



**Asia-Pacific  
Economic Cooperation**

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**2023/CTI/WKSP1/005**

Session 3b

## **“Cyber Port” initiatives in Japan**

Submitted by: Japan

**Utilizing Digital Technology in the Field of  
Trade Facilitation Under the Current COVID-19  
Pandemic and Beyond: Best-Practices  
Sharing Workshops (Phase II) – Third  
Workshop on Port Digitalization for Efficient  
Supply Chains  
17 January 2023**

# “Cyber Port” initiatives in Japan

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January 2023

Ministry of Land, Infrastructure, Transport and Tourism

Japan

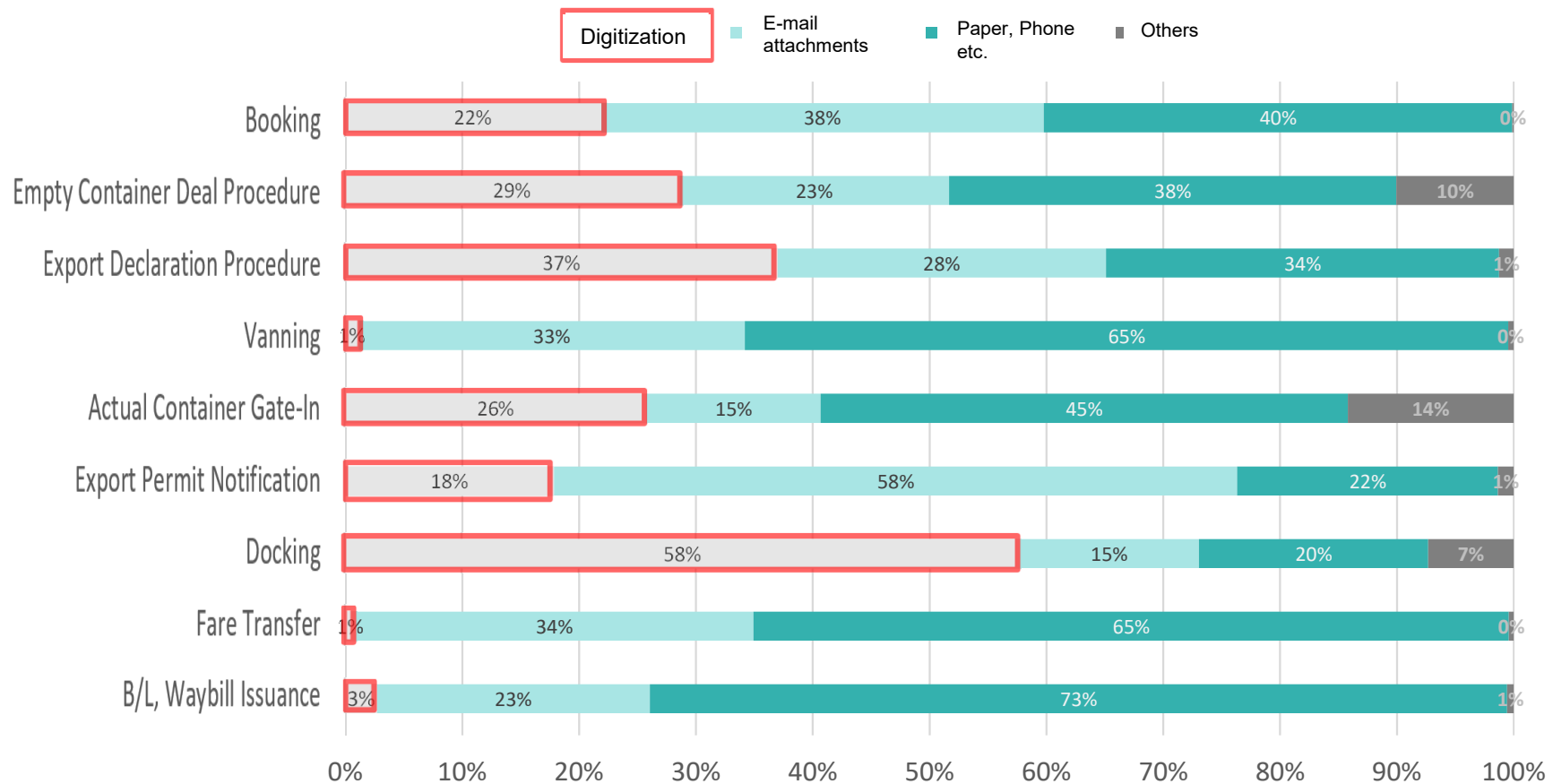
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# Japan's Logistics Industry Current Situation and Vision

# Challenges in Container Logistics Procedure①

Although some operations are being digitized, the percentage of E-mail attachments, paper, phone calls, etc. is high. Overall, digitization is not in progress

- ✓ Information transmission method by business (Export: From booking to B/L issuance)



(Source)

Created based on the questionnaire survey results for business operators (N = 239 companies) (2018)

Even with similar procedures, documents forms and necessary information items differ from company to company. So it is time-consuming that it is necessary to respond to individual clients

- ✓ Example: Differences in empty container pick up order formats

空コンテナ ピックアップオーダー

新規  訂正  キャンセル (ピックアップ場にチェックを入れてください)
  東京  横浜  大阪  神戸

BOOKING No.			
VESSEL NAME			
SHIPPER			
オーダー申込者 会社名	余社名		
積地	に積地名		
搬出港(1/3港)			
最終仕向け港			
コンテナタイプ	コンテナサイズ	本数	
DRY	20 (D2)		
	40 (D'5) (D4)		
REEFER	20 (R2)		
	40 (R5)		
敷設機	口 プラス / ロ マイナス		
パンチレーション	CL@SE /		
CA REEFER	0% : _____ %		
品名			
荷姿			
積出日			
パンニング情報 名称:			
運送会社			

○○  
 (FAX : XXXX or XXXXX)  
**PICK UP ORDER**

申込種別	新規	訂正	キャンセル	
本船名		V-No.	CY OPEN	CUT
BOOKING NO.			/	/
荷主				
乙仲業者		TEL		
担当者		FAX		
DRAY会社				
積地	東京 /		横浜	
陸揚港		仕向地		
品名	荷姿			
VAN詰場所				
A.搬出場所	B.実入搬入場所		•○○	
			•○○	
			•○○	
+その他( )		+その他( )		
搬出日	サイズ	タイプ	本数	搬入日
/				/
REMARKS				

- ✓ Example: Differences in the information items in bookings

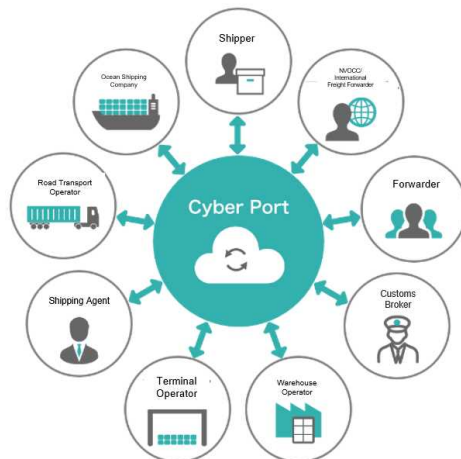
No.	BOOKING FORMAT	Sample1	Sample2	Sample3
1	Booking			
2	Company Name	●	●	
3	In Charge	●	●	
4	Party (Initiator)	●	●	
5	TEL/FAX	●	●	
6	E-Mail	●	●	
7	BL Shipper	●	●	●
8	Actual Shipper/NAC	●	●	●
9	Forwarder	●	●	●
10	Consigne(FOB)	●	●	●
11	NOTIFY PARTY	●	●	●
12	Commodity	●	●	●
13	Carrier	●	●	●
14	GNTR Pick Place	●	●	●
15	Place of Receipt	●	●	●
16	DOO/CY CUT	●	●	●
17	Service Type	●	●	●
18	Loading Port	●	●	●
19	ETD	●	●	●
20	Tranship as (via)	●	●	●
21	ETAD	●	●	●
22	Discharging Port	●	●	●
23	ETA	●	●	●
24	Place of Delivery	●	●	●
25	ETA	●	●	●
26	Booking No.	●	●	●
27	Service Mode	●	●	●
28	Payment Terms	●	●	●
29	Freight psyment	●	●	●
30	Contact No	●	●	●
31	US Filer	●	●	●
32	CA Filer	●	●	●
33	Vessel	●	●	●
34	Voyage Number	●	●	●
35	2nd Vessel	●	●	●
36	2nd Voyage Number	●	●	●
37	ETA-D	●	●	●
38	20' DRY	●	●	●
39	20' RAD	●	●	●
40	20' TK	●	●	●
41	40' DRY	●	●	●
42	40' HC	●	●	●
43	40' RAD	●	●	●
44	40' TK	●	●	●
45	LCL	●	●	●
46	MG	●	●	●
47	Total Gross Weight	●	●	●
48	Reefer Container	●	●	●
49	Out Gauge	●	●	●
50	Special Handling	●	●	●
51	Previous Booking No.	●	●	●
52	Booking No	●	●	●
53	MBL No	●	●	●
54	Remarks	●	●	●

We regard container logistics procedures as a cooperative area and aim to improve productivity through **"optimization and sophistication of the entire container logistics process"** instead of "partial optimization" of each entity.

## Initiative

- ✓ Commonize different information linkage methods and procedures among private businesses
- ✓ Collecting various types of big data surrounding ports and harbors and utilize them for port policy and for operation of private businesses

→ In order to achieve the above, a data platform "Cyber Port" has been established that can be utilized by all port-related businesses, while ensuring the necessary security and confidentiality of information



## Effects

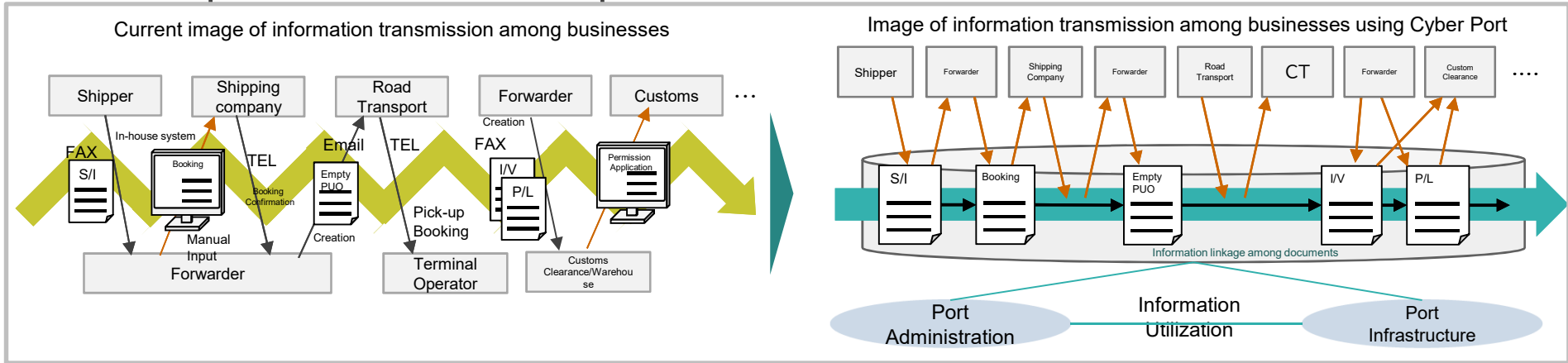
Contributes to solving social issues in addition to improving productivity in container logistics

- ✓ Reducing labor shortages by reducing working hours
- ✓ Reduction of CO2 emissions and contribution to the SDGs through paperless logistics, elimination of congestion in front of container terminal, gates, etc.

# Cyber Port Overview

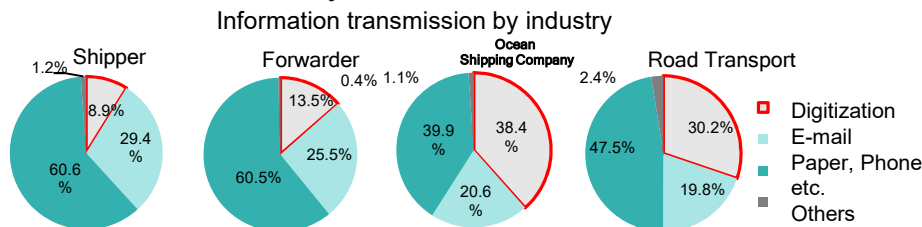
# Cyber Port Overview

A data platform that improves operational efficiency and productivity by digitizing and sharing container logistics procedures among private businesses. The first operation started in April 2021



## 【 Current Challenges of Information Transmission 】

- Re-entry/verification task due to transmission of paper information
- Inquiries due to imperfections in traceability  
⇒ Causes increase in potential cost
- Incomplete document descriptions, etc.  
⇒ Causes delay



## 【Short-term Effectiveness of Data Linkage】

- **Reduce re-input/verification task through data linkage**
- **Smooth status confirmation** by ensuring traceability

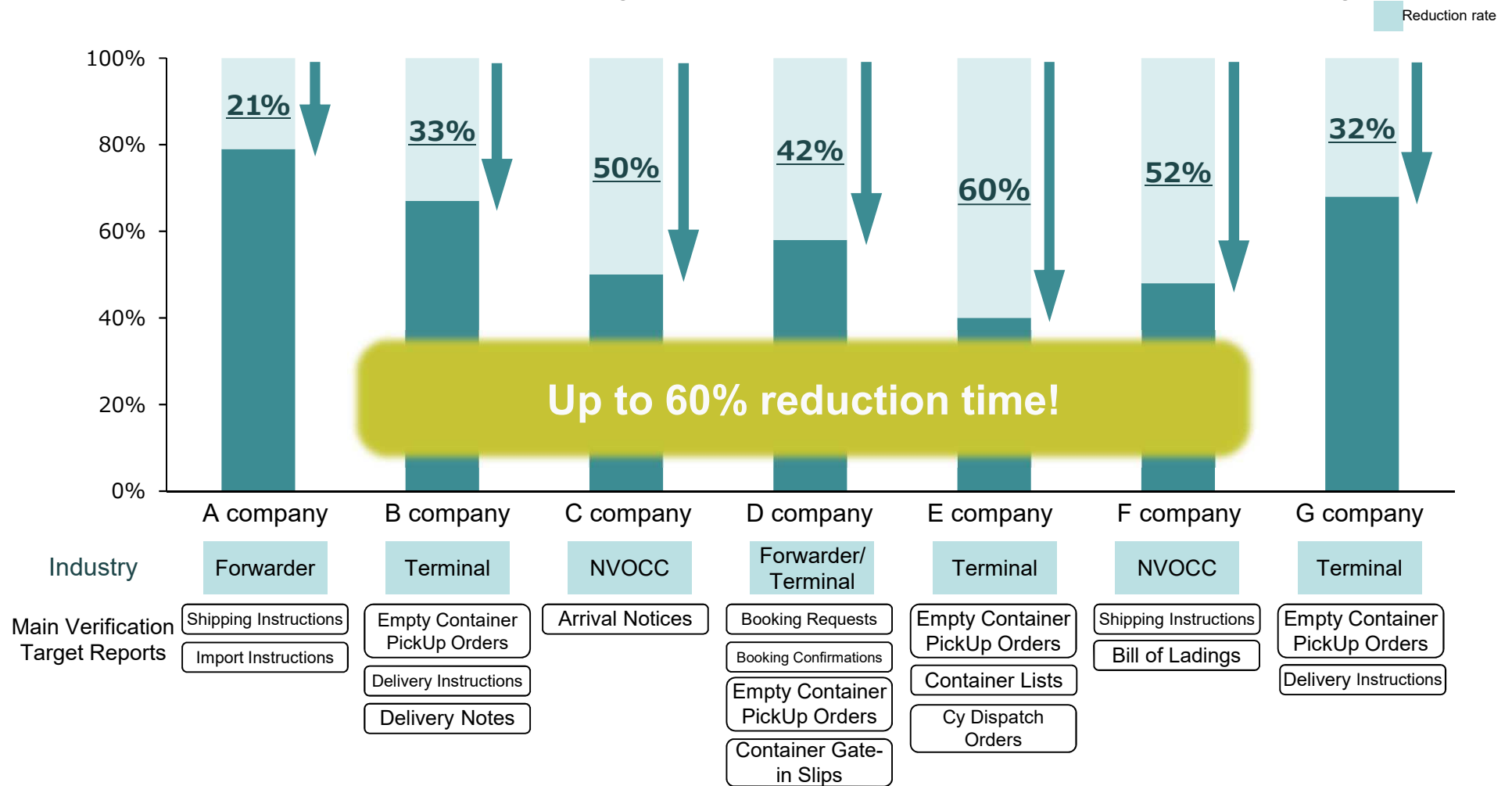
## 【Long-term Effectiveness of Information Utilization】

- Strategic port policy planning based on data analysis (state, etc.) (Efficient asset management for planning, maintenance and management of port facilities, etc.)
- Creation of new services by utilizing accumulated information and AI, etc. (private businesses, etc.)
- ▶ **Improving the productivity of the entire container logistics process and strengthening international competitiveness.**

# Time Reduction Effectiveness by Using Cyber Port

Demonstration project confirms up to 60% reduction in logistics procedure time

Time Reduction Effects of Port Logistics Procedures\* for businesses with API Linkage

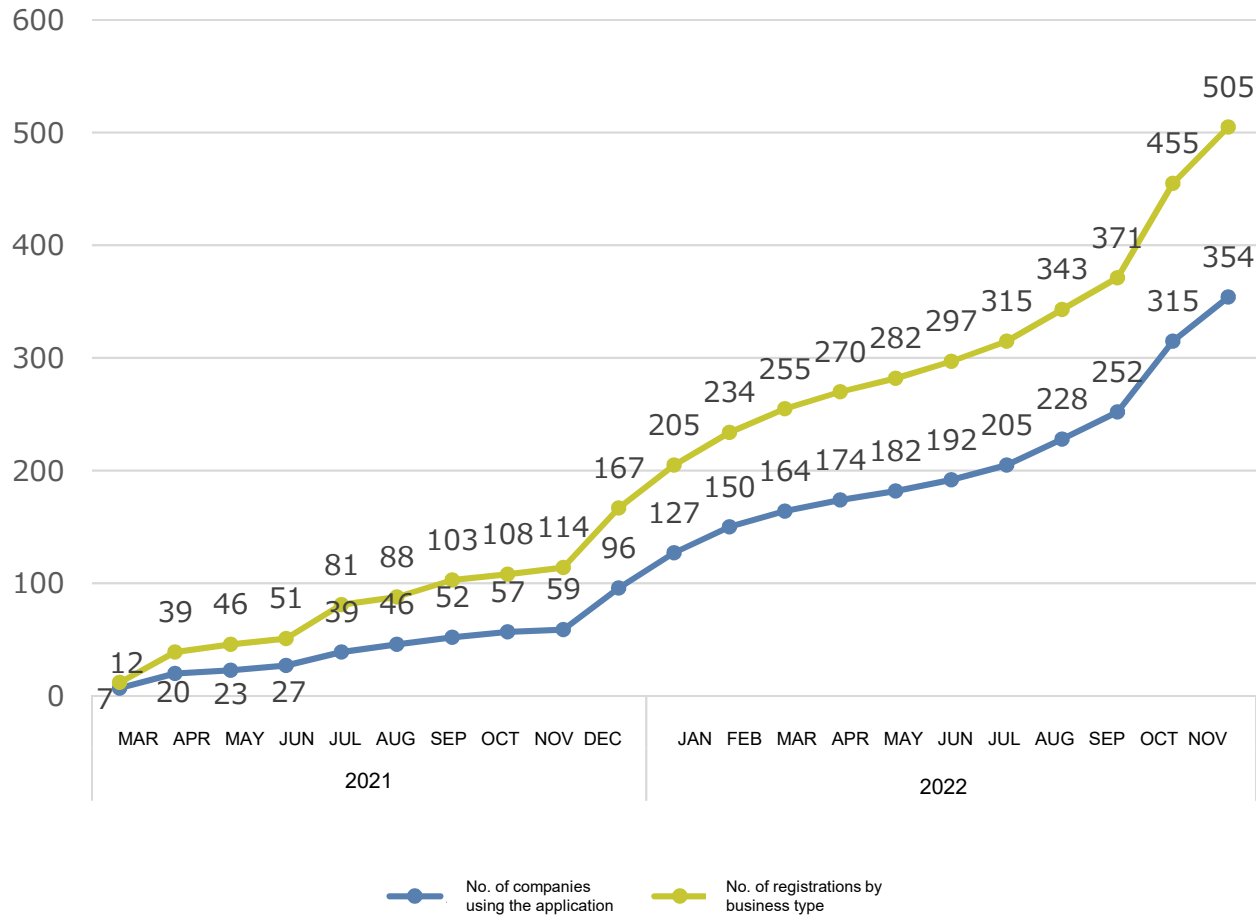


\*Creation and transmission of documents, data retrieval and re-entry, inquiries, etc.

# Cyber Port Usage Application Status



Cyber Port is widely used by many businesses  
It is currently installed in 354 companies as of December 1, 2022

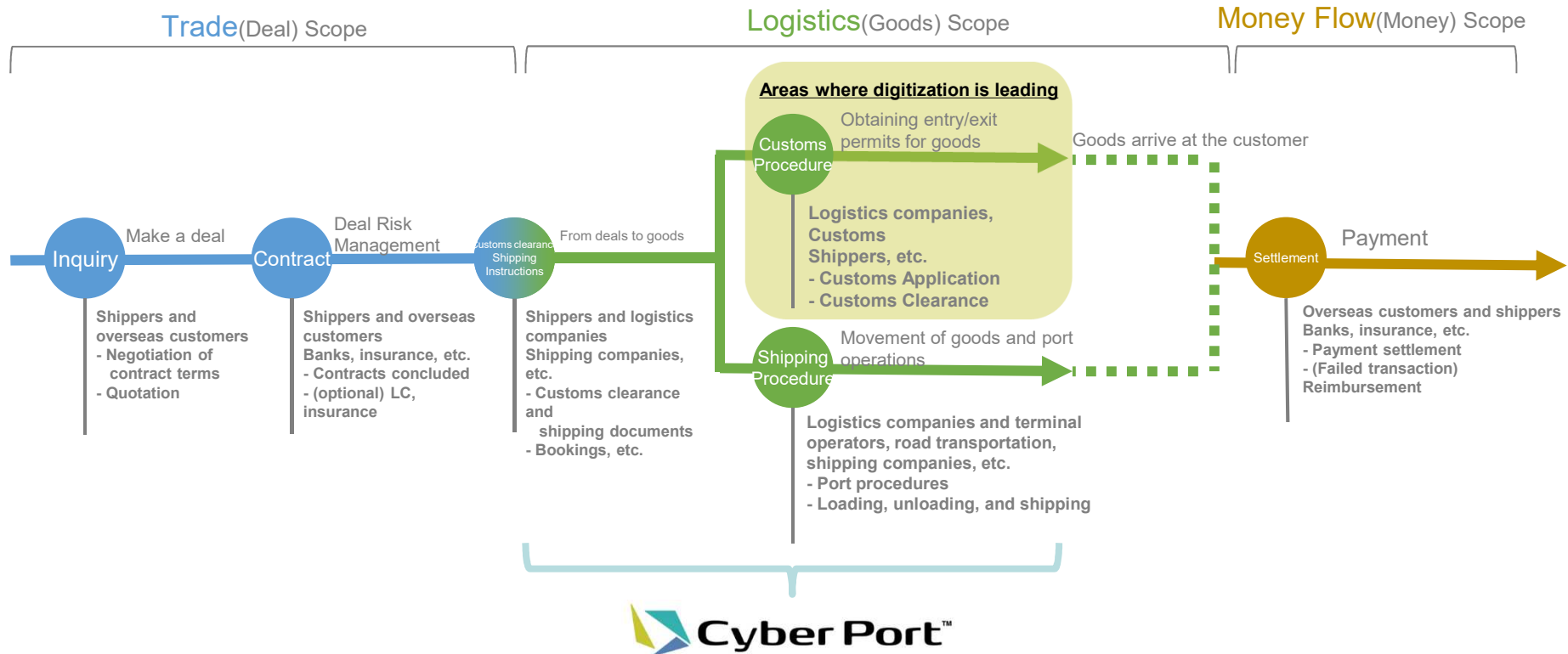


Business Type	No. of applications
Shipper	30
Ocean Shipping Company and Coastal Feeder Transport Company	4
NVOCC/Forwarder	58
Forwarder	49
Customs Broker	151
Terminal Operator	16
Road Transport Operator	145
Warehouse Operator	25
Shipping Agent	10
VGM Notification Member	3
VGM Registration Member	14
<b>Total</b>	<b>505</b>

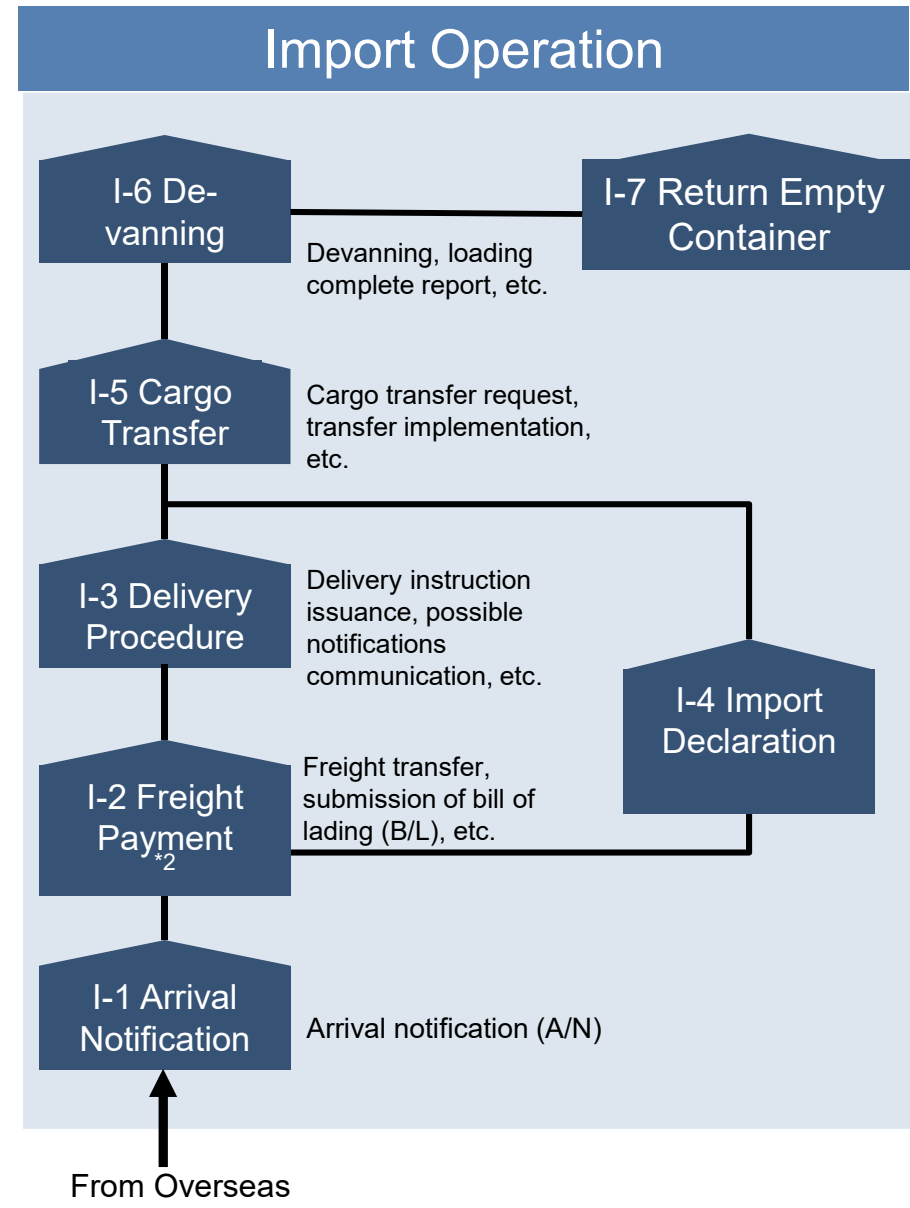
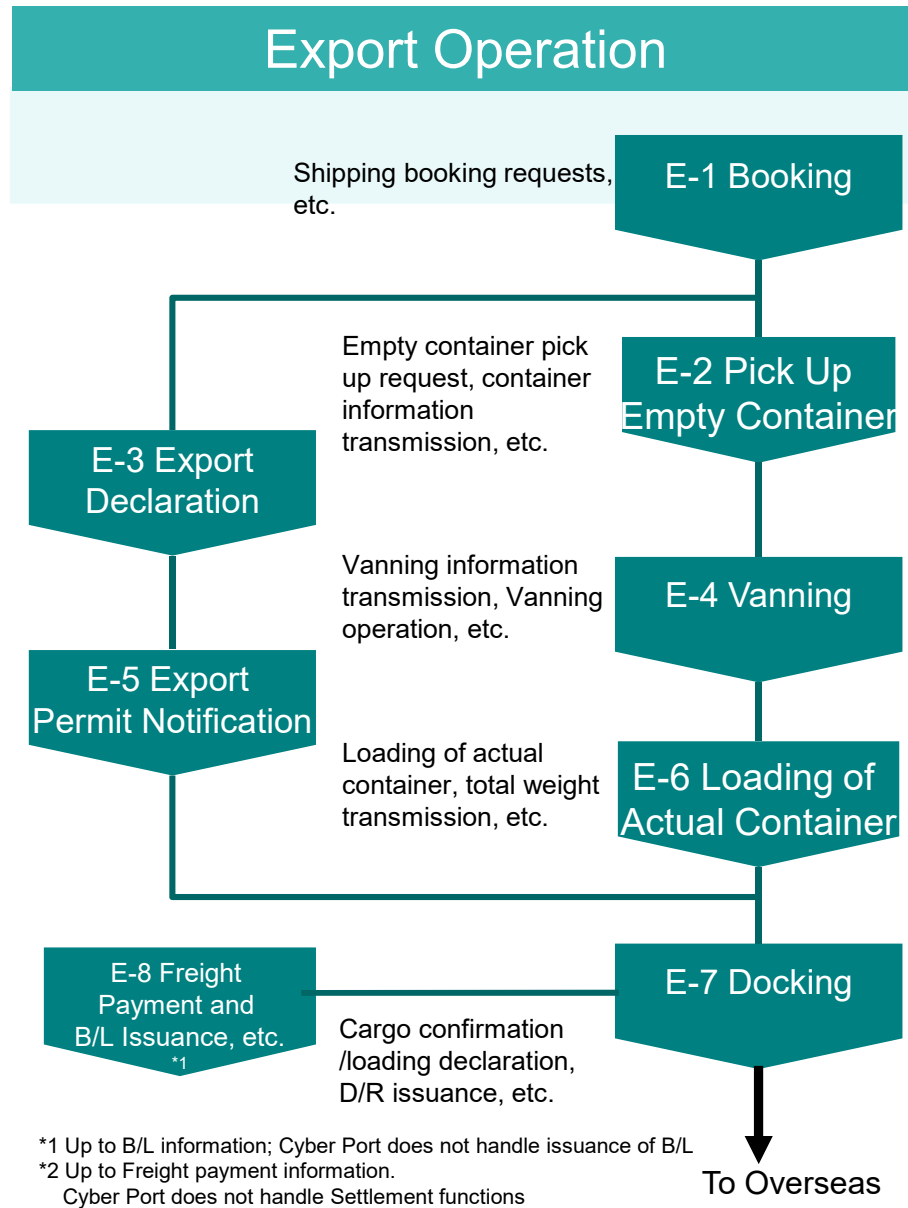
Cyber Port covers container logistics procedures between private businesses in Japan, excluding the commercial and financial fields of trade procedures

## ✓ Cyber Port Target Scope Image Diagram

### Trade Procedure Flow (Export Cases, Sea Transport, Brief Description)



\*In the future, we will consider collaboration with platforms in the commercial and financial sectors, as well as with overseas logistics platforms, etc.



# Cyber Port Functionality Features

With the participation of all players related to container logistics, Cyber Port completes all communication with business partners. Achieve common procedures and information linkage methods

## Procedures, Communication, ALL done in Cyber Port

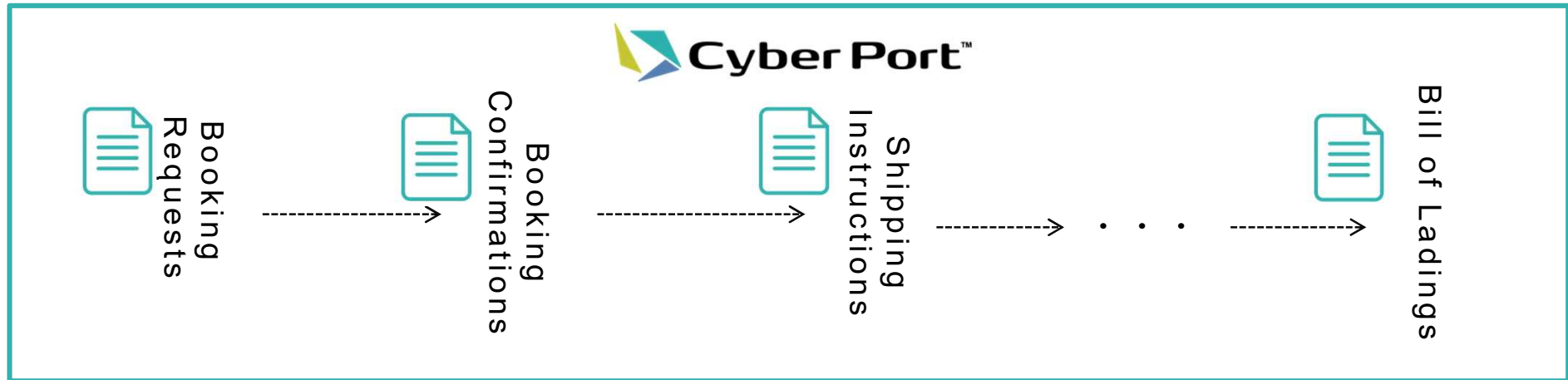
- ✓ Various reports of logistics deals can be seamlessly shared with any business partners on Cyber Port. (Permission to View/Edit a report can be flexibly set).
- ✓ With the messaging function, communication with business partners is completed on the Cyber Port.

Business Type	
Shipper	Terminal Operator
Ocean Shipping Company	Road Transport Operator
Coastal Feeder Transport Company	Warehouse Operator
NVOCC/International Freight Forwarder	Shipping Agent
Forwarder	VGM Notification Member
Customs Broker	VGM Registration Member

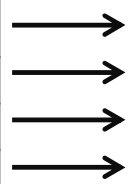


Duplicate entries between reports are automatically reflected, except for sensitive items, thus minimizing the number of entries

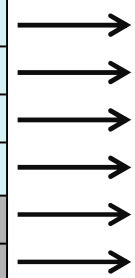
Image of Automatic Item Reflection in Exports



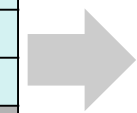
Item	Detail
Vessel Name	AAA
Voyage No.	BBB
Shipper	CCC
Place of Receipt	DDD
...	...



Item	Detail
Vessel Name	AAA
Voyage No.	BBB
Shipper	CCC
Place of Receipt	DDD
Marks and Numbers	EEE
Description of Goods	FFF
...	...



Item	Detail
Vessel Name	AAA
Voyage No.	BBB
Shipper	CCC
Place of Receipt	DDD
Marks and Numbers	EEE
Description of Goods	FFF
Container No.	GGG
Seal No.	HHH
...	...



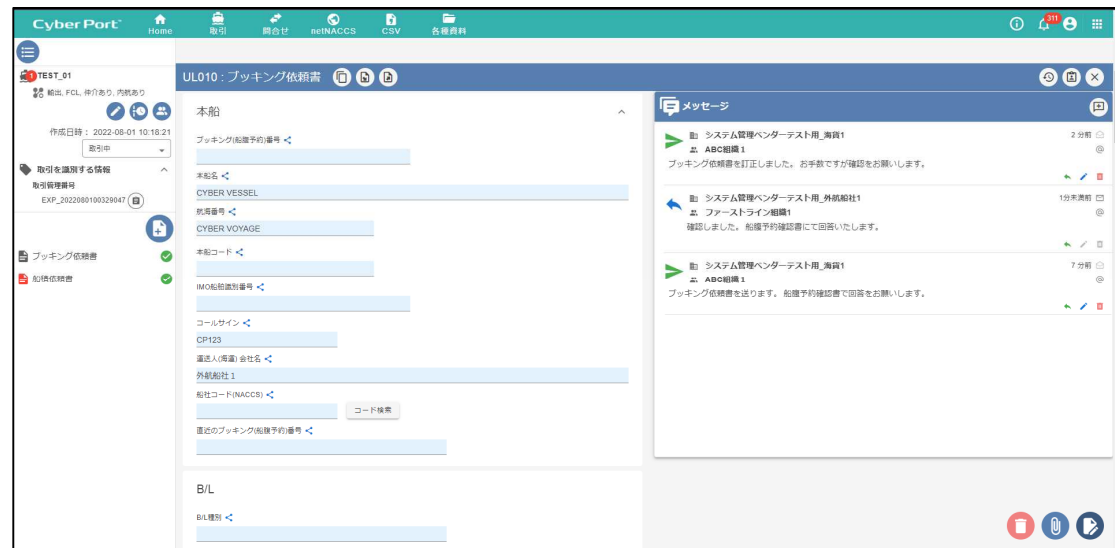
With automatic handling of entries in each report, 70% of inputs are eliminated

Cyber Port is available immediately after usage application  
It can be used without changing the business flow by linking with in-house system

## Using a Browser (In-house system not required)

- ✓ Cyber Port can be used immediately by simply accessing it from a browser.
- ✓ In addition to being able to digitize various reports of logistics deals, it is also easy to check ancillary communication and history updates.
- ✓ Use of a copy function for past deal information reduces input time and effort.

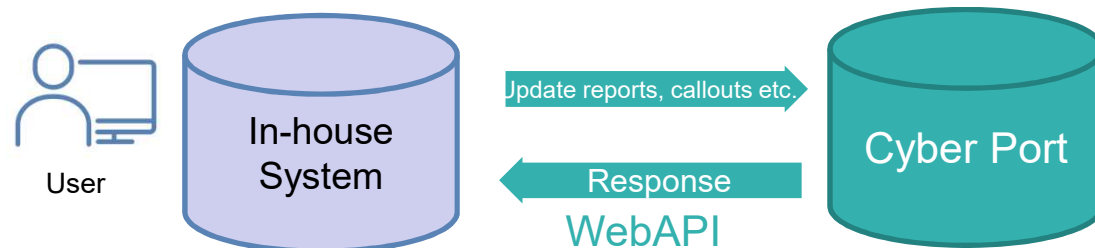
✓ Browser Screen(Image)



## Integrate Cyber Port with In-house system through API linkage

- ✓ By linking in-house system with Cyber Port via API, you can create, update, import, etc. reports on Cyber Port.
- ✓ Automation is also possible depending on how it is implemented.

✓ API Linkage(Image)

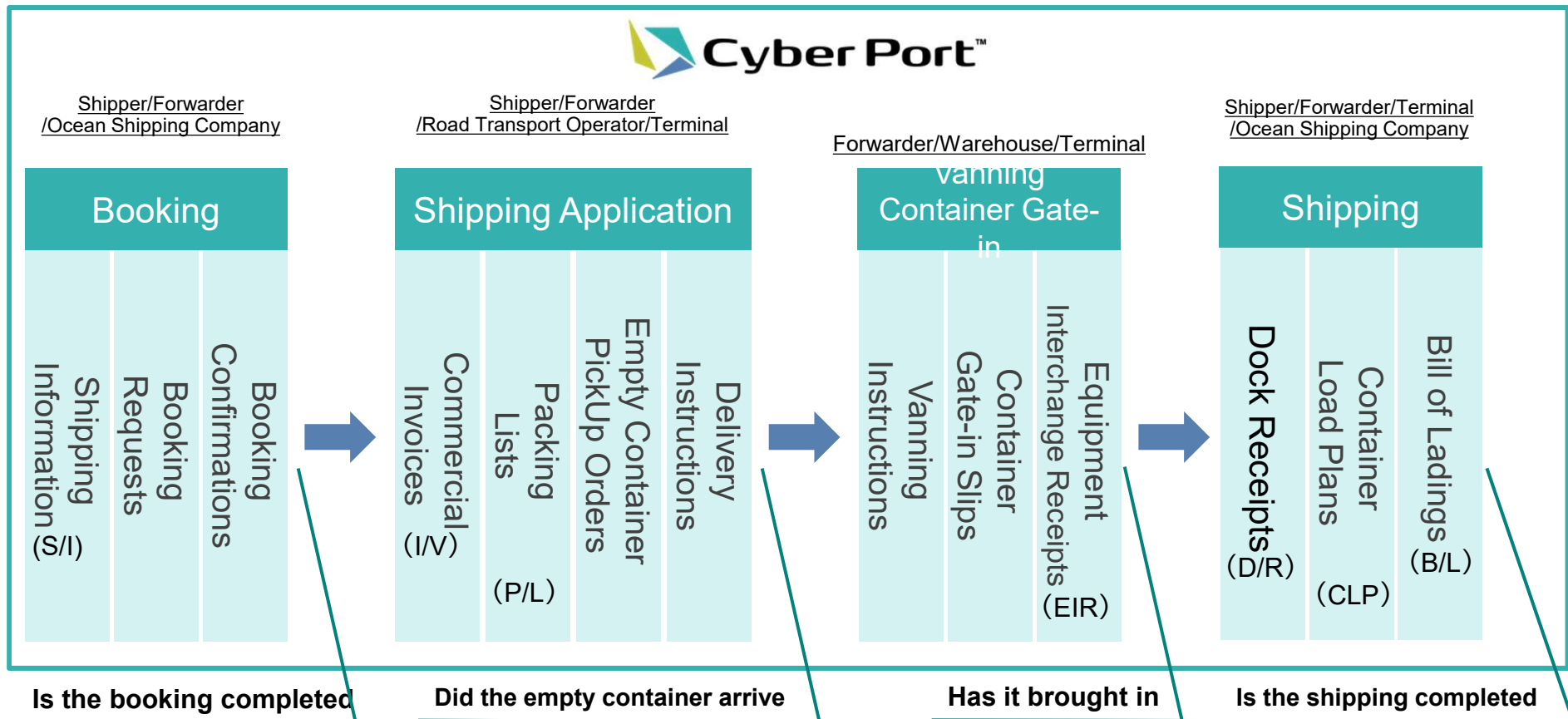


# Cyber Port Functionality Features④



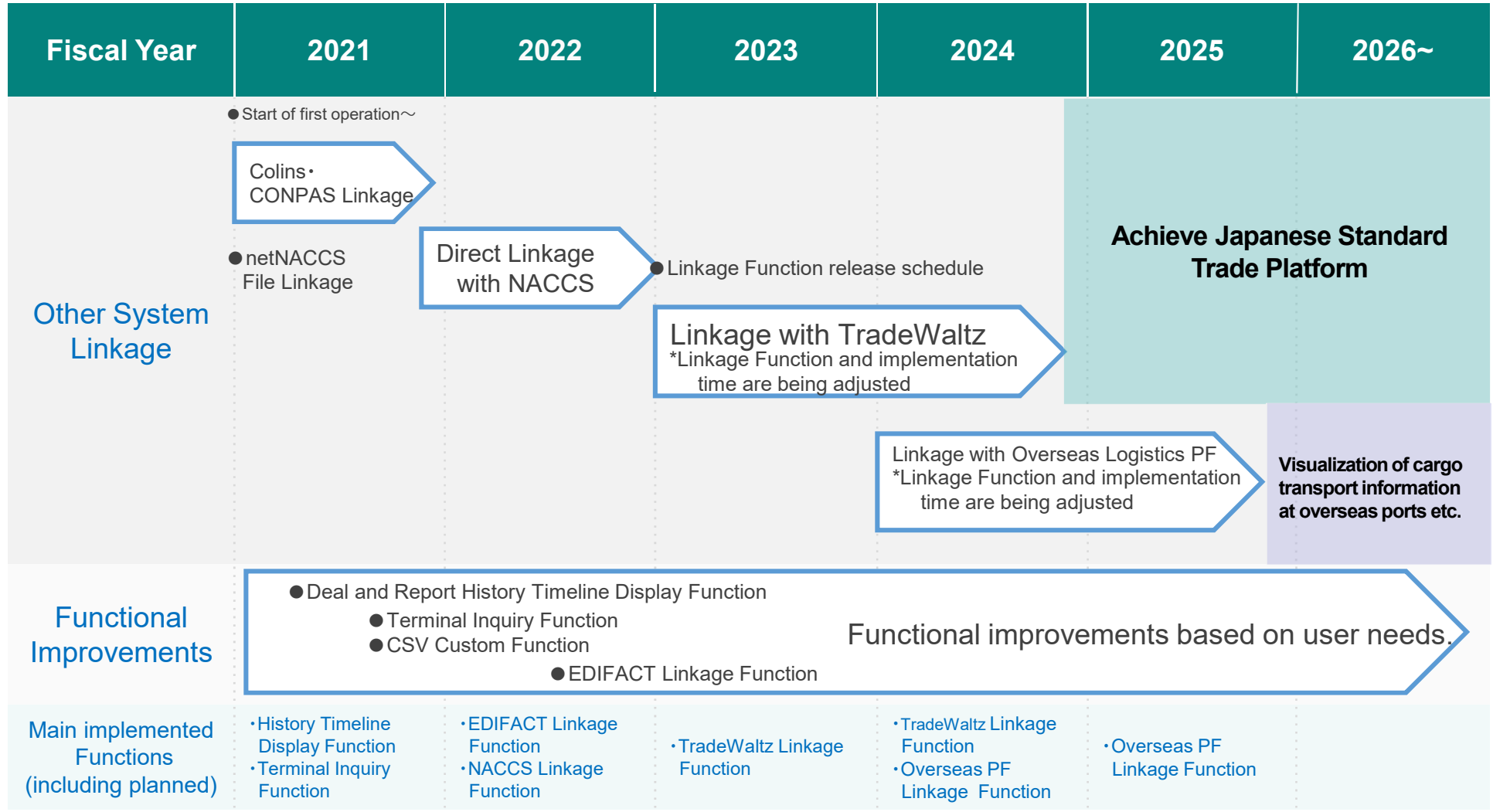
Operation status of each operator can be checked on the Cyber Port Procedure and cargo status is readily available so there is no need for an inquiry

<Export examples>



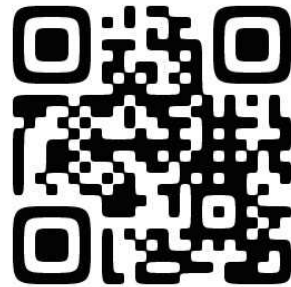
Cyber Port will continue to improve its functionality by integrating with other related systems. Cyber Port will continue to improve convenience by improving its functions based on the needs of users

\*Plans as of October 2022. Subject to change in the future.





# Cyber Port™



▲ You can access the portal site from this QR code.