

Freight containers — Container equipment data exchange (CEDEX) — General communication codes

ICS 35.240.60; 55.180.10

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National foreword

This British Standard reproduces verbatim ISO 9897:1998 and implements it as the UK national standard. It supersedes BS ISO 9897-1:1990 and BS ISO 9897-3:1990 which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PKW/5, Freight containers and transport, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO title page, pages ii to iv, pages 1 to 76 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

This British Standard, having been prepared under the direction of the Consumer Products and Services Sector Board, was published under the authority of the Standards Board and comes into effect on 15 May 1998

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INTERNATIONAL STANDARD

**ISO
9897**

First edition
1997-12-15

Freight containers — Container equipment data exchange (CEDEX) — General communication codes

*Conteneurs pour le transport de marchandises — Échange de données sur
les équipements de conteneurs (CEDEX) — Codes des communications
générales*



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Descriptors: Containers, freight containers, equipment, information interchange, data, data exchange, data elements, codes, data codes.

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.

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.

International Standard ISO 9897 was prepared by Technical Committee ISO/TC 104, *Freight containers*, Subcommittee SC 4, *Identification and communication*.

This first edition of ISO 9897 cancels and replaces the first editions of ISO 9897-1:1990 and ISO 9897-3:1990, which have been technically revised.

Annex A to Annex H and Annex K, Annex L form an integral part of this International Standard.

Annex J and Annex M are for information only.

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 standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

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

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

UN/EDIFACT 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. An example of the latter is CEDEX code “MF”, drawn from the damage type code list (Annex D), which stands for “motor failure”. 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, experience 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.

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 Code assignments

4.2.1 CEDEX codes

All code 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 the necessary codes are not included in this International Standard. It is strongly recommended that such codes be registered in accordance with 4.3 as soon as possible after introduction.

4.2.2 EDIFACT codes

Code assignments according to Annex A shall taken as obligatory. That is, for electronic data interchange transmission, an operator shall not pick and choose alternative codes unilaterally and shall not use the message types and codes contained in Annex A of ISO 9897-1:1990 (i.e the first edition of this International Standard).

NOTE Annex J is at the moment merely informative; it describes the manner in which a directory of users will eventually be developed. Until the directory is issued, Annex J is not a mandatory requirement of this International Standard.

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
Repair size dimension	G
Work scale (standard time factor)	G
Responsibility (for repair action)	H
Party identification and location	J
Component for container	K
Component for chassis	L

4.3 Updating data elements

The *International Intermodal Repairers (IIR)* has been nominated to act as the Registration Authority for the data elements:

International Intermodal Repairers (IIR)
c/o CEDEX Services International
450 Sansome St.
San Francisco, CA 94111
USA

Telefax: + 1 415 398 3610

Internet: <http://www.intermodalrepairers.com>

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)

Codes — Message types

(see notes below and 4.2.2)

Numerical code	Name	Description	EDIFACT code ¹⁾²⁾
01050	Damage/repair estimate	Description of damages and repair methods; authorization for repair work to proceed	DESTIM

NOTE 1 To be used for electronic data interchange transmissions. See appropriate message descriptions published by UN/EDIFACT 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 EDIFACT.

NOTE 1 EDIFACT codes, message standards (including the relevant message type codes) are controlled by UN/EDIFACT (Electronic Data Interchange for Administration, Commerce, and Transport), a subsidiary organization to UN/ECE/WP.4. ISO has assented to this arrangement via a memorandum of understanding between ISO and UN/ECE.

Annex B (normative)

Codes — Structural condition, repair condition, outside coating, inside coating; full/empty indicator

(see 4.1 and 4.2)

Numerical code	Name	Description	CEDEX code
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B.1 Structural condition, repair condition, outside coating, inside coating

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

01160	Empty	Empty condition of equipment	E
01170	Full	Loaded condition of equipment	F

Annex C (normative)

Codes — Damage location

(see 4.1 and 4.2)

C.1 Location coding convention

The location coding convention consists of three parts:

- a) For dry cargo, open top, thermal, tanks, and other container types:
 - A 1 200 mm × 1 200 mm (4 ft × 4 ft) numerical square system is used to identify damage to any face of a 20 ft or 40 ft container.
 - A 600 mm × 600 mm (2 ft × 2 ft) numerical square system is used to identify damage to any face of a 10 ft container.
 - A 900 mm × 900 mm (3 ft × 3 ft) numerical square system is used to identify damage to any face of a 30 ft container.
- b) For container ancillary equipment, which are an integral part of the container, such as reefer machinery, tank specific components, diesel generator set:
 - The location field is used to indicate the functional group to which a component belongs.
- c) For chassis:
 - As indicated in C.1.3.

C.2 All container bodies, refrigeration units, and generator sets (except chassis)

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 1 200 mm × 1 200 mm (4 ft × 4 ft) square, 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.2.1 First character

The first character shall be selected to identify the appropriate face of the container (if applied to a rectilinear closed container) or to the type of unit (if applied to a generator set, refrigeration unit, or tank container). For examples of use of codes for units other than closed containers or platforms, see C.1.2.

bottom (floor)	B
chassis	C
door end (rear)	D
container exterior	E
front end	F
generator set	G
container interior	I
left side	L
refrigeration unit	M
right side	R
tank container	A
top/roof	T
understructure	U
unspecified component	N
whole container or unit	X

C.2.2 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 understructure) are divided into right and left halves when viewed from the door end.

The relevant codes for CLOSED CONTAINERS are:

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

For other types of units, such as refrigeration units and generator sets, the second character designates the major assembly of the unit in which the damage is found. See C.1.2 for examples of how these codes are used. (Codes for chassis are shown in C.1.3.)

The relevant codes for REFRIGERATION UNITS are:

compressor	Q
condenser	K
electrical	E
evaporator	V
frame	F
miscellaneous	Z
pipng	P
regulation/control	C
unspecified assembly	N
whole unit	X

The relevant codes for GENERATOR SETS are:

alternator	L
electrical	E
engine (diesel)	D
frame	F
fuel system	U
miscellaneous	Z
oil system	O
unspecified assembly	N
water system	W
whole unit	X

The relevant codes for TANK CONTAINERS are:

access	A
frame	F
heating	H
insulation	I
loading/unloading	L
manhole	M
marking	D
miscellaneous	Z
pressure vessel	P
safety components	S
spill box	B
unspecified assembly	N
whole unit	X

C.2.3 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:

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

On all containers the right and left sides, the roof, the floor and the understructure, 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 (1, 2, 3, ..., 9, 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.1 a)].

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

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.1 c)].

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

The third and fourth characters of units other than closed containers, chassis and platforms, such as refrigeration units, generator sets, and tank containers, shall be “NN”. No further identification of the location of components on these units is required.

C.2.4 General location coding

When the damage/action covers *several faces of the inside* of the container such as steam cleaning, inside refurbishment, refixing 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, then the code XXXX shall be used.

C.2.5 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.

NOTE LHS = left-hand side;

RHS = right-hand side;

* = specific sequential number of component will be defined in separate free-text field.

Reference in Figure C.1	Location code	Component code	Description
a	LT5N	PAA	Side panel, LHS, upper half, within the 5th 1 200 mm (4 ft) section from rear
b	RT24	PAA	Side panel, RHS, upper half, extending through 2 nd to 4 th sections from rear
c	RB2N	PAA	Side panel, RHS, lower half, within the second section from the door
c	RB4N	PAA	Side panel, RHS, lower half, within the fourth section from rear
d	TXXX	PAA	Roof panel, both sides, extending through all sections
e	UX1N	CMA	Cross-member, both sides, within first section from door
f	UR12	CMA	Several cross-members, RHS, extending through first two sections*
g	TX12	RBO	Roof bows, both sides, extending through first two sections*
h	TR1N	RBH	Roof bow holder, RHS, within first section (bow holder number will be defined in separate free-text field)
i	UL8N	CMA	Outrigger, LHS, within the eighth section from door (40 ft) (outrigger number will be defined in separate free-text field)
j	UX3N	FLW	Web (side) of forklift pocket, both sides, within third section from door (pocket number will be defined in separate free-text field)
k	UR4N	FLS	Forklift pocket strap, RHS, within fourth section from door (pocket number will be defined in separate free-text field)
l	RX1N	SBO	Side post, RHS, both halves, within the first section from door (post number will be defined in separate free-text field)
m	UX15	RLA	Centre spacer rail, extending through sections 1-5 from door
n	UR80	RLA	Tunnel rail, extending through sections 8-10 from door
o	DX2N	LBA	Locking bar, LH door, both halves (locking bar number will be defined in separate free-text field)

NOTE Specific sequential number of component will be defined in separate free-text field as follows:

* Roof bows, cross-members, 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.

C.3 Ancillary equipment

The specific components of ancillary equipment which are an integral part of a container such as refrigeration machinery, diesel generator, tank fittings are identified

- firstly, by the two alpha characters selected to identify the major functional group to which the component belongs: they are the first and second characters of the location code;
- secondly, by the code NN: it forms the third and fourth characters of the location code.

EXAMPLES

MQNN	Reefer machinery (compressor)
APNN	Tank container (pressure vessel)
GDNN	Generator set (engine).

Components that occur more than once in an ancillary equipment or which are common or similar to other components are given the same component code but are differentiated by functional group code.

EXAMPLES

Location field	Component field	Description
MKNN	MAS	Refrigeration machinery — Condenser fan motor
MVNN	MAS	Refrigeration machinery — Evaporator fan motor
MPNN	VSA	Refrigeration machinery — Suction solenoid valve
ASNN	YTR	Tank — Safety relief valve

C.3.1 Chassis**C.3.2 First character**

The first character of the location code for all chassis is always C.

C.3.3 Second character

The second character defines the major assembly of the chassis. The relevant codes are:

axle (full width)	A
bumper (rear end) area	B
frame (main)	F
frame (extension)	Y
kingpin/grid/upper coupler	K
landing gear	G
left wheel(s)	L
miscellaneous	Z
right wheel(s)	R
subframe/suspension	U
unspecified assembly	N
whole unit	X

C.3.4 Third and fourth characters

On all chassis, the third and fourth characters indicate the section of the relevant assembly (defined by the second location code character) affected. Acceptable characters are shown in Table C.1 below:

Table C.1

Second character: Assembly (code)	Third character	Fourth character
Axle-full width (A)	N: Not applicable X: All wheels on axle	C: Centre axle (triauxle unit) F: Front axle N: Not specified R: Rear axle X: All axles
Bumper-rear end (B)	L: Left half N: Not specified R: Right half X: Both halves	N: Not applicable
Frame (main) (F)	Rearmost damaged section (identify left half, right half or both halves as applicable): 1: Aft section, left half (aft or forwardmost point on running gear or slider range if applicable) 2: Central section, left half (between landing gear and aft section) 3: Forward section, left half (forward of landing gear) 4: Aft section, right half 5: Central section, right half 6: Forward section, right half 7: Aft section, both halves 8: Central section, both halves 9: Forward section, both halves N: Not specified X: Entire frame	Forwardmost damaged section: Same codes as third character, except N also used when damage is limited to a single section
Frame extension (Y)	L: Left half N: Not specified R: Right half X: Both halves	F: Front half N: Not specified R: Rear half X: Both halves
Kingpin/grid/upper coupler (K)	L: Left half N: Not specified R: Right half X: Both halves	F: Front half N: Not specified R: Rear half X: Both halves
Landing gear (G)	L: Left half N: Not specified R: Right half X: Both halves	N: Not applicable
Left wheel(s) (L)	I: Inside wheel N: Not applicable O: Outside wheel X: Both inside and outside wheels	C: Centre axle (triauxle unit) F: Front axle N: Not specified R: Rear axle X: All axles
Miscellaneous (Z)	N: Not applicable	N: Not applicable
Right wheel(s) (R)	I: Inside wheel N: Not applicable O: Outside wheel X: Both inside and outside wheels	C: Centre axle (triauxle unit) F: Front axle N: Not specified R: Rear axle X: All axles
Subframe/suspension (U)	L: Left half N: Not specified R: Right half X: Both halves	F: Front half N: Not specified R: Rear half X: Both halves
Unspecified assembly (N)	N: Not applicable X: Entire assembly	N: Not applicable X: Entire assembly
Whole unit (X)	X: Entire assembly	X: Entire assembly

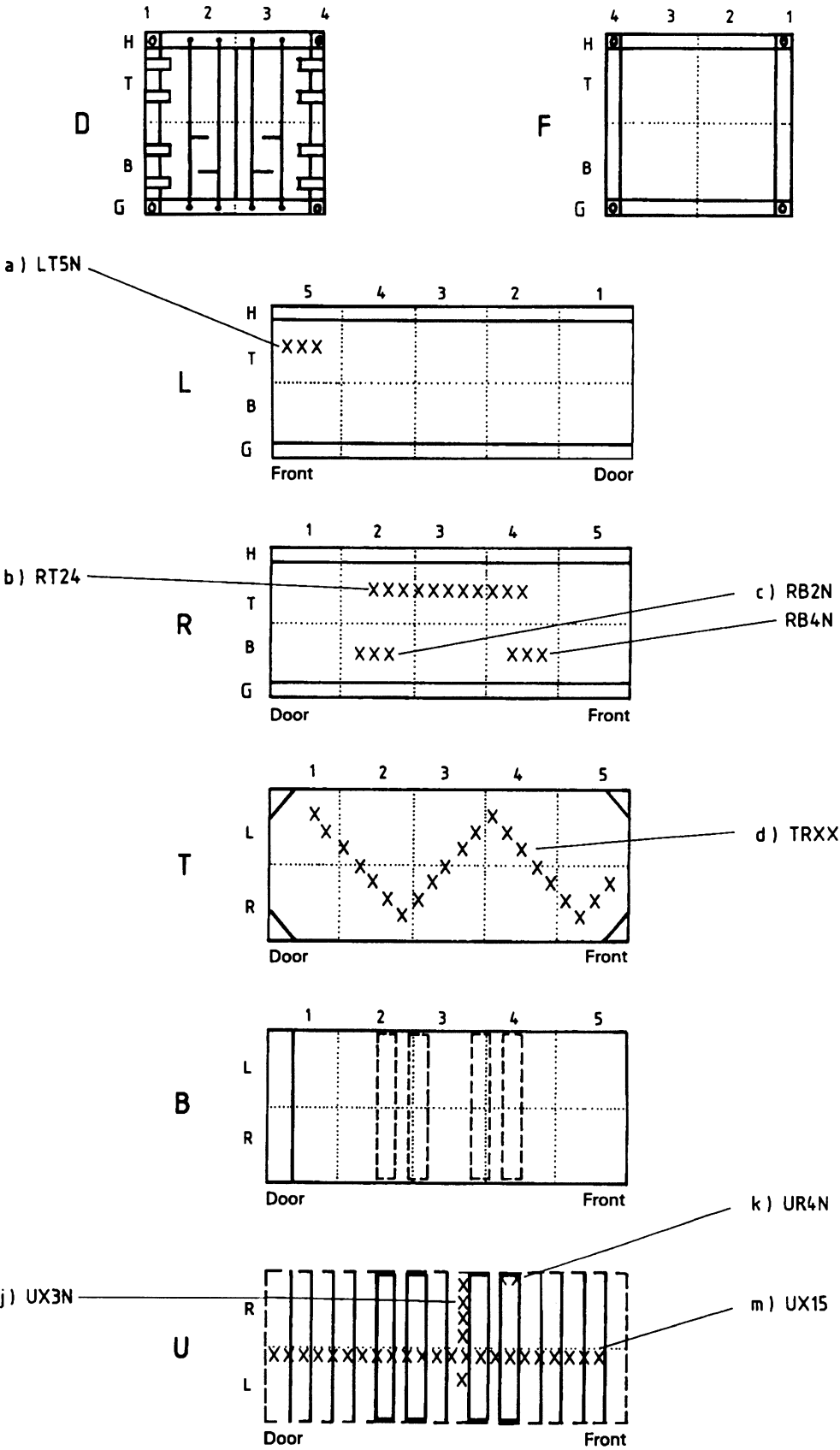


Figure C.1 — Examples of location coding for containers

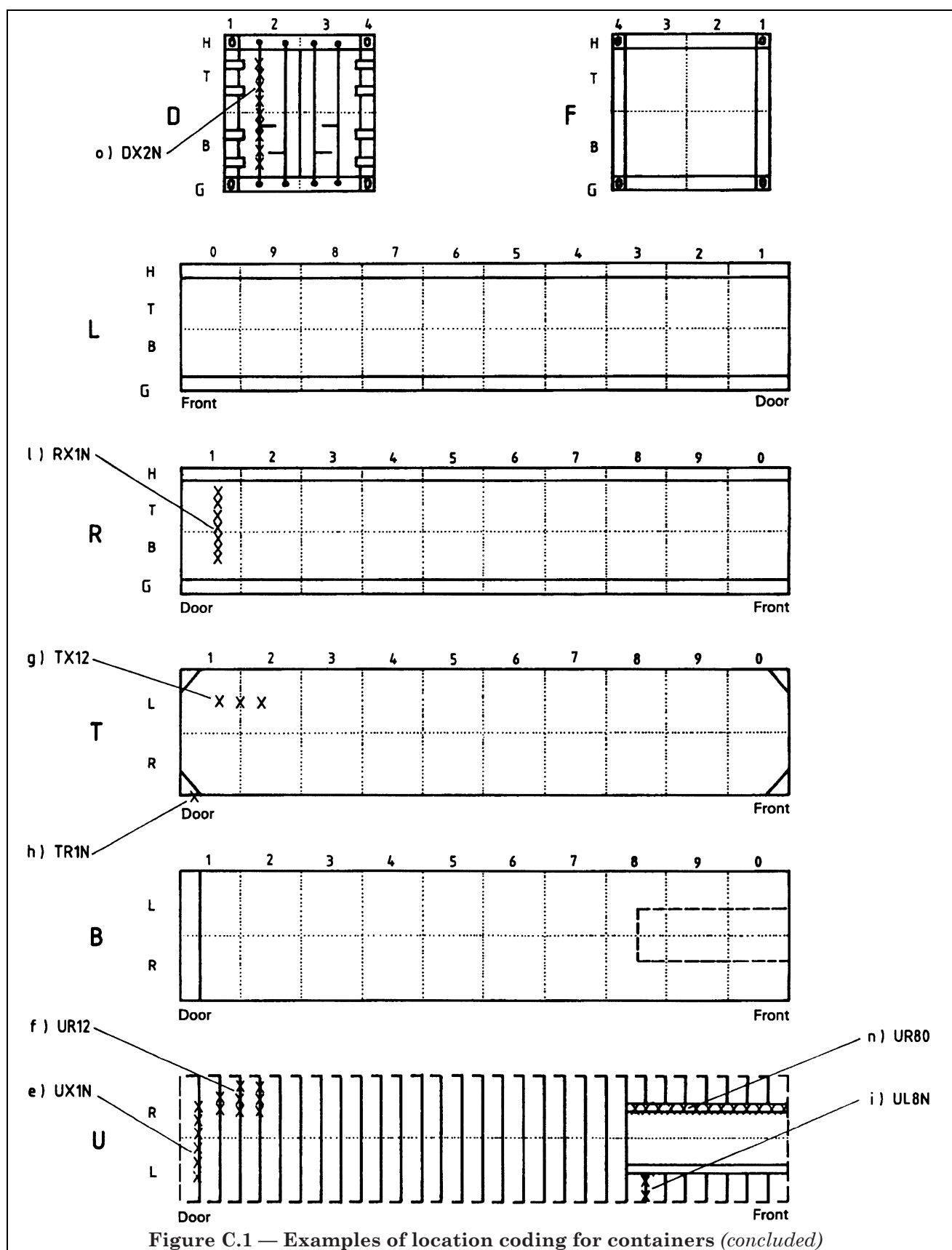


Figure C.1 — Examples of location coding for containers (concluded)

Annex D (normative)

Codes — Damage types

(see 4.1 and 4.2)

Numerical code	Name	Description	CEDEX code
04010	Bald	Tyre is bald or worn to less than legal tread depth remaining	WB
04020	Bent	Component is damaged by being bent	BT
04030	Bowed	Component is damaged by being bowed. Usually damage is gradual over the length of the component	BW
04040	Blocked	Drain, tube, outlet, etc. is blocked	BK
04050	Blowout	Tyre is unusable due to a blowout	BL
04060	Broken/split	Component is damaged by being broken or split	BR
04065	Bulged	Weakened wall permitting formation of a bulge due to internal pressure	BU
04069	Burned	Component whose surface is damaged by burns	BN
04070	Burned out	Electrical component is burned out	BO
04080	Casing/tread separation	Casing or tread has separated from the carcass of the tyre	TS
04090	Compression line	Series of dents in a straight line that decreases the strength of a component when it is placed in compression	CL
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
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
04130	Curbing	Tyre is rendered unusable by being damaged in the shoulder area by running up on the curb	CB
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
04160	Dent	Component is damaged by being dented	DT
04165	Dirty	Unclean condition that may affect utility of container	DY
04170	Flat/puncture	Tyre is deflated due to being punctured	FP
04180	Flat spots	Tyre has spots or areas where tread is worn below legal limits for tread depth remaining	FS
04190	Frozen	Component is inoperable by being frozen or corroded	FZ
04200	Gouged	Component is damaged by being gouged	GD
04210	GRP surface crack	GRP panel is cracked through the glass and gelcoat only	GO
04220	GRP surface and plywood crack	GRP panel is cracked through the glass, gelcoat and plywood	GP

Numerical code	Name	Description	CEDEX code
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
04250	Leak	Equipment or component leaks	LK
04260	Loose	Component is loose	LO
04270	Low fluid level	Component or system has less than required amount of fluid	LF
04280	Markings/labels	Labels, marks, logos, and graffiti, etc., not required by owner	ML
04290	Motor failure	Motor will not function	MF
04300	Misaligned	Component, usually chassis tandem, is misaligned	MA
04310	Mismatched	Two adjacent tyres have different diameters and are, therefore, not acceptable as matched pair	MM
04320	Missing/lost	Component is missing or lost	MS
04330	Nails	Equipment is rendered unsuitable for cargo due to nails, usually in flooring	NL
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
04365	Not as required by user	Equipment or component no longer complies with user's requirements	NV
04370	Odour	Equipment is rendered unsuitable for cargo because of odour	OR
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
04420	Over-inflated	Tyre is damaged by being run while over-inflated	OI
04430	Under-inflated	Tyre is damaged by being run while under-inflated	UI
04440	Pin holes	Component is damaged with minute holes	PH
04445	Rotted	Component integrity compromised by rot	RO
04450	Run flat	Tyre is damaged by being run with very little or no inflation	RF
04455	Scratched/abraded moving part	Moving part (bearing, piston, etc.) scored, scratched, or abraded by friction	SA
04460	Separated	Brake lining has separated from the brake shoe	SP

Numerical code	Name	Description	CEDEX code
04470	Short/open circuit	Electrical system is inoperable due to a short or open circuit	SH
04480	Shrunk	Component, usually tarpaulin, cover, tilt, or flooring is damaged by shrinkage	SR
04490	Stretched	Component, usually tarpaulin, cover, or tilt is damaged by stretching	SD
04500	Switched	Tyre is not original and is not comparable to the other tyres on the chassis	SW
04510	Uneven tread	Adjacent tyres have different tread depth remaining	TU
04520	Paint failure	Component suffers from a breakdown of the paint system	PF
04540	Warped	Component is damaged by being warped	WA
04550	Weathered	Tyre is rendered unusable due to long exposure to weather	WV
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. For a tyre, worn to below legal tread depth remaining	WN
04580	Wrong material	Previous repair or replacement was carried out using the wrong material	WM

Annex E (normative)

Codes — Material types

(see 4.1 and 4.2)

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
05140	Steel, stainless	Material is stainless steel (corrosion resistant)	SS
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
05300	Wood	Material is of wood of no specific type	WU
05310	Wood, hard plank	Material is of hardwood plank	WH
05320	Wood, soft plank	Material is of softwood plank	WS
05330	Wood, laminated plank	Material is vertically laminated plank of no specific wood type	LU
05340	Wood, hard laminated plank	Material is vertically laminated hardwood plank	LH

Numerical code	Name	Description	CEDEX code
05350	Wood, soft laminated plank	Material is vertically laminated softwood plank	LS
05360	Plywood	Plywood, unspecified type	PP
05370	GRP plywood	Plastic coated, glass-fibre reinforced plywood	PG
05380	Plymetal	Material is plywood, faced with metal of no specific type on both sides	PM
05400	Plastics	Plastics, unspecified type	PU
05410	Plastics reinforced	Plastics reinforced with fibres	PE
05420	Insulation material unspecified	Insulating material in slab	IS
05430	Insulation material <i>in situ</i>	Insulating material injected	II
05440	Rubber, unspecified	Rubber, unspecified type	RU

Annex F (normative)

Codes — Repair type

(see 4.1 and 4.2)

Numerical code	Name	Description	CEDEX code
06010	Abrasive clean and paint	Clean mechanically with abrasive grit or shot and paint	AB
06020	Adjust	Adjust a mechanical part or system (usually brakes) to improve performance	AJ
06030	Air	Inflate or deflate tyres to correct pressure	AR
06040	Air clean	Clean a component or equipment with high pressure air	AC
06050	Blank out	Remove a ventilator and “blank out” the panel behind	BU
06060	Brand	Apply a name/initial or other mark to tyres to denote ownership or other information	BD
06070	Chemical clean	Clean a component with chemical wash	CC
06075	Deodorize	Neutralize odour in container	DO
06080	Drain	Drain the system	DR
06090	Drain and fill	Drain the system and fill with appropriate fluid	DF
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
06110	Free	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
06120	Insert	Remove and replace part of the cross-sectional profile of a component over its entire length and/or width. The replacement portion is butt-welded to the original component	IT

Numerical code	Name	Description	CEDEX code
06125	Install	Fit a component for the first time	IN
06130	Lubricate	Apply lubrication	LC
06135	Modifications, miscellaneous	Alter a component such that its specification is changed	MD
06138	Not applicable	Condition for which no specific repair type applies	ZZ
06140	Overlapping partial section	Remove and replace part of the cross-sectional profile of a component over its entire length and/or width. The replacement portion is overlapped with and fillet-welded to the original component. The exterior of the patch is continuously welded to the original component. The interior may be continuously or skip-welded with sealer applied to seams between skip welds	OP
06150	Paint	Apply paint	PA
06155	Overlay	Cover a surface with a thin layer of the same or similar material	OX
06160	Partial refurbishment	Remove localized corrosion and repaint the surface of the equipment fully or partially	PR
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. A patch is overlapped with and fillet-welded to the original component. The exterior of the patch is continuously welded to the original component. The interior may be continuously or skip-welded with sealer applied to the seams between skip welds	PT
06175	Patch and foam	Patch as indicated in 06170, and also remove and replace underlying insulating foam	PX
06180	Preventive maintenance	Maintenance carried out under the owner's instruction	VM
06190	Re-align	a) Remove or unfasten a component, usually doors, and refit to bring into alignment b) Move chassis tandem to bring into alignment	RA
06200	Rebuild	Strip, clean, lubricate, and reassemble a mechanical component	RB
06205	Re-bush	Remove and refit a bush(ing) into a component	RU
06210	Recharge	Supply a full charge of fluid to system	CH
06220	Recondition/refurbish	Prepare surface of equipment and repaint in accordance with the owner's instructions	RC
06230	Refit	Refit a removable component to its proper position	FT
06240	Re-glass	Repair surface and veneer cracks or damage to GRP panels	RG
06250	Re-mark	Replace markings	MK
06260	Remove and dispose	Remove and dispose of debris, dunnage, or packing material	RD
06270	Repairs prior to refurbishment	Repairs ordered by owner prior to refurbishment	PV

Numerical code	Name	Description	CEDEX code
06280	Remove (without replacement)	Remove and not replace a component	RM
06290	Remove and refit	Remove and refit after repair	RR
06295	Remove glue and tape	Clean surfaces of glue and tape, including their residues	GT
06297	Remove markings	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
06310	Re-rate	Modify data relating to maximum gross mass or tare on any data plate or weight marking	RT
06315	Resecure	Reapply or tighten fasteners on loose components	RE
06320	Rewire	Repair an electrical component or system by rewiring	RW
06325	Sand	Smooth a surface by sanding	SD
06330	Seal/reseal	a) Repair pin holes in a tarpaulin cover or tilt using sealant b) Apply sealant to or around component	SE
06340	Section	Remove and replace the complete cross-sectional profile of a component over part of its length and/or width	SN
06345	Section and foam	Section as indicated in 06340, and also remove and replace underlying insulating foam	SF
06350	Splice	Repair by section using rivets with, usually, a doubler piece or backing plate at the joint	SI
06360	Straighten	Repair by straightening	GS
06370	Straighten and resecure	Repair by straightening and resecuring the component when repaired	RS
06380	Straighten and weld	Repair by straightening a component and rewelding it into position	GW
06390	Steam clean	Clean the component, usually the floor, using high pressure steam	SC
06400	Surface preparation and paint	Clean and prepare the surface and apply paint	PS
06410	Sweep	Clean the component, usually the floor, by sweeping	WP
06420	Top up	Refill fluid to correct level	TP
06430	Water wash	Clean the component, usually the floor, using water	WW
06440	Weld	Repair by welding	WD
06450	Grind and weld	Repair by grinding and welding	XW
06500	Temporary repair	Repair for temporary securement of cargoworthiness until a permanent repair can be made at a suitable repair shop	TR

Annex G (normative)**Codes — Measure unit specifier; repair size dimension and work scales**

(see 4.1 and 4.2)

Numerical code	Name	Description	CEDEX code
G.1 Measure unit specifier			
07010	Inches	Measurement is in inches	INH
07020	Feet	Measurement is in feet	FOT
07030	Millimetres	Measurement is in millimetres	MMT
07040	Centimetres	Measurement is in centimetres	CMT
07050	Metres	Measurement is in metres	MTR

G.2 Size of repair

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

EXAMPLE

Length only	6
Length and height	1 500 × 100
Length and width	2 × 1

G.3 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).

Annex H (normative)**Codes — Responsibility**

(see 4.1 and 4.2)

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 account	U
08050	Owner	The repair is for the owner's account	O
08060	Third party	The repair should be charged to the party responsible, usually not the owner or user	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