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Cold chain logistics services in **Business** to **Business** (B to B) sector – Requirements and guidelines for storage and transport

Services logistiques de la chaîne du froid dans le secteur du commerce interentreprises (B to B) — Cadre directeur et exigences pour le stockage et le transport

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 315, *Cold chain logistics*.

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Introduction

The steady economic growth and increasing incomes in the world in recent years have diversified food choices and created a heightened awareness of the need to maintain food freshness and safety. Such changes have led to an increase in demand for cold chain logistics services (e.g. refrigerated transport services and refrigerated storage services), primarily for foods such as agricultural and marine products and frozen foods. On the other hand, these business developments have been facing foodborne disease and, as well as food loss and waste problems since some logistics service providers lack awareness and knowledge of proper operation measures for highly reliable cold chain functions for ensuring food quality.

To enhance the quality of cold chain logistics services that directly affect the condition of foods, appropriate handling of cargo, facilities, and equipment are indispensable as well as, in addition to the development of infrastructure and equipment.

The aim of this document specifies the minimum requirements of cargo handling for refrigerated storage services and refrigerated transport services in the business to business (B to B) logistics sector to make sure cold chains are properly maintained.

The aim is to improve the quality level of the local logistics services through the use of these guidelines.

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Cold chain logistics services in ~~Business~~the business to Business~~business~~ (B to B) sector – Requirements and guidelines for storage and transport

1 Scope

This document specifies requirements and guidelines for refrigerated storage services and refrigerated transport services for foods, in ~~cold chain logistics services in the business~~ to business transactions (B to B) logistics sector in order to ensure that cold chains are properly maintained.

This document does not apply ~~for~~to logistics services for cosmetics, cigarettes, pharmaceutical and medical products, over-the-counter drugs and commercially available medicine.

This document does not apply to customs operations.

This document applies to environments where ~~the~~refrigeration needs to be created and maintained, and does not apply to environments needing to raise storage temperatures.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

food

substance (ingredient), whether processed, semi-processed or raw, which is intended for consumption, and includes drink and any substance which has been used in the manufacture, preparation or treatment of “food” but does not include cosmetics or tobacco or substances (ingredients) used only as drugs

[SOURCE: ISO 22000:2018, 3.18]

3.2

warehouse service provider

organization providing services to store cargo while keeping it at the required temperature using a *refrigerated warehouse* ~~(3.8)~~ (3.9)

3.3

transport service provider

organization providing services either to move ~~and/or~~ distribute cargo, or both, while keeping it at the required temperature using a *refrigerated vehicle* ~~(3.9)~~ (3.9)

3.4

service user

organization using a *refrigerated* (3.7) storage service or a refrigerated transport service, as per the agreement with a *warehouse service provider* (3.2(3.2)) or a *transport service provider* (3.3(3.3)).

3.5

loading area

space or area where cargo inspection takes place before cargo loading and unloading from a *refrigerated* (3.7) warehouse during provision of refrigerated storage services or during provision of refrigerated transport services

3.6

cargo transfer

activity in which cargo is moved from one *refrigerated vehicle* (3.9(3.9)) to another in the middle of the transport route, before the delivery is completed at the destination

3.7

refrigerated

state where a temperature is managed at either of the following temperature range: frozen, chilled or air conditioned

Note 1 to entry: CAC/RCP 8-1976 (Code of Practice for the Processing and Handling of Quick Frozen Foods) states in Clause 4.6 "~~Frozen Storage~~" that ~~Cold~~~~cold~~ stores should be designed and operated so as to maintain a product temperature of -18 °C or colder with a minimum of fluctuation.

3.8

refrigerated warehouse

fixed facilities for storage of cargo, with a cooling system for keeping cargo *refrigerated* (3.7)

3.9

refrigerated vehicle

means of transport containing at least one *refrigerated* (3.7) compartment to transport refrigerated cargo

3.10

refrigerated room

space managed at *refrigerated* (3.7) temperature in a warehouse

3.11

refrigerated compartment

space managed at *refrigerated* (3.7) temperature in a vehicle

4 Temperature ranges and target businesses

4.1 Temperature ranges

The temperature range applied is determined between the service provider and service user, as per the agreement.

4.2 Target businesses

The requirements and recommendations within this document focus on refrigerated storage services and refrigerated road transport services in the B to B ~~phasesector~~. An example of target businesses is shown in ~~Figure 1~~~~Figure 1.~~

This document for refrigerated storage services and refrigerated transport services is applicable for logistics required for handling food by processing factories, retail shops and restaurants.

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