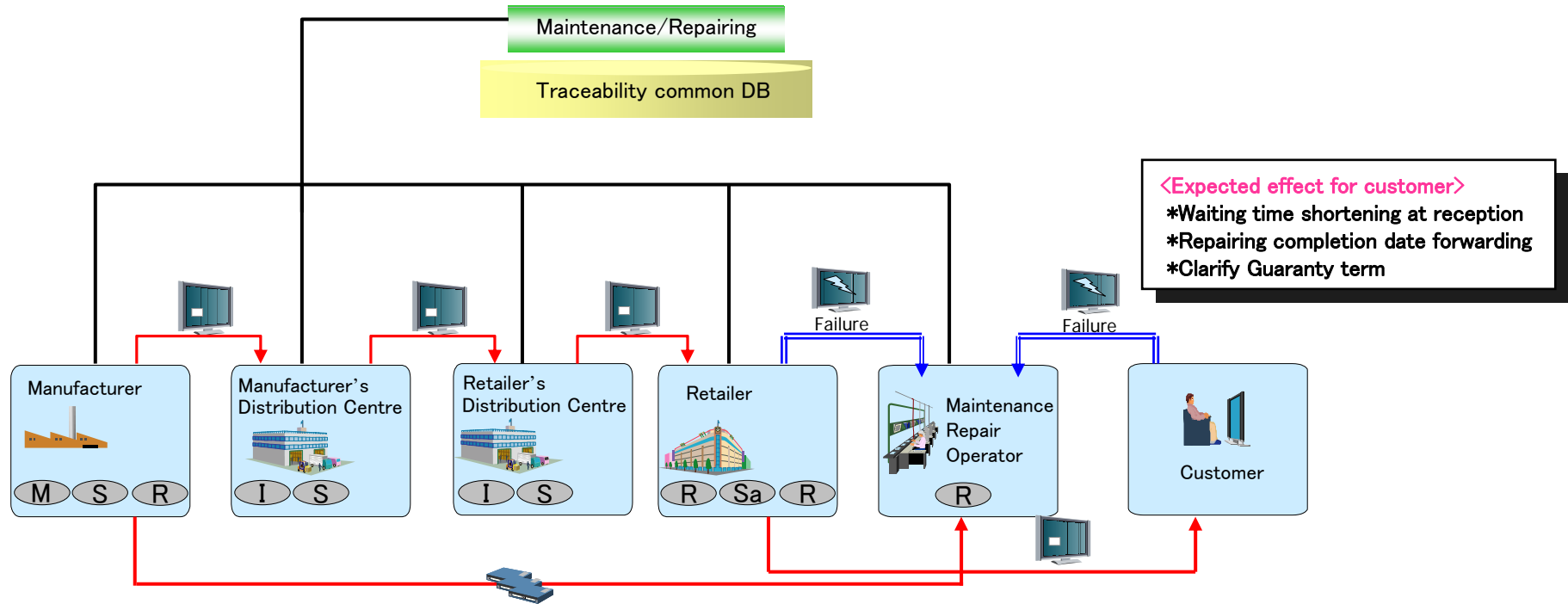
EU⇔Asia(Japan) International Pilot for Maintenance/Repair

Based on Ministry of Economy, Trade & Industry
2006 “Verification experiment projects
for Practical using of RFID into Commodity distribution”

Repair & Maintenance for CE Products



Expected effect (Maintenance/Repair use case) for business process & each player

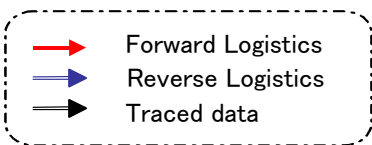


<Expected effect for customer>
 *Waiting time shortening at reception
 *Repairing completion date forwarding
 *Clarify Guaranty term

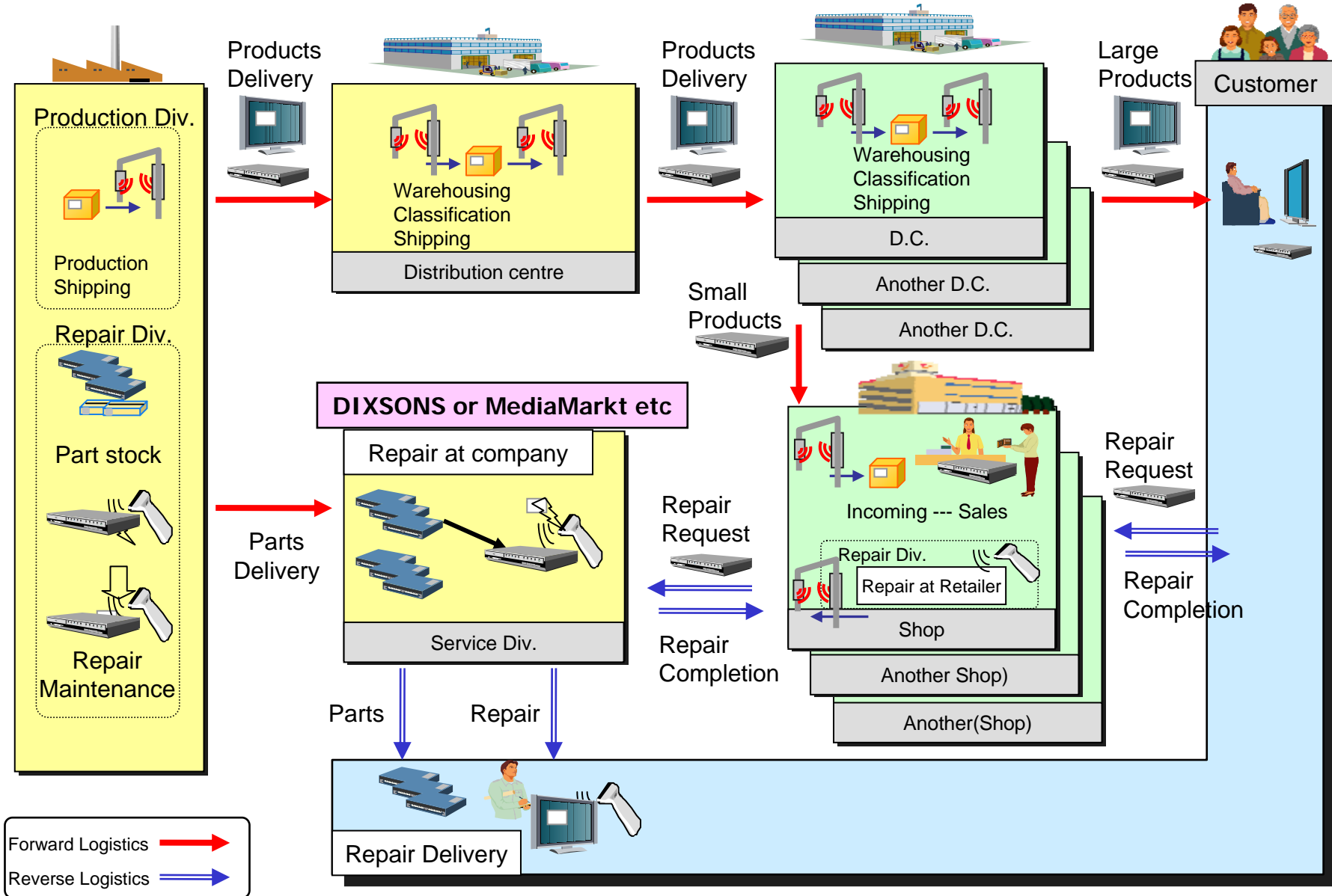
<Expected effect for Manufacturer>
 *repairing efficiency improvement
 *Clarify Guaranty term
 *Tracking defective products

<Expected effect for dealer>
 *Reception time shortening
 *Repairing efficiency, lead time improvement
 *Clarify Guaranty term

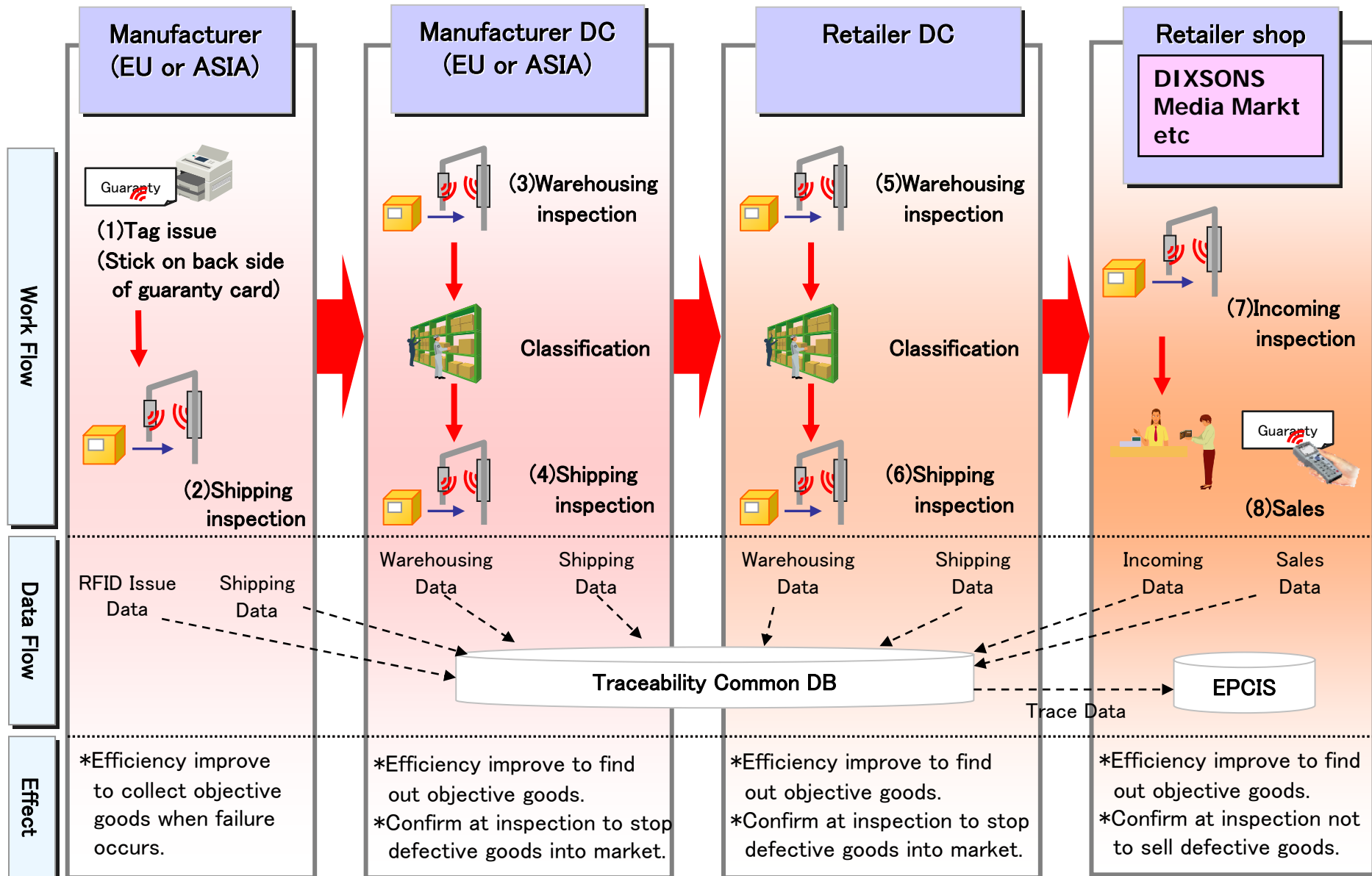
<Expected effect for maintenance operator>
 *Reception time shortening
 *Repairing efficiency, lead time improvement
 *Clarify Guaranty term



Practical experiment overview (Maintenance/Repair use case)

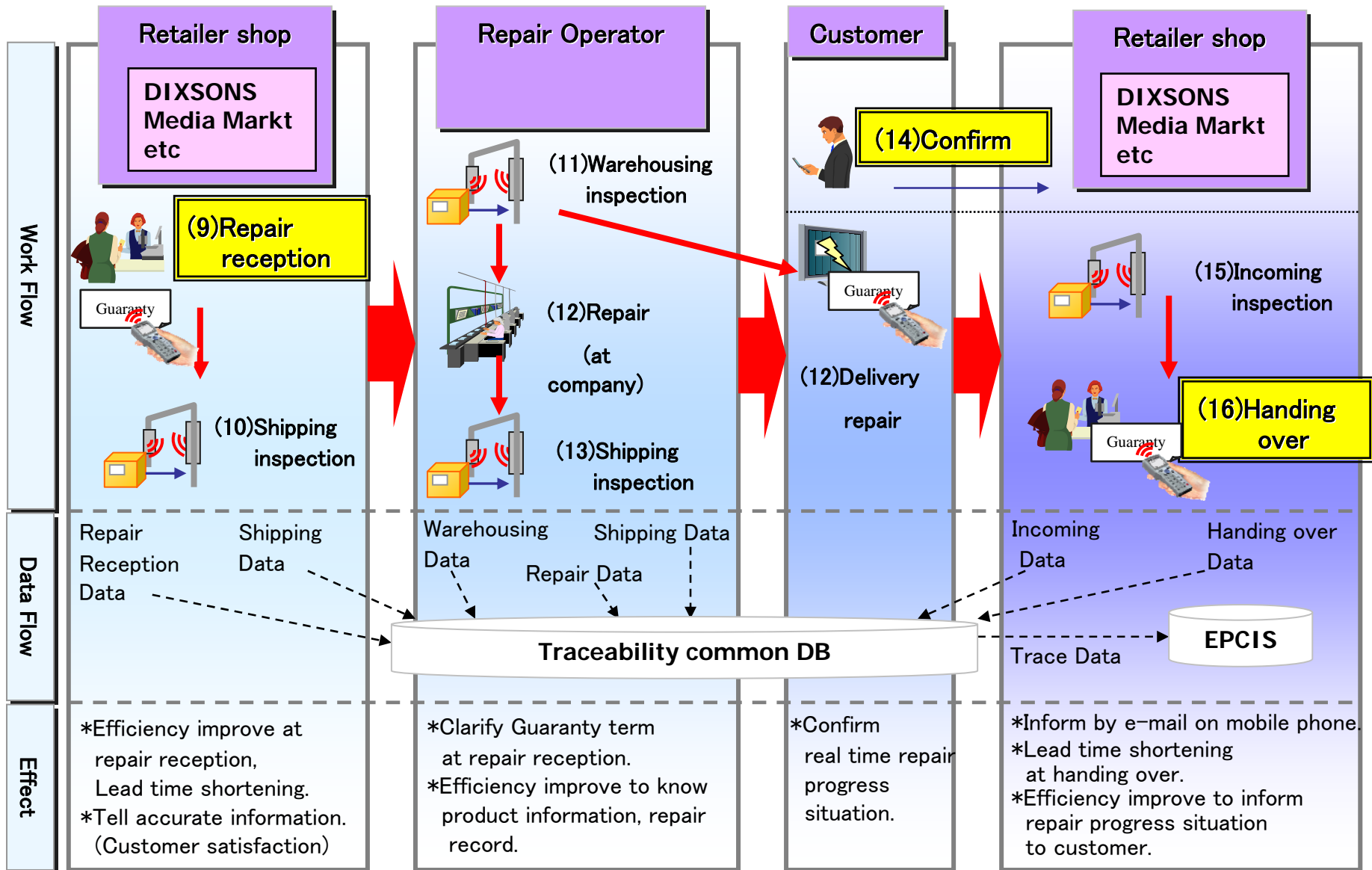


Experiment Flow(1) Forward Logistics (Maintenance/Repair use case) Manufacturer shipping --- Retailer sales



Experiment Flow(2)

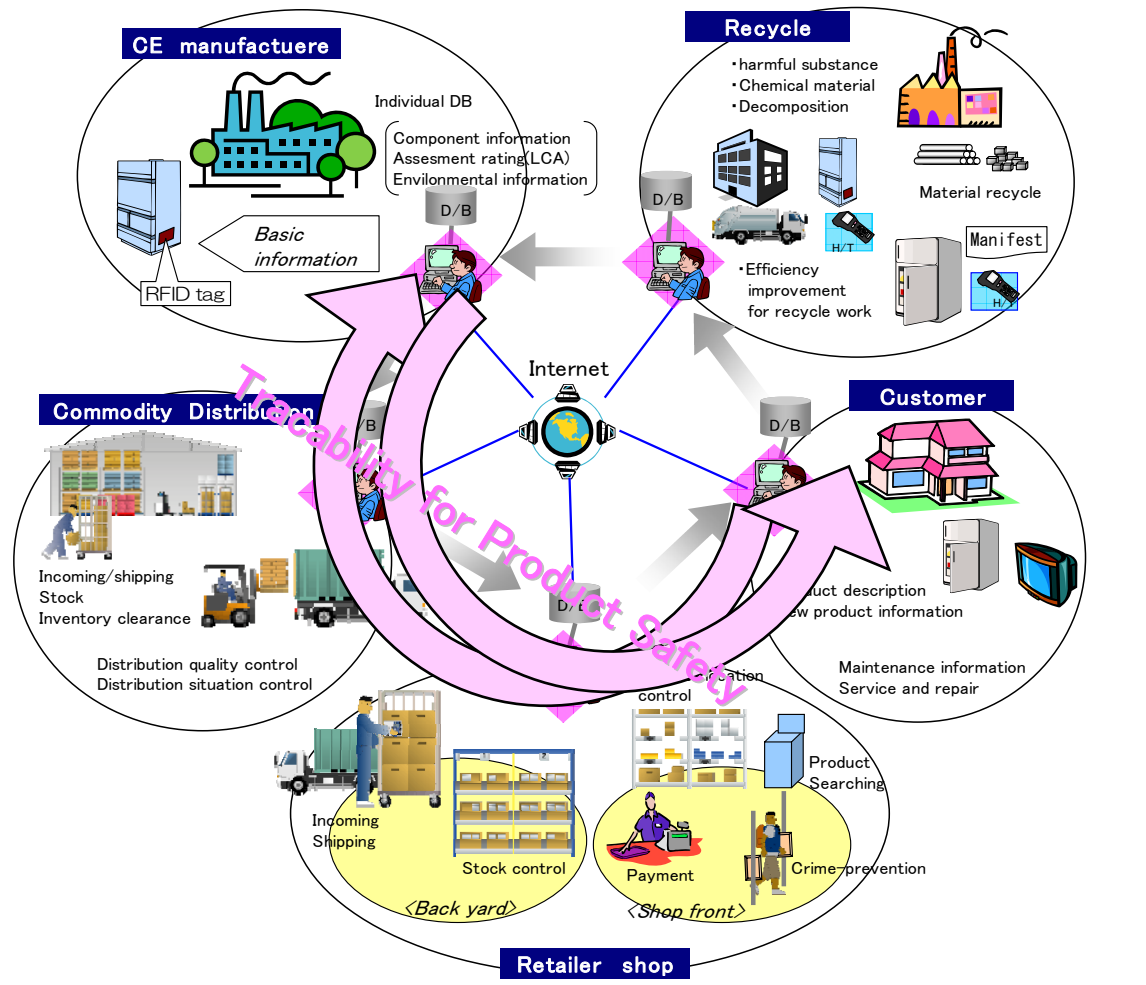
Reverse Logistics (Maintenance/Repair use case)
 Repair reception --- Handing over



EU⇔Asia(Japan) International Pilot for Product Safety

Based on Ministry of Economy, Trade & Industry
2008 “Verification experiment projects
for Practical using of RFID into Commodity distribution”

Product Safety for CE Products

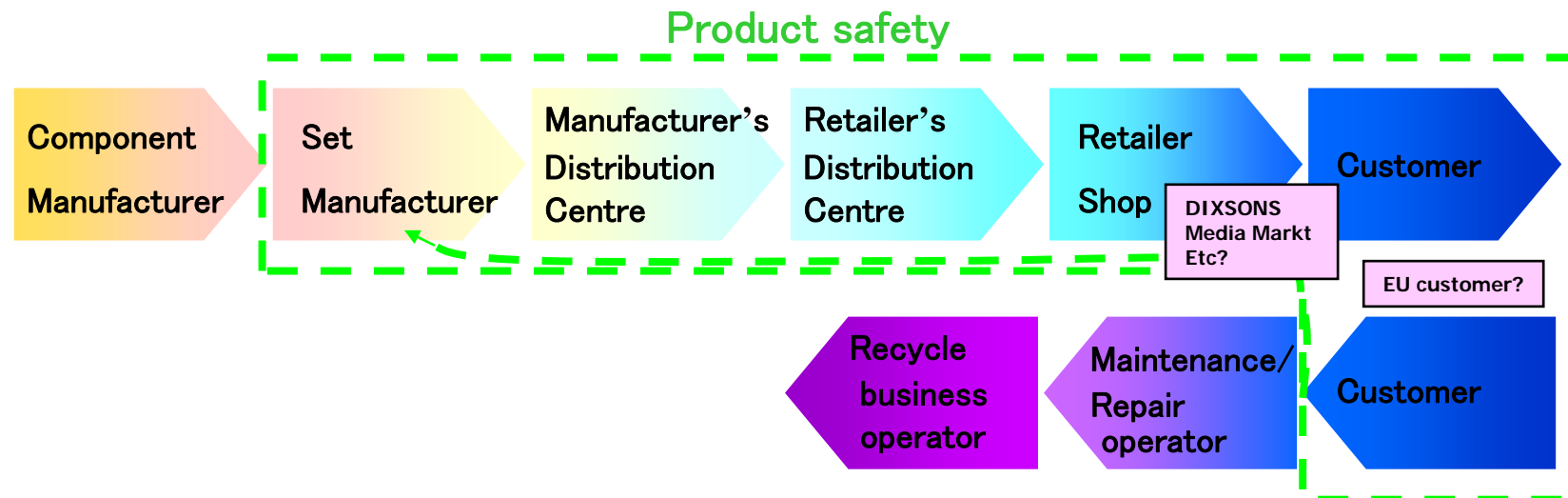


1. Objectives of this Pilot

- Focus point

- Trace and Catch up the location of CE products.
- Utilization of EPCIS & RFID(embedded Tag-recorder tag etc).
- Condition of Main supply chain rout about **Manufacturer → Logistics → Big retailer → customer**

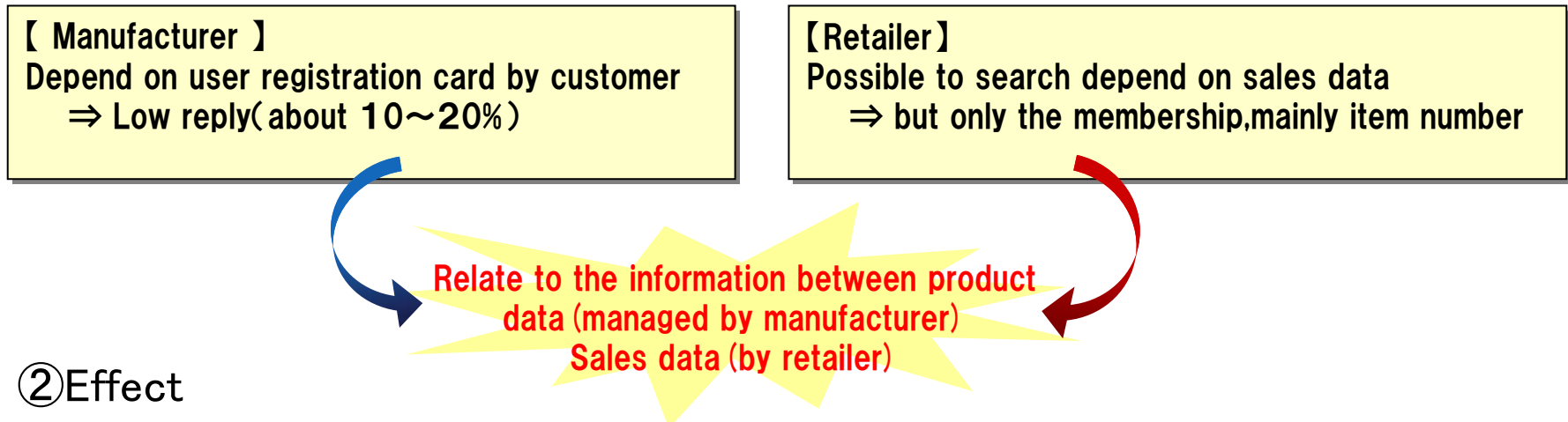
(at 2008 Collaboration by JRCCE & an organization of Japan big retailer for CE)



2. The present Problem and Expected Effect by this Pilot

① Problem

Difficulty to search the location by Manufacturer when product trouble occurred



② Effect

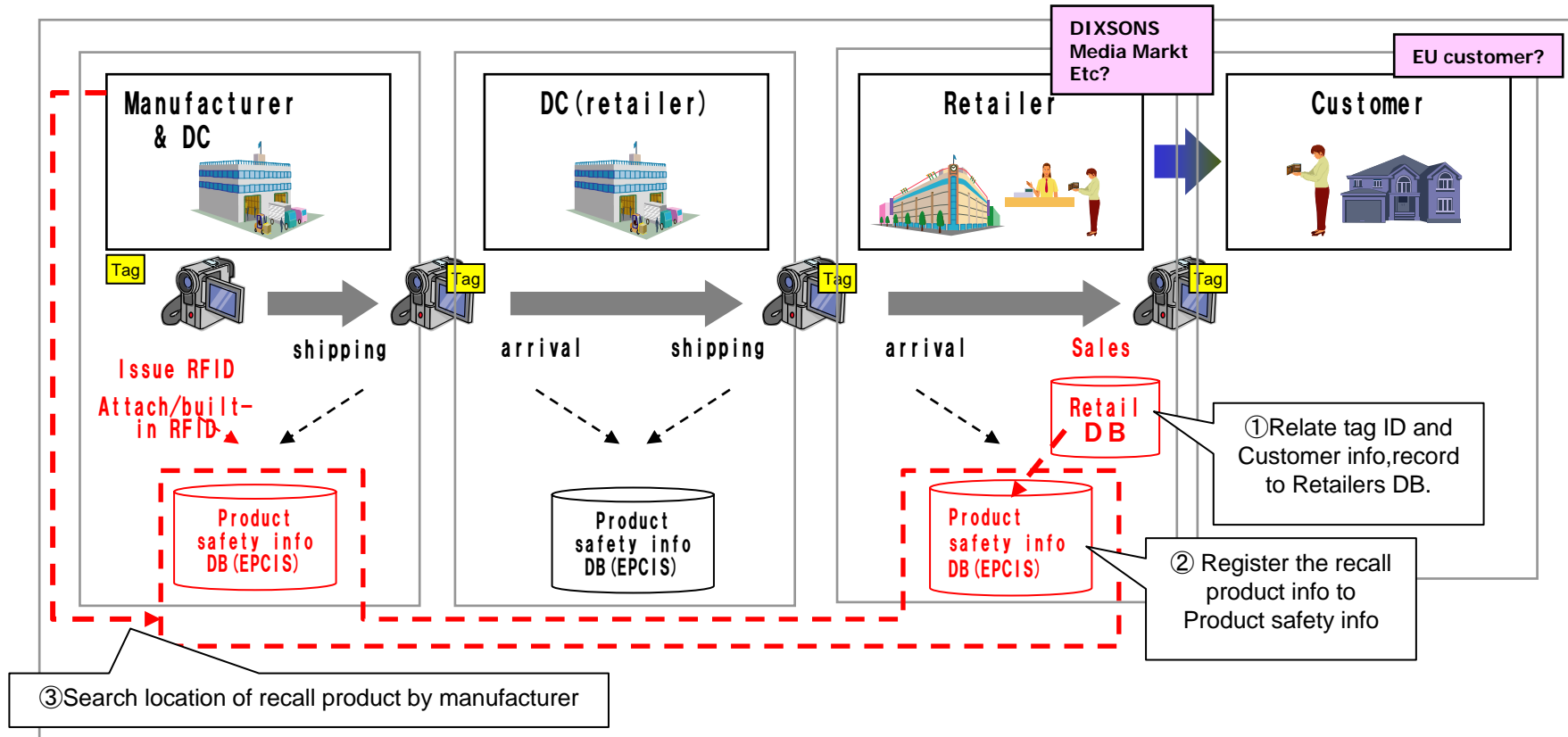
Manufacturer/ Manufacturers DC 	Retailers DC/ Retailers shop 	Customer
<ul style="list-style-type: none"> ■ Possible to search speedy & correctly when trouble occur 	<ul style="list-style-type: none"> ■ Possible to provide the necessary information to manufacturer speedy 	<ul style="list-style-type: none"> ■ Decrease the risk to be under damage to themselves ■ Decrease the cost/effort inquiring to company

3. Abstract

When Sales at Retailer ①Registration by Customer information, when trouble occur, ② Registration to Product safety management information DB, and ③Search location of trouble product.

This pilot include two pattern.

Abstract of Pilot



3. Operation image of pilot

<Sales timing>

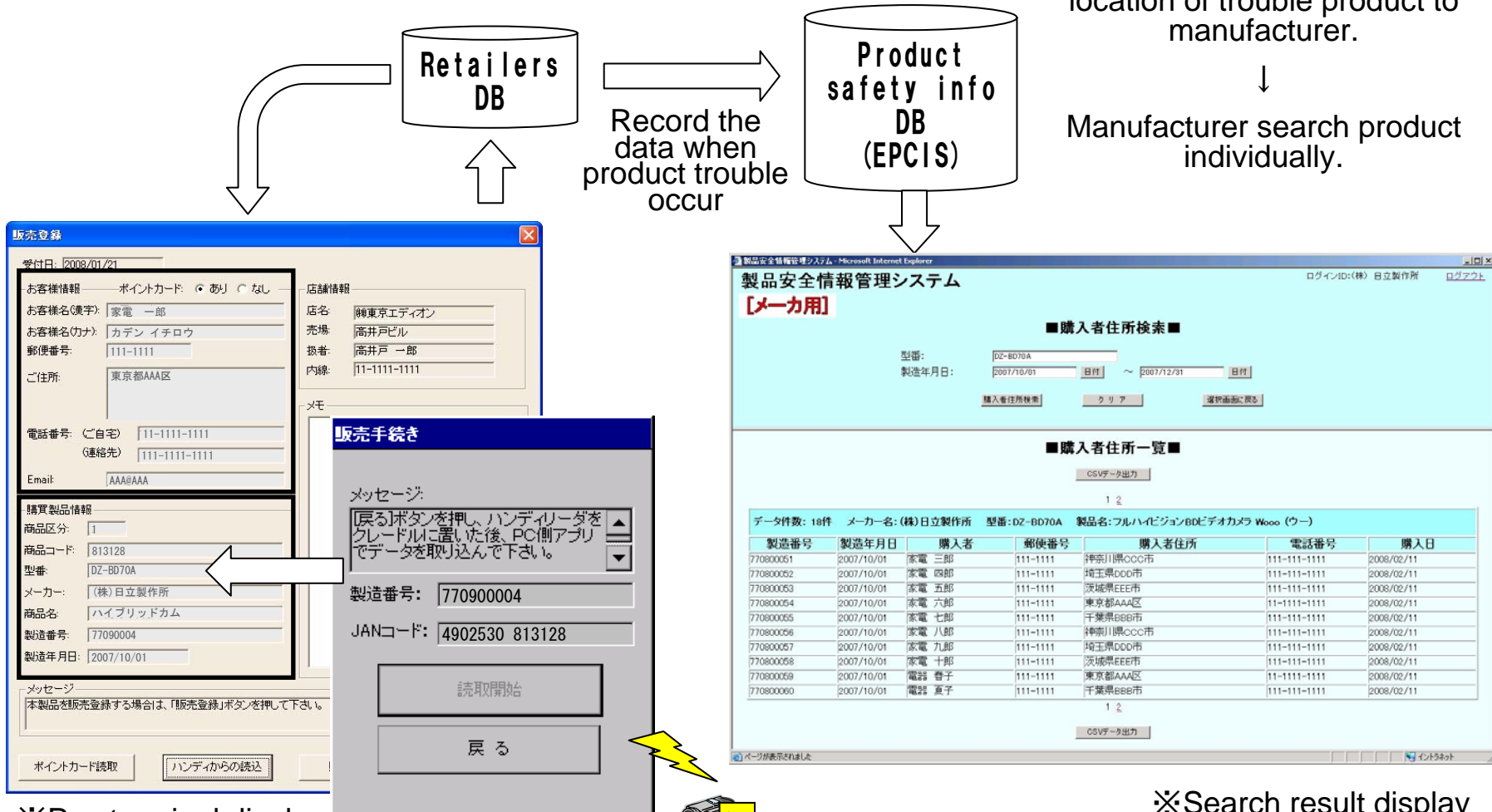
Relate tag ID and Customer info, record to DB.

<If trouble occur>

Retailer Permit to refer the location of trouble product to manufacturer.



Manufacturer search product individually.



※Pos terminal display

※Handy R/W display



※Search result display

4. Participant companies of Pilot_(at 2008 Japan past)

	Company	Mission
Manufacturer	Hitachi	Supply: <ul style="list-style-type: none"> ▪ Sample(Video cam-coder) ▪ RFID (μ —Chip Hibiki)
Retailer	edion	<ul style="list-style-type: none"> ▪ Shop for pilot Tokyo edion takaido shop
Vender	Hitachi	<ul style="list-style-type: none"> ▪ System for pilot ▪ Operation of pilot system
	NTT com	<ul style="list-style-type: none"> ▪ System (EPCIS) Maintenance ▪ Operation of pilot system
Secretariat	Mizuho	<ul style="list-style-type: none"> ▪ Management of pilot

Photo(pilot) sample
At 15/2/2008



Pos terminal



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Handy R/W display

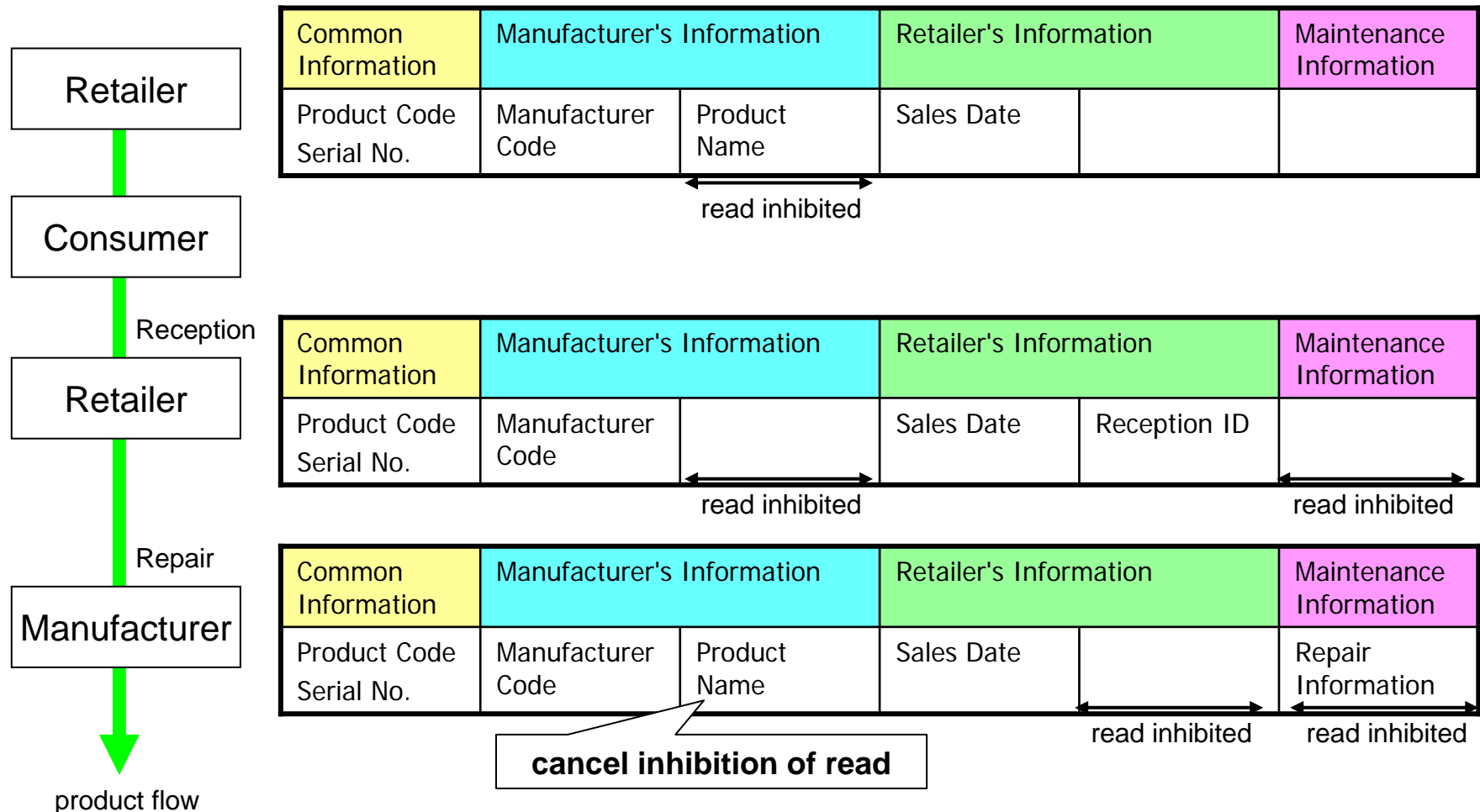
Utilization of Secure Tag (1)

Examples of requirements from the CE Industry

Scene in the Use Case	Necessary Data	Necessary Security Functions
Repair/Maintenance	Product identification code Repair history in the service center	Only Repairperson can write Everyone can read
Retailer's Store	Sales Information <ul style="list-style-type: none"> •Sales Timing •Selling Flag •Repair Acceptance Information 	Only Salesperson can write Also reading is restricted to part of persons.
Reuse/Recycle	All of stored data	Revival of killed tag
Logistics/Inventory Management	Physical Information	Can be written only when shipped from factories, cannot be written at other scenes Everyone can read
Protection of Environment	Existence of Hazardous Materials	Only manufacturer can write Everyone can read

Utilization of Secure Tag (2)

Example of Use Memory Implementation in the case of Repair/Maintenance



Summary

- Embedded Tag(Recorder tag etc) will be explained by prof Mitsugi.
- We shall use secure and function of embedded tag at this Pilot between EU↔Japan.
- Application of repair/maintenance and product safety by CE product shall give benefit to EU customer also.