



The Bureau International des Containers et du Transport Intermodal Global Container Database and Approved Continuous Examination Programme Database

Notice to all UK container owners, operators and lessees, container ship owners, ship operators and terminal operators.

This MIN expires 30th June 2021

Summary

The purpose of this Note is to draw to the attention of industry the existence of the Bureau International des Containers et du Transport Intermodal's Global Container Database and Approved Continuous Examination Programme Database, and to highlight potential benefits to the container industry of utilising these to enhance container safety.

1. Background

1.1 In January 2018, a container ship on passage from China to the US experienced heavy seas in the North Pacific Ocean and unexpectedly rolled 20° to starboard, paused for several seconds and then rolled 20° to port, causing a number of container bays to collapse sending 137 containers overboard and damaging a further 85 containers.

1.2 The UK Marine Accident Investigation Branch (MAIB) investigated the incident (the vessel being UK flagged) and made a number of recommendations. One of these recommendations was that, in conjunction with the Health and Safety Executive (HSE), the Maritime and Coastguard Agency (MCA) should '*..promote the involvement of UK container owners and operators in the Bureau International des Containers et du Transport Intermodal's (BIC) Global Container Database and the Approved Continuous Examination Programme (ACEP) database*'.

1.3 The International Convention for Safe Containers (CSC) requires that containers undergo periodic safety examinations approved by the Administration.



2. BIC Global Container Database

2.1 The BIC Global Container Database, known as BoxTech, was launched on 1 July 2016. It allows container owners and operators to register their entire container fleets in a central data repository, which is then available to shippers, carriers, terminals, depots and other supply chain participants. This common data platform allows users to check the technical details of a container such as tare weight, size and type, maximum gross mass, stacking weight and other technical characteristics. BoxTech is designed to allow users to have technical details loaded directly onto their own systems, avoiding re-keying and manual searches.

2.2 BoxTech includes functions which allow container owners to update the database when containers are sold and are no longer part of their fleets, thereby helping to ensure that containers are re-marked and inspected before re-entering the supply chain. A container flagging and recovery alert can assist in the quick identification and recovery of missing or damaged units. Container owners can enter any container with a valid CSC plate and ISO marking on to the BoxTech database.

2.3 The global container fleet is estimated to be over 25 million units and, as of September 2019, BoxTech contained data on approximately 45% of these (based on figures provided to the IMO in October 2019). The effectiveness of BoxTech in providing safety and efficiency benefits to the container industry will increase with greater coverage of the global container fleet.

2.4 Participation in the BoxTech system is voluntary.

3. ACEP

3.1 Under the CSC, periodic safety examinations are required. There are two types of container examination scheme, the Approved Continuous Examination Programme (ACEP) and the Periodic Examination Scheme (PES). In the UK, the Freight Containers (Safety Convention) Regulations 2017 implements the Convention and requires the examination of containers under an approved scheme. Containers should be regularly examined for their safety and suitability for use in accordance with one of these schemes. Operators are permitted to apply for either or both ACEP and PES approval and may operate their fleets under either or both arrangements.

3.2 Both ACEP and PES require containers to undergo regular examinations, carried out to the same standard and in the same manner. The difference lies in the frequency with which the examinations are necessary. This MIN focusses on the ACEP scheme. Information on PES can be found on the HSE website.

3.3 Under ACEP, an examination is carried out in connection with a major repair, refurbishment or on-hire/off-hire interchange. However, the interval between examinations must not exceed 30 months. Inspections must be carried out by a competent person (as defined in the Yellow Guide, see below) and cover the following aspects of the container:

- corrosion
- the condition of welding
- the condition of riveting or similar method of fastening
- the presence of mechanical damage
- the condition of structural components where applicable, e.g. frame, corner fittings, door and hatch closure gear, floor and external paneling
- the validity of the safety approval plate

3.4 The HSE approves examination schemes for owners or lessees of containers in Great Britain. Organisations wishing to obtain approval for an examination scheme should consider the



instructions found in the document 'Freight Container Examination Schemes or Programmes – Conditions for Approval' (the Yellow Guide, see link below) and provide the HSE with the information detailed in the guide. ACEP approval numbers should be displayed on containers (or next examination date (NED) if using the PES regime).

3.5 BIC operates the Global ACEP database under the guidance of the International Maritime Organization (IMO), thereby allowing the validity of ACEP numbers entered onto the database to be checked globally.

4. BoxTech and ACEP Database Benefits

4.1 Participation in, and use of, BoxTech offers potential benefits to those engaged in container industries, including the enhancement of safety and efficiency. BoxTech currently contains information on approximately half of the global container fleet. However, recognising that such systems are only as good as the data contained within them, greater participation, expanded coverage and enhanced information will further increase the effectiveness of these systems in contributing to safety and efficiency improvements.

4.2 The BoxTech database aims to provide a 'one stop shop' for container information and can be used in a number of ways, for example to check tare weights in order to support accurate SOLAS Verified Gross Mass (VGM) Method 2 calculations, to offer global traceability of all containers entered on the database and to assist appropriate stowage and stacking of containers. BoxTech is intended to be accessible to all in the industry and can be integrated with existing information systems in order to share data and avoid duplication of data input.

4.3 One of the objectives of the CSC is to maintain a high level of safety of human life in the transport and handling of containers. The requirements within the CSC for inspecting and maintaining containers are part of this and contribute to the safety of shipboard and shore-based personnel. The requirement for inspections aims to ensure that containers are maintained in a safe condition during their operating lives.

4.4 The ACEP database is intended to aid transparency in container inspection regimes by providing a central and accessible database of approved ACEPs. Containers are interchanged regularly through carriers and terminals and different modes of transport, they may cover many thousands of miles and be handled by many different operators. The approval of an ACEP provides those involved in the container industry with a measure of reassurance, knowing that containers with a valid ACEP number are covered by an approved maintenance and repair plan with regular inspections.

4.5 Having a system of regular inspections helps to maintain the operational life of containers and the provision of a global database allows for quick checking of ACEP numbers so that operators can ensure an ACEP is valid. This can be checked on the database using the ACEP number or the container prefix or operator/owner.

4.6 As outlined in the MAIB report, damaged containers and inaccurate information can impact on the operational safety of vessels and seafarers. By populating a central and accessible database such as BoxTech with full, accurate and up to date information on their fleets, container operators can contribute to the improvement of safety to the benefit of all involved in the containerised supply chain.

4.7 Further information can be found at the following links:

[Freight Container Examination Schemes or Programmes](#) – Yellow Guide (HSE)

[Freight Containers \(Safety Convention\) Regulations 2017](#)



[BoxTech](#) information provided by BIC

[MAIB report](#) on the loss of containers from the vessel CMA CGM G. Washington

More Information

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