

11.5 Definition Frame

name [Definition Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	16		Definition Frame Header		a
2	16	X		A Sequence of Definition Record(s) – #1 to #M	(1)	a

11.5.1 Definition Frame Header

name [Definition Frame Header]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'DCTF'	a
2	4	4	C	Data Type	'REAL' etc.	a
3	8	4		RESERVED		b
4	12	4	N	Number of Definition Records -M		a

- 1) A common representation method is used for definition frames and records. This will be detailed later.

Number of definition records is described, based on the representation method common to the definition records.
(Data records in units of 16 bytes)

- 2) The total data size of a definition block is described in an index detail information record and detailed POI information record.

'DCTF' = 'Define for Count of Fields'

On the supposition of multiple languages, character information is defined with one field of character information data size, one field of offset pointer table, and one field of character information list.

11.5.2 Definition Record

Free definition of constituent elements of information

Generally, one information comprises items of different elements. The type and content of the items of elements vary, according to the information classification as well as the intention of the information provider (collector).

Consideration is given to the fields of a record representing one data so that the information provider can be free to represent something and choose to some extent.

The signatures to be used shall be subject to maintenance and update, following the update of the format version/revision.

name [Definition Fields]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Field Application	(1)	a
2	4	4	C	Field Descriptor Type	(2)	a
3	8	2	C	Field Description Type Declaration	(3)	a
4	10	2		Field Data Count		
			C	Description type declaration representing data count if field descriptor type is variable length	(4)	a
			N	Representing data count unless field descriptor type is variable length	(5)	a
5	12	4		Field Additional Information	(6)	b

1) Field Application

Represents application with a "signature" consisting of four bytes of characters. (See Subsection 11.5.3.14.)

2) Field Descriptor Type

Represents a descriptor type with a "signature" consisting of four bytes of characters. This is used to identify the type of the content of the data to be stored into an available field or the type of the value content to be stored into an additional information field of four bytes. (See Subsection 11.5.3.15.)

3) Field Description Type Declaration

Represents description type declaration with a "signature" consisting of two bytes of characters.

name [Field Description Type Declaration List]

Signature	Name	Size	Meaning
VD	VoiD	0 Byte	Invalid
CH	CHARACTER	1 Byte	Character
QB	Quater Byte	1/4 Byte	Signed Integer comprising 2 bits
HB	Half Byte	1/2 Byte	Signed Integer comprising 4 bits
BT	BYTE	1 Byte	Signed Integer comprising 8 bits
BD	Packed BCD	1 Byte	Binary Coded Decimal
WD	WORD	2 Bytes	Signed Integer comprising 16 bits
LG	LONG	4 Bytes	Signed Integer comprising 32 bits
UQ	Unsigned Quater byte	1/4 Byte	Unsigned Integer comprising 2 bits

UH	Unsigned Half byte	1/2 Byte	Unsigned Integer comprising 4 bits
UB	Unsigned BYTE	1 Byte	Unsigned Integer comprising 8 bits
UW	Unsigned WORD	2 Bytes	Unsigned Integer comprising 16 bits
UL	Unsigned LONG	4 Bytes	Unsigned Integer comprising 32 bits
FL	FLOAT	4 Bytes	Signed real number comprising 32 bits
DO	DOUBLE	8 Bytes	Signed real number comprising 64 bits
SG	SIGNATURE	4 Bytes	Signature
BL	BOOL	4 Bytes	Logic type 0(FALSE) or not 0(TRUE)
PT	POINTER	4 Bytes	4-byte BCD hours/minutes/seconds sector representation (hhmmssbb)
FD	Field Definer	16 Bytes	Field Definition Table
BN	Bits and Num.	8 Bytes	Latitude/Longitude Representation
CT	SWS Table.	Variable length	Number + (Natural Type Data) Table
OT	Offset Table.	Variable length	Number of Offsets + Offset Table
SO	Size & Offset table.	Variable length	Number + (Size + Offset) Table
SS	Signature & Size & Offset table.	Variable length	Number + (Signature + Size + Offset) Table
BF	Bit Flag	1 Bit	bit flag, bit designation
NB	No use Bits	1 Bit	For padding when the bit flag is used
ML	Multi-Language	Variable length	Multilingual-support Representation Character Information Data List
MC	Multi language Character	Variable length	Multilingual-support Representation Character Information Data List 2

BN: Latitude/Longitude Representation

Latitudes and longitudes shall be represented in a PID format with the southwestern end being minimal and the northeastern end being maximal.

CT: Number + (Natural Number Type Data) Table

Consists of the number of SWSs + real data on natural number type.

To be used typically for specifying codes of multiple targets of nearby search.

name [CT: Number + (N data) Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	SWS	Number	= n	a
2	2	B1		(N Natural Number Type Data) Table		a

name [(N natural Number Type Data) Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
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1	0	4	N	Data (1)		c
2	2	4	N	Data (2)		c
3		4	N		c
4		4	N	Data (n)		c

OT: Number of Offsets + Offset Table

Consists of the number of SWS offsets + offset pointers in units of two bytes (D).

To be used when real data in a location indicated by an offset pointer is fixed length and its application is known.

To identify real data, use additional information in a definition field.

To be used typically for latitude/longitude representation of multiple targets of route search (multiple entrances).

name [OT: Number of Offsets + Offset Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	SWS	Number of Offsets	= n	a
2	2	B1		Offset Pointer Table		a

name [Offset Pointer Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	D	Offset Pointer (1)		c
2	2	2	D	Offset Pointer (2)		c
3		2	D		c
4		2	D	Offset Pointer (n)		c

SO: Number + (Size + Offset) Table

Consists of SWS pieces + (real data size of SWS + offset pointers in units of two bytes (D)) table.

To be used when real data in a location indicated by an offset pointer is variable length and its application (use method) is known.

To identify real data, use additional information in a definition field.

name [SO: Number + (Size + Offset) Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	SWS	Number of Pieces	= n	a
2	2	B1		(Size + Offset Pointer) Table		a

name [(Size + Offset Pointer) Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	SWS:D	(Size + Offset Pointer) (1)		a
2	4	4	SWS:D	(Size + Offset Pointer) (2)		a
3		4			a
4		4	SWS:D	(Size + Offset Pointer) (n)		a

name [(Size + Offset Pointer) Piece]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	SWS	Size		a
2	2	2	D	Offset Pointer		a

SO: Number + (Signature + Size + Offset) Table

Consists of SWS pieces + (real data size of SWS + offset pointers in units of two bytes (D)) table.

To be used when real data in a location indicated by an offset pointer is variable length and its application (use method) is known.

To identify real data, use additional information in a definition field.

name [SO: Number + (Signature + Size + Offset) Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	SWS	Number of Pieces	= n	a
2	2	B1		(Signature + Size + Offset Pointer) Table		a

name [(Signature + Size + Offset) Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	8	C:SWS:D	(Signature + Size + Offset Pointer) (1)		a
2	8	8	C:SWS:D	(Signature + Size + Offset Pointer) (2)		a
3		8			a
4		8	C:SWS:D	(Signature + Size + Offset Pointer) (n)		a

name [(Signature + Size + Offset) Piece]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Signature		a
1	4	2	SWS	Size		a
2	6	2	D	Offset Pointer		a

BF: bit flag

NB: For padding when bit flags are used

To use bit flags (bit specification), it is necessary to define the bit flag field in the definition record and declare the bit array.

When bit flags are used, assignment shall start with the MSB. Unused bits shall be marked clearly by the use of "NB."

ML: Multilingual-support Representation Character Information Data List

The multilingual representation character information data list is generated in the format used typically for "representation items." Data length is variable. The number of fields shall be always 1. All applicable languages defined by META data shall be described in the same sequence as they were defined in the META file. If only a single language (for example, Japanese) is stored, a language-specific offset table is deleted.

name [Multilingual-support Representation Character Information Data List]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	SWS	Data Size of Character Information Supporting Multilingual		a
2	2	B1		Multilingual-support Representation Language-specific Offset Pointer Table		c
3		B2		Multilingual representation Character Information List		a

MC: Multilingual-support Character Information Data List 2

The multilingual representation, character information data list 2 is generated in the format used typically for "representation items." Unlike the above multilingual representation character information list, the character information data size does not exist, which is defined separately.

All applicable languages defined by META data shall be described in the same sequence as they were defined in the META file. If only a single language (for example, Japanese) is stored, a 'language-specific offset table' and 'multilingual string size' are deleted.

name [Multilingual-support Representation Character Information Data List 2]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	-	B0		Multilingual-support Representation Language-specific Offset Pointer Table 2		c
2	-	B2		Multilingual-support Representation Character Information List 2		c

name [Multilingual-support Language-specific Offset Pointer Table 2]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	B0	D	Multilingual Language-specific Offset Pointer 2 (language 1)		c
2	B0	B0	D	Multilingual Language-specific Offset Pointer 2 (language 2)		c
3					c
4	B0*(n-1)	B0	D	Multilingual Language-specific Offset Pointer 2 (language n)		c

name [Multilingual Character Information 2]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	B0	N	Multilingual-support Character String Size (in bytes)		c
2	O1	B3	C;CC	Multilingual-support Character String		c

Data length B0, given above, shall equal the data length defined separately for this field when the field is defined. Specifically to say:

B0 = 2, providing fixed-length representation applies and the 'size of multilingual character information 2' is separately defined by 'UW.'

B0 = 1, providing variable-length representation applies and the data length of this field is defined by 'CH.'

4) Field Data Count (if field application is variable length)

According to "Field, description type declaration" in 3), describes the quantity of that data with the corresponding type at the beginning of that data string.

Example: (CH) (UB) = Expresses a data size with a one-byte unsigned integer at the beginning of the corresponding variable-length data string.

(CH) (UW) = Expresses a data size with a two-byte unsigned integer at the beginning of the corresponding variable-length data string.

5) Field Data Count (unless field application is variable length)

According to "Field, description type declaration" in 3), describes the quantity of that data in words.

Example: (CH) 8 = 8 bytes

(WD) 2 = 4 bytes

(UL) 2 = 8 bytes

(FD) 1 = 16 bytes

Because this representation differs from the abbreviation symbol representation for format description, care should be taken when using this field.

(This is because it is assumed that data types are described in fixed two bytes and for diversified representations.)

6) Field Additional Information

This field normally contains NULL, but may be used for the entry of a direct value, according to the content of the field for application.

The area for additional information is 4 bytes.

Practical examples are given below:

For category

- 1) Specifying a keyboard for selection
- 2) Specifying automatic processing for, for example, latitude/longitude acquisition

For POI information

- 1) Specifying automatic processing for, for example, latitude/longitude acquisition
- 2) Specifying processing for automatic connection to Internet

Detail can be determined at the discrepancy of company the content-producing.

Because additional information is for increased efficiency and differentiation, it is not discussed in detail herein.

The information known to be required by all companies is, however, defined in a format, instead of being handled as additional information.

11.5.3 Signature List

As of November 26, 1999 (V2.2), the following signatures are defined.

11.5.3.1 Signature List

Signatures are given below. (Those marked with an asterisk (*) have not yet been defined in detail. Some of them depend on the hardware used and others have not been authorized.)

name [Signature list]

Signature	Name	Meaning
DGAM	Define for GAMes	Game (general-purpose one using HTML, etc.)
DIRD	Define for Interesting Route 's Data	Recommended route data
DPOI	Define for Point Of Interest	POI information data declaration
DPOU	Define for Points Of Users	Registered point
DSAR	Define for Search of Around	(Static) nearby search
DSAD	Define for Search of ADDRESS	Address search
DSBT	Define for Search of B-Tree	B-Tree search
DSIH	Define for Service Information of HTML	HTML service information search
DSIM	Define for Service Information of Map	Service information for map overlay
DSRC	Define for SeaRCh	Hierarchical search and composite search
DSRT	Define for Search of Route side	(Dynamic and realtime) nearby search
DSTL	Define for Search of Telephone number	Telephone number search
DSVC	Define for Search of Voice	Voice search
DSZP	Define for Search of ZIP number	Zip code search
DVCR	Define for Volume Control	(Additional) volume management
PIME	Point of Interest Mesh Control data	POI information mesh search management (normal)
PINR	Point of Interest Normal	POI information (normal)
KBA1	Keyboard Alphabet 1	Alphabetic keyboard (not case-sensitive)
KBA2	Keyboard Alphabet 2	Alphabetic keyboard (KBA1 + digits)
KBC1	Keyboard Country 1	District name keyboard
KBC2	Keyboard Country 2	Prefecture name keyboard
KBC3	Keyboard Country 3	City/ward/town/village name keyboard
KBC4	Keyboard Country 4	Place name keyboard
KBGC	Keyboard Group & Chain	Affiliated company name, chain store name keyboard
KBGN	Keyboard Genre list	Genre list keyboard
KBGR	Keyboard Group list	Group (sightseeing, leisure, and dining) list keyboard
KBJ1	Keyboard Japanese 1	Japanese syllabary keyboard (full)
KBJ2	Keyboard Japanese 2	Japanese syllabary keyboard (uppercase characters only)
KBJ3	Keyboard Japanese 3	Japanese syllabary keyboard (KBJ1 + digits)
KBJ4	Keyboard Japanese 4	Japanese syllabary keyboard (KBJ2 + digits)
KBJ5	Keyboard Japanese 5	Japanese syllabary keyboard (KBJ1 + alphabet)

Signature	Name	Meaning
KBJ6	KeyBoard Japanese 6	Japanese syllabary keyboard (KBJ2 + alphabet)
KBJ7	KeyBoard Japanese 7	Japanese syllabary keyboard (KBJ3 + alphabet)
KBJ8	KeyBoard Japanese 8	Japanese syllabary keyboard (KBJ4 + alphabet)
KBN1	KeyBoard Number 1	General-purpose keyboard for digits
KBN2	KeyBoard Number 2	Keyboard for telephone numbers
KBN3	KeyBoard Number 3	Keyboard for zip codes
KBN4	KeyBoard Number 4	Keyboard for international telephone number (country number added)
KBN5	KeyBoard Number 5	Keyboard for overseas zip codes (number-of-digits restrictions changed)
KBRT	KeyBoard Route	Route name keyboard
KBS1	KeyBoard Sightseeing search 1	Sightseeing area classification keyboard
KBS2	KeyBoard Sightseeing search 2	Sightseeing area item 1 keyboard
KBS3	KeyBoard Sightseeing search 3	Sightseeing area name keyboard
KBTB	KeyBoard Telephone Book	Telephone directory genre selection keyboard
NORM	NORMal	Normal keyboard (list format)
ADCR	Around Data Control Header	Declaration of matching data for nearby search
DCTR		File management section declaration
DFSM	Define For Search depend of search Mesh	Mesh search block declaration
DFSR	Define For SeaRch	Search block declaration
ADCT	ADdress name CounT	Number of address characters
ADD1	ADDress (group1)	Prefecture code
ADD2	ADDress (group2)	Administrative area (city/ward/town/village) code
ADD3	ADDress (group3)	Ooaza/koaza code
ADD4	ADDress (group4)	-Chome
ADD5	ADDress (group5)	-Go
ADD6	ADDress (group6)	-Banchi
ADD7	ADDress (group7)	Floor number in a building
ADD8	ADDress (group8)	Room number
ADNM	ADDReSS NaMe	Address name
ADNO	ADDress NO	(Address) banchi name
ADR1	ADdReSS 1	Address 1
ADR2	ADdReSS 2	Address 2
ADR3	ADdReSS 3	Address 3
AL50	for ALI of 50 on code	All Japanese syllabary codes (Japanese only)
ALAD	for ALI of ADress	Banchi (digit) code
ALCT	for ALI CaTegory code	Type + store code
ARCD	ARea CoDe	Area code
BDID	BuilDing ID	Building ID
BDNM	BuilDing NaMe	Building name

Signature	Name	Meaning
DMMY	DuMMY	Dummy
G150	for Group1 of 50 on code	Japanese syllabary codes "digits, A, KA, SA, ..., and N" only
G1CT	for Group1 CaTegory code	Type code
G2CT	for Group2 CaTegory code	Store code, up to X high-order bits
GDXY	GuiDe point XY	Guide point latitude and longitude coordinates
HWIF	High Way InFomation	Highway facilities (SA and PA) information
JPCT	JamP table record Count	Number of jump table records
JPKY	JamP KeY	Jump key
JPLV	JamP table making LeVel	Jump table creation standard
JPST	JamP table Start offseT	Offset to jump table selectable record
JPSZ	JamP table SiZe	Jump table size
JPTB	JamP TaBle	Jump table size & supported key & offset &
LATI	LATItude	Latitude
LDR1	Link DiRection 1	Link direction 1
LDR2	Link DiRection 2	Link direction 2
LGG2	LonGitude Guide 2	Guide point longitude 2
LGOF		Representation item - language-specific offset
LID1	Link ID 1	Link ID number 1
LID2	Link ID 2	Link ID number 2
LKDR	LinK DiRection	Link direction
LKID	LinK ID	Link ID number
LOGI	LOnGItude	Longitude
LTG1	LaTitude Guide 1	Guide point latitude 1
LTG2	LaTitude Guide 2	Guide point latitude 2
LVXY	LeVel of XY	Coordinate precision
MPSC	MaP SCale	Display map scale
NAME	NAME	(Display) name
NMCT	NaMe CounT	Number of name characters
RLXY	ReaL point XY	Longitude and latitude (real position) coordinates
SMEN	Serch MESH No	Search mesh number
SMEL	Serch MESH Level	Search mesh integrity
TEL1	TELEphone number (group1)	Toll number
TEL2	TELEphone number (group2)	Local number
TEL3	TELEphone number (group3)	Subscriber number
TEL4	TELEphone number (group4)	Subscriber number
TELE	TELEphone number	Telephone number
TELN	TELEphone Number	Telephone number
TISZ		Representation item character information size

Signature	Name	Meaning
TXCT	TeXt CounT	Number of text characters
TXDT	TeXt DaTa	Text data
YMCT	YoMi CounT	Number of reading characters
YOMI	YOMI	(Name) reading
ZIPC	ZIP no Count	Number of zip code digits
ZIPN	ZIP No	Zip code
ACTN	ACTioN	Action description
FDRL	FieID ReLation	Field relation
NORM	NORMal	Normal (state and representation)
OFST	Offset	Offset representation
PITR	PolnTeR	pointer representation
REAL	REAL	Real number substitution
RLOF	ReaL Offset	Real offset description
RPTR	Real PoinTeR	Real pointer description
VOCE	VOICE	Data for voice recognition
VRBL	Variable	Variable-length representation
KY50	KeY by 50 on	Japanese syllabary + code search key
KYA1	KeY by Area (group1)	Prefectural code search key
KYA2	KeY by Area (group2)	Administrative area code search key
KYA3	KeY by Area (group3)	Ooaza/koaza code search key
KYAL	KeY by ALphabet	Alphabet search key
KYBI	KeY by Building Id	Building ID search key
KYME	KeY by MESH no	Search mesh number key
KYT1	KeY by Telephone no 1	Toll number search key
KYT2	KeY by Telephone no 2	Local number search key
KYT3	KeY by Telephone no 3	subscriber number search key
KYTL	KeY by TeLePhone no	Number search key
KYZP	KeY by ZiP no	Zip code search key
SR50	SeaRch by 50 on	Japanese syllabary search
SRAG	SeaRch by Around Genre	Nearby genre search
SRAR	SeaRch by ARound	Nearby search
SRBD	SeRch Building ID	Building ID search
SRBI	SeRch Building Information	Building information search
SRBT	SeaRch Blanced Tree	B-Tree search function
SRGN	SeaRch by Genre	(Simple) hierarchical search
SRGS	SeaRch by Gyanre Sightseeng	(Sightseeing area-by-sightseeing area) hierarchical search
SRHA	SeaRch Hybrid Area	Hybrid area search (small area: administration)
SRHS	SeaRch Hybrid Sightseeing area	Hybrid area search 2 (small area: sightseeing area)

Signature	Name	Meaning
SRHG	SeaRch Hybrid Genre	Hybrid genre search
SRJP	SeaRch by JaPanese	Area search (Japan)
SRJS	SeaRch by Japanese Sightseeing area	Sightseeing area search (Japan)
SRME	SeaRch MEsh	Mesh search
SRMX	SeaRch MiXed	Hybrid search
SRNR	SeaRch NoRmal	(Simple) hierarchical search
SRTN	SeaRch by Telephone Number	Telephone number search
SRZP	SeaRch by ZiP code	Zip code search
FGAM	Function Genre AMusement park	Genre amusement park search function
FGAP	Function Genre Air Port	Genre air port search function
FGAQ	Function Genre AQuarium	Genre aquarium search function
FGBH	Function Genre Business Hotel	Genre business hotel search function
FGCP	Function Genre CamP	Genre camp search function
FGCR	Function Genre Cross Road	Genre intersection search function
FGCS	Function Genre CaStle	Genre castle and castle ruins search function
FGDS	Function Genre Department Store	Genre department store search function
FGFR	Function Genre FeRry	Genre ferry search function
FGFS	Function Genre Famous place & Sightseeing point	Genre famous place and sightseeing point search function
FGGF	Function Genre GolF	Genre golf course search function
FGHL	Function Genre Hall	Genre hall search function
FGHP	Function Genre HosPital	Genre hospital search function
FGHT	Function Genre HoTel	Genre hotel and inn search function
FGHW	Function Genre High Way	Genre highway facilities search function
FGIE	Function Genre International Exhibition	Genre international exhibition search function
FGJM	Function Genre JaMe's	Genre Jame's search function
FGLB	Function Genre LiBrary	Genre library search function
FGLR	Function Genre Library and mateRial	Genre library and morgue search function
FGMR	Function Genre MaRina	Genre marina search function
FGMS	Function Genre Museum	Genre museum search function
FGPB	Function Genre PuBlic office	Genre public office search function
FGPG	Function Genre Public Games	Genre public game search function
FGPH	Function Genre Public Hotel	Genre public hotel search function
FGPK	Function Genre ParK	Genre park search function
FGPL	Function Genre PoLice	Genre police station search function
FGPS	Function Genre PenSion	Genre pension search function
FGSA	Function Genre SpA	Genre spa search function
FGSI	Function Genre Special Information	Genre special-information-attached facilities search function
FGSK	Function Genre SKi	Genre skiing ground search function

Signature	Name	Meaning
FGSL	Function Genre School	Genre school search function
FGSN	Function Genre ShriNe	Genre temple and shrine search function
FGSP	Function Genre SPorts	Genre sport search function
FGSR	Function Genre Station of Road	Genre station-of-road search function
FGST	Function Genre STation	Genre station search function
FGSD	Function Genre Sports ground	Genre sports ground
FGTD	Function Genre Tyota Dealer & sales	Genre Toyota dealers and store search function
FGTL	Function Genre ToLI road	Genre toll road search function
FGTR	Function Genre Toyota Rent a car	Genre Toyota rent-a-car search function
FGTT	Function Genre Tax office & District land Transport bureau	Genre tax office and transport bureau search function
FGWM	Function Genre Wedding Marriage	Genre wedding ceremony hall search function
FGZB	Function Genre Zoo & Botanical gardens	Genre zoological and botanical garden search function
FTEL	Function TELEphon No	Telephone number search function
FTLA	Function TeLephon Address in	Telephone number office number function
FHYB	Function HYBrid	Hybrid search function
FARS	Function ARea Search	Area search function
FGTB	Function Genre Telephone Book	Telephone directory search function
FZPC	Function Complex ZiP code	Zip code composite search function
FZIP	Function ZIP code	Zip code search function
FARD	Function ARound	Nearby search function
FARG	Function ARound Genre	Nearby genre search function
FMES	FunctionMESh	Mesh search function
FSBI	Function Search Building Information	Building information search function
CGCT	CateGory code CounT	Number of type codes
CTFN	CaTeGory 1	Next-table category matching data decision flag
CTG1	CaTeGory 1	Type code, major classification
CTG2	CaTeGory 2	Type code, minor classification (store code)
CTGS	CateGorS	Type code (general) type + store
CTGY	CaTeGorY	Type code
SCGY	Sub CateGorY	Incidental facilities/type code
CTM1	CaTegory Mask code 1	Type mask code, major classification
CTM2	CaTegory Mask code 1	Type mask code, minor classification
ADFC		Number of characters in additional information file name
ADFN		Additional information file name
ADOF		Additional information offset (from the beginning of file)
ADSZ		Additional information size

Signature	Name	Meaning
BFRL	BeFore ReLation	Relation to the beginning of previous record
DCSF	Define for Count of Sub Fields	Number of selectable record Definition Fields
DCTF	Define for CounT of Fields	Number of Definition Fields
DSRA	Define of SeaRch Action	Search action definition
DTFG		Storage data flag
FLDL	Flag of Delete	Deletion flag
FNCT	FiNd table Count	Number of matching data items
FNRS	FiNd table Record Size	Matching data record size
FNST	FiNd table ofSeT	Offset to matching data
FNSZ	FiNd table SiZe	Matching data read size
HDOF	Html Data OFset	Offset to HTML data
HDSZ	Html Data SiZe	HTML data size
ISID	InStitution ID	Related facilities (POI) ID
MXKY	MiXed serch KeY	Hybrid search key
MXK2	MiXed serch Key2	Hybrid search key 2
MXSG	MiXed serch SiGneture	Hybrid search signature
NEXT	NEXT category offset	Offset to next layer
NFRL	Next Field ReLation	Relation to the beginning of subsequent record
NTCT	NexT category Count	Next category selectable record (child), number of matching data items
NTSZ	NexT category SiZe	Next layer read size
NXCT	NeXt data frame Count	Number of next-level data frame records
NXFN	NexT data Frame Number	Next-level data frame serial number
NXKB	NeXt data frame Key Board	Next-level data frame keyboard
NXKD	NeXt data frame KinD	Next-level data frame type
NXOF	NeXt data frame OFsset	Next-level data frame offset
NXSZ	NeXt data frame SiZe	Next-level data frame size
PDOF		Offset to voice data
PDSZ		Voice data size
POIC	Point Of Interest Count	Number of POI information items
POIG	Point Of Interest Group number	POI information group number
POIO	Point Of Interest Offset	Offset to POI information
POIP	Point Of Interest Pointer	Offset to POI information
POIS	Point Of Interest Size	POI information size
RICN	Relation Institution CoNdition	Related facilities condition
RIID	Relation Institution ID	Related facilities reference ID
RPCT	RePetition CounT	Number of identical objects in succession
SAOF	Search Around data OFset	Offset to nearby search data frame
SDFA	Search Depend Frame A	Additional information A dependent search

Signature	Name	Meaning
SDFB	Search Depend Frame B	Additional information B dependent search
SDME	Search Depend Mesh	Mesh-dependent search
SDJP	Search Depend JaPan address	Address-dependent search (Japan)
SEFG	SEbtajkushi data FlaG	Selectable record storage data flag
SELN	SEntakushi Line Number	Number of selectable records
SFBO	Sub Field Bop Offset	Offset to last selectable record
SFTO	Sub Field Top Offset	Offset to first selectable record
SRVC	SeRViCe information table	Service information
STFG		Storage data flag
TPNM	ToP menu NaMe	Top menu name
VDID	Visual Data ID	Image data ID
VDOF	Visual Data OFFset	Offset to image data
VDSZ	Visual Data SiZe	Image data size
VLIF	Vehicles Limited InFomation	Vehicle restriction information
ADIF		Additional information description
HTML		HTML information
IBMP		BMP image file
IGIF		GIF image file
IJPG		JPG image file
IMGS	IMaGeS	Image data
MEMC		Number of memo (text information) bytes
MEMO		Memo (text information)
RUTC	RoUTe Condition	Route calculation condition
RUTD	RoUTe Data	Route data
RUTP	RoUTe Points	Route data point column
RUTS	RoUTe data Size	Route data size
SOND	SOunND	Voice data
STNM		Road name
STR(L)S		Right (left) side of road
SVIM		Service information for map overlay
TADI		Additional information type
TEXT	TEXT	Text data
WAVE		WAV sound file
XYCT		Number of longitude and latitude coordinates (number of responding points)

11.5.3.2 Signature List for Field Description Type

name [Signature List for Field Description Type]

Signature	Name	Meaning
NORM	NORMAL	Normal representation
REAL	REAL	Real number substitution
OFST	OFFSET	Offset representation
RLOF	REAL OFFSET	Real offset description
FNME	FILE NAME	File name description
DNME	DIRECTORY NAME	Directory name description
PITR	POINTER	Pointer representation
RPTR	REAL POINTER	Real pointer description
ACTN	ACTION	Action description
VOCE	VOICE	Data for voice recognition
VRBL	VARIABLE	Variable-length representation
FDRL	FIELD RELATION	Field relation (offset to previous and next records)

11.5.3.3 Signature List for Address Representation Data Declaration (descriptive content)

name [Data Declaration (descriptive content) for Address Representation]

Signature	Name	Meaning
FNME	File Name	File name description
DRNM	DiRectory NaMe	Directory name description
PITR	PoinTer	Pointer representation
OFST	OFFseT	(Absolute) offset specification
DPUA	DePend of Unit A	Map unit dependent specification (additional information A)
DPUB	DePend of Unit B	Map unit dependent specification (additional information B)
DPME	DePend of Mesh	Mesh-dependent specification

11.5.3.4 Signature Definitions used for Individual Expansion

The signatures common to manufacturers that are to be specified in this format must start with an uppercase alphabetic character.

When additional signatures are to be defined for individual expansion, the manufacturer identification character code (single character) corresponding to the MID whose first character is defined by metadata must be defined using a code other than uppercase alphabetic characters.

11.5.4 Rules for Record Boundaries

As means of improving the primary data access efficiency, the following operating rules are established:

- 1) Record size shall be in multiples of 2. (It is recommended to set record size in multiples of 4.)
- 2) Field size shall be in multiples of 1. (It is recommended to set record size in multiples of 2.)

Note: If successive fields of less than one byte are defined, follow the rules as will be described later in Subsection 11.5.7.

11.5.5 Rules for Defining B-Tree Type Search Keys

If a key for search such as B-Tree type search is used, the search key shall be located at the beginning of a record.

11.5.6 Rules for Defining Option

'DCSF' = 'Define for Count of Sub Fields'

Once the number of category option items has been defined, subsequent fields are used for defining the option. To make the option fields clear, declare signature 'DCSF.' If 'SELN' is defined, the definition field following the 'SELN' field shall always contain 'DCSF.'

To explain this rule specifically, an example is given below:

name [example of railway station and route category definition]

No.	Application (Signature)	Descriptor type (Signature)	Description type declaration	Data count	Additional information	Description
1	'DCTF'	'REAL'	-	-	-	Definition fields declaration
2	'NAME'	'NORM'	'CH'	44	-	Name
3	'SELN'	'NORM'	'LG'	01	-	Number of option items
4	'DCSF'	'REAL'	-	-	-	Option definition fields declaration
5	'NAME'	'NORM'	'CH'	44	-	(Option) Name
6	'FNCT'	'NORM'	'LG'	01	-	Matching data count
7	'FNST'	'OFST'	'LG'	01	-	Offset to matching data
8	'NEXT'	'OFST'	'LG'	01	-	Offset to next category

The part of 4) and subsequent concerns defining the option.

11.5.7 Rules for Field Boundaries

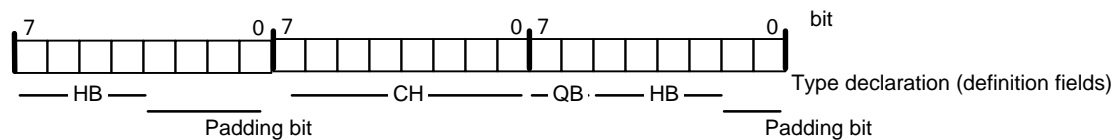
11.5.7.1 Rules for Fields Boundaries of One byte or More

Assures field boundaries in units of one byte.

11.5.7.2 Rule for Fields Boundaries of Less than One byte

To improve the data access efficiency, defining fields across byte boundaries is ruled.

If fields are defined across byte boundaries, some fields are padded as shown below. (See the figure below.)



11.5.8 Rules for Field Type Declaration

If the use of 'variable length representation' is specified in the descriptor type field, describe the size of data string at the beginning of the appropriate fields, according to the specified type, corresponding to the data count of the fields defined as variable-length fields. (If the type declaration is less than one byte, follow the operating rules described in Subsection 11.5.4.)

11.5.9 Rules for Variable-length Records

If the use of variable length representation is specified in the descriptor type field or if stored data flag application is specified in the application (signature) field, the relevant records are variable-length records.

For efficient bidirectional access to the variable-length records, the following operating rules are established:

- 1) Record size shall be in multiples of 2. (It is recommended to set record size in multiples of 4.)
- 2) Store the relation of the record to its preceding and following fields into the actual data string.

11.5.10 Rules for Storage Data Flag

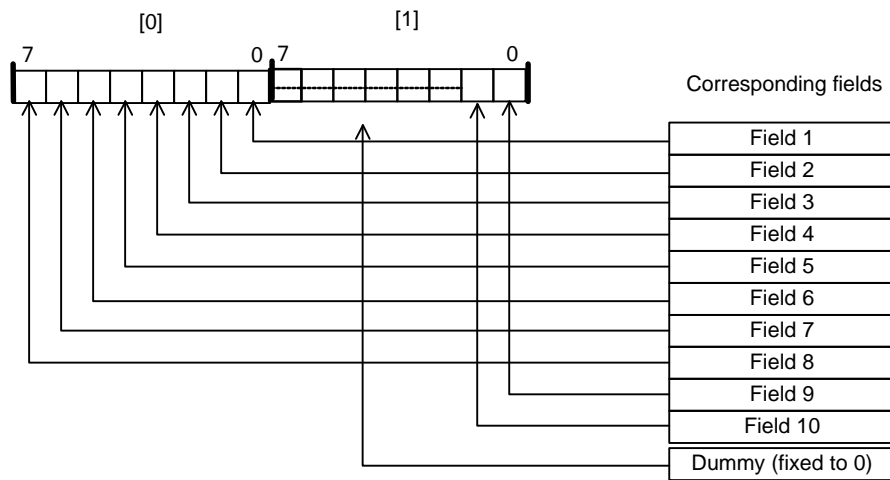
A stored data flag can be located in an arbitrary position in a definition frame. Each bit flag can indicate whether a further field exists, following the defined fields.

Stored data flags can be used, according to the established operating rules below:

- 1) A stored data flag indicates whether fields as many as the set bits exist in addition to the defined fields. All fields outside the range of the stored data flag representation shall be assumed to exist.
- 2) Multiple stored data flags can be set in a same definition frame. When a new stored data flag is defined, subsequent stored data flags shall become invalid with dummy bits. Subsequent fields are defined by the newly set stored data flag.
- 3) In a definition frame in which option definition fields are declared, a stored data flag can be used to indicate whether a parent category field exists. (The flag, however, shall be effective only in the parent category and the surplus bits become dummy bits.)
- 4) In a definition frame in which option definition fields are declared, if a same stored data flag is defined for all option, the "stored data flag for option" (= 'SEFG') can be defined for the parent category. (Such flag shall also conform to other operating rules.)
- 5) Stored data flags shall be defined by 'UB' array type and their size varies in different definition frames. (The surplus bits in each stored data flag shall become dummy bits.)

bit flags shall be assigned, starting with the LSB.

In a case where 10 fields are defined



If a bit corresponding to a field is 1, the field exists. If the bit is 0, the field does not exist.

If the number of fields to be defined exceeds 8, requiring multiple stored data flag bytes, the flag area shall be expanded in units of bytes. Make the bits of the additional byte correspond to further fields, starting with the LSB.

The surplus bits of the byte shall become dummy (fixed to 0).