

Study on simplification of port procedures

[Abstract]

In the wake of concluding the Convention on Facilitation of International Maritime Traffic (FAL Convention), simplification and integration of forms were pursued as regards the notification of arrival and departure of ships as well as on-board procedures including application for using mooring facilities. To improve the convenience of port users, simplification was further pursued in this study as regards onshore procedures including application for using cargo handling facilities.

Integration and deletion of forms and items, standardization of terminology, integration of multiple procedures, and extension of approval periods for reducing the number of applications were discussed in this study. Challenges to be addressed for practical implementation were surveyed by hearing from port managers.

The results of the study indicate that it is duly possible to simplify onshore port procedures, such as applying for the use of cargo handling machines.

1. Study items

- <1> Survey on port procedures
- <2> Discussion on appropriate procedures
- <3> Discussion on simplification of port procedures

2. Study approach

The approach of the study is summarized in Figure 1.

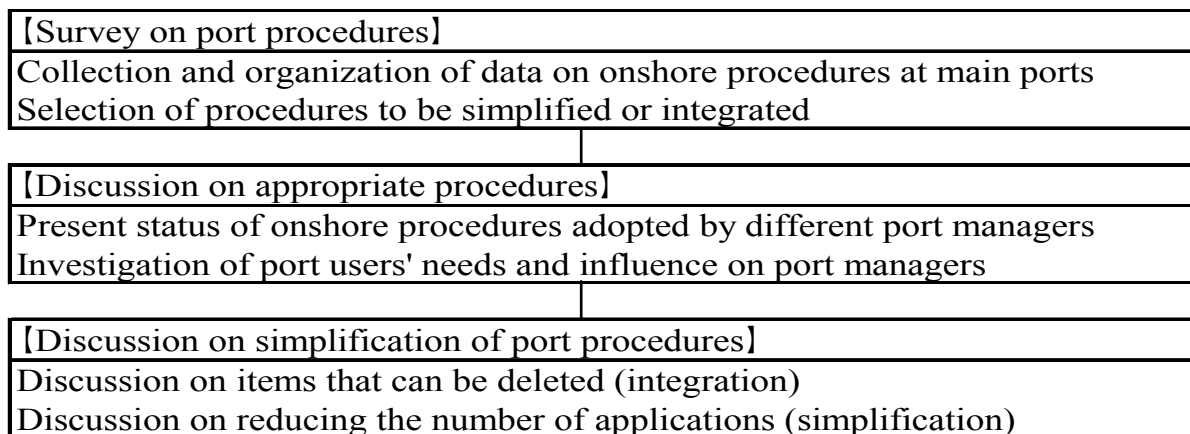


Figure 1 Flow of study

3. Study results

3-1. Survey on port procedures

The port procedures executed by the managers of the 22 main ports according to the relevant facility ordinances are listed in Table 1.

Table 1 List of port procedures

Name of procedure (division)	No.	Name of procedure (class)
Procedures related to arrival and departure of ships	1	Notification of arrival and departure of ships
	2	Notification of ships that enter port
	3	Application for exemption and refund of harbor charges
Procedures related to ship passage	4	Application for ship passage
Procedures related to the state of ships	5	Notification of the state of ships
	6	Notification of changes in the state of ships
Procedures related to the use of mooring facilities	7	Application for the use of mooring facilities (quays, discharging areas, piers, and mooring buoys)
	8	Application for reduction and exemption of mooring facility usage fees
	9	Application for the use of ferry bridges and movable bridges at terminals of ferries and passenger ships
	10	Report on the record of using movable bridges for ferries
Procedures related to the use of port facilities	11	Report on the use of locks
	12	Application for the use of tug boats
	13	Application for the use of ship service facilities (watering, oiling, and line-handling facilities, etc.)
	14	Application for the use of waste treatment facilities (waste oil disposal facilities)
	15	Application for the use of cargo handling machines (gantries, belt conveyors, and special cargo handling machines)
	16	Report on the record of using cargo handling machines (gantries, belt conveyors, and special cargo handling machines)
	17	Notification of cargo handling machine operators
	18	Application for the use of buildings (sheds, fumigation facilities, etc.)
	19	Report on the record of using buildings (sheds, fumigation facilities, etc.)
	20	Application for the use of land areas (cargo handling, open storage, and port facility areas, etc.)
	21	Report on the record of using land areas (cargo handling, open storage, and port facility areas, etc.)
	22	Application for the use of water areas (mooring basins, timber basins, canals, etc.)
	23	Application for the use of port facilities (sprinklers, port lines, worker stations, offices, equipment storage places, vehicle weighing machines, power systems, auxiliary facilities, etc.)
	24	Report on the record of using port facilities (worker stations, offices, equipment storage places, vehicle weighing machines, power systems, auxiliary facilities, etc.)
	25	Application for the use of electric facilities (power supplies for refrigerated containers, etc.)
	26	Report on the record of using electric facilities (power supplies for refrigerated containers, etc.)
Procedures related to cargo handling	27	Report on the record of cargo handling (incoming and outgoing cargo)
	28	Application for cargo handling and other operations
	29	Application for handling hazardous materials and cargo
Other procedures	30	Application for the revision of application
	31	Procedures to check preparedness for arrival and departure of ships

Among the onshore procedures, those related to cargo handling machines, land areas, and buildings were focused on and the following seven procedures were investigated for the possibility of simplification.

- <1> Application for the use of cargo handling machines (gantries, belt conveyors, and special cargo handling machines)
- <2> Report on the record of using cargo handling machines (gantries, belt conveyors, and special cargo handling machines)
- <3> Notification of cargo handling machine operators
- <4> Application for the use of buildings (sheds, fumigation facilities, etc.)
- <5> Report on the record of using buildings (sheds, fumigation facilities, etc.)
- <6> Application for the use of land areas (cargo handling, open storage, and port facility areas, etc.)
- <7> Report on the record of using land areas (cargo handling, open storage, and port facility areas, etc.)

3-2. Discussion on appropriate procedures

The present status of onshore procedures at main ports were surveyed, and port users' needs for procedural simplification and the influence of simplification on port managers were investigated.

(1) Present status of onshore procedures

The procedures related to cargo handling machines at main ports are listed in Table 2.

Table 2 Procedures related to cargo handling machines at main ports

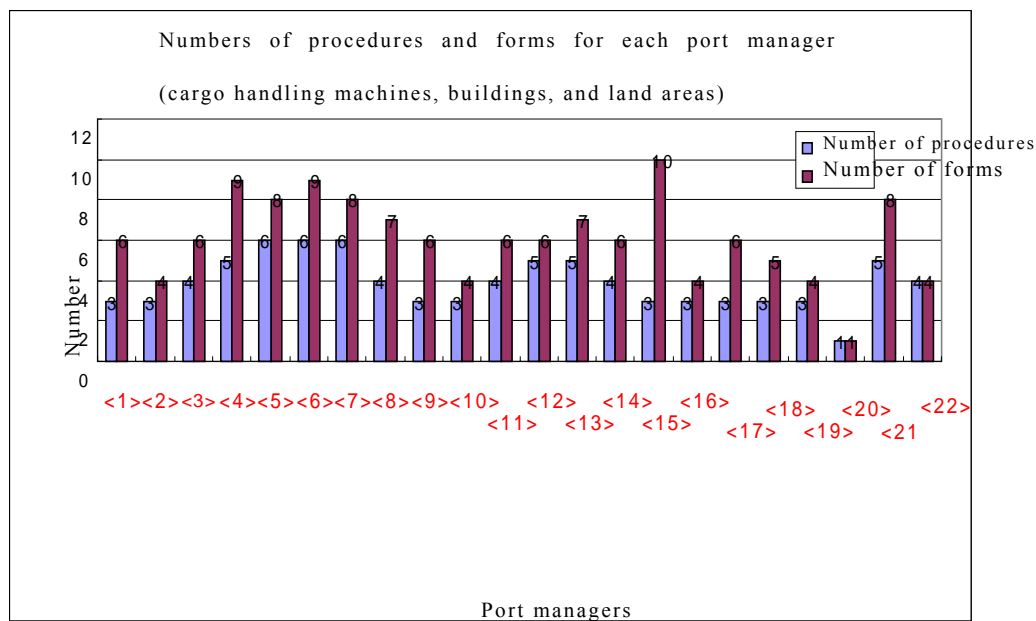
Name of procedure	Manager	Form name	Form number	
Application for the use of cargo handling machines (gantries, belt conveyors, and special cargo handling machines)	Tomakomai Port Management	Application for the use of cargo handling machines	Form No. 9	
	Muroran City	Application for use (sheds, cargo handling machines, warehouses) (normal, exceptional, exclusive) (general, dedicated)	Form No. 6	
	Miyagi Prefecture	Application for use (renewal)	Form No. 2	
	Chiba Prefecture	Application for the use of derricks	2 of Form No. 6	
		Application for the use of belt conveyors	Form No. 6	
		Application for the use of weighing machines	Form No. 5	
	Tokyo Metropolis	Application for the use of cargo handling machine	Form No. 4	
	Kawasaki City	Application for the use of track cargo handling machines	Form No. 15	
	Yokohama City	Application for the use of heavy-duty bridge derricks	Form No. 8	
		Application for the use of horizontally travelling retractable derricks	Form No. 7	
		Application for the regular use of derricks	Form No. 12	
	Niigata Prefecture	Application for the use of cargo handling machines	Form No. 4	
	Toyama Prefecture	Application for the use of cargo handling machines	Form No. 5	
	Shizuoka Prefecture	Application for the use of stationary, track, and movable cargo handling machines	Separate form No. 14	
	Nagoya Port Management	Application for the use of cargo handling machines	Form No. 15	
	Yokkaichi Port Management	Application for the use of cargo handling machines	2 of form No. 2	
	Osaka City	Application for the use of port facilities (cargo handling machines, etc.)	(i) of form No. 1	
	Osaka Prefecture	Application for the use of cargo handling machines and areas	4 of form No. 1	
	Kobe City	Application for the general use of derricks	Form No. 10	
		Application for the exclusive use of derricks	Form No. 11	
	Hyogo Prefecture	Application for the use of derricks	Form No. 2	
		Application for the use of movable cargo handling machines	Form No. 9	
	Wakayama Prefecture	Application for the use of cargo handling machines	2 of form No. 4	
	Okayama Prefecture	Application for the use of cargo handling machines	Form No. 11	
	Hiroshima Prefecture	Application for the use of cargo handling machines (revision)	Form No. 5	
	Yamaguchi Prefecture			
Report on the record of using cargo handling machines (gantries, belt conveyors, and special cargo handling machines)	Shimonoseki City	Application for the use of other port facilities	Form No. 17	
	Kitakyushu City	Application for the use of port facilities (2) (general use)	No form number	
	Chiba Prefecture	Register book of regular gantry crane checking	Form No. 5	
		* Daily log of gantry crane operations	Unknown	
	Tokyo Metropolis	Submission of the record of using cargo handling machines	Form No. 31	
	Kawasaki City	Notification of the completion of using track cargo handling machines	Form No. 20	
	Yokohama City	Daily report of gantry crane operations	Form No. 21	
	Niigata Prefecture	Report of container crane operation time	No form number	
		Daily log of gantry crane operations	No form number	
		Report of the amount handled by cargo handling machines	No form number	
	Nagoya Port Management	Report of the completion of using cargo handling machines	Form No. 40	
	Yokkaichi Port Management	Report on the record of using container cranes	Form No. 1	
	Osaka City	Report on the use of heavy-duty bridge derricks	2 of form No. 5	
		Detailed statement on the use of cargo handling machines	No form number	
	Osaka Prefecture	Report on the use of cargo handling machines	Unknown	
	Shimonoseki City	* Monthly statement of gantry crane operation time	No form number	
		* Report on the record of using unloaders	No form number	
		* Daily report of portable conveyor operations	No form number	
	Notification of cargo handling machine operators	Osaka City	List of cargo handling machine operators	No form number
		Kitakyushu City	* Notification of cargo handling machine operators	No form number

* No data available

There are various cargo handling machines such as gantry cranes and belt conveyors, and some port managers have different application forms for different machine types. User convenience may be improved by consolidating these forms.

It should be noted that some port managers describe gantry cranes as derricks.

Application forms for land areas and buildings were also surveyed. The numbers of procedures and forms for each port are summarized in Figure 2.



- < 1 > Tomakomai Port Management Association < 2 > Muroran City < 3 > Miyagi Prefecture
- < 4 > Chiba Prefecture < 5 > Tokyo Metropolis < 6 > Kawasaki City < 7 > Yokohama City
- < 8 > Niigata Prefecture < 9 > Toyama Prefecture < 10 > Shizuoka Prefecture
- < 11 > Nagoya Port Management Association < 12 > Yokkaichi Port Management Association
- < 13 > Osaka City < 14 > Osaka Prefecture < 15 > Kobe City < 16 > Hyogo Prefecture
- < 17 > Wakayama Prefecture < 18 > Okayama Prefecture < 19 > Hiroshima Prefecture
- < 20 > Yamaguchi Prefecture < 21 > Shimonoseki City < 22 > Kitakyushu City

Figure 2 Numbers of procedures and forms at different ports

It appears highly possible to consolidate forms because the number of forms exceeds the number of procedures at almost all ports.

(2) Investigation of port users' needs and influence on port managers

To investigate port users' needs for procedural simplification and the influence of simplification on port managers, a survey was conducted by hearing opinions from relevant parties. The results of the survey are summarized in Table 3.

Table 3 Opinions and requests from relevant parties

Port users	<ul style="list-style-type: none">• Different port managers require different ways of correspondence, such as fax, paper documentation, and email.• Online application using a simple form is preferable.• In the case of using one facility by multiple companies, it is convenient if an integrated application, rather than multiple applications by different companies, is allowed.
Port managers	<ul style="list-style-type: none">• If it is worth investment, computerization is desired for the convenience of port users.• Because port managers have different views on facility management, standardization may lead to further complication.• Standardization and computerization will continue to be pursued in response to the high demand of users.

3-3. Discussion on simplification of port procedures

(1) Discussion for integration

With the aim of improving the efficiency of onshore port procedures, the deletion, integration, and standard terminology of forms and items were discussed.

The items described in the documents of various application procedures at eight main ports (Tokyo, Kawasaki, Yokohama, Nagoya, Osaka, Kobe, Shimonoseki, and Kitakyushu Ports) were compared to discuss the necessity of each item. The items considered necessary were standardized in terminology.

Regarding the application for the use of cargo handling machines, the following six items were considered necessary (the item names follow the standard terminology proposed in this study).

Name of procedure: application for the use of cargo handling machines

Description items: <1> date, <2> ship name, <3> applicant's name, address, and phone number, <4> duration of use, <5> codes of facility and machine to be used, <6> name of machine to be used

The items deleted include the purpose of use and the amount of cargo handled. These items are not regarded as necessary items because some port managers do not require them.

(2) Discussion for simplification

As an approach to procedural simplification, it appears possible to reduce the number of applications by integrating procedures and extending permit periods.

This approach is easy to take because ordinance modification is minimally required. In fact, some port managers have already used this approach to reduce the number of procedures.

At Yokohama Port, for example, applications for the use of quays and cargo handling machines are combined and accepted simultaneously under the name of application for regular use. Whereas one application is usually required for one occasion of mooring, the permit period has been extended to about three months so that the number of applications can be reduced. This approach of application is effective at facilities used by a limited number of users and is also applicable to other ports.

4. Summary

The items described in the procedural forms of main Japanese ports were summarized and the items necessary for all the ports were identified to pursue integration of forms. For the simplification of procedures, methods to reduce the number of applications were discussed with some case studies.

The results of the study indicate that it is duly possible to simplify onshore port procedures. With the aim of early realization of procedural simplification, further efforts will be made by hearing opinions from port users and managers.