CONTAINER SHIPPING AND THE QUALITY OF CONTAINERS
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The FIATA Working Group Sea Transport has produced this second best practice guide to assist both FIATA National Associations and their individual Member freight forwarders.

Working Group Sea Transport is comprised of freight forwarders and trade association staff that specialise in maritime transport whether as practitioners or in advising on disputes and legal issues that may arise. The working group is managed by the FIATA Secretariat and usually meets three times each year in February, June and at the FIATA World Congress. The working group is part of the FIATA Multimodal Transport Institute (MTI) and reports at the FIATA Spring Headquarters session and at the FIATA World Congress.

During the FIATA World Congress in September 2018 held in New Delhi, the FIATA Working Group Sea Transport released its first “Best Practice Guide” with a focus on demurrage and detention charges in container shipping. The Guide was very timely, because during the last few years free time periods have been reduced and tariffs for demurrage and detention have increased considerably. Shipping lines have been accused of abusing their position by charging unjust and unreasonable demurrage and detention charges to merchants. The FIATA Working Group Sea Transport received a lot of acknowledgement and positive feedback from FIATA members and other stakeholders alike.

With this document the FIATA Working Group Sea publishes its second “Best Practice Guide” with a focus on “Container Shipping and the quality of containers”.

FIATA Working Group Sea noticed that the quality of containers provided by shipping lines in global container shipping has decreased significantly. One has to come to the conclusion that shipping lines are cutting cost in the maintenance of their equipment.

A container that does not meet the expected and agreed quality may lead to disruption in the supply chain and consequently leads to delays and additional cost for the merchant, shipping line and terminal alike.

This guide identifies responsibilities of the stakeholders involved making reference to related conventions (Convention for Safe Container – CSC) and to the Code of Practice for Packing of Cargo Transport Units. But above all it refers to practical considerations that stakeholders involved in container transport and container handling are subjected to in their day to day operations.

The intention of this best practice guide is once again that any reader, no matter from which industry sector, can see the logic and validity in each of the scenarios: clear, transparent and to the point. It is hoped that the guide will create a better understanding.

Similar to the first best practise guide, this document aims to examine the current situation and outline best practices that could be implemented voluntarily by all parties moving cargo through ports. These best practices may help reduce inefficient behaviour that lead to delays and unnecessary supply chain costs.

For further information about the activities of FIATA Working Group Sea Transport or to make comments about this guide, please contact the FIATA Secretariat info@fiata.com
EXECUTIVE SUMMARY

Containers are an important investment of the shipping lines and it is in the interest of shipping lines to turn around their containers as fast as possible. It is the responsibility of the shipping lines to ensure that their containers are safe and fit to be used for the required purpose.

Being the property of the shipping lines, the merchant is obliged to treat and handle the containers with good care. Container interchange documents that are issued during empty release or empty return are a good tool for both the merchant and the shipping lines to have some control.

The existing rules and convention such as
- Convention for Safe Container (CSC)
- Code of Practice for Packing of Cargo Transport Units
  as approved by IMO/ILU/UNECE
are clear and transparent and provide a good legal base and recommended practices.

However, the quality of containers at empty pick up has decreased significantly and there are practical considerations that frequently lead to disputes, additional costs and above all to disruptions in the supply chain.

Whilst the mentioned rules are clear in as far as the shipping lines are obliged to provide containers that are “fit for purpose”, the main problem seems negligence of container depots (often subcontracted by shipping lines) with regard to the verification of the condition of containers prior to empty release.

Another problem is the fact that it is up to the merchant to verify that an empty container provided by the shipping line is indeed “fit for purpose”. A real thorough verification (including light test to verify that there is no hole in the container) can only be done at the merchant premises - just prior to loading. But at that point in time, the empty container has already been picked up and may have travelled a few hundred kilometres.

Whilst it is a general practise to have truckers verifying the quality of an empty container during empty pick up, they have limited possibilities to ensure full compliance. Shipping lines must appreciate that it is their responsibility to provide “fit for purpose” containers and carry the responsibility for any failure.

When it comes to the empty return of containers after use, there is a responsibility for the merchant to treat containers with care and ensure their return in the same state that they were delivered to them. In this regard the FIATA Working Group Sea Transport has identified unfair practises of shipping lines related to the charging of unjustified cleaning and repair charges during empty return.

Concluding, the FIATA Working Group Sea Transport has identified problems related to the state and quality of the container as well as related to unfair demands for extra charges during empty pick up and during empty return.
DEFINITIONS AND REFERENCE TO RELATED CONVENTIONS AND CODE OF PRACTICE

When it comes to the quality of containers, there are two important rules / regimes that need to be referred to:
- Convention for Safe Container (CSC)
- Code of Practice for Packing of Cargo Transport Units as approved by IMO/ILO/UNECE

In the following paragraphs we refer to and quote important extracts from the mentioned convention respectively Code of Practice.

THE CONVENTION FOR SAFE CONTAINER (CSC)

Following the rapid increase in the use of freight containers for the transport of goods by sea, the International Maritime Organisation (IMO) agreed, in 1967, to carry out a study of the safety of containerisation in marine transport. A draft Convention on freight containers was then prepared in cooperation with the Economic Commission for Europe (ECE). This was followed in 1972 by the holding of a conference, jointly convened by the United Nations and IMO, to consider the draft. The outcome of the conference was the adoption of the 1972 Convention for Safe Containers (CSC 1972).

When the Convention was initially drafted the world wide fleet of containers was 145,000 TEU. It was remarkable foresight by the authors to develop such a scheme for a transport medium which contributed such a small proportion of international freight transport undertaken at the time. Since then the global container fleet is said to have grown to well above 25,000,000 TEU.

The 1972 Convention for Safe Containers and its amendments has two goals:
- to maintain a high level of safety of human life in the transport and handling of containers by providing generally acceptable test procedures and related strength requirements which have proved to be adequate over the years.
- to facilitate the international transport of containers by providing uniform international safety regulations, which are equally applicable to all modes of surface transport.

Containers which are manufactured to meet CSC requirements have a safety approval plate (CSC plate) affixed, containing technical data as prescribed by CSC.

The CSC plate is recognized by all contracting states to the CSC. This is the cornerstone of the convention; and once a container has been approved and plated it will be able to move in international transport with the minimum of safety control formalities.
The convention includes two Annexes:

**Annex I** includes regulations for the testing, inspection, approval and maintenance of containers. **Annex II** covers structural safety requirements and tests, including details of test procedures.

Annex I sets out procedures whereby containers used in international transport must be safety-approved by an administration of a contracting state or by an organization acting on its behalf.

The subsequent maintenance of a safety-approved container is the responsibility of the owner (or lesser), who is required to have the container periodically examined.

The Convention specifically requires that the container be subjected to various tests which represent a combination of safety requirements of both the inland and maritime modes of transport.

Containers may be examined under a periodic examination scheme (PES) or under an approved continuous examination programme (ACEP). Each owner needs to decide which regime is most suitable for his operations. Most containers are now examined under an ACEP programme. The Convention does not require all the containers operated by an owner to be examined under the same regime.

In either case, it should be noted that the CSC requires the container to be examined at intervals “appropriate to operating conditions”.

**Periodic Examination Schemes**

Under a periodic examination scheme a container must be first examined within five years of the date on which it was manufactured and thereafter within 30 months of the date of the last examination. The date before which a container should next be examined must be clearly marked on the safety approval plate of the container or as close as practical to it.

**Approved Continuous Examination Programmes**

Under an approved continuous examination programme, a container must undergo thorough examinations in connection with a major repair, refurbishment or on-hire/off-hire interchange.

Frequent routine operating inspections should also be carried out to detect any damage or deterioration which might necessitate repair or other corrective action. The thorough examinations should be carried out in the same manner as those, carried out under a periodic examination scheme.

The first thorough examination of a container under an approved continuous examination programme must be carried out within 30 months of the date on which it was manufactured. Thereafter the intervals between thorough examinations must not exceed 30 months.
The aim of the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code) is to give advice on the safe packing of cargo transport units (CTUs) to those responsible for the packing and securing of the cargo and by those whose task it is to train people to pack such units. The aim is also to outline theoretical details for packing and securing as well as to give practical measures to ensure the safe packing of cargo onto or into CTUs.

Whilst the main focus of the CTU Code is on the loading and securing of goods inside containers, the CTU Code also provides information and advice for all parties in the supply chain, in this context there is also reference to the quality and suitability of a container.

**CTU Code: definition of a freight container:**
An article of transport equipment that is of a permanent character and accordingly strong enough to be suitable for repeated use; specially designed to facilitate the transport of goods, by one or more modes of transport, without intermediate reloading; designed to be secured and/or readily handled, having fittings for these purposes, and approved in accordance with the International Convention for Safe Containers (CSC), 1972, as amended. The term “freight container” includes neither vehicle nor packaging; however a freight container that is carried on a chassis is included.

**CTU Code: definition of “clean”:**
As per the CTU Code, a container is considered clean if it is free from:
- any previous cargo residues
- any securing materials used from previous consignments
- any marks, placards or signs associated with previous consignments
- any detritus (waste) that may have accumulated in the container
- visible pests and other living or dead organisms, including any part, gametes, seeds, eggs or propagules of such species that may survive and subsequently reproduce; soil; organic matter
- all other items covered by contamination, infestation and invasive alien species that can be discovered upon visible inspection.

**CTU Code: quality of the container**
The CTU Code refers to the responsibility of the shipping line for providing containers that
- are fit for purpose
- comply with international structural integrity requirements
- comply with international or national safety regulations
- are clean, free of cargo residues, noxious materials, plants, plant products and visible pests.
**CTU Code: definition of contamination**

Contamination is defined by the CTU Code as visible forms of animals, insects or other invertebrates (alive or dead, in any lifecycle stage, including egg casings or rafts), or any organic material of animal origin (including blood, bones, hair, flesh, secretions, excretions); viable or non-viable plants or plant products (including fruit, seeds, leaves, twigs, roots, bark); or other organic material, including fungi; or soil, or water; where such products are not the manifested cargo within the container.

**CTU Code: communication and information amongst parties involved**

The CTU also refers to the various parties involved in the supply chain and their responsibility to communicate with each other and exchange of information:

- the identification, in accordance with a risk assessment, of risks to the integrity of the container that may be present for all or some part of the journey
- container identification
- seal number (where required)
- verified gross mass of the container
- accurate description of the cargo carried in the CTU
- the correct description of dangerous goods
- correct and appropriate transport documentation
- any information required for safety, security, phytosanitary, veterinary, customs or other regulatory purposes
BEST PRACTICES

Whilst the CTU Code is reasonably clear regarding the responsibilities of the various parties involved, the quality of empty containers is traditionally a reason for disputes. In this context, in particular the freight forwarder acting as (contractual) carrier is exposed and liable out of his contract of carriage for the provision of a suitable container. There is concern that shipping lines as owners of the containers neglect their duties related to the quality of containers for cost reasons and the forwarder is then considered responsible.

The objective of FIATA is to recommend “best practices” that should be considered by commercial partners in their relations and dealings. The following paragraphs summarize the scenarios involving the bad quality of containers, followed by the proposed “best practices” for commercial partners to consider in their relations.

SCENARIOS DURING EMPTY PICK UP

The shipping lines together with their appointed container depots are obliged to provide a container that is suitable for the goods to be transported (= fit for purpose). It is up to the merchant to verify that an empty container provided by the shipping line is suitable for the goods to be transported as described in the related booking.

However, the actual quality of the booked container can only be verified at the premises of the actual shipper. It is only possible to really have access to the inside of the container at the shipper’s premises for the purpose of an inspection. At this point in time the container may have travelled a few hundred kilometres and may have accumulated substantial transport cost. Should the container turn out to be unsuitable for the intended use, it will lead to delays and possible extra charges related to an extra haulage, in a worst case scenario a container may not be shipped with the intended vessel.

It is a common practice to request the inspection of the empty container to be done by the trucker who picks up the empty container. Whilst this makes a lot of sense, also at this earlier stage extra costs may apply and delays may occur due to the release of a container that is not “fit for purpose”. But above all, the trucker has limited possibilities to inspect the container and the inspection cannot be as thorough as at the shipper’s premises. The extend of this problem is directly related to the kind and availability of a container. A general purpose container that is considered as non-suitable may be replaced on the spot, special equipment such as open tops, flats and above all reefer containers (see below) are limited and may not be available for replacement.

It is obvious, that the shipping lines don’t fulfil their obligation to provide “fit for purpose” containers in this scenario, yet often they don’t accept responsibility, are unreasonable and the merchant is left to bear the consequences.
Best practice

Above all, by accepting a booking, it is the shipping lines obligation to provide a container that is suitable (“fit for purpose”) for shipment of the goods to be transported. In principle, there should be no questions related to the agreed quality. In order to avoid any kind of arguments, the merchant should be very clear in the booking process and both cargo description and cargo details as well as specific requirements of the container should be clearly communicated.

Should the container be unsuitable for the transport and not fulfil the required booking and specification, shipping lines should take full responsibility for their failure to comply with their obligation. Additional costs that may occur as a consequence related to extra trucking and other charges should be accepted in full.

In order to avoid unpleasant surprises for all parties involved, shipping lines should ensure a professional quality control of their equipment. As mentioned above, it is the shipping lines obligation to provide a suitable container and charges involved for the quality assurance should be covered by the ocean freight and not based on surcharges or other fees outside the actual freight.

SCENARIO: FOOD GRADE CONTAINERS (ALSO PHARMA GRADE)

We believe that special attention should be given to food grade / pharma grade and above all reefer containers. Goods related to the food and pharma industry have very specific requirements usually referred to as “food grade” or “pharma grade”. Whilst there are no international definitions, usually containers must be clean, dry and odourless.

Due to the specific nature of the goods to be carried in food or pharma grade containers, additional charges and delays due to the inability to supply suitable containers are usually more serious as compared to general cargo containers and extra care by all parties involved is essential.

In order to ensure technical functionality of reefer containers, shipping lines are obliged to arrange for professional “pre trip inspections” of containers and also assure steam cleaning of the container itself. However, it happens that shipping lines don’t always have proper control on their subcontracted container depots. This leads to arguments and disputes involving the haulage operator, container depot, the shipping line and the forwarder.

If a container smells of fish or is not fully dried after the cleaning process it is simply useless for the transport of certain products!
Best practice
In general, all points mentioned in the previous paragraph apply. But both shippers and shipping lines should be more specific and responsible and should have clear agreements and container specifications in place. This should ideally be done by means of a separate agreement or mentioned in a very detailed booking.

Above all, we suggest more transparency and data sharing involving food and pharma grade containers. Information and data may include the following:
- provision of records of the last journeys and products transported
- visibility of events, including empty return and cleaning events
- provision of SOP's to ensure quality – for example SOP's related to PTI's

In addition to the mentioned information / data, we suggest common definitions of “food / pharma grade” or the different levels of food / pharma grade containers in order to reduce any arguments during empty pick up to a minimum.

SCENARIOS DURING EMPTY RETURN

Responsibility of the consignee at destination

The CTU also refers to the responsibility of the consignee to clean the container, mentioning that after unloading and prior to returning of the empty container, the consignee or its appointed agent has the responsibility to clean the interior of the container to remove all traces of the cargo, especially loose powders, grains and noxious materials and fumigants, unless otherwise agreed with the shipping line.

Furthermore the consignee is obliged to remove all marks, placards and signs regarding the previous consignment from the exterior of the container once it has been cleaned.

More specifically, the CTU mentions that the receiver or consignee should return the container in the same state that it was delivered. This means that the container should be completely empty and clean. A clean container should be free of all cargo residues, plants, plant products, visible signs of pests, packing, lashing and securing materials marks, signs and placards associated with packing the container or the cargo, and any other debris removed. This includes fumigant materials or other noxious substances.

When it comes to the cleanliness of the empty container the CTU mentions that if additional cleaning beyond a thorough sweep of the container is required the consignees should consider the following techniques:

- washing the interior of the container using a low pressure hose and a scrubbing brush (if required). To remove contamination a suitable additive or detergent can be used;
- power washing internal faces using a medium pressure washing device;
- scraping areas of contamination. Care should be taken not to damage the paint work, or flooring.
## Container cleaning charges

### Scenario

Invoices by shipping lines for container cleaning charges have increased significantly. It appears that often such charges are not justified and charged with the objective to increase revenue. Usually, it is the consignee (or their appointed freight forwarder) who is exposed to such charges during the empty return of a container at the terminal / depot.

The freight forwarders offering the empty return have often very little choice but to accept additional charges in order to avoid delays and delay related extra charges.

### Best practice

Shipping lines should not charge the merchant for unreasonable wear and tear work that are inherent of a normal container transport. Freight forwarders should not accept such charges unless there is proof during the actual empty return of the container that:

- Cleaning is necessary
  The kind or goods transported should be considered. Clean cartons transported on pallets can hardly lead to oil stains on the container floor. Pictures of the state of the container and the reason for the cleaning should be provided.

- The cleaning has actually occurred, i.e. documentary proof by the container depot.

Above all, we highly recommend to insist on a joint survey of the container that is said to be improper. The merchant must have the right to verify the state of the container and should not be subjected to a one sided finding of a shipping line.

## Container cleaning charges and picking up of unclean empty containers

### Scenario

There are cases where it may be advisable to accept an empty container during empty pick up that is not considered clean. For example, for products that are not sensitive to oil stains or other contamination one may accept an unclean container in order to avoid losing time and money – for all parties involved. Why arguing on an item that is not relevant?

But the problem is that the consignee may end up having to pay for cleaning charges during empty return. The parties involved should consider a scenario in which the shipper is able to accept an inferior container, yet protects the consignee against the exposure of additional charges during empty return.

### Best practice

If a merchant decides to accept an unclean container during empty pick up, a picture should be taken and communicated to the shipping line. Shipping lines should record and accept such remarks and inform destination accordingly to ensure that the consignee is not charged with unjust cleaning charges.

Such picture and remark should be sufficient proof to allow the consignee to return a container without being responsible for cleaning charges.
Container repair charges

**Scenario**
Also invoices for container repair charges have increased significantly. Similar to container cleaning charges, it is usually the consignee (or their appointed container haulier) who is exposed to such charges during the empty return of a container at the terminal.

The freight forwarders offering the empty return has often very little choice but to accept additional charges in order to avoid delays and delay related extra charges.

**Best practice**
Shipping lines should not charge the merchant for unreasonable wear and tear work that are inherent of a normal container transport. In this context it must be remembered that often damages are due to the handling (lifting) of the container itself in terminals or on board the ship. Such damages are beyond the control of the merchant and should be covered as part of the freight. The CSC clearly mentions that containers must be examined and repaired at intervals “appropriate to operating conditions”.

Freight forwarders should not accept such charges unless there is proof during the actual empty return of the container that:
- Repair is necessary and the damage was caused by the transport of the goods.
- Pictures of the state of the container and the reason for the repair should be provided. Again, the kind or goods transported should be considered. Palletised goods can hardly lead to damage to the floor of the container.
- The repair has actually occurred, i.e. documentary proof by the container depot.
- The repair and related charges should be agreed by the merchant within the least amount of time. Again, we highly recommend to insist on a joint survey of the container that is said to be damaged. The merchant must have the right to verify the state of the container and should not be subjected to a one sided finding of a shipping line.

General charges related to the container maintenance and container cleaning

**Scenario**
Some shipping lines seem to have started to include in their general tariff a charge per each container dedicated to the cleaning or maintenance of the container. In other words, also containers that do not require cleaning or repairing are subjected to these charges.

There is concern that such general charges related to the maintenance of the container are an effort to increase profits and that they will not benefit those who may need support in order to increase service levels: the subcontracted container depots who are supposed to assure container quality. There is also concern that maintenance and repair is transferred to low cost labour countries rather than if and when repair is required.

**Best practice**
As mentioned already, it is the shipping lines obligation to provide a suitable container and charges involved for the quality assurance should be covered by the ocean freight and not based on surcharges or other general charges outside the actual freight.
CONCLUSION

Whilst shipping lines have a clear obligation to provide empty containers subject to the quality as described in the booking, disputes during empty pick up are not uncommon and lead to disruptions and additional cost in the supply chain.

During empty return at destination, shipping lines often charge container cleaning or container repairing charges that tend to be completely unreasonable.

Often shipping lines refuse to take responsibility and related charges are enforced on the merchant who has to deal with the situation at the container depot – usually subcontracted by the shipping lines. The mentioned attitudes are unreasonable and require change.

In order to improve the situation, FIATA suggests the following best practices:

- As per CTU it is the shipping lines obligation to provide a container that is suitable for shipment of the goods to be transported = “fit for purpose”.
- the shipper should be very clear in the booking process and both cargo description and cargo details as well as specific requirements of the container must be communicated.
- Should the container be unsuitable for the transport and not fulfil the required booking and specification, the shipping line should take full responsibility for their failure to comply with the booking.
- shipping lines should ensure a professional quality control of their equipment
- more transparency and data sharing involving food / pharma grade containers should be agreed
- the stakeholders should agree to common definitions of “food / pharma grade” or the different levels of food / pharma grade containers in order to reduce any arguments during empty pick up to a minimum.

- Shipping lines should not charge the merchant for unreasonable wear and tear work that are inherent of a normal container transport
- Freight forwarders should not accept such charges unless there is proof during the actual empty return of the container that
  - cleaning or repair is necessary
  - cleaning or repairing has actually occurred, i.e. documentary proof by the container depot.

Above all, we highly recommend to insist on a joint survey of the container that is said to be improper. The merchant must have the right to verify the state of the container and should not be subjected to a one sided finding of a shipping line.

- it is the shipping lines obligation to provide a suitable container and charges involved for the quality assurance should be covered by the ocean freight and not based on surcharges or other general charges outside the actual freight.

[Images of shipping lines and container depots]