

This is a preview of ISO/TS 7352:2023. [Click here to purchase the full version from the ANSI store.](#)

First edition
2023-03

Freight containers — NFC or/and QR code seals



Reference number
ISO/TS 7352:2023(E)

© ISO 2023



COPYRIGHT PROTECTED DOCUMENT

© ISO 2023

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

This is a preview of ISO/TS 7352:2023. Click [here](#) to purchase the full version from the ANSI store.

Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms and definitions		1
4 Freight container — NFC or/and QR code seals		2
4.1 General requirements.....		2
4.2 Data format and content of NFC seal.....		2
4.3 Data format and content of QR code seal.....		3
4.4 Data format and content of NFC and QR code seal.....		3
4.5 Requirements for the communication interface between NFC seal and NFC read/ write device.....		3
4.6 Requirements of QR code printing and reading.....		4
5 NFC or/and QR code seal system for freight containers		4
5.1 System components.....		4
5.2 General requirements.....		4
6 NFC read/write device and QR code read device		5
6.1 General requirements.....		5
6.2 Content and format of data interaction.....		5
7 Information management platform		6
7.1 General requirements.....		6
7.2 Content and format of the data interaction interface.....		6
7.3 Extensions.....		7
8 Operation requirements		7
8.1 Operation at sealing point.....		7
8.2 Operation at unsealing point.....		7
8.3 Operation during transportation.....		8
8.4 Abnormality reporting.....		8
8.5 Authenticity verification of NFC and QR code seal.....		8
Bibliography		9

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 104, *Freight containers*, Subcommittee SC 4, *Identification and communication*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This is a preview of ISO/TS 7352:2023. [Click here to purchase the full version from the ANSI store.](#)

Introduction

This document proposes a specification for freight container NFC or/and QR code seals, including clear and unique identification and status of NFC or/and QR code seals. It is intended to greatly improve container transportation security and transparency with the advantages of low cost, easy to promote and apply.

The main body of implementation of this document is users, producers and information platform operators of container NFC or/and QR code seals, including cargo owners, shipping companies, logistics companies, agents, customs, inspection and quarantine, port tally, NFC or/and QR code seal manufacturers and information management platform operators.

The anticipated effects and benefits are as follows.

- To facilitate quick access to the Internet for container sealing information.
- To improve the safety of freight container transportation and reduce theft, smuggling and illegal immigration.
- To improve the transparency of freight container transportation and facilitate the accountabilities partition in multimodal transport of containers.
- To facilitate the supervision by such national institutions as customs, and inspection and quarantine bureaus.
- To facilitate the manufacturers' upgrading of products and expanding of the NFC or/and QR code seal market.