

# Efforts towards sustainable hinterland transport of containers

Port and Harbor Department

Although there are concerns about a shortage of truck drivers, we will propose measures to maintain and improve the efficiency by promoting cooperation among firms including container round use and reviewing transportation networks to/from inland areas, so that hinterland transport functions of international maritime containers can be maintained in the future.

## Social background and issues

- In the majority of cases, international maritime containers are transported to/from shippers by truck, however there are concerns about the serious shortage of truck drivers and the impacts this might cause.
- There is a need to meet the Sustainable Development Goals (SDGs), including reducing carbon dioxide emissions.
- In order to improve and maintain the efficiency of transport, there is a growing trend that firms introduce cooperative activities in their logistics functions.

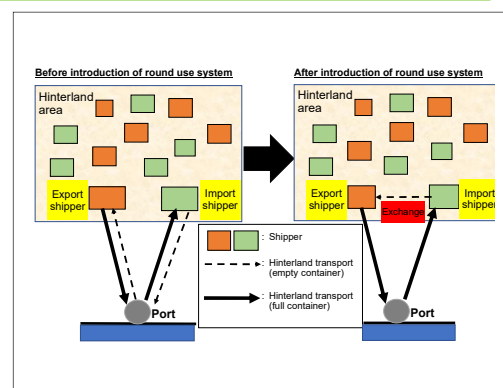
## Research content

### Estimating the future shortage of truck drivers and establishing efficiency targets

We will estimate the future balance between demand and supply of truck drivers involved in international container hinterland transport to assess shortages. In addition, measures to promote container round use which more and more firms are introducing will be examined, while evaluating expected improvements in transport efficiency (reduction in the number of transport to/from firms from/to ports, etc.) based on the participation rate of shippers adopting the round use system and other factors.

Based on these considerations, we will establish targets for efforts to improve the efficiency of hinterland transport systems.

Note: Container round use is a system in which shippers engaged in exporting and shippers engaged in importing match and exchange empty containers in the hinterland area in order to reduce transport to/from port areas.

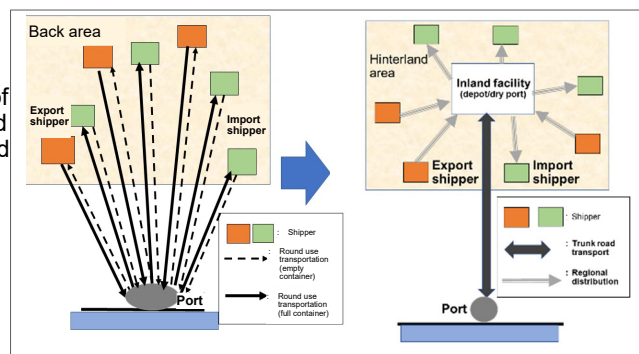


Container round use system

### Proposal and evaluation of social system for hinterland transport systems

We propose a social system for sustainable hinterland transport systems through the review of transport networks between ports and hinterland areas. As a part of this measure, the introduction of inland facilities to support container round use, and the introduction of new methods such as trunk road or convoy transport will be considered. The effectiveness of the proposed systems will be evaluated based on indicators such as degree of secure of sufficient truck drivers, reduction of transport costs, reduction of transportation cycles, and reduction of environmental impacts.

At this time considerations will be given so that advantages are given to the parties involved in the hinterland transport system. Various challenges for the realization as well as measures to solve them will also be examined.



Current practice (left) and after improvements (right)

We will contribute to the realization of SDGs by proposing a "social system" in order to maintain and improve hinterland transportation systems.