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Freight containers — Container equipment data exchange (CEDEX) — Part 1: General communication codes for general purpose containers

Conteneurs pour le transport de merchandises — Échange de données sur les équipements de conteneurs (CEDEX) — Partie 1: Codes des communications générales

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Foreword

This first edition of ISO 9897-1, together with ISO 9897-2, ISO 9897-3, ISO 9897-4, ISO 9897-5 and ISO 9897-6, cancels and replaces ISO 9897:1997. Together with a thoroughly technical revision of the ISO 9897:1997, this international standard have been split into parts to simplify and relate the technical content of each part to each type of container and also, as far as possible, to harmonize the parts of ISO 9897 with the order of container types as contained in the parts of ISO 1496.

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 9897-1 was prepared by Technical Committee ISO/TC 104, *Freight containers*, Subcommittee SC 04, *Identification and communication*.

This first edition of ISO 9897-1, together with ISO 9897-2, ISO 9897-3, ISO 9897-4, ISO 9897-5 and ISO 9897-6, cancels and replaces ISO 9897:1997. Together with a thoroughly technical revision of the ISO 9897:1997, this international standard have been split into parts to simplify and relate the technical content of each part to each type of container and also, as far as possible, to harmonize the parts of ISO 9897 with the order of container types as contained in the parts of ISO 1496.

ISO 9897 consists of the following parts, under the general title *Freight containers — Container equipment data exchange (CEDEX)*:

— *Part 1: General communication codes for general purpose containers*

— *Part 2: Refrigerated containers*

— *Part 3: Tank*

— *Part 4: Special purpose containers*

— *Part 5: Chassis*

— *Part 6: Message sets for data transfer between trading partners and systems*

Freight containers — Container equipment data exchange (CEDEX) — Part 1: General communication codes for general purpose containers

1 Scope

This International Standard specifies general communication codes for container equipment data exchange (CEDEX).

It is intended for business entities for use in communications relating to freight container transactions.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3166:1993, *Codes for the representation of names of countries*

ISO 6346:1995, *Freight containers — Coding, identification and marking*

ISO 9897-6:2010, *Freight containers — Container equipment data exchange (CEDEX) — Message sets for data transfer between trading partners and systems*

UN/C-FACT Draft Directory and Standard Directory

3 Principle

In ISO 9897, codes are assigned to pieces of information, called "data elements", which are commonly used in transactions relating to freight containers. These data elements are named and defined, and each element is assigned a CEDEX alphabetical or alphanumeric code. Separate code lists for each type of information (damage, component, repair, location, etc.) are maintained. A code may be reused in several different code lists, but a code is never used for more than one data element within a single code list.

The data element may be phrased about material of construction of a container. For example, CEDEX code "LS" in material type code list (Annex E) stands for "wood, soft laminated plank". A code may define the component of the container that is damaged, its location, or its operating defect, depending on which data element is being defined. A selection is made from the appropriate code list to indicate which component, location, or defect, respectively, is chosen. Other coded data elements indicate essential physical characteristics of the container and information pertinent to the use and management of the container, such as names and addresses of owners.

It can be seen from these examples that the text of a message can be substantially reduced in length by using the CEDEX codes instead of plain language. Use of the CEDEX codes results in messages much reduced in length, transmission time and communication cost, yet conveying information as complete as a much longer plain-language message.

Through proper programming of a computer, a CEDEX-encoded message can be printed out in plain language for the benefit of the communicators, if so desired, or it can be left in its encoded form. The personnel using the code routinely will develop the skill of being able to read messages in coded form; in fact, experi-

ence using the code has borne out this assertion. Also, many operators will not require use of all CEDEX codes assigned in ISO 9897, but only a portion of them due to the limited variety of containers and chassis in their domain.

Specific information about manufacturer, type and model of a container or chassis and its equipment is contained in the message, see 4.2.2.

4 Data elements and codes

4.1 Data elements

Data elements and corresponding code sets required to describe equipment components, their condition, repair methods, etc., are included in the appropriate Annex shown in table 1.

4.2 Data assignments

4.2.1 CEDEX codes

All codes assignments of CEDEX shall be taken as obligatory. That is, an operator shall not pick and choose alternative codes unilaterally, nor depart from the established protocol, nor introduce new codes without having registered the codes in accordance with 4.3.

However, two trading partners may agree mutually to use alternative codes if necessary code are not included in this standard. It is strongly recommended that such code be registered in accordance with 4.3 as soon as possible after introduction.

4.2.2 Message sets

Message sets as per ISO 9897-6 are alternative interface messages used for electronic data interchange transmission. An owner or operator can pick and choose amongst other standards and the standard serves as a list of required and optional data elements.

The specific information about manufacturer, type and model of a container or chassis and its equipment is contained in the message sets.

Annex A of ISO 9897-6 is normative; it describes the manner in which a directory of users is developed. The directory is maintained by BIC – Bureau International des Containers listed as BIC-LOCODES at www.bic-code.org.

Table 1 — Data elements and code sets

Data elements	Code set See Annex
Message type	A
Full/empty indicator (container)	B
Structural condition (container)	B
Repair condition (container)	B
Outside coating (container)	B
Inside coating (container)	B
Damage location	C
Damage type	D
Material type	E
Repair type	F
Measure unit specifier	G
Work scale (standard time factor)	G
Responsibility (for repair action)	H
Component for container	I

4.3 Updating data elements

The ISO Council has, in accordance with the provisions of the Directives for the technical work of ISO, designated the Bureau International des Containers (BIC) as the Registration Authority for the data elements:

Registration Authority for ISO 9897
Bureau International des Containers (BIC)
41, rue Réaumur
FR 75003 Paris
France
Phone: +33 1 47660390
Telefax: +33 1 47660891
E-mail: bic@bic-code.org
www.bic-code.org

Additional data elements will be added to table 1 at the request of international organizations, ISO/TC 104 member bodies, and approval of TC 104/SC 4. The actual process of registration will be performed by the TC 104/SC 4 Secretariat in consultation with the experts of TC 104 /SC 4/WG 3.
Each additional data element will be allocated an alphabetic or alphanumeric code, not at present used within the same code list covering a type of data.

Annex A
(normative)

Code - Message types

Numerical code	Name	Description	Message
01050	Damage / repair estimate	Description of damages and repair methods; authorization for repair work to proceed	DESTIM [a b]
01060	Damage / repair estimate	Description of damages and repair methods; authorization for repair work to proceed	WESTIM [c] WESTIMDT [c]

[a] To be used for electronic data interchange transmissions. See appropriate message descriptions published by UN/C-FACT to determine messages to which the codes in this standard may apply. Further message types and equivalent EDIFACT codes will be added as released by C-FACT TBG3.

[b] EDIFACT codes, message standards (including the relevant message type codes) are controlled by UN/C-FACT, a subsidiary organization to UN/ECE/WP.4. ISO has assented to this arrangement via a memorandum of understanding between ISO and UN/ECE.

[c] To be used for electronic data interchange transmissions. See appropriate message descriptions in ISO 9897 Part 6.The messages of Part 6 of this standard are developed for trading partner systems that do not support EDI. These messages are also used for import and export of data between systems.

Annex B
(normative)

Structural condition, repair condition, outside coating, inside coating, full /empty indicator

B.1 Structural condition, repair condition, outside coating, inside coating

Numerical code	Name	Description	Message
01110	Bad	Inferior quality or state of structural parts, workmanship, surface treatment, etc.	B
01120	Poor	Poor quality or state of structural parts, workmanship, surface treatment, etc.	P
01130	Medium	Average or acceptable quality or state of structural parts, workmanship, surface treatment, etc.	M
01140	Good	Good quality or state of structural parts, workmanship, surface treatment, etc.	G
01150	Excellent	Excellent quality or state of structural parts, workmanship, surface treatment, etc.	X

B.2 Full/empty indicator

Numerical code	Name	Description	Message
01160	Empty	Empty condition of equipment	E
01170	Full	Loaded condition of equipment	F

Annex C
(normative)

Damage Location

C.1 Location coding convention

C.1.1 All container bodies

The location coding convention consists of:

- A 1200 mm x 1200 mm (4 ft x 4 ft) numerical square system is used to identify damage to any face of a 20 ft or 40 ft container.
- A 600 mm x 600 mm (2 ft x 2 ft) numerical square system is used to identify damage to any face of a 10 ft container.
- A 900 mm x 900 mm (3 ft x 3 ft) numerical square system is used to identify damage to any face of a 30 ft container.

The container location coding convention locates damages within an area as large as a complete face of the container or as small as a nominal square as above, or even less for the main components located on its edges (rails, corner posts).

The location code shall consist of four characters depending upon the area to be described. It identifies the smallest area containing the entire vertical and horizontal length of the damage.

C.1.1.1 First character

The first character shall be selected to identify the appropriate face of the container,

door end (rear)	**D**
container exterior	**E**
front end	**F**
left side	**L**
Container interior	**I**
right side	**R**
top/roof	**T**
under-structure	**U**
bottom floor	**B**
Others:	
unspecified location or not applicable	**N**
container exterior and interior (whole container)	**X**

C.1.1.2 Second character

It shall be selected to identify the appropriate part of the container face where the damage is contained, when applied to a closed container. The vertical faces of the container are divided into top and bottom halves and

upper and lower main components. The horizontal faces of the container (roof or top and floor or bottom and under-structure) are divided into right and left halves when viewed from the door end.

The relevant codes for containers are:

both halves (li.e. top and bottom, or left and right or centre)	**X**
bottom half both halves (i.e. top and bottom, or left	**B**
higher portion (upper)	**H**
left half	**L**
lower portion (ground)	**G**
right half	**R**
top half	**T**

C.1.1.3 Third and fourth characters

They shall be selected to identify the section of the container part in which the damage is contained.

On all containers the front and door ends are divided into vertical sections numbered as follows when viewed from the door end from left to right:

for the left-hand side corner post	**1**
for the left half	**2**
for the right half	**3**
for the right-hand side corner post.	**4**

On all containers the right and left sides, the roof, the floor and the under-structure, are divided into equal sections:

for 10 ft and 20 ft containers, five sections numbered	**1 to 5**
for 30 ft and 40 ft containers, ten sections numbered	**1 to 0**

When the damage covers one section only, the third character indicates the appropriate section number and the fourth character shall be **N** (see figure C.1a)).

When the damage covers several adjacent sections the first and last section numbers are used (see figure C.1b)).

When the damage covers several non-adjacent sections or if damage repair details are not the same, then separate line items shall be used (see figure C.1c)).

When the damage covers the entire length of the container face, the third and fourth characters shall each be **X** (see figure C.1d)).

C.1.1.4 General location coding

When the damage/action covers *several faces of the inside* of the container such as steam cleaning, inside refurbishment, reaffixing or sealing of panels, then the code **IXXX** shall be used.

When the damage/action covers *several faces of the outside* of the container such as outside refurbishment, refixing or sealing of panels, removing of cargo stickers, then the code **EXXX** shall be used.

When the damage/action covers *several inside and outside* faces of the container such as examinations, handling/transport, complete refurbishing, and then the code **XXXX** shall be used.

C.1.1.5 Examples of location coding for containers

Examples of location coding of components of typical containers are shown below. A diagram showing the components is shown in Figure C.1.

Figure C.1 Reference	Location code	Component code	Description
a	LT5N	PAA	Side panel, LHS, upper half, within the 5th 1200 mm (4 ft) section from rear
b	RT24	PAA	Side panel, RHS, upper half, extending through 2nd to 4th sections from rear
c	RB2N	PAA	Side panel, RHS, lower half, within the second section from the door
d	RB4N	PAA	Side panel, RHS, lower half, within the fourth section from rear
e	TXXX	PAA	Roof panel, both sides, extending through all sections
f	UX1N	CMA	Crossmember, both sides, within first section from door
g	UR12	CMA	Several crossmembers, RHS, extending through first two sections*
h	TX12	RBO	Roof bows, both sides, extending through first two sections*
I	TR1N	RBH	Roof bow holder, RHS, within first section (bow holder number will be defined in separate free-text field)
j	UL8N	CMA	Outrigger, LHS, within the eighth section from door (40 ft) (outrigger number will be defined in separate free-text field)
k	UX3N	FLW	Web (side) of fork-lift pocket, both sides, within third section from door (pocket number will be defined in separate free-text field)
l	UR4N	FLS	Fork-lift pocket strap, RHS, within fourth section from door (pocket number will be defined in separate free-text field)
m	RX1N	SBO	Side post, RHS, both halves, within the first section from door (post number will be defined in separate free-text field)
n	UX15	RLA	Centre spacer rail, extending through sections 1-5 from door
o	UR80	RLA	Tunnel rail, extending through sections 8-10 from door
p	DX2N	LBA	Locking bar, LH door, both halves (locking bar number will be defined in separate free-text field)

NOTE 1 LHS = left-hand side; RHS = right-hand side; * = specific sequential number of component will be defined in separate free-text field.

NOTE 2 Specific sequential number of component will be defined in separate free-text field as follows: Roof bows, crossmembers, outriggers and forklift pocket sides are to be numbered from rear (door) end to front. Locking bars are to be numbered from left to right.

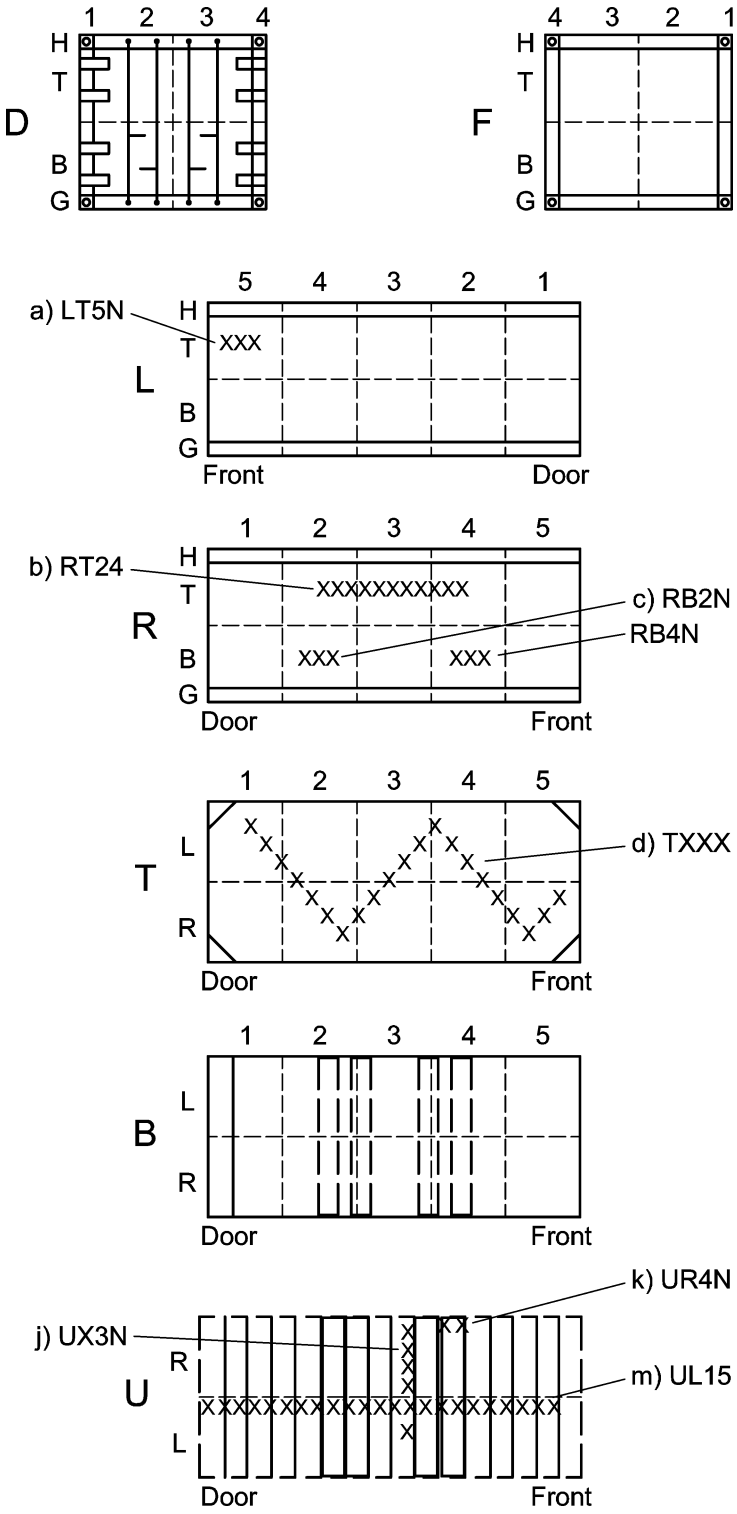

Figure C.1 — Examples of location coding for containers

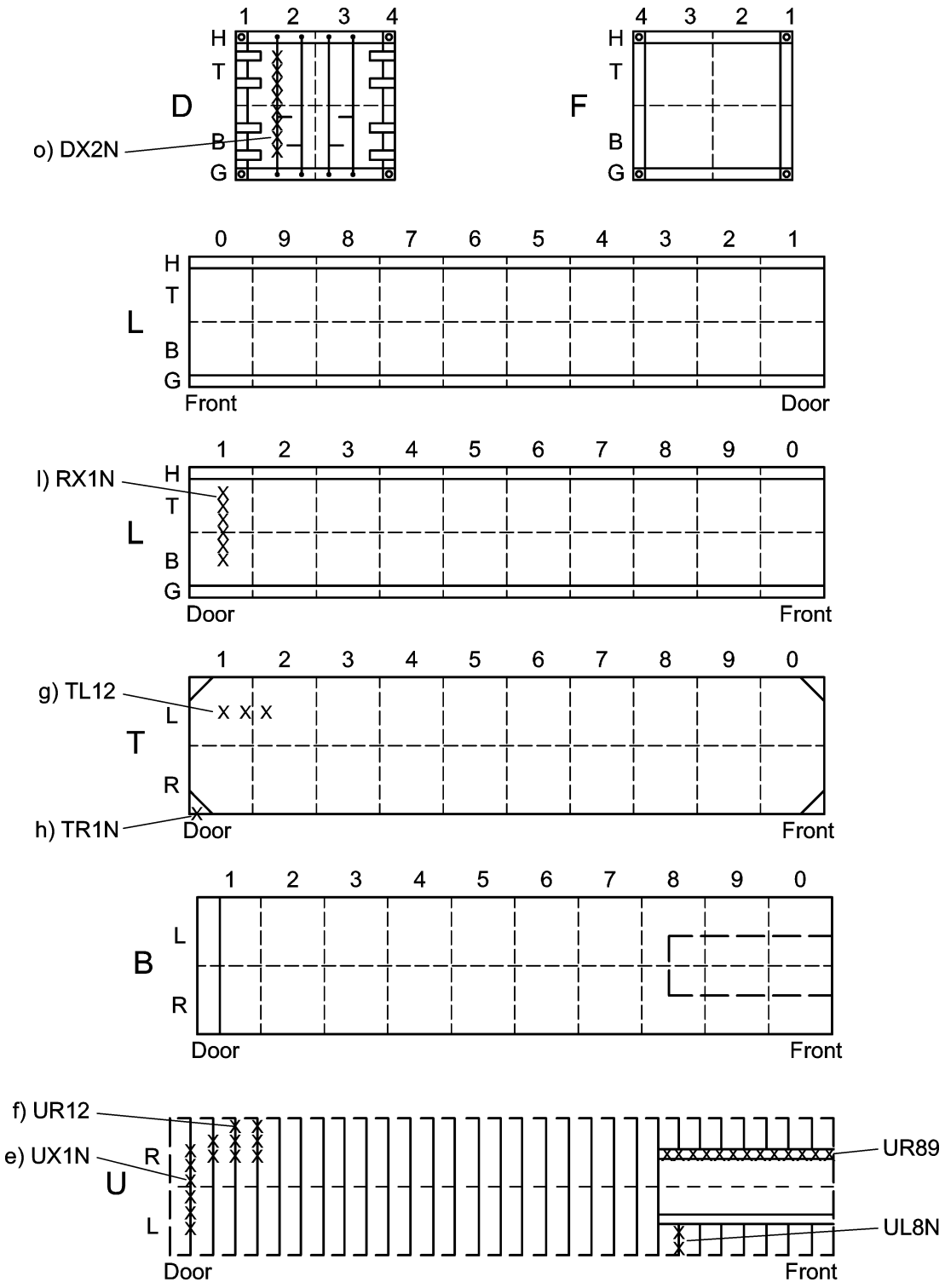

Figure C.1 concluded

Annex D
(normative)

Damage types

Numerical code	Name	Description	CEDEX code
04020	Bent	Component is damaged by being bent	BT
04025	Overhead Obstruction	Damage usually to the upper sections of a container caused by impact with a structure such a bridge,	OO
04030	Bowed	Component is damaged by being bowed. Usually damage is gradual over the length of the component	BW
04060	Broken/split	Component is damaged by being broken or split	BR
04069	Burned	Component whose surface is damaged by burns	BN
04090	Compression line	A series of dents in a straight line that decreases the strength of a component when it is placed in compression	CL
04095	Forklift Damage	Impact or pressure damage caused by a forklift	FD
04100	Contaminated	Equipment is rendered unsuitable for cargo because of contamination by chemicals or other cargo products, or by infestation	CT
04110	Corroded/rusty	Component is corroded or rusty	CO
04112	Corroded/Holed	Component is holed by corrosion	CH
04115	Cracked	Crack apparent either in surface or through part or all of component profile	CK
04117	Cracked weld	Welding seam is damaged by being cracked	CW
04120	Cut	Component is damaged by being cut	CU
04140	Debris/dunnage	Equipment is unusable due to cargo residue or dunnage left inside	DB
04150	Delaminated	Component, usually of wood, is damaged due to separation of laminations	DL

Numerical code	Name	Description	CEDEX code
04160	Dent	Component is damaged by being dented	DT
04162	Dented and Holed	Component is dented and holed	DH
04165	Dirty	Unclean condition that may affect utility of container	DY
04167	Improper Cleaning	The component has had an inadequate cleaning procedure performed	IC
04190	Frozen/Seized	Component is inoperable by being frozen or seized due to corrosion	FZ
04200	Gouged	Component is damaged by being gouged	GD
04230	Holed	Component is damaged by being holed	HO
04240	Improper repair	A repair that does not conform to owner's requirements or industry standards	IR
04245	New Improper Repair	A repair performed during the most recent lease that does not conform to owner's requirements or industry standards	IN
04260	Loose	Component is loose	LO
04280	Markings/labels	Labels, marks, logos, and graffiti, etc., not required by owner	ML
04320	Missing/lost	Component is missing or lost	MS
04335	Remove For Access	Removal of a component to facilitate either a repair or further inspection	RA
04340	Not within ISO dimensions	Equipment is not usable because it is no longer within the ISO dimensional envelope	NI
04350	Not to TIR requirements	Equipment or component no longer complies with TIR regulations	NT
04355	Not applicable	A condition for which no specific damage type applies	ZZ
04360	Not as required by owner	Equipment or component no longer complies with owner's requirements	NO
04362	Conversion Required	An alteration to the structure, rating, designation, etc as directed by the owner or operator	RC
04363	Repair necessary	Damage code for preparation times in combination with MCO 12 000	RN

Numerical code	Name	Description	CEDEX code
04365	Not as required by user	Equipment or component no longer complies with user's requirements	NV
04366	Container not in place	Handling needed for e.g. inspection, photos, repairs or num release	NP
04370	Odour	Equipment is rendered unsuitable for cargo because of odour	OR
04375	Food Quality Required	The condition of the container requires work to reach Food Grade Quality	FQ
04380	Oil saturated	Component, usually flooring, is damaged by being heavily contaminated with oil	OL
04390	Oil stains	Component, usually flooring, is damaged by being spotted with oil	OS
04400	Other unacceptable repairs	Any repair deemed unacceptable by the owner or for reasons not specifically covered	OU
04410	Out-of-date	Renewal of a periodic inspection, test or document is overdue	OD
04440	Pin holes	Component is damaged with minute holes	PH
04445	Rotted	Component integrity compromised by rot	RO
04480	Shrunk	Component, usually tarpaulin, cover, tilt, or flooring is damaged by shrinkage	SR
04520	Paint failure	Component suffers from a breakdown of the paint system	PF
04530	Refurbishment Program	A programme of refurbishment as directed by the owner or operator	RV
04540	Warped	Component is damaged by being warped	WA
04555	Saturated/Wet	Excess moisture is present within the component.	ST
04560	Wear and tear	The unavoidable deterioration of a component during usage under proper operating conditions	WT
04570	Worn	Component is rendered unusable by being worn.	WN
04580	Wrong material	Previous repair or replacement was carried out using the wrong material	WM

Numerical code	Name	Description	CEDEX code
4590	Existing Manufacturing Defect	A manufacturing defect which is documented and known about by the owner	ME
04595	New Manufacturing Defect	A potential or actual defect which may result from the manufacturing process and is not known about by the owner	MN
04610	Consequential Damage	Damage caused by failure to perform an adequate repair	CD
04615	Operator failure	Damage has been caused by the operators failure to use the container correctly	OE

Annex E
(normative)

Material types

Numerical code	Name	Description	CEDEX code
05000	Material unspecified	Material is not specified	MU
05100	Steel unspecified	Material is steel of no specific type	SU
05110	Steel, carbon	Material is of carbon steel	ST
05120	Steel, corten	Material is of corten steel	SK
05130	Steel muffler	Material is muffler grade steel (semi-corrosion resistant)	SM
05150	Steel, galvanized	Material is galvanized steel	SG
05200	Aluminium unspecified	Material is aluminium of no specific type	AU
05210	Aluminium pre-painted	Material is of pre-painted aluminium	AP
05360	Plywood	Plywood, unspecified type	PP
05362	Plywood Bamboo	Plywood, Bamboo faced	PB
05364	Plywood soft wood	Harwood faced plywood,with softwood core	PY
05366	Plywood	Hardwood plywood with facing material, e.g. phenol impregnated paper	PF
05370	GRP plywood	Plastic coated, glass fibre reinforced ply-wood	PG
05400	Plastic	Plastic, unspecified type	PU
05410	Plastic reinforced	Plastic reinforced with fibres	PE
05440	Rubber, unspecified	Rubber, unspecified type	RU

Annex F
(normative)

Repair types

Numerical code	Name	Description	CEDEX code
06001	No Action Necessary	The damage to the component is within acceptable limits and will not require repair.	NA
06002	Special Repair	The work necessary to repair the component is not described by another single repair code. A series of different repair steps may be involved	SP
06003	Prepare for work	Time allowed to prepare the container and/or components for the repair steps to follow	PW
06005	Technical Bulletin completed	A specific schedule of work instructions has been completed. May apply to a set of instructions issued by the owner or manufacturer detailing procedures for a modification, repair, warranty etc.	TB
06010	Abrade and paint	To remove rust/loose paint using abrasive grit/shot blast and paint.	AB
06015	Mechanical Cleaning (scrape off paint)	To clean the surface of a component by mechanical means, (i.e. scrape or grind off paint)	MC
06070	Chemical clean	To clean a component with chemical wash	CC
06075	Deodorise	Neutralise odour in container	DO
06100	Inspect and report	Inspect equipment or component for proper function, damage or reason for non-operation, and re-estimate. An additional report will follow on completion	IP
06101	Take photos	Take photos and transmit or upload to requesting party	TP
06110	Free	To free a frozen, seized or stiff component by means of force, lubricants or heat	FR
06115	Handling	Equipment must be handled in order to make available, but without other repair action	HN

Numerical code	Name	Description	CEDEX code
06120	Insert	To remove and replace part of the cross sectional profile of a component over part of its length and/or width. The replacement portion is butt welded to the original component	IT
06125	Install	To fit a component for the first time	IN
06127	Reinforce	To provide additional support to a component	RI
06135	Modifications, miscellaneous	To alter a component such that its specification is changed	MD
06138	Not applicable	A condition for which no specific repair type applies	ZZ
06150	Paint	To apply paint	PA
06155	Overlay	Cover a surface with a thin layer of the same or similar material	OX
06170	Patch	Remove and replace a part of the cross sectional profile of a component, over only part of the component's length and/or width. The patch is secured either by riveting or welding the sheet material to the panel	PT
06173	Repair with tape	To use an adhesive tape to effect a repair. (the repair is general of a temporary nature)	TR
06205	Re-bush	To remove and refit a bush(ing) into a component	RU
06220	Recondition/refurbish	To refurbish the container in accordance with the owner's instructions	RX
06230	Refit	To refit a removable component to its proper position	FT
06260	Remove and dispose	To remove and dispose of debris, dunnage, or packing material	RD
06270	Repairs prior to refurbishment	Repairs ordered by owner prior to refurbishment	PV
06280	Remove (without replacement)	To remove and not replace a component	RM
06290	Remove and refit	To remove and refit after repair	RR
6295	Remove glue and tape	To clean surfaces of glue and tape, includ-	GT

Numerical code	Name	Description	CEDEX code
		ing their residues	
06297	Remove markings	To remove unwanted labels, marks, logos, and graffiti	MV
06300	Replace	Remove and replace the complete cross sectional profile of a component over its entire length and width	RP
06305	Fit Part from Owners Stock	Renew using a component from the owners stock	EX
06310	Re-rate	To modify data relating to maximum gross mass or tare on any data plate or weight marking	RT
06315	Re-secure	To reapply or tighten fasteners on loose components	RE
06325	Sand	To smooth a surface by sanding	SD
06330	Seal/reseal	a)To repair pin holes in a tarpaulin cover or tilt using sealant b) To apply sealant to or around compo-nent	SE
Numerical code	**Name**	**Description**	**CEDEX code**
06340	Section	To remove and replace the complete cross sectional profile of a component over part of its length and/or width	SN
06350	Splice	To repair by section using rivets with, usu-ally, a doubler piece or backing plate at the joint	SI
06360	Straighten	To repair by straightening	GS
06370	Straighten and re-secure	To repair by straightening and re-securing the component when repaired	RS
06380	Straighten and weld	To repair by straightening a component and re-welding it into position	GW
06390	Steam clean	To clean the component, usually the interi-or/ floor, using high pressure steam	SC
06430	Water wash	To clean the component, usually the floor, using water	WW
06440	Weld	To repair by welding	WD

Numerical code	Name	Description	CEDEX code
06460	Conversion	To amend the character or function of a component / Unit	CN
06470	Dry Out	To remove moisture, i.e. the floor or the interior of the unit	DU

Annex G
(normative)

Measure unit specifier, repair size dimension and work scales

G.1 Measure unit specifier

Numerical code	Name	Description	CEDEX code
07010	Inches	Measurement in inches	INH
07012	Square inches	Measurement in square inches	SQI
07014	Cubic inches	Measurement in cubic inches	CUI
07020	Feet	Measurement in feet	FOT
07022	Square feet	Measurement in square feet	SQF
07024	Cubic feet	Measurement in cubic feet	CUF
07030	Millimetres	Measurement in millimetres	MMT
07032	Square millimetres	Measurement in square millimetres	SQT
07034	Cubic millimetres	Measurement in cubic millimetres	CUT
07040	Centimetres	Measurement in centimetres	CMT
07042	Square centimetres	Measurement in square centimetres	SQC
07044	Cubic centimetres	Measurement in cubic centimetres	CUC
07050	Metres	Measurement in metres	MTR
07052	Square metres	Measurement in square metres	SQM
07054	Cubic metres	Measurement in cubic metres	CUM
07060	Pounds	Measurement in pounds	LBS
07070	Kilograms	Measurement in kilograms	KGS
07080	Pints	Measurement in pints	PNT
07090	Litres	Measurement in litres	LTR
07100	Hours	Measurement in hours	HRS
07110	Minutes	Measurement in minutes	MTS
07120	Quantity	Measurement in quantity	QTY

G.2 Size of repair

Size of repair, where required, is defined as either length, length and height, or length and width.

Example

Length only	15
Length and height	1 500 x 100
Length and width	60 x 30

G.3 Scale

G.3.1 Work scale

The work scale is a factor related to the standard time to reflect ease or difficulty of repair. The factor is a percentage shown as 2-numeric. In normal cases it may range from 05 (i.e. 50% easier work) to 10 (i.e. standard time) to 15 (i.e. 50% over the standard time needed).

G.3.2 Material scale

The material scale is a factor related to the standard material amount to reflect differences of material used for combined repairs. The factor is a percentage shown as 2-numeric. In normal cases it may range from 05 (i.e. 50% easier work) to 10 (i.e. standard time) to 15 (i.e. 50% over the standard time needed).

Annex H
(normative)

Responsibility

Numerical code	Name	Description	CEDEX code
08010	Manufacturer	The repair is necessary to correct a manufacturer's defect outside the warranty or guarantee period	H
08020	Depot	The repair is necessary to correct damage/negligence by depot and is for the account of the depot	D
08030	Terminal	The repair is necessary to correct damage/negligence by terminal and is for the account of the terminal	S
08040	User	The repair is for the user's / lessee's account	U
08050	Owner	The repair is for the owner's account	O
08060	Third party	The repair should be charged to a party responsible for the damages, usually not known at time of damage assesment	T
08070	Warranty	The repair is required under a manufacturer's warranty within the agreed period	W
08080	DPP /Insurance	The repair costs are covered by insurance or an insurance programme	I
08090	Consignor/ consignee	The repair costs are to be recovered from consignor and/or consignee	C
08100	Trucker	The repair costs are to recovered from the haulier	V

Annex I
(normative)

Components of the general purpose container

I.1 Components of general purpose containers

I.1.1 Bow and tarpaulins (roof)

Numerical code	Name	Description	CEDEX code
10200	Roof bow	Members mounted transversely across the top of a container and either forming part of a rigid roof structure or supporting flexible, removable covers, in which case the members are commonly removable, or so designed as to slide to facilitate the loading of cargo through the top of the container [from ISO 830]	RBO
10210	Roof-bow securement device	Device at the top rail to support the ends of the roof bow	RBS
10220	Roof bow holder	Device at the top rail to support the ends of a detachable roof bow	RBH
10225	Roof bow pin	Pin on top rails used to secure removable roof bow	RBP
10226	Tarpaulin	Tarpaulin of OT ctrs	TNA
10227	TIR cord	Rope with customs sealing point to hold the Tarpaulin on OT ctrs.	TIC
10228	Tarpaulin grommet	Grommet in the edge of Tarpulins to be fitted over the TIR cord rings	TNG

I.1.2 Cargo securing device

Numerical code	Name	Description	CEDEX code
10230	Cargo securing device assembly	Cargo tie-down fittings fixed to any part of the container for the attachment of straps or other devices to restrain movement of cargo	LSA
10240	Lashing bar	Bar for the attachment of straps or other devices to restrain movement of cargo	LSB
10250	Lashing ring	Part of the securing device assembly to which straps or other lashings are secured to restrain cargo movement	LSR

I.1.3 Corner posts

Numerical code	Name	Description	CEDEX code
10260	Corner post assembly	Vertical structural member at either side of an “end frame” of a container joining a top and a bottom corner fitting (and thereby forming a “corner structure”) [from ISO 830]	CPA
10280	Corner fitting	Fittings located at the corners of containers providing means of supporting, stacking, handling, and securing the container [from ISO 830]	CFG
10300	Corner post inner piece	The inner part of a two- or multi-component corner post	CPI
10310	Corner post J-bar	The portion of the exterior part of the rear corner post that encircles the door hinges	CPJ
10320	Corner post hinge lug	Hinge component permanently attached by welding to the rear corner post	CPL
10330	Corner post outer piece	The outer part of a two- or multi-part corner post	CPO
10340	Corner post reinforcement	The vertical reinforcement of a corner post, normally welded to the corner post outer part	CPR

I.1.4 Cross-members (including outriggers)

Numerical code	Name	Description	CEDEX code
10370	Cross-member assembly	Components in the base structure of a container supporting the floor	CMA
10380	Cross-member fixing plate/ T-clip	Components fixed to the cross-member ends for their securing to the bottom side rails by rivets or special bolts	CMF
10425	Outrigger	Short cross-member extending between bottom side rail and gooseneck tunnel rail	CMO

I.1.5 Door gaskets

Numerical code	Name	Description	CEDEX code
10430	Gasket assembly	The seal running round the edge of a door and other fittings needed to ensure ist	GTA

Numerical code	Name	Description	CEDEX code
		proper fixing	
10440	Gasket retainer strip	A strip running inside a gasket around a door through which fasteners are passed to secure the gasket to the door edge	GRS
10472	Door gasket corner tape	Cover piece for corner joint on door gasket	GCT

I.1.6 Door hinges

Numerical code	Name	Description	CEDEX code
10480	Hinge assembly	Fitting on which the door rotates	HGA
10490	Hinge blade	Hinge component that is secured to the door and holds the pin	HGB
10500	Hinge pin	Hinge component attaching the blade to the lug	HGP
10505	Door hinge bush(ing)	Bush(ing) inserted into door hinge for smooth operation	DHB

I.1.7 Door gear

Numerical code	Name	Description	CEDEX code
10509	Door gear, complete	Set of door locking rods, cams, and cam retainers (keepers), including mounting hardware, for a single door	DGR
10510	Locking bar assembly	The complete mechanism that keeps the door secured closed	LBA
10520	Locking bar bracket	A device attaching the locking bar to the top and bottom of a door, usually containing a bushing	LBB
10530	Locking bar cam	The part of the door securing device that engages the retainer, which, by a lever action, forms the cam lock	LBC
10540	Locking bar guide	A component, intermediate to the locking bar brackets, which holds the locking bar to the door in proper alignment	LBG
10550	Locking bar handle	A component attached to the locking bar rod by mean of the lug, which, by turning,	LBH

Numerical code	Name	Description	CEDEX code
		operates the assembly	
10560	Locking bar lug	A component, part of the locking bar rod to which the locking bar handle is secured	LBL
10565	Locking bar handle hub	The fastener with which the locking bar handle is secured to the locking-bar lug	LHH
10570	Locking bar rod (tube)	The vertical shaft or rod to which the cam locks are fitted	LBR
10575	Locking bar nut	Nut used to secure locking bar hardware	LBN
10587	Door retainer lug	Mounting bracker, attached to door panel, that holds the door retainer	DRL
10590	Door handle lock assembly	The device which can be sealed for compliance with the CCC and which locks the door in the closed position	DHL
10600	Door handle catch	A component of the door handle lock assembly, fixed to the door and which the door handle is engaged when the doors are closed	DHC
10610	Door handle retainer	A component of the door handle lock assembly, which rotates and holds the door handle in the closed position, and through which the seal is secured	DHR
10620	Door custom seal point	The holes in the door handle catch and door handle retainer through which the customs seal is secured	DCS
10630	Door retainer	A device which retains the door in the open position	DRT
10632	Door chain hook	Link device for holding door in open position	DRH
10635	Door stop/slam (security) plate	Door edge plate preventing opening the left-hand door unless the right hand door is open	DPL
10636	Door plate rivets	Rivets used to attach door plate	DPR
10640	Anti-rack device	A device which reinforces the securement of the locking bar assembly and limits the racking of the door frame	ARD
Doors/Panels See I.1.10, Panels			

Numerical code	Name	Description	CEDEX code
End transverse members See I.1.12, Rails			

I.1.8 Floor (wooden)

Numerical code	Name	Description	CEDEX code
10680	Wood floor assembly	Complete wooden floor	FWA
10690	Plain plank	Flooring of wood plank	FPB
10700	Hat section	Hat or omega steel section running longitudinally, sometimes used with either plywood or plank floorings	FHS
10710	Laminated plank	Flooring of (vertically) laminated plank	FLB
10720	Plywood panel	Flooring of plywood	FPP
10730	Threshold plate	Steel plate secured inside doorway to protect flooring against cargo handling equipment	FTP
10740	Combination steel and wood floor	Floor of wood planks combined with longitudinal omega sections	FWS

I.1.9 Fork lift pockets

Numerical code	Name	Description	CEDEX code
10850	Fork lift pocket assembly	Reinforced pockets running transversally across the base of a container, piercing the bottom side rails at prescribed positions to permit the entry of the tines of fork lift devices for lifting and carrying the container	FLA
10870	Fork lift pocket strap	The plate welded to the bottom of each fork lift pocket entrance	FLS
10880	Fork lift pocket top plate	The plated welded to the top of the fork lift pocket	FLP
10900	Fork lift pocket web	The web or side of the fork pocket	FLW

I.1.10 Panels

Numerical code	Name	Description	CEDEX code
11200	Panel assembly	A complete panel (of all types)	PAA
11240	Panel - fixing strip	Metal strip securing the edge of the plywood lining to the frame of a container	PFX
11320	Panel - plywood lining	Plywood panel that lines the inside of dry cargo and other types of containers	PPW
11330	Customs sealing point	Metal bar affixed to the side panel to fix the ends of a TIR cord with a customs seal to the container	TNS

I.1.11 Panel equivalents

Numerical code	Name	Description	CEDEX code
11490	Side post (inner)	A reinforcing vertical member, placed between top and bottom, side or end rails, on the inside of the panel, in a side or end wall	SPI
11500	Side post (outer)	A reinforcing vertical member, placed between top and bottom, side or end rails, on the outside of the panel, in a side or end wall	SPO

I.1.12 Rails (including end transverse members and tunnel rails)

Numerical code	Name	Description	CEDEX code
11510	Rails assembly	The longitudinal and transverse structural members at the bottom, top, and sides of the container and sides of the tunnel	RLA
11520	Cam keeper	A device at the rear top and bottom end transverse member which retains the locking bar cam when the locking bar mechanism is locked closed	RCK
11530	Rail doubling plate	An additional plate attached to the container roof, adjacent to the top corner fittings, providing protection from misuse of spreader equipment	RDP

Numerical code	Name	Description	CEDEX code
11538	Roof Corner Gusset – Steel	A web fitted between the end rail and corner post or top corner casting	RCG
11540	Rail gusset	Reinforcement plate either between the corner fitting and side or end rail, or inside the front and rear lower rails	RLG
11550	Rail inner web	A closing plate on the inside of the front and rear lower rails. Used as an alternative to the rail gusset, 11540	RIW
11555	Rail cone protector recess	Recess or cut-out in a front or door sill web and lower flange, adjacent to corner fitting, used to prevent damage to the rail when securing contianer to twist lock or stacking cone	RCI
11582	Door/Front Sill Stiffener	A web for strenghtening the rear or front lower rail	DFS
11585	Gooseneck tunnel rail	Side longitudinal rail of gooseneck tunnel	RTL
11590	Rain gutter	Part of, or attachment to, rear upper end rail to divert water away from door frame	RNG
11627	Door stiffener - hinge side edge	Vertical reinforcing member of door, installed along hinge side	DSH
Numerical code	**Name**	**Description**	**CEDEX code**
11629	Door stiffner – vertical edge	Vertical reinforcing member of door	DSV
11630	Floor support angle	Angle attached to bottom side rail which supports edge of floor	FSA
11640	Steel plate combination floor	Longitudinal steel floor sections, used in conjunction with alternating wood sections	FSP
11650	Header extension plate	Extended header plate used to protect roof from damage	HEP
11660	Rail - interior component	Interior portion of multi-piece rail	RLI
11661	Rail - exterior component	Exterior portion of multi-piece rail	RLE
11670	Piggybacker rail reinforcement	Reinforcement on side bottom rail for piggybacker lifting	RPP
11680	Header pin chain	Chain to secure the pin of a swinging rear header of OT ctrs.	HPC

Numerical code	Name	Description	CEDEX code
11681	Water box	Metal box fixed to the top rails at each corner below a tarpaulin in OT ctrs.	RWB
11682	Removable/swinger header	Removable/swinger header at the door end of an OT ctr	RRT
11683	TIR cord ring	D-Ring fixed to the top rails to hold the TIR cord at OT ctrs.	TIR

I.1.13 Tunnel

Numerical code	Name	Description	CEDEX code
11770	Tunnel cross-member	Transverse members providing support to the tunnel plate	TUC
11780	Tunnel plate	A steel plate separating the tunnel recess from the interior of the container	TUP
11790	Tunnel bolster	A transverse member which supports the rearmost portion of the tunnel	TUB
Tunnel rail [See I.1.12, Rails – Gooseneck Tunnel]			
Tunnel outriggers [See I.1.4, Cross-members]			

I.1.14 Ventilators

Numerical code	Name	Description	CEDEX code
11800	Ventilator assembly	Device permanently attached to the side (or front) panel of a container which permits air exchange with the ambient atmosphere	VRA
11810	Ventilator baffle	Baffle inside the ventilator which prevents ingress of sea water	VRB
Numerical code	**Name**	**Description**	**CEDEX code**
11820	Ventilator cover	Outermost portion of the ventilator, which is a part of the exterior of the container	VRR
11830	Ventilator grid	Lower portion of the ventilator which is either pierced with holes or formed with mesh to permit passage of air	VRG

I.1.15 Miscellaneous

Numerical code	Name	Description	CEDEX code
11850	Joint between components	Junction where components are welded or fastened together	VJT
11855	Sealer (for joining components)	Caulking component to seal joining components like floor, ventilator, etc.	SEA

I.1.16 Hardware

Numerical code	Name	Description	CEDEX code
11900	Hardware	Screws, nuts, and bolts	HWR
11913	Panel Assembly - Rivet / Fixing	Rivet or fixings used to fasten together panel assemblies or components	PRV
11915	Hardware - Huckbolts	Structural fastener for securing components and performing repairs	HWH

I.1.17 Major Assemblies

Numerical code	Name	Description	CEDEX code
12000	Cargo container	Entire container	MCO
12020	Endwall-complete	Complete assembly of all endwall (not door) panels, including posts and stringers, at one end of container	EAA
12030	Roof-complete	Entire roof assembly, including bows if applicable	RAA
12040	Understructure-complete	Entire understructure of cross-members, fork lift pockets, and gooseneck tunnel components (as applicable)	UAA
12050	Door, complete (without hardware)	Entire door, including stiffeners, but not including hardware and gaskets	DAA
12060	Door, complete (with hardware)	Entire door, including stiffeners, hardware (except hinges), and gaskets	DAH
12070	Door frame assembly	Complete door frame with all component pieces	DFA

I.2 Components applicable to marking

I.2.1 ISO marking

Numerical code	Name	Description	CEDEX code
40010	Country code	Code designating the country of registration of the owner, in accordance with ISO 3166	MCC
40020	Identification marking set	Owner's code, 40040; serial number and check digit, 40050; size and type code, 40060; in accordance with ISO 6346	MIS
40030	Mass marking	Maximum gross and tare weights, in accordance with ISO 6346; playload	MMI
40040	Owner's code	Owner's mark, in accordance with ISO 6346	MOC
40050	Serial number and check digit	Number of the equipment plus check digit, in accordance with ISO 6346	MSN
40060	Size/type marking	Code designating the size and type of the equipment, in accordance with ISO 6346	MST

Numerical code	Name	Description	CEDEX code
40070	Height marking	Optional height marks for containers of height greater than 2,6 m (8,5 ft), in accordance with ISO 6346:1984, Annex H	MHT
40072	High cube strips	Alternating oblique striped marking fitted to upper rails used to distinguish 1AAA, 1BBB and 1CCC (high-cube) containers	MHC
40080	Caution marking	Warning sign of oversize and or electrical danger, in accordance with ISO 6346:1984, Annex C	MCA
40082	Height caution marking	Caution marking indicating 9ft6in height	MCH
40084	Width caution marking	Caution marking indicating over width	MCW
40090	Consolidated data plate	A single consolidated data plate prepared according to a means of combining various labels and plates	MPD
40100	Markings-full set	Entire set of markings on a container	MFS
40110	Markings-single digit/character	A single digit/character of a serial number marking	MSD
40115	UIC decal	Marking fitted to the side of a container indicating registration of the container with a member carrier of the Union Internationale des Chemins de Fer (UIC)	MUI

I.2.2 Other markings

Numerical code	Name	Description	CEDEX code
40200	CSC plates	A plate on which data required by the safety convention is displayed	MPS
40210	ACEP marking	A marking required of a container that is operated under an approved continuous examination programme prescribed in the CSC	MCE
40220	Class survey marking	Marking of classification societies and other organizations approved by the competent authority	MCS
40230	Customs plate	Plate on which customs approval data is displayed	MPC
40240	Owner's plate	A plate on which the owner's name, and	MPO

Numerical code	Name	Description	CEDEX code
		sometimes address, is displayed	
40250	Manufacturer's plate	A plate on which the manufacturer's name and/or logotype, and sometimes other data is displayed	MPM
40260	Cargo label plate	An area, usually marked in black, for cargo labels	MPL
40280	Timber chemical treatment	A plate on which data relating to quarantine treatment of exposed wooden component is displayed	MTT
40290	Other markings	Any unspecified marking	MRU
40300	Owner's logo	Owner's logotype	MOL
40302	Address Decal	Owners address decal fitted to container	MAD
40310	Customers Markings	Users logo or decal	MCU

I.3 Miscellaneous

Numerical code	Name	Description	CEDEX code
50710	Container identification device	Electronic container identification device permanently affixed to the container	CID
50720	Container identification device battery	Battery for an electronic container identification device requiring power supply (active device)	ECC

Annex M
(informative)

Alphabetical list of CEDEX codes

CEDEX code	Numerical code	CEDEX code	Numerical code	CEDEX code	Numerical code	CEDEX code	Numerical code
AB	6010	CL	4090	CUM	7054	DSH	11627
AC	6040	CMA	10370	CUT	7034	DSV	11629
AJ	6020	CMB	10375	CW	4117	DT	4160
AP	5210	CMF	10380	D	8020	DU	6470
ARD	10640	CMO	10425	DAH	12060	DY	4165
AU	5200	CMS	10420	DB	4140	DAA	12050
BD	6060	CMT	7040	DCA	10586	EX	6305
BK	4040	CO	4110	DCS	10620	EAA	12020
BN	4069	CO	6460	DFA	12070	FD	4095
BR	4060	CPA	10260	DFS	11582	FGQ	50770
BT	4020	CPI	10300	DGR	10509	FHS	10700
BU	4065	CPJ	10310	DH	4162	FLA	10850
BU	6050	CPL	10320	DHB	10505	FLB	10710
BW	4030	CPO	10330	DHC	10600	FLP	10880
C	8090	CPR	10340	DHL	10590	FLS	10870
CC	6070	CPT	10360	DHR	10610	FLT	10910
CD	4610	CT	4100	DL	4150	FLW	10900
CEX	50750	CTA	10385	DO	6075	FOT	7020
CFG	10280	CTS	10387	DPL	10635	FPB	10690
CH	4112	CU	4120	DR	6080	FPP	10720
CID	50710	CUC	7044	DRH	10632	FQ	4375
CIN	50755	CUF	7024	DRL	10587	FR	6110
CK	4115	CUI	7014	DRT	10630	FSA	11630

CEDEX code	Numerical code
FSP	11640
FT	6230
FTP	10730
FWA	10680
FWS	10740
FZ	4190
GCT	10472
GD	4200
GO	4210
GRS	10440
GS	6360
GT	6295
GTA	10430
GW	6380
H	8010
HEP	11650
HGA	10480
HGB	10490
HGP	10500
HN	6115
HO	4230
HPC	11680
HRS	7100
HWH	11915
HWR	11900
I	8080

CEDEX code	Numerical code
IC	4167
IDB	50720
IF	6122
II	5430
IN	4245
IN	6125
INH	7010
IO	4244
IP	6100
IR	4240
IS	5420
IT	6120
KGS	7070
LBA	10510
LBB	10520
LBC	10530
LBG	10540
LBH	10550
LBL	10560
LBN	10575
LBR	10570
LBS	7060
LHH	10565
LK	4250
LO	4260
LO	6485

CEDEX code	Numerical code
LSA	10230
LSB	10240
LSR	10250
LTR	7090
MAD	40302
MC	6015
MCA	40080
MCC	40010
MCE	40210
MCH	40082
MCO	12000
MCS	40220
MCU	40310
MCW	40084
MD	6135
ME	4590
MFS	40100
MHC	40072
MHT	40070
MIS	40020
MK	6250
ML	4280
MMI	40030
MMT	7030
MN	4595
MOC	40040

CEDEX code	Numerical code
MOD	40305
MOL	40300
MPC	40230
MPD	40090
MPL	40260
MPM	40250
MPO	40240
MPS	40200
MRU	40290
MS	4320
MSD	40110
MSN	40050
MST	40060
MTR	7050
MTS	7110
MTT	40280
MU	5000
MUI	40115
MV	6297
NA	6001
NI	4340
NO	4360
NP	4366
NT	4350
NV	4365
O	8050

CEDEX code	Numerical code	CEDEX code	Numerical code	CEDEX code	Numerical code	CEDEX code	Numerical code
OD	4410	PRV	11913	RLA	11510	SK	5120
OE	4615	PT	6170	RLE	11661	SM	5130
OL	4380	PU	5400	RLG	11540	SN	6340
OO	4025	PV	6270	RLI	11660	SP	6002
OR	4370	PW	6003	RLT	11620	SPI	11490
OS	4390	PAA	11200	RM	6280	SPO	11500
OU	4400	RA	4335	RN	4363	SQC	7042
OX	6155	RA	6190	RNG	11590	SQF	7022
PA	6150	RAA	12030	RO	4445	SQI	7012
PB	5362	RBH	10220	RP	4530	SQM	7052
PBK	11400	RBO	10200	RP	6300	SQT	7032
PE	5410	RBP	10225	RR	6290	SR	4480
PF	4520	RBS	10210	RRT	11682	SS	5140
PG	5370	RC	4362	RS	6370	ST	4555
PG	6172	RC	6220	RT	6310	ST	5110
PH	4440	RC	6480	RTL	11585	SU	5100
PM	4368	RCG	11538	RU	5440	T	8060
PM	5380	RCI	11555	RU	6205	TB	6005
PP	5360	RCK	11520	RWB	11681	TC	6105
PP	6076	RD	6260	S	8030	TIC	10227
PY	5364	RDP	11530	SC	6390	TIR	11683
QTY	7120	RE	6315	SD	6325	TNA	10226
TNS	11330	RG	6240	SE	6330	TNG	10228
PI	5366	RI	6127	SEA	11855	TP	6101
PNT	7080	RIS	11505	SG	5150	TR	6173
PR	6160	RIW	11550	SI	6350	TUB	11790

CEDEX code	Numerical code
TUC	11770
TUP	11780
U	8040
UAA	12040
V	8100
VJT	11850

CEDEX code	Numerical code
VM	6180
VRA	11800
VRB	11810
VRG	11830
VRR	11820
W	8070

CEDEX code	Numerical code
WD	6440
WM	4580
WN	4570
WT	4560
WW	6430
ZZ	4355

CEDEX code	Numerical code
ZZ	6138

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[1] ISO 9735, *Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules.*

[2] ISO 9897:1997, *Freight containers — Container equipment data exchange*

[3] ISO 10374:1991*, Freight containers — Automatic identification*

[4] ISO/TS 10891:2009, *Freight containers — Radio frequency identification (RFID) — Licence plate tag*

[5] United Nations Directories for Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT message sets), Joint Transport Group (JM4), CODECO, COARRI and COPARN, release 06B and onwards (expected 2H/2006)