EDI Method

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Japan Industrial Waste Information Center

自然にやさしいネットワーク
JWNET
Japan Waste Network.

Introduction

The manifest system in Japan was started for only hazardous industrial waste with a paper only Manifest in April 1993. In 1998, the regulation was changed to expand to all kinds of industrial waste. At the same time, the legal E-manifest system was established in order to reduce the burden on a generator. When E-manifest system was introduced in 1998, JW provided only WEB method. In 2001, JW provided EDI method which can be constructed by subscribers' free design.

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Outline of EDI method

  The EDI method is a method of exchanging data of electronic manifest information between a subscriber and a server of an information processing center(IPC), enabling efficient registration and report of E-manifest information.

There are 2 ways to use the EDI method.
- Build an EDI system dedicated to subscribers based on the "Specification on EDI method for E-manifest system " for connecting to JWNET specified by the information processing center
- Use ASP service provided by ASP providers

IPC

JWNET Web system

EDI system
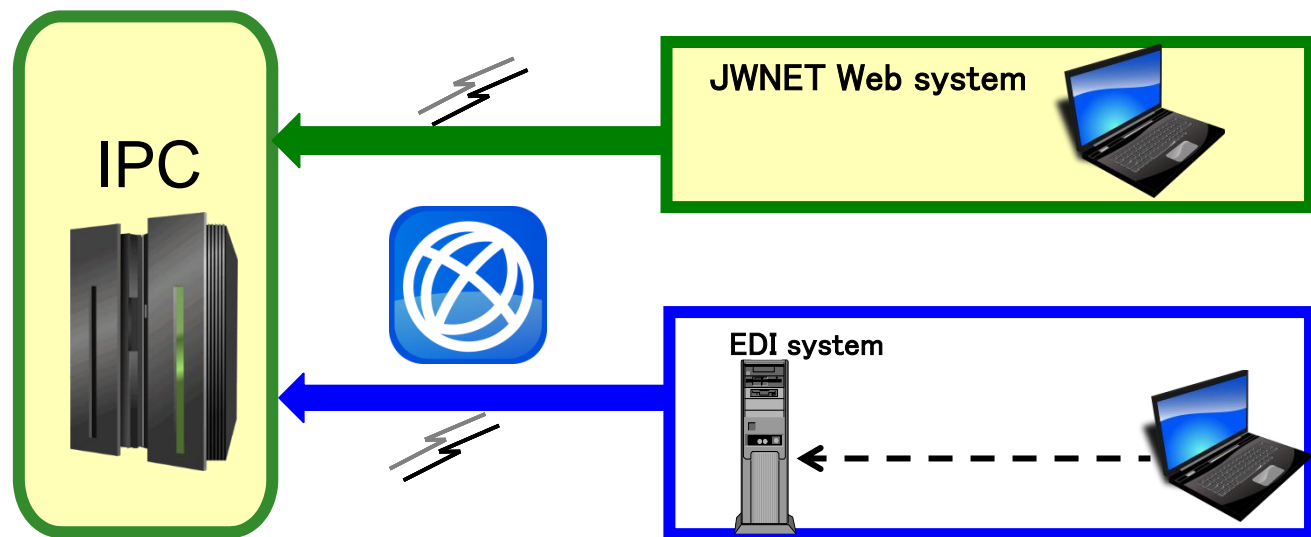
Characteristics of EDI function

1. System can be constructed by subscribers' free design

In the EDI method, manifest information is transmitted and received according to the communication procedure and file format specified in this specification.

Because EDI providers / ASP companies can develop systems themselves, it is possible for subscribers to build systems that have their own functions that are easier to use.

【JWNET Web system】

【EDI/ASP system】

FREE DESIGN

JWNET Web system

HTTPS connection

IPC

IPsec connection

Text file

EDI system

FREE DESIGN

JW specify the file format.

2. Many amount of manifest information can be sent and received

In the EDI method, it is possible to transmit and receive a large amount of manifest information compared with the Web method.
It is a mechanism suitable for subscribers who handle a lot of manifest information.

|	EDI system	Web method
Number of manifests that can be registered (reported) at once	**Maximum 300**	**Maximum 100**
Number of manifests that can be inquired at once	**Maximum 3000**	**Maximum 500**

3. Manifest information of multiple subscribers can be sent and received at once

You can send and receive manifest information of multiple subscribers with different subscriber numbers at once.

For example, if you are a collecting carrier and a disposal agent, you can also send the report of the completion of transportation and disposal together.

Case1:Report

【JWNET Web system】

Generator

Transporter
Disposer

Report

① ②

Resister

IPC
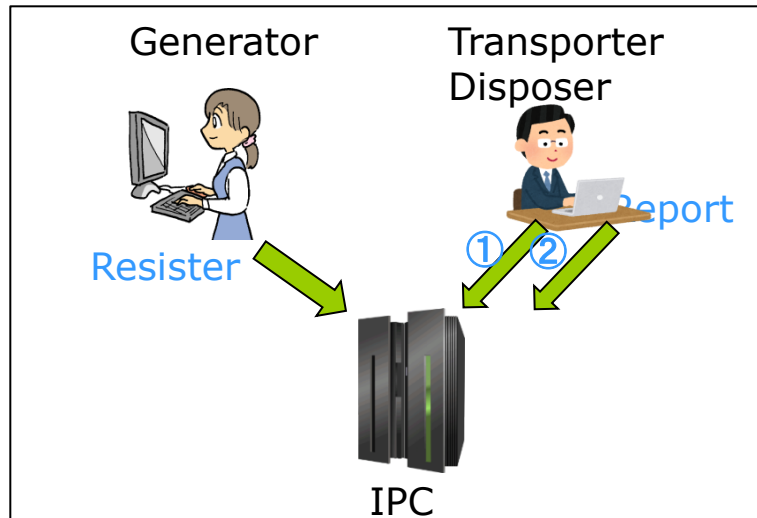
His company has a collecting carrier and a disposal agent. He should send two reports as follow.
①Report of the completion of transportation
②Report of the completion of disposal

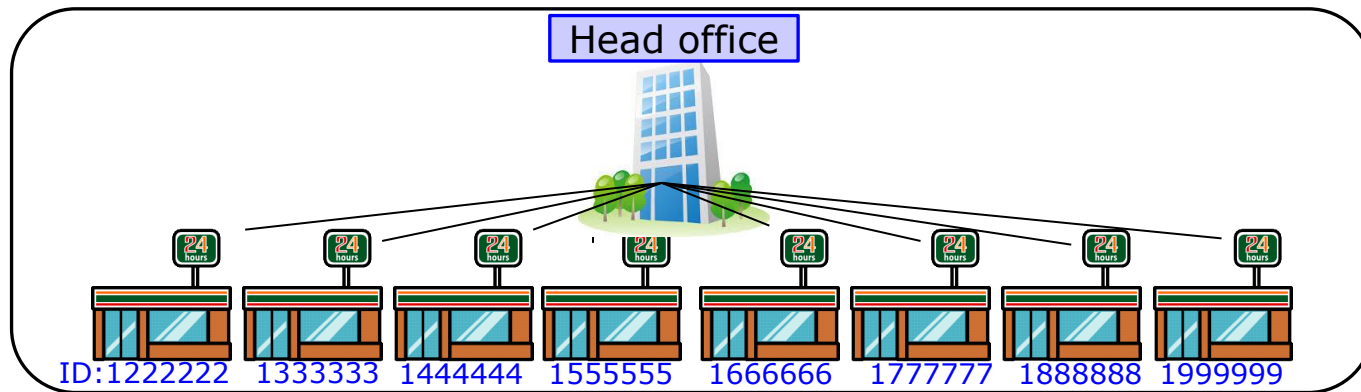In order to send them, first he should log in as the transporter, then log in as the disposer.

【EDI/ASP system】

Generator

Transporter
Disposer

Resister

①② Report

IPC
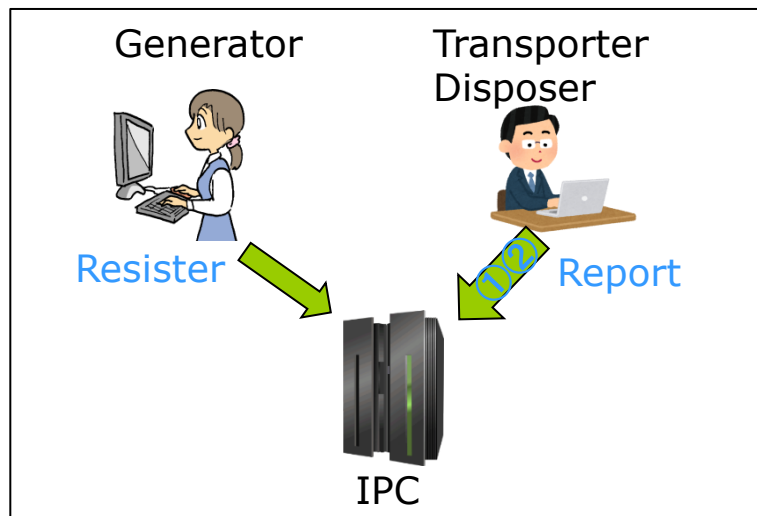
He can also send the report of the completion of transportation and disposal at once.

Case2:Register

Head office

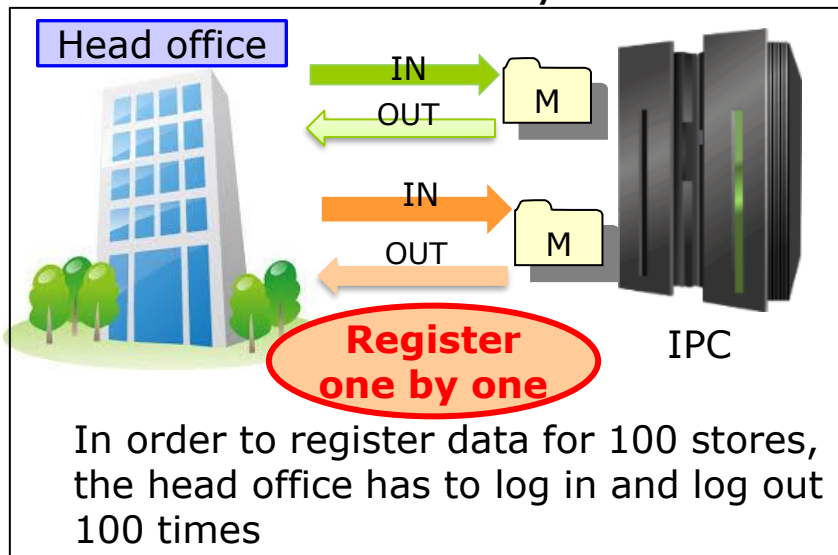ID:1222222 1333333 1444444 1555555 1666666 1777777 1888888 1999999

Each franchise store is one corporation, so it is necessary to subscribe to JWNET and acquire ID at each store.

【Case】
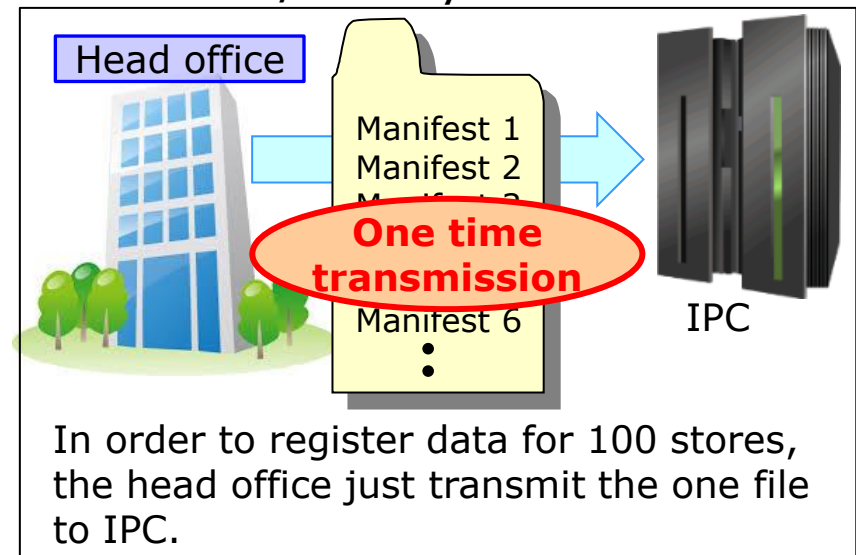The head office registers manifests on behalf of the franchise store.

【JWNET Web system】

Head office

IN
OUT
M

IN
OUT
M

Register one by one

IPC

In order to register data for 100 stores, the head office has to log in and log out 100 times

【EDI/ASP system】

Head office

Manifest 1
Manifest 2
One time transmission
Manifest 6
・
・

IPC

In order to register data for 100 stores, the head office just transmit the one file to IPC.
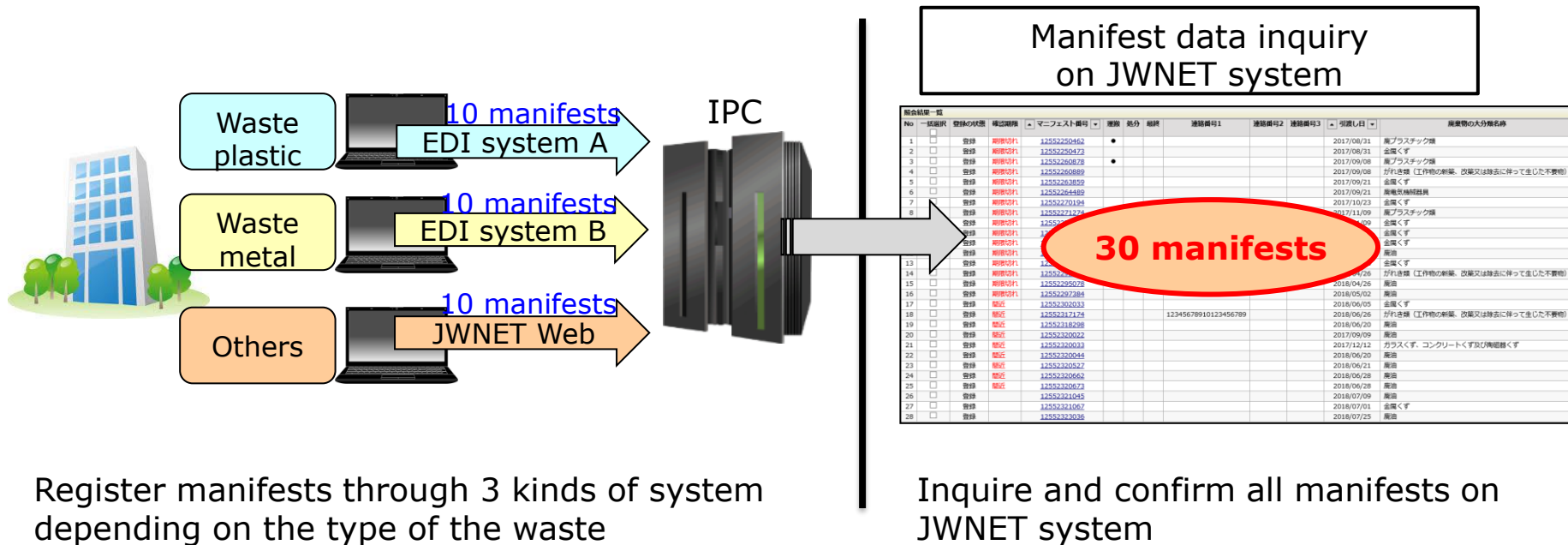
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4. It can be used in conjunction with web method

Since manifest information is managed centrally in the database of the information processing center, it can be used in conjunction with the web method.

For example, registration and reporting processing are performed by the EDI method, other processing like manifest information modification processing, cancellation processing is used in the Web method.

Manifest data inquiry on JWNET system

Waste plastic — 10 manifests EDI system A

Waste metal — 10 manifests EDI system B

Others — 10 manifests JWNET Web

IPC

30 manifests

Register manifests through 3 kinds of system depending on the type of the waste

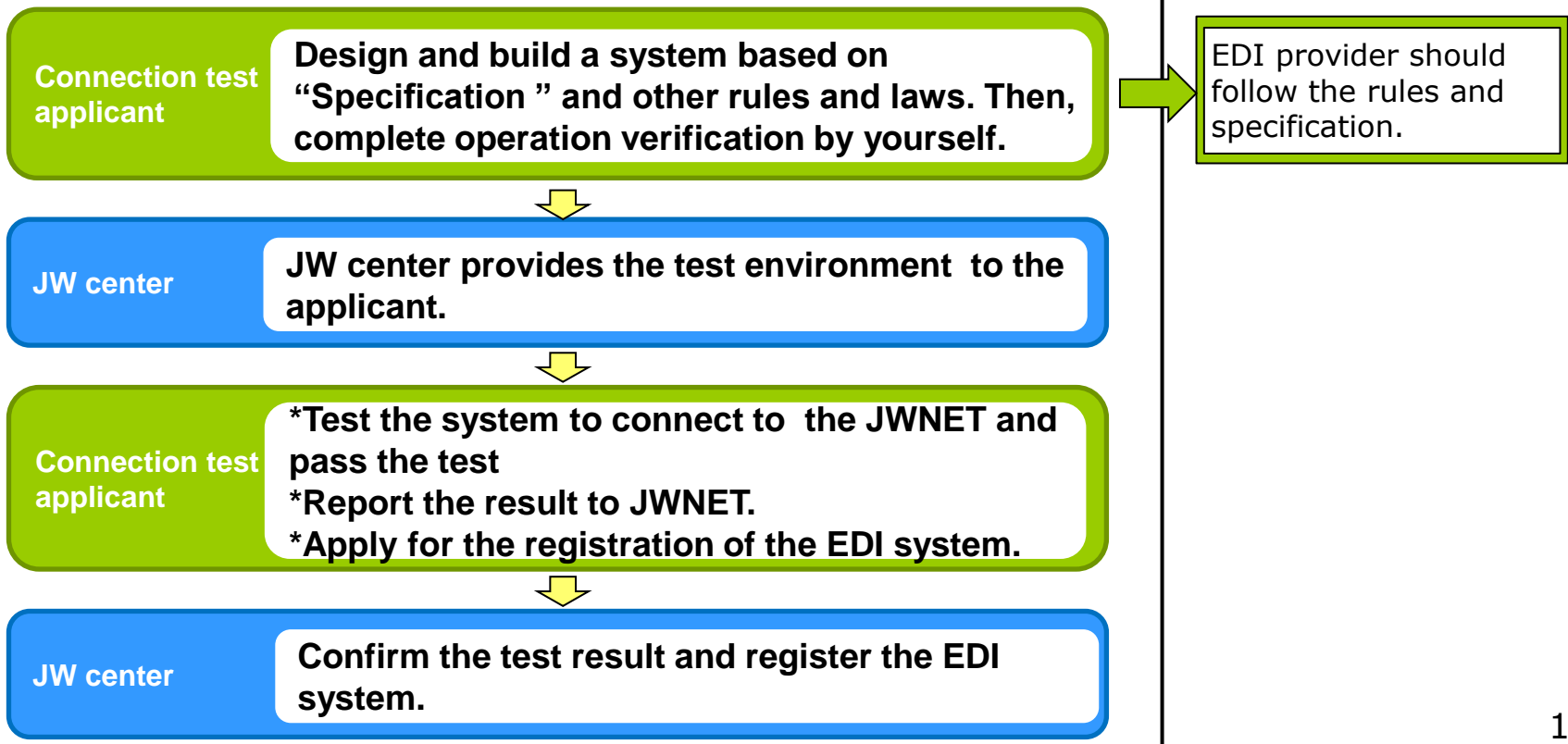Inquire and confirm all manifests on JWNET system

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Build an EDI system

The EDI system must conform to "Specification on EDI method for E-manifest system", "EDI system operation rule" and other related laws and regulations to connect to JWNET. EDI operators should build a system that meets these requirements.

Flow of building EDI system

| Connection test applicant | Design and build a system based on "Specification" and other rules and laws. Then, complete operation verification by yourself. |

EDI provider should follow the rules and specification.

| JW center | JW center provides the test environment to the applicant. |

| Connection test applicant | *Test the system to connect to the JWNET and pass the test
*Report the result to JWNET.
*Apply for the registration of the EDI system. |

| JW center | Confirm the test result and register the EDI system. |

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Responsibility of EDI Business Provider

☐ In setting up and operating the EDI system, the EDI operator shall comply with the Waste Disposal Law and other related laws and regulations. (EDI system operation rule ,Article 16)

☐ Regularly, submit legal confirmation sheet (as below)about E-manifest operation.

✓ Generator should conform the report from the transporter or disposer within the time period regulated by law.

✓ Transporter should report completion of transportation within……

✓ Disposer should report completion of disposal within……

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Security for data connection

☐ Data is encrypted by IP Security Protocol(IP Sec).
☐ JW provides details of rules to build EDI system and to connect IPC according to "Specification on EDI method for E-manifest system"

EDI/ASP Business Provider   Internet   JWNET(IPC)

Encrypted by IP Sec
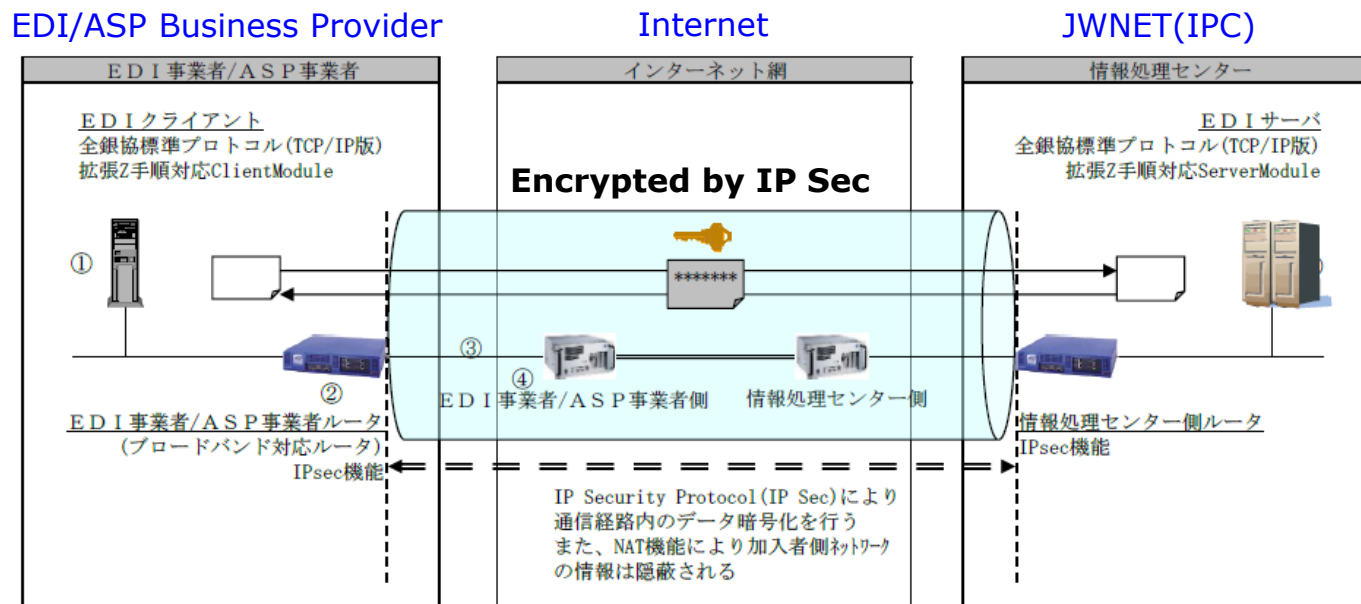
【 Reference 】

Restriction for getting information from EDI system

What is this restriction…?

Information disclosure range of E-manifest data which registered by JWNET users to EDI system

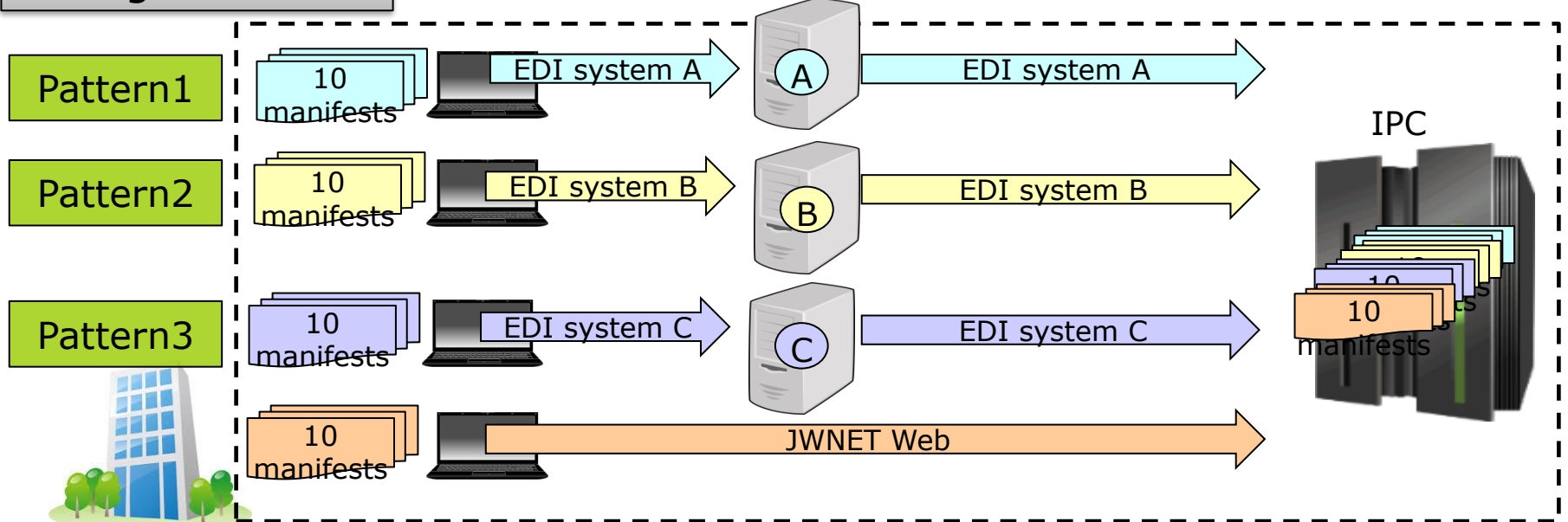| Pattern1	EDI systems can get only the E-manifest data registered through the EDI systems.
Pattern2	EDI systems can get the E-manifest data registered through the EDI system and JWNET Web.
Pattern3	EDI systems can get the E-manifest data registered through the EDI systems ,JWNET Web and other EDI systems.

Why dose JW restrict for getting information?

Security for JWNET users

Registration

A generator uses 3 EDI systems and JWNET web.

Pattern1 — 10 manifests — EDI system A → A → EDI system A → IPC

Pattern2 — 10 manifests — EDI system B → B → EDI system B

Pattern3 — 10 manifests — EDI system C → C → EDI system C

10 manifests — JWNET Web → IPC

Get information
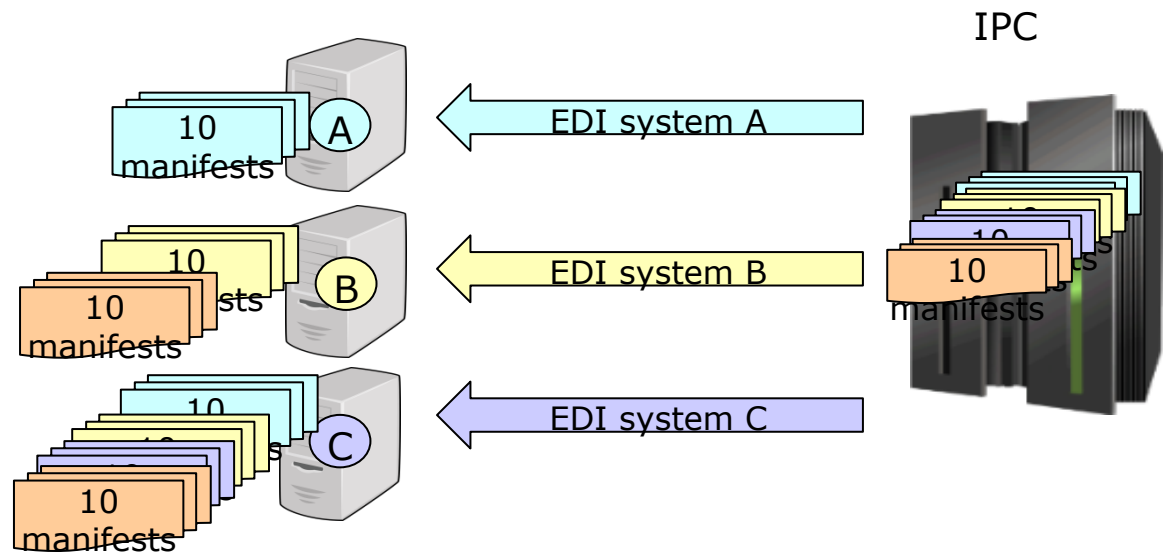
EDI system A can get only the E-manifest data registered through EDI system A.
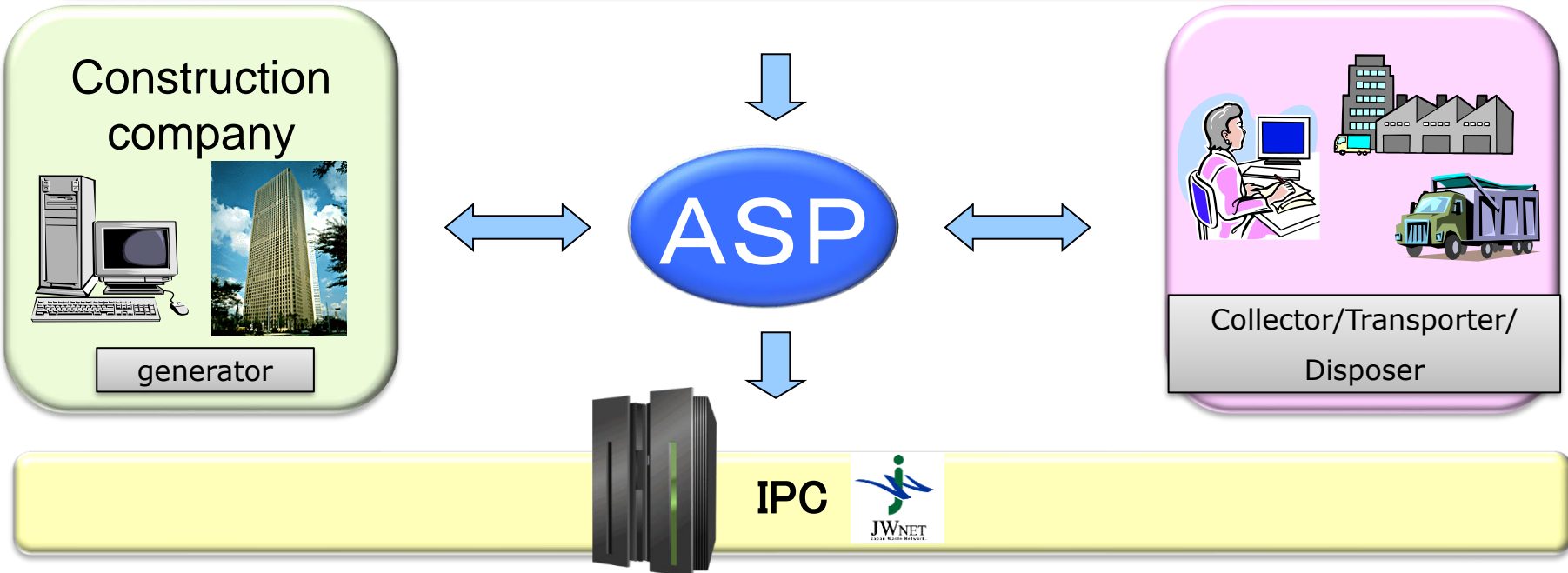
EDI system B can get the E-manifest data registered through EDI system B and JWNET Web.

EDI system C can get the E-manifest data registered through EDI system A,B,C and JWNET Web.

A ← EDI system A ← IPC (10 manifests)

B ← EDI system B (10 manifests, 10 manifests)

C ← EDI system C (10 manifests, 10, 10)

Cases using EDI/ASP operation

1)Using cell phones/smart phones/ tablets at construction sites

Generator site

Collector

Input the waste data on a mobile phone.

Waste data

Pass word

Generator

Confirm the data, then allow it by inputting PW.

Register the manifest at a generator site

Construction company

generator

ASP

Collector/Transporter/ Disposer

IPC

2)Using bar cord at medical institutions

Hospital

Transporter

Disposer

640509-040147

640509-040147

640509-040147

Register the manifest at a generator site by scanning the bar code

Collect the waste

Carry the waste

Scan

Scan

Scan

ASP

IPC

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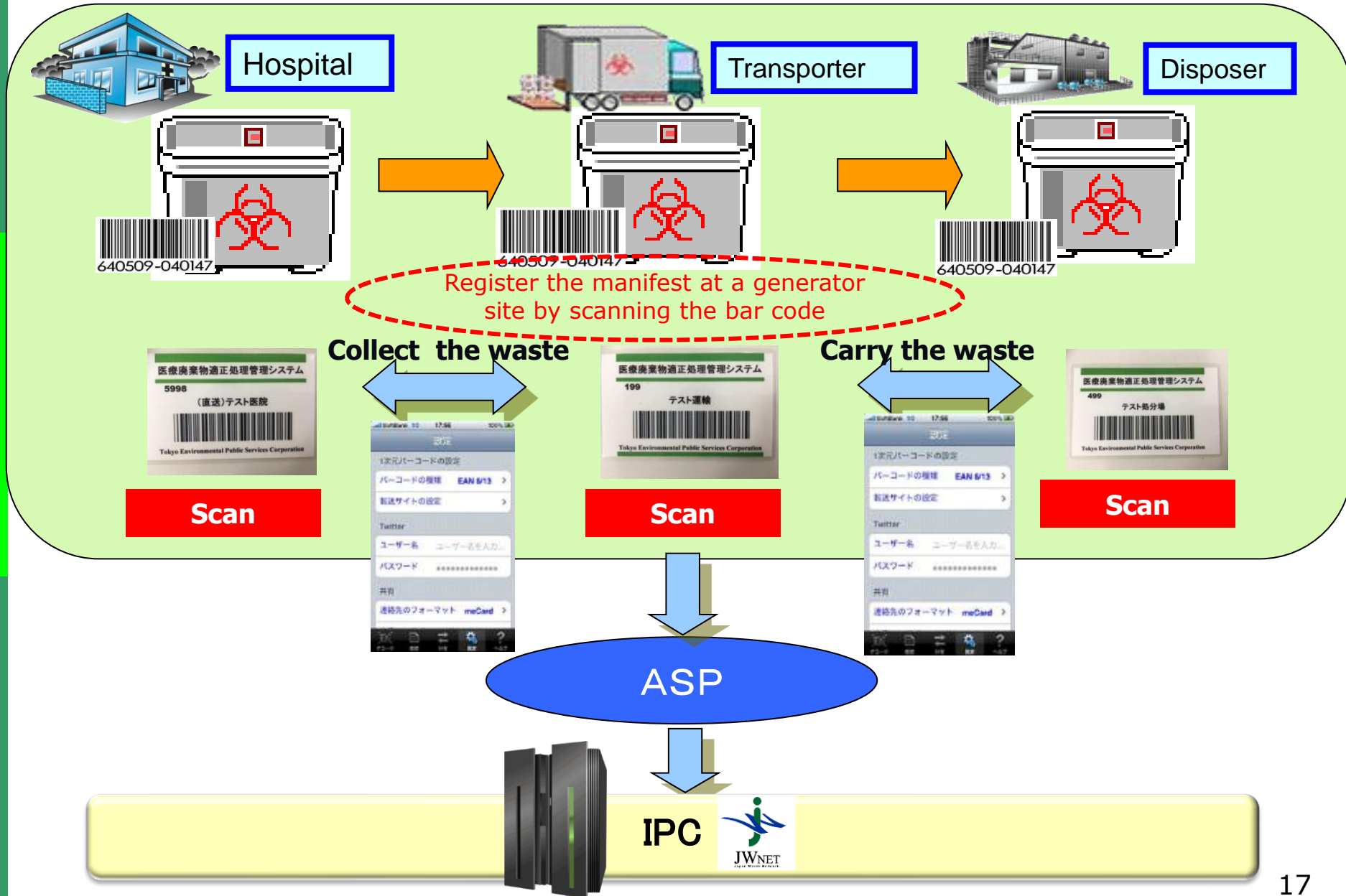
【 Reference 】 Usage: EDI vs Web

FY2017

0.08%

46.54%

53.38%

■ EDI ■ Web ■ others(smartphone etc.)

FY2021

0.13%

45.99%

58.88%

■ EDI ■ Web ■ others(smartphone etc.)