

# STANDARD FOR ELECTRONIC STATISTICS REPORTING

## DIS-WAGE STATISTICS

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## 0. INTRODUCTION

The ESI standard is the standard that ensures a uniform way of reporting personal and wage data to the Confederation of Danish Employers (DA). It is important that the individual IT salary systems are structured as described in the row types 1-9 on pages 4-7.

### **File**

The file name of the report file is optional, but please do not use the letters Æ, Ø and Å or spaces between letters.

The file type is .esi.

## 1. ROW TYPE DESCRIPTIONS

The report file must be divided into a number of row types, cf. 'Overview of row types', p. 8. The row type is set in pos. 21 in each row/record. There must be only one row type 1 (Reporter) and 9 (End).

In between row type 1 and 9 there are several row types 3 (Personal data) and row types 4 (Wage data) for *each employee/seafarer*. A typical seafarer has a set of at least five records of personal data (row type 3) and two records of wage data (row type 4).

Please note the relationship between the personal and wage data that is described in section '4. Breaks/splits' on pages 10 - 14.

All row types (records) are 100 characters long and end with CR/LF.

For reporting, we prefer fixed formatting, but it can be agreed that commas or TAB separation can be used, and if so, there must be one separator mark less for each row type than there are fields. Comma-separated files must not contain question marks unless a comma can be used in the alphanumeric field in question.

For each data field in row types 1-9 it is indicated whether it is numerical (N) or alphanumeric (A).

The following applies to numeric (N) fields:

- Only whole numbers unless otherwise stated, i.e. 30,5 days must be reported as 3050
- They must be right-justified and prefixed with zeros

The following applies to alphanumeric (A) fields:

- They must be right-justified and prefixed with zeros

The character sets that can be used are indicated in row type 1. The character sets are described further on pages 15 - 16.

## ROW TYPE 1 – REPORTING ROW TYPES

Row type 1 is the first physical record in the file, and only one row is allowed. It contains for example the name and address of the reporter.

NOTE. If commas are used after TAB separation, the first seven fields (positions 1-23) must be combined in one field.

Position	Data name	Type	Abbreviation	Field contents/Data description
1-8	Filler	N		"00000000"
9-10	Filler	N		"00"
11-15	Filler	N		"00000"
16-20	Filler	N		"00000"
21	Row type	N	ITYPE	"1"
22	Character set	N	CHARACTER	Code for the character set used 1 – EBCDIC 2 – ISO-646 (ASCII) 3 – ANSI (Windows) 4 – Code page 850 (DOS)
23	Format	N	FORMAT	Code for whether the following is used 1 – fixed formatting 2 – comma separation 3 – TAB separation
24-31	Reporter's business registration (CVR) number	N	SENR	The reporter's business registration (CVR)/tax registration (SE) number allocated by the Danish Tax Authority
32-33	Filler	N		"00"
34-59	The reporter's name	A	INAVN	
60-86	The reporter's address	A	IADR	
87-90	The reporter's postal code	N	IPOST	
91-100	Filler	N		"0000000000"

## ROW TYPE 3 – PERSONAL ROW TYPE

Contains personal data on one employee – individual information about the employee's employment relationship (IPTYPE), the company in which the he or she is employed and the vessel he or she is onboard. There will be a number of personal row types for the same employee.

Position	Data name	Type	Abbreviation	Field contents/Data description
1-8	The company's business registration (CVR) number	N	SENR	The company registration (CVR)/tax registration (SE) number allocated by the Danish Tax Authority
9-10	Filler	N		"00"
11-15	DS workplace code	N	DSK	DSK is to be filled in with zeros.
16-20	DA association code	N	DAK	The Confederation of Danish Employers' 4-digit association code. If only one membership please fill with zeros.
21	Row type	N	ITYPE	"3"
22-36	Employee number	A	MNR	The employee's internal number in the company's salarysystem prefixed with the international 2-digit alphanumerical code for country of birth.
37-46	Civil registration (CPR) number	N	CPR	The employee's 10-digit civil registration (CPR) number.
47-50	Type of content – person	N	ITYPE	Indicates which type of personal information this is about, cf. the Guidelines on Wage Statistics p. 3.
51-62	Employee code	N	MKODE	Code for the individual IP type. Valid codes are on pg. 3 in the Guidelines on Wage Statistics. The supplement containing codes for job position used in 0351 from Udligningskontoret can be obtained from Danish Shipping.
63-70	Time of implementation	N	IKR	The date from which the employee code (MKODE) is valid. Format: YYYYMMDD
71-78	Valid from	N	GFRA	Start date of the validity period. Format: YYYYMMDD
79-86	Valid until	N	GTIL	End date of the validity period. Format: YYYYMMDD
87-90	Filler	N		"0000"
91-100	P number	A	PNR	The vessels 7-digit IMO-number which the employee is onboard. Prefixed with 3-digit currency in which salary is paid.

## ROW TYPE 4 – WAGE ROW TYPE

Contains wage data on one employee - company data, personal data, wage type (ILTYPE), amount and/or number and wage/validity period. There will be a number of wage row types for the same employee.

Position	Data name	Type	Abbreviation	Field contents/Data description
1-8	The company's business registration (CVR) number	N	SENR	The company registration (CVR)/tax registration (SE) number allocated by the Danish Tax Authority
9-10	Filler	N		"00"
11-15	DS workplace code	N	DSK	DSK is to be filled in with zeros.
16-20	DA association code	N	DAK	The Confederation of Danish Employers' 4-digit association code. If only one membership please fill with zeros.
21	Row type	N	ITYPE	"4"
22-36	Employee number	A	MNR	The employee's internal number in the company's salarysystem prefixed with the international 2-digit alphanumerical code for country of birth.
37-46	Civil registration (CPR) number	N	CPR	The employee's 10-digit civil registration (CPR) number.
47-50	Type of content – wage	N	ILTYPE	Indicates the type of wage information. Valid numbers used as ILtypes are described in the Wage Statistics Guidelines under wage information pg. 4-7.
51-60	Units	N	UNITS	Number of units of the relevant ILtype. Mandatory for the ILtypes that are marked with Days in the column 'Number' in the Wage Statistics Guidelines, pg. 4-7.
61	Prefix of UNITS	A	FT	"+" or "-" Blank characters are also "+"
62-71	Amount	N	AMOUNT	Indication of the amount for the relevant ILtype. Mandatory for the ILtypes that are marked with Øre (1 øre = 0.01 DKK) in the column 'Amount' in the Wage Statistics Guidelines, pg. 4-7.
72	Prefix of AMOUNT	A	FT	"+" or "-" Blank characters are also "+"
73-80	Valid from	N	GFRA	Start date of the validity period. Format: YYYYMMDD
81-88	Valid until	N	GTIL	End date of the validity period. Format: YYYYMMDD
89-90	Filler	N		"00"
91-100	P number	A	PNR	The vessels 7-digit IMO-number which the employee is onboard. Prefixed with 3-digit currency in which salary is paid.

## ROW TYPE 9 – END ROW TYPE

This row type is the last physical row type in the file, and only one row is allowed.

Contains a calculation of all number row types in the report (Optional) and information about system suppliers and IT salary systems used.

Position	Data name	Type	Abbreviation	Field contents/Data description
1-8	Filler	N		"99999999"
9-10	Filler	N		"00"
11-15	Filler	N		"00000"
16-20	Filler	N		"00000"
21	Row type	N	ITYPE	"9"
22-30	Number of row types	N	IANTAL	A count of the number of row types in the report. That is, ALL row types including the reporter and end row type (+ any filler row types). Optional, if the total cannot be carried out, fill with zeros.
31-38	Supplier identification	N	UDBID	Business register (CVR) number of the system supplier.
39-42	System number	N	SYSID	Unambiguous serial number for each IT salary systems as agreed with DA.
43-50	Date of update	N	OPDATO	Date for latest change of the wage statistics module. Format: YYYYMMDD
51-90	Salary system name	A		The name of the IT salary system.
91-100	Filler	N		"0000000000"

## 2. OVERVIEW OF THE ROW TYPES

The size of the spaces does not reflect the size of the data fields (see the descriptions of the individual row types instead, pg. 4-7).

### 1 REPORTER

Filler	Filler	Filler	Filler	ITYPE	CHAR- ACTER	FORMAT	SENR	Filler	INAVN	IADR	IPOST	Filler
--------	--------	--------	--------	-------	----------------	--------	------	--------	-------	------	-------	--------

### 3 PERSON

SENR	Filler	DSK	DAK	ITYPE	MNR	CPR	IPTYPE	MKODE	IKR	GFRA	GTIL	Filler	PNR
------	--------	-----	-----	-------	-----	-----	--------	-------	-----	------	------	--------	-----

### 4 WAGE

SENR	Filler	DSK	DAK	ITYPE	MNR	CPR	ILTYPE	UNITS	FT	AMOUNT	FT	GFRA	GTIL	Filler	PNR
------	--------	-----	-----	-------	-----	-----	--------	-------	----	--------	----	------	------	--------	-----

### 9 END

Filler	Filler	Filler	Filler	ITYPE	IANTAL	UDBID	SYSID	OPDATO	Salary system name	Filler
--------	--------	--------	--------	-------	--------	-------	-------	--------	--------------------	--------



### 3. SEQUENCE OF ROW TYPES IN THE REPORT FILE

The report file must start with row type 1 and end with row type 9. Only one of each is allowed. In between data must be stated about their employees/seafarers:

- The sequence of personal data (row type 3) and wage data (row type 4) can be made in two ways as shown in the example below. Either with the two types of individual rows alone or with data on an employee alone.

The following example illustrates what the sequence of records in a report file can be like.

Between Reporter (1) and End (9) the sequence of rowtypes 3 and 4 can be as follows:

```

REPORTER      (Row type 1)
-----
PERSON 1     }
PERSON 1     } Same person 1 is described twice
              } with different personal information (row type 3)
PERSON 2
PERSON 3
WAGE 1       }
WAGE 1       } Two different kinds of wage information (row type 4)
              } for the same person 1
WAGE 2
WAGE 3
  
```

END (Row type 9)

```

REPORTER      (Row type 1)
-----
PERSON 1     }
WAGE 1       } All information (row types 3 and 4)
              } reported on person 1
PERSON 2
PERSON 2     }
PERSON 2     } All information (row types 3 and 4)
WAGE 2       } reported on person 2
WAGE 2
WAGE 2
  
```

END (Row type 9)

## 4. BREAKS/SPLITS

If one or more of the following data items is changed for an employee

- IMO-number (i.e. datafield P number) - example 2, pg. 13/14
- Currency in which salary is paid - example 2, pg. 13/14
- The code (MKODE) in the specially marked personal ITypes (0200, 0351, 0400, 0620, cf. the Guidelines on Wage Statistics where the numbers are marked in grey) - example 1, pg. 11/12

the employee has a new employment relationship in regards to statistics.

Accordingly, a break has to be made in the enumeration of all wage data (ILtypes). In other words, a complete set of wage data is generated for every employment relationship. The validity periods (GFRA and GTIL) in the personal data and wage data must match these relationships.

This division of the report into a number of different data sets (IP- and ILTYPE) for the same employee is called *breaks/splits*. It is *not* expected that the validity periods GFRA and GTIL are broken into smaller units than one wage period.

The examples on pages 11-14 illustrate what the reporting must look like when using breaks; that is, in cases where the IMO and/or Currency (data name P number) is changed or there are changes to the code for one of the specially marked personal types. In both cases the validity periods GFRA and GTIL 'bite each others tails' taking into consideration what date is filled in as IKR (Time of implementation).

In the example with the changed code, there must be at least two or more records of the personal type for which the code is changed often initiated by a change in IKR – corresponding to the number of times the code is changed during the reporting period. The personal data and wage data records in the report can have one of the following structures, which must have a set of both person and wage information that can be matched using GFRA and GTIL.

## EXAMPLE 1 - CHANGING JOB POSITION

On March 1, the job position (MKODE in IPTYPE 0351) is changed from 324 to 322. All other personal information remains unchanged. The way to report personal information (row type 3) can be either solution A1 or A2.

A. PERSONAL ROW TYPES								
<b>A1</b> Duplicated personal information. All records are duplicated and GFRA and GTIL for identical IP types 'bite each others tails'. Note IKR with the new code for job position in 0351.								
...	Row type	MNR	IPTYPE	MKODE	IKR	GFRA	GTIL	.....
	3	00000000PL15135	0100	000001	20100101	20170101	20170228	
	3	00000000PL15135	0200	000004	20100101	20170101	20170228	
	3	00000000PL15135	<b>0351</b>	<b>000324</b>	<b>20100101</b>	<b>20170101</b>	<b>20170228</b>	
	3	00000000PL15135	0400	000009	20100101	20170101	20170228	
	3	00000000PL15135	0620	000100	20100101	20170101	20170228	
	3	00000000PL15135	0800	000092	20100101	20170101	20170228	
	3	00000000PL15135	0100	000001	20100101	20170301	20171231	
	3	00000000PL15135	0200	000004	20100101	20170301	20171231	
	3	00000000PL15135	<b>0351</b>	<b>000322</b>	<b>20170301</b>	<b>20170301</b>	<b>20171231</b>	
	3	00000000PL15135	0400	000009	20100101	20170301	20171231	
	3	00000000PL15135	0620	000100	20100101	20170301	20171231	
	3	00000000PL15135	0800	000092	20100101	20170301	20171231	

<b>A2</b> Non-duplicated personal information. Only for the IPtype with a changed MKODE, GFRA and GTIL are structured so that the individual records 'bite each others tails'. Note the non-duplicated information all have GFRA/GTIL valid through the entire period.								
...	Row type	MNR	IPTYPE	MKODE	IKR	GFRA	GTIL	.....
	3	00000000PL15135	0100	000001	20100101	20170101	20171231	
	3	00000000PL15135	0200	000004	20100101	20170101	20171231	
	3	00000000PL15135	<b>0351</b>	<b>000324</b>	<b>20100101</b>	<b>20170101</b>	<b>20170228</b>	
	3	00000000PL15135	<b>0351</b>	<b>000322</b>	<b>20170301</b>	<b>20170301</b>	<b>20171231</b>	
	3	00000000PL15135	0400	000009	20100101	20170101	20171231	
	3	00000000PL15135	0620	000100	20100101	20170101	20171231	
	3	00000000PL15135	0800	000092	20100101	20170101	20171231	

Regardless of solution A1 or A2, the wage data must follow the structure below when there are breaks. Each wage record can be matched with the personal data using GFRA and GTIL.

## EXAMPLE 1 – CONTINUED

B. WAGE ROW TYPES								
...	Row type	MNR	ILTYPE	Units	Amount	GFRA	GTIL	...
	4	00000000PL15135	0010	xxxxxxxxxxx	xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0013		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0015		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0121		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0122		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0024		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0026	xxxxxxxxxxx		20170101	20170228	
	4	00000000PL15135	0027	xxxxxxxxxxx	xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0034	xxxxxxxxxxx		20170101	20170228	
	4	00000000PL15135	0132		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0232		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0332		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0432		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0035		xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0037	xxxxxxxxxxx	xxxxxxxxxxx	20170101	20170228	
	4	00000000PL15135	0010	yyyyyyyyyy	yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0013		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0015		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0121		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0122		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0024		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0026	yyyyyyyyyy		20170301	20171231	
	4	00000000PL15135	0027	yyyyyyyyyy	yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0034	yyyyyyyyyy		20170301	20171231	
	4	00000000PL15135	0132		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0232		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0332		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0432		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0035		yyyyyyyyyy	20170301	20171231	
	4	00000000PL15135	0037	yyyyyyyyyy	yyyyyyyyyy	20170301	20171231	

## EXAMPLE 2 - CHANGING VESSEL

An employee changes vessel on July 1 and is therefore allocated a new IMO number (wage period start 1 July) and at the same time gets paid in a different currency. All other personal information remains the same.

When changing the vessel and/or currency, all personal information must be duplicated. *Ikr is only changed* if there are changes in the employment relationships at the new vessel – that is, if there are changes in one or more MKODES for the specially marked personal information 0200, 0351, 0400 or 0620.

A. PERSONAL ROW TYPES									
...	Row type	...	IPTYPE	MKODE	IKR	GFRA	GTIL	...	PNR (IMO)
	3		0100	000002	20100101	20170101	20170630		<b>DKK8917999</b>
	3		0200	000005	20100101	20170101	20170630		<b>DKK8917999</b>
	3		0351	000691	20100101	20170101	20170630		<b>DKK8917999</b>
	3		0400	000009	20100101	20170101	20170630		<b>DKK8917999</b>
	3		0800	000092	20100101	20170101	20170630		<b>DKK8917999</b>
	3		0100	000002	20100101	20170701	20171231		<b>EUR9186999</b>
	3		0200	000005	20100101	20170701	20171231		<b>EUR9186999</b>
	3		0351	000691	20100101	20170701	20171231		<b>EUR9186999</b>
	3		0400	000009	20100101	20170701	20171231		<b>EUR9186999</b>
	3		0800	000092	20100101	20170701	20171231		<b>EUR9186999</b>

The wage data records *must* follow the structure with breaks, where each record can be matched with the personal data using GFRA and GTIL.

## EXAMPLE 2 – CONTINUED

B. WAGE ROW TYPES											
...	Row type	...	ILTYPE	Units	..	Amount	..	GFRA	GTIL	..	PNR (IMO)
	4		0010	xxxxxxxxx		xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0013			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0015			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0121			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0122			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0023	xxxxxxxxx		xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0024			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0132			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0232			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0332			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0432			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0035			xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0037	xxxxxxxxx		xxxxxxxxxxxxx		20170101	20170630		DKK8917999
	4		0010	yyyyyyyyy		yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0013			yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0015			yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0121			yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0122			yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0023	yyyyyyyyy		yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0024			yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0132	yyyyyyyyy		yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0232			yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0332			yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0432			yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0035			yyyyyyyyyyy		20170701	20171231		EUR9186999
	4		0037	yyyyyyyyy		yyyyyyyyyyy		20170701	20171231		EUR9186999

**Character set 1: EBCDIC**

					b <sub>0</sub>	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	
					b <sub>1</sub>	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	
					b <sub>2</sub>	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	
					b <sub>3</sub>	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	
	b <sub>4</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	0	0	0	0	00					1)	&	-					æ	å			0	
	0	0	0	1	01							/		a	j	Û	A	J				1
	0	0	1	0	02									b	k	s	B	K	S			2
	0	0	1	1	03									c	l	t	C	L	T			3
	0	1	0	0	04									d	m	u	D	M	U			4
	0	1	0	1	05									e	n	v	E	N	V			5
	0	1	1	0	06									f	o	w	F	O	W			6
	0	1	1	1	07									g	p	x	G	P	X			7
	1	0	0	0	08									h	q	y	H	Q	Y			8
	1	0	0	1	09									i	r	z	I	R	Z			9
	1	0	1	0	10									ø	:							
	1	0	1	1	11					.	Å	,	Æ									
	1	1	0	0	12					*	%	Ø										
	1	1	0	1	13					(	)	-	'									
	1	1	1	0	14					+												
	1	1	1	1	15					Ô	Â	"										

b<sub>i</sub> = bit no. i in the byte. 1) blank

**Character set 2: ISO-646 (EMCA-43, ASCII and DS2089)**

					b <sub>0</sub>	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	
					b <sub>1</sub>	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1		
					b <sub>2</sub>	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1		
					b <sub>3</sub>	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1		
	b <sub>4</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15		
	0	0	0	0	00			1)	0	Å	P	Ô	p										
	0	0	0	1	01				1	A	Q	a	q										
	0	0	1	0	02				2	B	R	b	r										
	0	0	1	1	03				3	C	S	c	s										
	0	1	0	0	04				4	D	T	d	t										
	0	1	0	1	05			%	5	E	U	e	u										
	0	1	1	0	06			&	6	F	V	f	v										
	0	1	1	1	07			'	7	G	W	g	w										
	1	0	0	0	08			(	8	H	X	h	x										
	1	0	0	1	09			)	9	I	Y	i	y										
	1	0	1	0	10			*	:	J	Z	j	z										
	1	0	1	1	11			+		K	Æ	k	æ										
	1	1	0	0	12			,		L	Ø	l	ø										
	1	1	0	1	13			-		M	Å	m	å										
	1	1	1	0	14			.		N	Û	n											
	1	1	1	1	15			/		O		o											

b<sub>i</sub> = bit no. i in the byte. 1) blank

**Character set 3: ANSI (Windows)**

					b <sub>0</sub>	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
					b <sub>1</sub>	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
					b <sub>2</sub>	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
					b <sub>3</sub>	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
b <sub>4</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
0	0	0	0	00			1)	0		P		p									
0	0	0	1	01				1	A	Q	a	q									
0	0	1	0	02				2	B	R	b	r									
0	0	1	1	03				3	C	S	c	s					Â		ä		
0	1	0	0	04				4	D	T	d	t					Å		å		
0	1	0	1	05			%	5	E	U	e	u					Æ		æ		
0	1	1	0	06			&	6	F	V	f	v						Ë		ë	
0	1	1	1	07				7	G	W	g	w									
1	0	0	0	08			(	8	H	X	h	x						Ø		ø	
1	0	0	1	09			)	9	I	Y	i	y									
1	0	1	0	10			*	:	J	Z	j	z									
1	0	1	1	11			+	;	K		k										
1	1	0	0	12			,		L		l							Ü		ü	
1	1	0	1	13			-		M		m										
1	1	1	0	14			.		N		n										
1	1	1	1	15			/		O		o										

b<sub>i</sub> = bit no. i in the byte. 1) blank

**Character set 4: CODEPAGE 850 (DOS)**

					b <sub>0</sub>	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
					b <sub>1</sub>	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
					b <sub>2</sub>	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
					b <sub>3</sub>	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
b <sub>4</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
0	0	0	0	00			1)	0		P		p									
0	0	0	1	01				1	A	Q	a	q	ü	æ							
0	0	1	0	02				2	B	R	b	r		Æ							
0	0	1	1	03				3	C	S	c	s									
0	1	0	0	04				4	D	T	d	t	ä	ö							
0	1	0	1	05			%	5	E	U	e	u									
0	1	1	0	06			&	6	F	V	f	v	å								
0	1	1	1	07			'	7	G	W	g	w									
1	0	0	0	08			(	8	H	X	h	x									
1	0	0	1	09			)	9	I	Y	i	y		Ë							
1	0	1	0	10			*	:	J	Z	j	z		Ü							
1	0	1	1	11			+	;	K		k			Ø							
1	1	0	0	12			,		L		l										
1	1	0	1	13			-		M		m			Ø							
1	1	1	0	14			.		N		n		Å								
1	1	1	1	15			/		O		o		Å								

b<sub>i</sub> = bit no. i in the byte. 1) blank