

BICS - Interface specification V5.01  
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**BICS Documentation**  
**Interface Specification**  
**V5.01**

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## 1 Introduction

### 1.1 General

This document describes the interface between BICS and other applications. It defines the possibility of filling BICS with data related to voyages and cargoes based on the exchange of ASCII files.

### 1.2 List of versions

<u>Version</u>	<u>Date</u>	<u>Description</u>
A(1)	23-03-97	Initial
A(2)	09-04-97	Comments from Rijkswaterstaat
A(3)	15-04-97	Comments from QC Logica
A(4)	22-04-97	Comments from NTEX
A	28-07-97	Comments from Logica resulting from implementation
B	10-03-98	Stowage position + message version number message added as a result of BICS Containers
C	10-03-99	Number of persons is compulsory.
D	10-05-00	Language code for the substance added (V2.01)
E	07-07-00	Ship number definition
F	14-11-00	Route information, Time fields, ERN, Invoice address
G	08-12-00	Translation into English
H	19-12-00	Order of vessel type field and vessel number changed; Dossier language added
I	23-01-02	Added vessel dimensions; packing types, container types, modified Locode field length, mailbox field length, made import and export file definitions similar
J	12-04-03	Added packing group
K	29-12-2007	ERINOT 1.2 changes: Length of the PlaceCode increased to 20. Aircraft, Persons on Board added on Voyage level. Volume of the cargo on Cargo level. Dossier-id in resultfile.

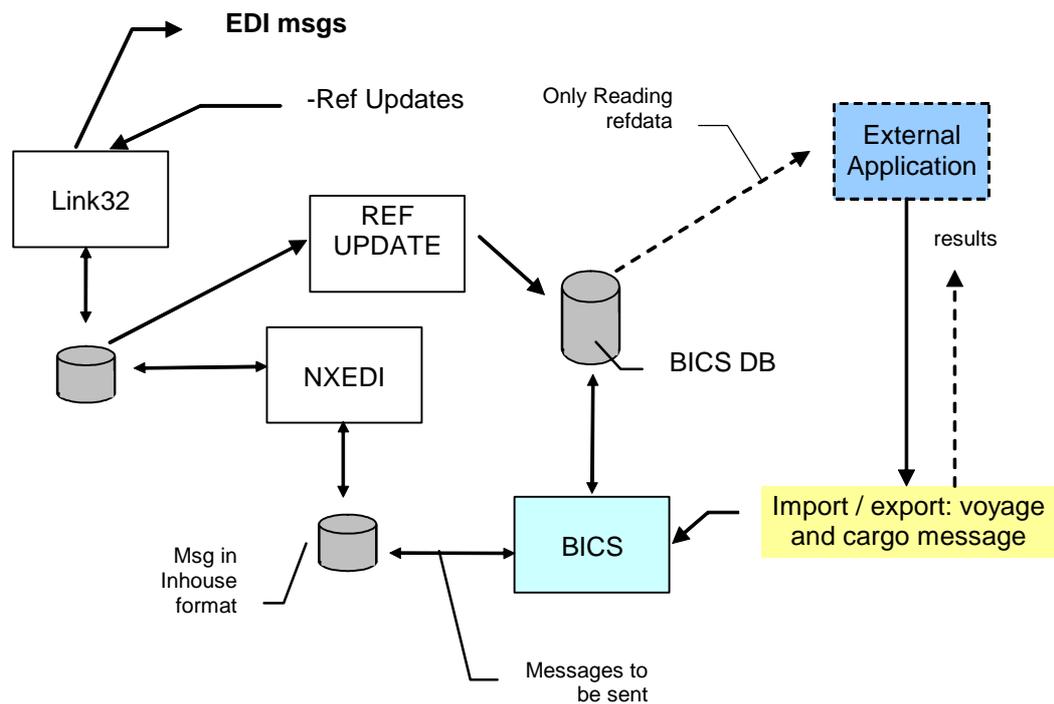


## 2 BICS modules

BICS consists of a number of modules:

- BICS.EXE, the BICS application itself;
- NXEDI.EXE, the EDI converter;
- Link32.EXE, the communication module;
- REFUPDATE.exe, the update module for updating the reference data.

The following diagram shows how the BCS modules are interrelated.



**Figure 2-1: BICS Import mechanism - Overview**

In BICS voyage and cargo data (from a External application) can be imported into the system using the format as described in this document. After succesful processing of the import file the data is stored in de BICS Database where the user can edit it before creating and sending the EDI message to the authorities.

In BICS, as soon as a message needs to be sent, a file is created in the In-house format. Then the NXEDI module is activated, which converts the file into EDI format.

As soon as the file in In-house format has been converted into a file in EDI format, BICS activates the communication module, Link32, with which the communication session with the mailbox is started. In this session the message in EDI format is sent to the mailbox and messages, if available in the mailbox, are received.

## **2.1 In-house format**

A file in the In-house format contains the EDI message with each segment on a separate line. The segments are completely filled out with spaces and contain no EDI field separation characters.

## **2.2 EDI format**

A file that is being sent via Link32 to the mailbox consists of two parts, separated from each other by an empty line:

- Address. The address section contains the data used to place the message in the appropriate mailbox. It concerns the mailbox numbers of the sender and the addressee(s).
- Content. The content section contains the EDI message with each segment on a separate line whereby the EDI conversion rules, i.e. the removal of spaces and the addition of field separation characters, have been applied.

## **2.3 Update message**

A file with modified BICS reference data that can be sent to the BICS users via the Update mechanism. With the aid of this file the reference data in the BICS Database can be updated.

## **2.4 Voyage and cargo message**

An ASCII message (described in this document), with which voyage and cargo data can be delivered to BICS. External applications can supply information to BICS via this interface so the user does not have to fill in this data manually.

BICS can also export the voyage and cargo data in an ASCII message. The format of such a message is the same as for importing voyage and cargo data.

### **3 Interface description**

#### **3.1 Introduction**

The purpose of the link between BICS and other applications is to avoid that voyage and cargo data have to be entered several times within the organisation or applications.

#### **3.2 Importing into BICS**

The interface is based on the exchange of files in ASCII format. BICS checks - by command of the BICS user - whether one or more such files are present in the import directory.

Each file of said type contains information about precisely one voyage. If the processing of the whole file succeeds without any errors, the file is considered to be correct and the voyage is added to the database. If an error occurs during the processing, the file is considered to be incorrect and the voyage is not added to the database. Because there is a one-on-one relationship between voyages and files, one can immediately derive from the list of correct and incorrect files which voyages have and have not been added to the database.

The content of the 'fixed-length' ASCII import file consists of one or more lines, each concluded with a <CR> and an <LF> character. If a line begins with the '#' character, the rest of the line is seen as commentary.

When reading in the import file, a log file is generated in the log subdirectory of the import directory. In this file, created every day, information is written concerning the import actions of that day. If the log subdirectory does not exist, no log file will be generated.

After activation of the import function, the import file is first moved to the temp subdirectory of the import directory. If the processing of the file was successful, the file is placed in the archive subdirectory under a unique name based on date-time information. If the processing of the file was unsuccessful, the file is placed in the bad subdirectory under a unique name based on date-time information. The log file contains the relationship between the original import file and the name of the file in either the archive subdirectory or in the bad subdirectory. If the relocation of the file from the temp to the archive or bad directory is unsuccessful because one of the two does not exist, the file is thrown out instead of relocated.

The default extension of the files to read should be: '.REI'. If file 'xxxxxxx.REI' (xxxxxxx is a name assigned by the generating application) has been processed, a result file 'xxxxxxx.RST' is generated in the log subdirectory, providing it exists. Whether the import of the file was successful or not, is indicated in the result file. If not, this file contains the line and field in which a processing error occurred. This result file is of a fixed format so that - if required - it can be read by the application delivering the import files. If the log subdirectory is missing, no result files will be generated.

Both the import directory path, the extension of the import file, and the extension of the result file are configurable. The default values are:

- Import directory path : c:\bics\import
- Import file extension: REI
- Result file extension: RST

### **3.3 Exporting from BICS**

On command of the BICS user an export file is generated for a voyage in the export directory.

Both the export directory path, and the extension of the export file are configurable. The default values are:

- Export directory path : c:\bics\export
- Export file extension: REI

The filename of the export file is the dossier number as generated by the BICS application.

If a file with the same name and extension already is present in the export directory, the file will be overwritten.

### **3.4 Format specification**

The formats used with the interface are:

- Ax: Alphanumerical text, whereby the number x is the fixed number of characters of the field. The field should be aligned to the left. If the text is shorter than x, it has to be filled with spaces on the right side. International characters are not permitted, i.e. only characters with an ASCII-code from the collection {32, 33, ..., 126} are permitted;
- Nx: Numerical (i.e. contains only characters from the collection {'0', '1', ..., '9'}), whereby the number x is the fixed number of characters of the field. The field should be aligned to the right. If the number in question contains less than x digits, leading zeros or leading spaces need to be added. However, leading spaces are only permitted if it concerns a non-code field, such as e.g. draught, length, etc. (examples of code fields: HS-code, OFS-number, etc.). The fact is, in the case of codes leading zeros are significant. This all points to the fact that decimal points or commas are not permitted.
- DT: Date-Time, in the format yyyyymmddhhmm.

### **3.5 User interface**

If - in the configuration settings - BICS has been configured so that it can read in externally delivered data, the user can use the 'import' button on the voyage selection screen to start the import action for reading in voyage data. The importing will then run interactively, i.e. during the course thereof messages will be sent to the screen, whereby the user may have to answer questions. It is also possible to make the import function start automatically on a periodical basis with the aid of a timer. The

period can be set via the configuration menu (period zero means no timer). In that case the import runs in batch mode, i.e. the import action is completed without a user being required.

Finally it is possible to activate the import function through the use of DDE. In this case the executable kick.exe is supplied in the prog directory. If an external application uses kick.exe, BICS is activated and the import function started.

If the directory concerned contains no files with the correct extension, a warning is given and no further action undertaken.

As soon as one or more files are found which do have the correct extension, they are read in and processed one by one. During the processing of the files, the progress and the number of errors are shown on a separate screen. Once the import function has finished, the corresponding log file can be viewed with an editor.

### 3.6 Format Specification

The format in which BICS exchanges data via the Import / Export interface is:

Nr		Field name	Format	Description	Pos
1-1	M	Version number	A5	Message definition version number "V5.01"	2
1-2	O	Document-ID	A35	Voyage identification, transport document number	7
1-3	M	Reporting point	A3	First reporting point code / IVS90 code (A99 if unknown)	42
1-4	O	ETA	DT	Estimated time of arrival	45
1-5	O	ETD	DT	Estimated time of departure	57
1-6	M	Persons	N3	Total number of persons on board (crew+pax+stowaway)	69
1-7	M	Draught	N4	Draught in centimetres	72
1-8	M	Container indication	A1	Container transport indication ('Y','N')	76
1-9	O/M	Amount-20-empty	N3	Amount empty 20-29 foot containers	77
1-10	O/M	Amount-30-empty	N3	Amount empty 30-39 foot containers	100
1-11	O/M	Amount-40-empty	N3	Amount empty 40 and more foot containers	103
1-12	O/M	Amount-20-full	N3	Amount of laden 20-29 foot containers	106
1-13	O/M	Amount-30-full	N3	Amount of laden 30-39 foot containers	109
1-14	O/M	Amount-40-full	N3	Amount of laden 40-and more-foot containers	112
1-15	O	Dossier-ID	N10	Dossier identification number (empty = new dossier)	115
1-16	O	Invoice-ID	A3	ID of recipient of the invoice	125
1-17	O/M	Invoice Name	A30	Name of recipient for invoice	128
1-18	O	Dossier language	A2	Dossier language (NL, DE, FR, EN), default is current setting	158
1-19	O	Cones	A1	Cones, '0', '1', '2', '3', 'B', or 'V')	160
1-20	O	Pax on Board	N3	Passengers on Board (incl stowaway)	161
1-21	O	Airdraft	N4	Airdraft of vessel in centimetres	164
2-1	M	Convoy-indication	A1	Convoy indication, ('Y','N')	2
2-2	O/M	Convoy-type	N4	UN rec 28 code convoy type	3
2-3	O/M	Length	N6	Length in centimetres (of vessel or transportcombination)	7
2-4	O/M	Width	N5	Width in centimetres (of vessel or transportcombination)	13
2-5	M	Number	N1	Number of ships in the convoy (>= 1)	15
2-6	O	Route-1	A20	Location SRS code of route point	16
2-7	O	Route-1-ETA	DT	Estimated time of passage	36
2-8	O	Route-2	A20	Location SRS code of route point	48
2-9	O	Route-2-ETA	DT	Estimated time of passage	68
2-10	O	Route-3	A20	Location SRS code of route point	80
2-11	O	Route-3-ETA	DT	Estimated time of passage	100
2-12	O	Route-4	A20	Location SRS code of route point	112
2-13	O	Route-4-ETA	DT	Estimated time of passage	132

Nr		Field name	Format	Description	Pos
2-14	O	Route-5	A20	Location SRS code of route point	154
2-15	O	Route-5-ETA	DT	Estimated time of passage	174
3-1	M	Ship-ID-type	A3	Type of the ship number (OFS, IMO, NOS, ENI)	2
3-2	M	Ship-ID	N8	Identification number of the ship (1)	5
3-3	M	Ship name	A30	Name of the ship	13
3-4	O	Ship-type	N4	UN rec 28 code ship type	43
3-5	O	Ship-length	N6	Length in centimetres of <u>this</u> vessel/barge	47
3-6	O	Ship-width	N5	Width in centimetres of this vessel/barge	53
3-7	O	Ship-tonnage	N5	Tonnage in tonnes	58
3-8	M	Port of departure	A20	Location code port of departure according SRS code	63
3-9	M	Port of arrival	A20	Location code port of arrival according SRS code	83
4-1	M	Cargo-Ship-ID-type	A3	Type of the ship number (OFS, IMO, NOS, ENI)	2
4-2	M	Cargo-Ship-ID	N8	Identification number of the Ship with the cargo (1)	5
4-3	M	Cargo-Ship-name	A30	Name of the Ship with the Cargo	13
4-4	M	Cargo-ID	N5	Cargo identification, sequence number	43
4-5	M	Hazardous substance	A1	Hazardous substance indication, (“A”, “T”, “N”)	48
4-6	O/M	UN-number	A4	UN number of the hazardous substance	49
4-7	O/M	Class	A5	ADNR or IMO class of the hazardous substance	53
4-8	O/M	ADNR-Number	A5	ADNR classification of the hazardous substance	58
4-9	O/M	HS-code	A10	HS code of the non-hazardous substance	63
4-10	O/M	Container-ID	A17	Container number (2)	73
4-11	O/M	Container-type	A4	Container type	90
4-12	M	Quantity	N9	Cargo amount in kilograms	94
4-13	O	Packing type	A2	Inner Packing type code	103
4-14	O	Packing number	N6	Number of packages of the given type	105
4-15	M	Loading location	A20	Location code of the loading location according SRS code	111
4-16	M	Unloading location	A20	Location code of the unloading location according SRS code	131
4-17	O	Recipient-ID	A3	Short (EDI) code of the recipient as known in BICS addresses	151
4-18	O	Recipient name	A30	Name of the recipient	154
4-19	O	Recipient mailbox	A25	Mailbox / e-mail address of the recipient	184
4-20	M	Transshipment time	DT	Start date/time of unloading at the unloading location	209
4-21	M	Departure time	DT	Completion date/time of loading at the loading location	221
4-22	O	Stowage position	A7	Stowage position, BBBRRTT	233
4-23	O	Substance Language	A2	Language code in which substance name is specified	240
4-24	O	Packing group	A1	Packing group of the hazardous substance (“1”, “2”, or	242

Nr		Field name	Format	Description	Pos
				“3”)	
4-25	O	Volume	N4	Volume of the cargo in m3	243

Column 2 indicates whether the field concerned is mandatory or optional: M = Mandatory, O = Optional, M/O=Optional OR Mandatory depending on other fields.

(1): For a ship, which has no number, enter '00000000' here. Also, in that case the number type should be 'NOS'.

(2): If 'container ID' is filled in, BICS will assume that the goods are in a container. Vice versa, if it is empty, the goods will not be in a container (irrespective of the setting in field 1-8).

Fields 1-1 up to and including 1-19 are on a single line that begins with character 'A' as an indication of the type of line. Fields 2-1 up to and including 2-15 are on a single line that begins with the character 'S'. Fields 3-1 up to and including 3-9 are on a line that begins with the character 'R', and fields 4-1 up to and including 4-23 are on a single line that begins with the character 'L'.

A file has to contain precisely one A- and one S-line. It has to contain at least one R-line. The R- and L-lines may appear several times. Comment lines aside, these lines must always appear in the same order:

1. First line is always an A-line;
2. Second line is always an S-line;
3. An R-line always comes directly after an S- or an R-line;
4. An L-line always comes directly after an R- or an L-line.

Fields 1-1, 1-3, 1-6, 1-7 and 1-8 are mandatory. Field 1-3 may be 'A99' if IVS90 can explicitly specify the reporting station from the origin and destination of the name-giving ship. If that is not possible, the specific reporting station has to be entered here. If the voyage involves the transport of containers, field 1-8 has to contain the value 'Y'. In addition, in that case fields 1-9 up to and including 1-14 are compulsory. The weight of containers is exchanged in cargo lines. If the voyage does not involve the transport of containers, field 1-8 has to contain the value 'N'. In addition, fields 1-9 up to and including 1-14 have to be filled with spaces. If the voyage information is replacing a previously specified voyage, field 1-15 needs to contain a valid BICS file-ID. If 'invoice address' details are known, field 1-16 needs to contain a valid ID. In addition, in that case field 1-17 is compulsory.

Fields 2-1 and 2-5 are mandatory. If it involves a voyage of a convoy, field 2-1 has to contain the value 'Y'. In addition, in that case fields 2-2, 2-3 and 2-4 are compulsory. Field 2-5 should in that case contain the total number of ships in the combination. The number of times that line 3 appears is equal to the content of field 2-5. The ship that appears in the first line 3 is the name-giving ship of the convoy. If

it does not involve a voyage of a convoy, field 2-1 has to contain the value 'N'. Fields 2-2, 2-3 and 2-4 are in that case filled with zeroes and field 2-5 contains the value '1'.

Fields 2-6 up to and including 2-15 are used if additional route information is available.

Fields 3-1, 3-2 and 3-3 are all mandatory.

For the cargoes, the 4-lines, it is applicable that - if a consignment consists of a number of goods - each of them has to contain a similar Cargo-ID. A consignment is built up from one or more goods of the same type, of the same type of packaging (for example, all containers), with the same loading location, unloading location and recipient

Fields 4-1, 4-2, 4-3, 4-4, 4-5, 4-12, 4-15, 4-16 and 4-20 are all mandatory.

If one of the cargo lines concerns a hazardous substance, field 4-5 has to contain the value 'A' for a substance classified according to ADNR class or 'I' for a substance classified according to IMO class. In addition, in that case fields 4-6, 4-7 and 4-8 are compulsory and 4-9 should contain spaces. If field 4-7 concerns an IMO class, field 4-8 should also contain spaces. If the cargo is non-hazardous, field 4-5 should contain the value 'N'. In addition, in that case field 4-9 is compulsory and 4-6, 4-7 and 4-8 should contain spaces.

If field 4-10 has been filled in, it means that the cargo concerned is in a container. Field 4-11 then is mandatory. If the two fields are empty, the cargo is not in a container.

Non-completed fields should contain spaces.

### **3.7 Import checks**

When reading in the import file, checks are carried out on the content of the various fields and field combinations. If one or more errors are found, the import data are not entered in BICS as a new voyage. It involves the following checks:

- BICS does not recognise the ship-ID in combination with Ship-ID-type and Ship name;
- BICS does not recognise UN-number in combination with IMO Class and packing group, or BICS does not recognise UN-number in combination with ADNR Class, Number and packing group;
- BICS does not recognise the UN location code of the first part of one of the location fields;
- BICS does not recognise the IVS90 reporting station code;
- BICS does not recognise the HS-code.
- BICS does not recognise the Container type.
- BICS does not recognise the Invoice-ID.

### 3.8 Result file

The result file consists of one line with the following format:

Number	Field name	Format	Description
1	Processed	A1	Indication of whether processing was successful ('Y', 'N')
2	Line number	N3	If the processing was unsuccessful, this is the number of the line where the processing error occurred.
3	Line indicator	A1	First character of the line of the above-mentioned line number.
4	Field number	N2	Number of the field where the processing error occurred. This number is the second number (after the dash) of the field numbers in the 'Number' column of the previous table.
5	Info/Error text	A35	Optional Info/Error text
6	Created dossier number	N10	Dossier-ID of dossier as created in BICS (successful import). If not successful this field is empty.

Disregard fields 2, 3 and 4 if the processing was successful (Processed = 'Y').

## 4 Reference data

In the Import interface information is exchanged using coded reference data whenever possible.

The following types of reference data is used:

- Location SRS code
- Ship type
- Container type
- Packing type
- ADNR code
- HS code

All the reference data, its structure and used standards are described in the ERIGuide part IV (Annex).

All reference data is available in paradox tables in the BICS application and can be downloaded from the [www.bics.org](http://www.bics.org) website.

### 4.1 Location code

Each location code in the Ship Reporting Standards (SRS) represents a location where a vessel can do some activity (loading, unloading cargo, waiting etc).

The location SRS codes (20 chars) are built up as follows:

<UN Locode><fairwaycode><Terminal/object code><km code>

The <UN Locde> is based on UN/ECE Trade Facilitation Recommendation 16 and is the two letter ISO 3166country code followed by three characters for the location.

The Fairway, Terminal and KM code are codes with a maximum length of 5 positions according to the SRS code (based on the RIS index) as specified in de ERIGuide part IV.

The SRS codes are always based on the so called RIS index. Each SRS code has a related RIS index (RIS index or reference point nearby). So in the SRS code at least the parts UN locode, Fairway and km code are the same as the related RIS index.

Below some examples are given of SRS codes:

SRS Code	Description
DEMAI 03901 00FRB 00000	Germany; Mainz; Rhine; Frankenbach.
NLRTM 0102F 0WAAL 00027	The Netherlands; Rotterdam; Section 102F (Oude Maas); Waalhaven (general); KM 2,7.
NLRTM 0102F 0WHTW 00027	The Netherlands; Rotterdam; Section 102F (Oude Maas); Waalhaven Terminal; KM 2,7.

## 4.2 Ship type

The 4-digit ship type code is the unique key. This code is built up in accordance with the UN Rec 28, whereby the 1<sup>st</sup> position indicates the mode of transport 8=Inland Shipping, 1=Seagoing. The 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> positions indicate the type of the means of transport.

See: [http://www.unece.org/cefact/recommendations/rec\\_index.htm](http://www.unece.org/cefact/recommendations/rec_index.htm)

Some Examples of ship types:

Code	Description
8010	MOTOR FREIGHTER
8020	MOTOR TANKER
8030	CONTAINER VESSEL

The ship type for convoys also consists of four digits based on the UN rec 28 standard.

Some Examples of convoy types:

Code	Description
8130	COUPLED TUG FREIGHTERS
8140	COUPLED TUG FREIGHTER/TANKER,

## 4.3 Container type

The container types are based on Containertypes, ISO 6364.

The ISO 6364 container type (new style since 1996) is built up of 4 characters:

- The 1<sup>st</sup> character refers to the code for the length.
- The 2<sup>nd</sup> character refers to the code for the width and height.
- And the 3<sup>rd</sup> and 4<sup>th</sup> character refers to the type of container (general cargo, tank etc.).

The 4-letter container type code forms the unique key in the container type table.

The table below describes the construction of the container type code as is now known.

1<sup>st</sup> character:

Length (mm)	ft in	Code
2 991	10	1
6 068	20	2
9 125	30	3
12 192	40	4
7 150		A

Length (mm)	ft in	Code
7 315	24	B
7 430	24 6	C
7 450		D
7 820		E
8 100		F
12 500	41	G
13 106	43	H
13 600		K
13 716	45	L
14 630	48	M
14 935	49	N
16 154		P

2<sup>nd</sup> character:

		Code characters:		
Height		Width:		
mm	ft in	2 438mm (8ft)	>2438mm <2500mm	>2500mm
2 438	8	0 (zero)		
2 591	8 6	2	C	L
2 743	9 4		D	M
2 895	9 6	5	E	N
>2 895	>9 6	6	F	P
1 295	4 3	8		
=<1 219	4	9		

3<sup>rd</sup> and 4<sup>th</sup> characters:

Code	Type Designation	Group code	Main Characteristics	Detailed Type code
G	General purpose container without ventilation	GP	Openings at one or both ends	G0
			Passive vents at upper part of cargo space	G1
			Opening(s) at one or both ends plus "full" opening(s) on one or both sides	G2
			Opening(s) at one or both ends plus "partial" opening(s) on one or both sides	G3
V	General purpose container with ventilation	VH	Non-mechanical system, vents at lower and upper parts of cargo space	V0
			Mechanical ventilation system, located internally	V2
			Mechanical ventilation system, located externally	V4
B	Dry bulk container			
	Non pressurized, box type	BU	Closed	B0

Code	Type Designation	Group code	Main Characteristics	Detailed Type code
			Airtight	B1
	Pressurized	BK	Horizontal discharge, test pressure 150 kPa	B3
			Horizontal discharge, test pressure 265 kPa	B4
			Tipping discharge, test pressure 150 kPa	B5
			Tipping discharge, test pressure 265 kPa	B6
S	Named cargo container	SN	Livestock carrier	S0
			Automobile carrier	S1
			Live fish carrier	S2
R	Thermal container			
	Refrigerated	RE	Mechanically refrigerated	R0
	Refrigerated and heated	RT	Mechanically refrigerated and heated	R1
	Self-powered refrigerated/heated	RS	Mechanically refrigerated	R2
			Mechanically refrigerated and heated	R3
H	Thermal container			
	Refrigerated and/or heated with removable equipment	HR	Refrigerated and/or heated with removable equipment located externally; heat transfer coefficient $K=0.4 \text{ W/(m}^2\cdot\text{K)}$	H0
			Refrigerated and/or heated with removable equipment located internally	H1
			Refrigerated and/or heated with removable equipment located externally; heat transfer coefficient $K=0.7 \text{ W/(m}^2\cdot\text{K)}$	H2
	Insulated	HI	Insulated; heat transfer coefficient $K=0.4 \text{ W/(m}^2\cdot\text{K)}$	H5
			Insulated; heat transfer coefficient $K=0.7 \text{ W/(m}^2\cdot\text{K)}$	H6
U	Open-top containers	UT	Opening(s) at one or both ends	U0
			Opening(s) at one or both ends, plus removable top member(s) in end frame(s)	U1
			Opening(s) at one or both ends, plus opening(s) on one or both sides	U2
			Opening(s) at one or both ends, plus opening(s) on one or both sides plus removable top member(s) in end frame(s)	U3
			Opening(s) at one or both ends, plus partial opening on one side and full opening on the other side	U4
			Complete, fixed side and end walls (no doors)	U5
P	Platform (container)	PL	Platform (container)	P0
	Platform based containers with incomplete superstructure:			
	Fixed	PF	Two complete and fixed ends	P1

Code	Type Designation	Group code	Main Characteristics	Detailed Type code
			Fixed posts, either free-standing or with removable top member	P2
	Folding (collapsible)	PC	Folding complete end structure	P3
			Folding posts, either free-standing or with removable top member	P4
	Platform-based containers with complete superstructure	PS	Open top, open ends (skeletal)	P5
T	Tank container			
	For non-hazardous liquids	TN	Minimum pressure 45 kPa	T0
			Minimum pressure 150 kPa	T1
			Minimum pressure 265 kPa	T2
	For dangerous liquids	TD	Minimum pressure 150 kPa	T3
			Minimum pressure 265 kPa	T4
			Minimum pressure 400 kPa	T5
			Minimum pressure 600 kPa	T6
	For gases	TG	Minimum pressure 910 kPa	T7
			Minimum pressure 2 200 kPa	T8
			Minimum pressure (to be decided)	T9
A	Air/Surface container	AS		A0

Some more information see: <http://62.195.114.122/index2.html>

Examples for container type:

Code	Description
20G0	20' General purpose non -vented container
40T0	40' Tank Container (Minimum pressure 45 kPa)

#### 4.4 Packing type

The (inner) packaging type consists of a 2-letter code and is based on the UN/ECE Trade Facilitation Recommendation 21.

See: [http://www.unece.org/cefact/recommendations/rec\\_index.htm](http://www.unece.org/cefact/recommendations/rec_index.htm)

The 2-letter packaging code forms the unique key in the packaging type table.

Examples for inner package type:

Code	Description
AE	Aerosol
AM	Ampoule, non-protected
AP	Ampoule, protected
NE	Unpacked

#### 4.5 ADNR (Hazardous) code

For hazardous substances the International ADNR regulation is used. This regulation sets down for various substances the identification numbers (UN no.), classifications (ADNR, IMO), names, synonyms and other codes for the calculation of the signalling.

The 7-digit UN serial number (a combination of UN no. and internal 3-digit serial number) is the unique key to the Hazardous substances table.

Example:

Serial no.	UN no	Class	Classification	Pack Grp.	NAME
1202001	1202	3	F1	III	GAS OIL or DIESEL FUEL or HEATING OIL, LIGHT (61 C)
1203001	1203	3	F1	II	MOTOR SPIRIT or GASOLINE or PETROL
1204001	1204	3	D	II	NITROGLYCERIN SOLUTION IN ALCOHOL

#### 4.6 HS (non-hazardous) code

For the non-hazardous substances the International Harmonized System (HS) codes standard is used at Customs (Chapters 01-97), supplemented with BICS/IVS90 specific items (Chapter 00).

HS codes up to level 6 (first 6 digits) are used (there are no deeper levels).

The 6-digit serial HS code has 4 zeros added to a length of 10 digits if it is a "genuine" HS substance (from the official Customs list). If it is a synonym or other added item the last 4 digits are used as a (unique) serial number (e.g. 0001).

The 10-digit HS Code is the unique key for the Non-Hazardous substances table.

Examples of the HS-code:

HS CODE	NAME
0000000001	MIXED CARGO
2601200002	PYRITE
7501200000	NICKEL OXIDE
9706000000	ANTIQUITIES >100 YEARS OLD



