

11.A.2.14. POI Information Frame

11.A.2.14.1. Street Address POI Information Frame

11.A.2.14.1.1. Management Frame of POI Information Frame

name [Management Frame of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	16		Management Frame Header of POI Information Frame		a
2	16	X		Detailed POI Information Record - #1		a

11.A.2.14.1.1.1. Management Frame Header of POI Information Frame

name [Management Frame Header of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'PINR'	a
2	4	4	N	Number of Detailed POI Information Records - G	=1	a
3	8	4	SWS	Size of Detailed POI Information Record	1)	a
4	12	4	D	Offset to Detailed POI Information Record	2)	a

- 1) This field describes the size of the detailed POI information record. If there are two or more records, the records must have the same size.
- 2) The displacement from the top of the POI information frame management frame to the first record of a sequence of detailed POI information records is described, as it allows future expansion and manufacturer-specific data description.

11.A.2.14.1.2. Detailed POI Information Record

name [Detailed POI Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'DPOI'	a
2	4	4	SWS	Expansion Field Size	1)	a
3	8	4	D	Offset to Expansion Field	1)	a
4	12	4	SWS	Size of POI Information Definition Frame	2)	a
5	16	4	D	POI Information Definition Frame Address	3)	a
6	20	4	SWS	POI Information Data Frame Size	2)	a
7	24	4	D	POI Information Data Frame Address	3)	a
8	28	4	SWS	Size of the Record of POI Information Data Frame	4)	a
9	32	4	N	Total Number of the Records of POI Information Data Frame	5)	a
10	36	B1		A Sequence of Additional Frame Address(es) (#1 to #2)	3)	c
11	O1	B2		Expansion Field		c
12	O2	B3		Padding Field		c

Note: Items 10 and 11 are optional in the target detailed POI information record since their areas can be determined by items 3, 5, and 7. However, the detailed POI information record size specified in the management frame of the higher POI information frame must be satisfied by items 10 to 12.

1) Expansion Field Size and Offset

The fields describe the displacement from the top of the target detailed POI information record to the top of the expansion field as the offset to the expansion field.

When there is no expansion field, invalid values are assigned to the size and offset.

2) These fields describe the total size of the target data frame.

3) These fields describe the storage address of the target data frame as described in 7) of Section 11.A.2.1.2. according to the principles described in the "address description declaration" for the target POI information management record.

4) Size of the Record of POI Information Data Frame

Since the record length is variable, specify the maximum record size of the target data frame.

5) Total Number of the Records of POI Information Data Frame

This field describes the total number of records in the POI information data frame.

11.A.2.14.1.3. POI Information Definition Frame

No.	Usage	Description type	Description type declaration	Number of data items	Additional information	Comment	Remarks	Classification
1	'DCTF'	'REAL'	-	-	(7)	Definition Field Declaration		a
2	'BFRL'	'FDRL'	'UB'	1	-	Relation to the Top of the Previous Record Forward Relation from the Top of This Record	1)	a
3	'NFRL'	'FDRL'	'UB'	1	-	Relation to the Top of the Following Record Backward Relation from the Top of This Record	1)	a
4	'FGSA'	'NORM'	'UB'	1	-	Street Address Flag	2)	a
5	'STAD'	'VRBL'	'BT'	'UH'	'CMST'	Street Address	3)	a
6	'RLXY'	'VRBL'	'BT'	'UH'	'CMP6'	Latitude and Longitude	4)	a
7	'LKID'	'VRBL'	'BT'	'UH'	'CMUL'	Link ID		a
8	'RPSN'	'NORM'	'UB'	1	-	Link Serial Number within Identical Link ID	5)	c

1) These fields describe the displacement from the top of the applicable data record to the previous or following record as the field relation.

When there are no previous and following records, specify 0.

2) The street address flag settings are as follows:

bit 7: Center link flag. 0: Disabled (Not center link), 1: Enabled (center link)

bit 6: Address representation flag

0: Address + "_" + Street name (+ City name + Area name)

1: Street name + "_" + Address (+ City name + Area name)

bit 5: Reserved (fixed at 0)

bit 4: Flag for start point in intersection, 0: Disabled (out of intersection), 1: Enabled (in intersection)

bit 3: Enabled side flag (left)

bit 2: 0: Disabled, 1: Odd, 2: Even, 3: Odd and even

bit 1: Enabled side flag (right)

bit 0: 0: Disabled, 1: Odd, 2: Even, 3: Odd and even

Note: These settings are defined with a street address.

- 3) For regular address data, supply a street address to a road identified by a link ID-representative figure point number.

For irregular address data, specify the applicable street address.

- 4) For regular address data, specify the coordinates of the link start point.

Because the latitude and longitude are data necessary to search for a link ID stored as main map data, specify the coordinates for identifying a stored parcel, in 'PID format. (Use caution because the reference in the main map data that is for the latitude and longitude of a parcel boundary changes.)

For irregular address data, specify the applicable coordinates.

- 5) When one link is long (such as an inter-town link), the numbers in the same link ID are indicated.

When the invalid value is 0 and no settings are needed for all the data, it is allowed to delete this item from the definition field.

11.A.2.14.1.4. POI Information Frame

name [Street Address POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	1		A Sequence of Street Address POI Information Records		a

name [Street Address POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	1	D	Relation to the Top of the Previous Record Forward Relation from the Top of This Record		a
2	1	2	D	Relation to the Top of the Following Record Backward Relation from the Top of This Record		a
3	2	1	B:...:B	Street Address Flag		a
4	3	B1	N:N:N:N	Street Address		a
5	O1	B2	N;N;N;N	Latitude and Longitude		a
6	O2	B3	N;N;N	Link ID		a
7	O3	1	N	Link Serial Number within Identical Link ID		c

11.A.2.14.1.5. Street Address Flag Settings

This data frame determines the link IDs corresponding to the addresses after the street names and address range are determined to display the map. Therefore, for the street addressees, separately store the start address and end address for each link, and if different ranges are used on the right side and left side, separately store a record for each side.

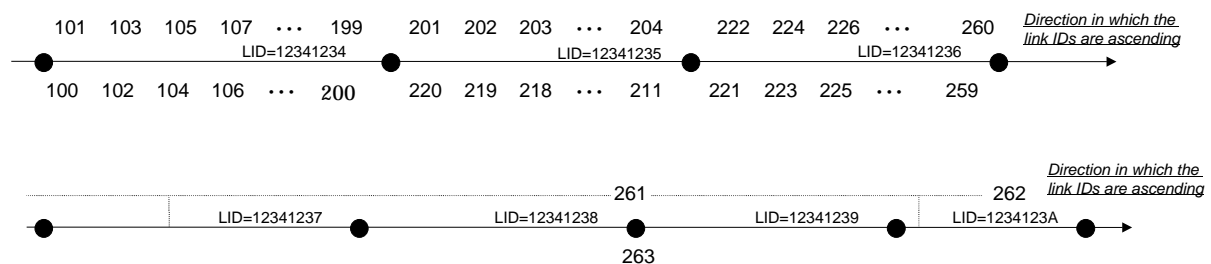
In addition, specify a center link flag into the first record so that the map can be displayed without any address entered. The representative coordinates are determined by calculating the center point of the link IDs where the center link flag (there is only one center link flag in the target record) is indicated using the map data.

No.	Reference from street address search frame	Street address flag			Street address	Link ID
		(left)	(right)	(center)		
0	A-City, AB-St.	Odd/even	Odd/even	Enabled	-1 - -1	0x10001002
1	A-City, ABC-St.	Odd	Even	x	100-200	0x12341234
2	A-City, ABC-St.	Odd/even	x	x	201-204	0x12341235
2	A-City, ABC-St.	x	Odd/even	x	220-211	0x12341235
3	A-City, ABC-St.	Even	Odd	x	221-260	0x12341236
4	A-City, ABC-St.	Even	Odd	x	260-261	0x12341237
5	A-City, ABC-St.	Odd/even	x	Enabled	261-261	0x12341238
6	A-City, ABC-St.	Odd/even	x	x	261-261	0x12341239
7	A-City, ABC-St.	Odd/even	x	x	261-262	0x1234123A
8	A-City, ABC-St.	x	Odd	x	263-263	0x12341238
9	A-City, ABC-St.	x	Odd	x	263-263	0x12341239
10	A-City, ABC-St.	x	Odd	x	263-263	0x1234123A

Note: Item No. 0 (A-City, AB-St.) indicates the example of settings for the representative point at a street without address data.

Note: Items No. 1 to 10 indicate the examples of settings for the street indicated in the figure below.

Note: x : Disabled (=0)



Note: Data is sorted in order of streets, cities (including all-city) (prefix addresses), smaller address ranges, link IDs, and representative shape point numbers.

Only one representative coordinate center link flag is contained in the record. To set it as the center (representative point) in the target address range, the center coordinates of the specified link are specified as the representative point. (Information about odd/even is ignored.)

11.A.2.14.2. Freeway POI Information Frame

11.A.2.14.2.1. Management Frame of POI Information Frame

name [Management Frame of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	16		Management Frame Header of POI Information Frame		a
2	16	X		Detailed POI Information Record - #1		a

11.A.2.14.2.1.1. Management Frame Header of POI Information Frame

name [Management Frame Header of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'PINR'	a
2	4	4	N	Number of Detailed POI Information Records - G	=1	a
3	8	4	SWS	Size of Detailed POI Information Record	1)	a
4	12	4	D	Offset to Detailed POI Information Record	2)	a

- 1) This field describes the size of the detailed POI information record. If there are two or more records, the records must have the same size.
- 2) The displacement from the top of the POI information frame management frame to the first record of a sequence of detailed POI information records is described, as it allows future expansion and manufacturer-specific data description.

11.A.2.14.2.2. Detailed POI Information Record

name [Detailed POI Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'DPOI'	a
2	4	4	SWS	Expansion Field Size	1)	a
3	8	4	D	Offset to Expansion Field	1)	a
4	12	4	SWS	POI Information Definition Frame Size	2)	a
5	16	4	D	POI Information Definition Frame Address	3)	a
6	20	4	SWS	POI Information Data Frame Size	2)	a
7	24	4	D	POI Information Data Frame Address	3)	a
8	28	4	SWS	Size of the Record of POI Information Data Frame	4)	a
9	32	4	N	Total Number of the Records of POI Information Data Frame	5)	a
10	36	B1		A Sequence of Additional Frame Address(es) (#1 to #2)	3)	c
11	O1	B2		Expansion Field		c
12	O2	B3		Padding Field		c

Note: Items 10 and 11 are optional in the target detailed POI information record since their areas can be determined by items 3, 5, and 7. However, the detailed POI information record size specified in the management frame of the higher POI information frame must be satisfied by items 10 to 12.

- 1) Expansion Field Size and Offset

These fields describe the displacement from the top of the target detailed POI information record to the top of the expansion field as the offset to the expansion field.

When there is no expansion field, specify invalid values as the size and offset.

- 2) These fields describe the total size of the target data frame.
- 3) These fields describe the storage address of the target data frame as described in 7) of Section 11.A.2.1.2 according to the principles described in the "address description declaration" for the target POI information management record.
- 4) Size of the Record of POI Information Data Frame

Since the record length is variable, specify the maximum record size of the target data frame.

- 5) Total Number of the Records of POI Information Data Frame

This field describes the total number of records in the POI information data frame.

11.A.2.14.2.3. POI Information Definition Frame

No.	Usage	Description type	Description type declaration	Number of data items	Additional information	Comment	Remarks	Classification
1	'DCTF'	'REAL'	-	-	(10)	Definition Field Declaration		a
2	'BFRL'	'FDRL'	'WD'	1	-	Relation to the Top of the Previous Record Forward Relation from the Top of This Record	1)	a
3	'NFRL'	'FDRL'	'WD'	1	-	Relation to the Top of the Following Record Backward Relation from the Top of This Record	1)	a
4	'RLXY'	'VRBL'	'BT'	'UH'	'CMP6'	Latitude and Longitude	2)	a
5	'STFG'	'NORM'	'UB'	1	-	Storage Data Flag		a
6	'GLKI'	'NORM'	'UB'	1	-	Navigable Link Information	3)	c
7	'ARCD'	'NORM'	'UL'	1	-	Area Code	4)	c
8	'LKID'	'VRBL'	'BT'	'UH'	'CMUL'	Link ID		c
9	'GDXY'	'VRBL'	'BT'	'UH'	'CMP6'	Navigable POI Information Latitude and Longitude		c
10	'LGNO'	'NORM'	'UB'	1	-	Language Number	5)	c
11	'NAME'	'VRBL'	'CH'	'UB'	'CMCH'	Name		c

- 1) These fields describe the displacement from the top of the applicable data record to the previous or following record as the field relation.

When there are no previous and following records, specify 0.

- 2) This field describes the navigable POI information latitude and longitude only for a facility that exists.

When no settings are specified and the facility has no navigable link ID, the route is searched using the latitude and longitude (map displayed position) as the latitude and longitude of the navigable final point.

- 3) This field describes information about the navigable link ID as follows:
bits 7 to 4: Dummy

bit 3: Navigable link type. 0: Navigable, 1: Non navigable

A facility that contains the destination point out of the target navigable link is handled as a non navigable facility.

bit 2: Composite intersection flag 0: Not composite intersection, 1: Composite intersection

bit 1: POI information side information

bit 0: 0: Unknown, 1: Right, 2: Left, 3: Invalid

The direction of a link is defined according to the ascending order of link IDs (from the left to the right).

4) This field describes the area code.

5) This field describes the language number corresponding to the META definition.

When one language is used for representation (the additional information 'CMCH' for 'NAME'), specify the language number corresponding to the target record name. It is allowed to omit it when it is the same with the default language number implicitly declared at a higher level. In that case, the classification is 'c.'

11.A.2.14.2.4. POI Information Frame

name [Freeway POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	1		A Sequence of Freeway POI Information Records		a

name [Freeway POI Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	D	Relation to the Top of the Previous Record Forward Relation from the Top of This Record		a
2	2	2	D	Relation to the Top of the Following Record Backward Relation from the Top of This Record		a
3	4	B1	N:N:N:N	Latitude and Longitude		a
4	O1	1	B:....:B	Storage Data Flag		a
5	O2	1	B:....:B	Navigable Link Information		c
6	O3	4	N	Area Code		c
7	O4	B2	N:N:N	Link ID		c
8	O5	B3	N:N:N:N	Navigable POI Information Latitude and Longitude		c
9	O6	1	N	Language Number		c
10	O7	B5	N:C	Name		c

11.A.2.14.3. Intersection POI Information Frame

11.A.2.14.3.1. Intersection POI Information Frame (Step-by-step Retrieval Method)

11.A.2.14.3.1.1. Management Frame of POI Information Frame

name [Management Frame of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	16		Management Frame Header of POI Information Frame		a
2	16	X		Detailed POI Information Record - #1		a

11.A.2.14.3.1.1.1. Management Frame Header of POI Information Frame

name [Management Frame Header of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'PINR'	a
2	4	4	N	Number of Detailed POI Information Records - G	=1	a
3	8	4	SWS	Size of Detailed POI Information Record	1)	a
4	12	4	D	Offset to the Top of Detailed POI Information Record	2)	a

- 1) This field describes the size of the detailed POI information record. If there are two or more records, the records must have the same size.
- 2) The displacement from the top of the POI information frame management frame to the first record of a sequence of detailed POI information records is described, as it allows future expansion and manufacturer-specific data description.

11.A.2.14.3.2.1. Detailed POI Information Record

name [Detailed POI Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'DPOI'	a
2	4	4	SWS	Expansion Field Size	1)	a
3	8	4	D	Offset to Expansion Field	1)	a
4	12	4	SWS	POI Information Definition Frame Size	2)	a
5	16	4	D	POI Information Definition Frame Address	3)	a
6	20	4	SWS	POI Information Data Frame Size	2)	a
7	24	4	D	POI Information Data Frame Address	3)	a
8	28	4	SWS	Size of the Record of POI Information Data Frame	4)	a
9	32	4	N	Total Number of Records of POI Information Data Frame	5)	a
10	36	B1		A Sequence of Additional Frame Address(es) (#1 to #2)	3)	c
11	O1	B2		Expansion Field		c
12	O2	B3		Padding Field		c

Note: Items 10 and 11 are optional in the target detailed POI information record since their areas can be determined by items 3, 5, and 7. However, the detailed POI information record size specified in the management frame of the higher POI information frame must be satisfied by items 10 to 12.

1) Expansion Field Size and Offset

The field describes the displacement from the top of the target detailed POI information record to the top of the expansion field as the offset to the expansion field.

When there is no expansion field, specify invalid values as the size and offset.

2) These fields describe the total size of the target data frame.

3) Address Representation

These fields describe the storage address of the target data frame as described in 9) of Section 11.2.2 according to the principles described in the "address description declaration" for the target POI information management record.

4) Size of the Record of POI Information Data Frame

Since the record length is variable, specify the maximum record size of the target data frame.

5) Total Number of the Records of POI Information Data Frame

This field describes the total number of records in the POI information data frame.

11.A.2.14.3.2.3.POI Information Definition Frame

No.	Usage	Description type	Description type declaration	Number of data items	Additional information	Comment	Remarks	Classification
1	'DCTF'	'REAL'	-	-	(7)	Definition Field Declaration		a
2	'BFRL'	'FDRL'	'UB'	1	-	Relation to the Top of the Previous Record Forward relation from the Top of This Record	1)	a
3	'NFRL'	'FDRL'	'UB'	1	-	Relation to the Top of the Following Record Backward Relation from the Top of This Record	1)	a
4	'STID'	'VRBL'	'BT'	'UH'	'CMUL'	Street ID	2)	a
5	'SIDC'	'VRBL'	'BT'	'UH'	'CMUL'	Cross street ID	3)	a
6	'ARCD'	'NORM'	'UL'	1	-	Area Code	4)	a
7	'ZIPN'	'VRBL'	'CH'	'UB'	'CMCH'	Zip Code	5)	d
8	'RLXY'	'VRBL'	'BT'	'UH'	'CMP6'	Latitude and Longitude		a

1) These fields describe the displacement from the top of the applicable data record to the previous or following record as the field relation. When there are no previous and following records, specify 0.

2) This field describes the street ID.

3) This field describes the ID of the street that intersects with the street of police box 4.

4) This field describes the area code.

Basically, specify the area code with a City code. If two or more objects are identified by the street ID, cross street ID, and City name, specify an area code such as a lower layer (Settlement).

5) This field describes the zip code.

The zip code is required only if two or more intersections are identified by the same street ID, cross street ID, and area code. Otherwise, set 0 character.

Note: POI information data frames are arranged in order by street ID, in order by cross street ID, in order by City name that matches the order by area code.

11.A.2.14.3.2.4. POI Information Frame

name [Intersection POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	1		A Sequence of Intersection POI Information Records		a

name [Intersection POI Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	1	D	Relation to the Top of the Previous Record Forward Relation from the Top of This Record		a
2	1	1	D	Relation to the Top of the Following Record Backward Relation from the Top of This Record		a
3	2	B1	N:N:N	Street ID		a
4	O1	B2	N:N:N	Cross Street ID		a
5	O2	4	N	Area Code		a
6	O3	B3	N:C	Zip Code		c
7	O4	B4	N:N:N:N	Latitude and Longitude		a
8	O5	1	BR	Padding Field		c

11.A.2.14.4. POI Information Frame

11.A.2.14.4.1. Management Frame of POI Information Frame

name [Management Frame of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	16		Management Frame Header of POI Information Frame		a
2	16	X		Detailed POI Information Record - #1		a

11.A.2.14.4.1.1. Management Frame Header of POI Information Frame

name [Management Frame Header of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'PINR'	a
2	4	4	N	Number of Detailed POI Information Records - G	=1	a
3	8	4	SWS	Size of Detailed POI Information Record	1)	a

4	12	4	D	Offset to the Detailed POI Information Record	2)	a
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- 1) This field describes the size of the detailed POI information record. If there are two or more records, the records must have the same size.
- 2) The displacement from the top of the POI information frame management frame to the first record of the detailed POI information record is described, as it allows future expansion and manufacturer-specific data description.

11.A.2.14.4.2. Detailed POI Information Record

name [Detailed POI Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'DPOI'	a
2	4	4	SWS	Expansion Field Size	1)	a
3	8	4	D	Offset to Expansion Field	1)	a
4	12	4	SWS	POI Information Definition Frame Size	2)	a
5	16	4	D	POI Information Definition Frame Address	3)	a
6	20	4	SWS	POI Information Data Frame Size	2)	a
7	24	4	D	POI Information Data Frame Address	3)	a
8	28	4	SWS	Size of the Record of POI Information Data Frame	4)	a
9	32	4	N	Total Number of the Records POI Information Data Frame	5)	a
10	36	B1		A Sequence of Additional Frame Address(es) (#1 to #2)	3)	c
11	O1	B2		Expansion Field		c
12	O2	B3		Padding Field		c

Note: Items 10 and 11 are optional in the target detailed POI information record since their areas can be determined by items 3, 5, and 7. However, the detailed POI information record size specified in the management frame of the higher POI information frame must be satisfied by items 10 to 12.

- 1) Expansion Field Size and Offset

The field describes the displacement from the top of the target detailed POI information record to the top of the expansion field as the offset to the expansion field.

When there is no expansion field, invalid values (0) is assigned to the size and offset.

- 2) These fields describe the total size of the target data frame.
- 3) Address Representation

These fields describe the storage address of the target data frame as described in 7) of Section 11.A.2.1.2 according to the principles described in the "address description declaration" for the target POI information management record.

- 4) Size of the Record of POI Information Data Frame

Since the record length is variable, specify the maximum record size of the target data frame.

- 5) Total Number of the Records POI Information Data Frame

This field describes the total number of records in the POI information data frame.

11.A.2.14.4.3. POI Information Definition Frame

No.	Usage	Description type	Description type declaration	Number of data items	Additional information	Comment	Remarks	Classification
1	'DCTF'	'REAL'	-	-	(18)	Definition Field Declaration		a
2	'BFRL'	'FDRL'	'WD'	1	-	Relation to the Top of the Previous Record Forward Relation from the Top of This Record	1)	a
3	'NFRL'	'FDRL'	'WD'	1	-	Relation to the Top of the Following Record Backward Relation from the Top of This Record	1)	a
4	'ARCD'	'NORM'	'UL'	1	-	Area Code	2)	a
5	'RLXY'	'VRBL'	'BT'	'UH'	'CMP6'	Latitude and Longitude		a
6	'NAME'	'VRBL'	'CH'	'UB'	'CMCH' or 'CMMC'	Name		a
7	'STFG'	'NORM'	'UB'	2	-	Storage Data Flag		a
8	'LVXY'	'NORM'	'UH'	1	-	Coordinate Accuracy		c
9	'MPSC'	'NORM'	'UB'	1	-	Displayed Map Scale	4)	c
10	'GLKI'	'NORM'	'UB'	1	-	Navigable Link Information	5)	c
11	'LKID'	'VRBL'	'BT'	'UH'	'CMUL'	Link ID	6)	c
12	'GDXY'	'VRBL'	'BT'	'UH'	'CMP6'	Navigable POI Information Latitude and Longitude	7)	c
13	'CTGY'	'VRBL'	'UW'	'UB'	-	A Sequence of Type Codes		c
14	'LGNO'	'NORM'	'UB'	1	-	Language Number	3)	c
15	'YOMI'	'VRBL'	'CH'	'UB'	'CMCH' or 'CMMC'	Reading (Name)		c
16	'TELE'	'VRBL'	'UH'	'UH'	'CMBD'	Telephone Number	8)	c
17	'ZIPN'	'VRBL'	'CH'	'UB'	'CMCH'	Zip Code	7)	c
18	'ADNM'	'VRBL'	'CH'	'UB'	'CMCH'	Address Name	8)	c
19	'TELC'	'VRBL'	'CH'	'UB'	'CMCH'	Punning for Telephone Number	9)	c

- 1) These fields describe the displacement from the top of the applicable data record to the previous or following record as the field relation. When there are no previous and following records, assign 0 to these fields.
- 2) This field describes the area code for the target object.
- 3) This field describes the language number corresponding to the META definition.

When one language is used for representation (the additional information 'CMCH' for 'NAME'), specify the language number corresponding to the target record name. It is allowed to omit it when it is the same with the default language number implicitly declared at a higher level. In that case, the classification is 'c.'

4) Map Display Scale

Represent the radius of the major axis in the direction of latitude/longitude of the area to be displayed with 10-m LSB precision setting the representation latitude and longitude to the center as follows:

Upper 4 bits: Mantissa x

Lower 4 bits: Characteristic y

$$\text{Displayed map scale (10 m/LSB)} = x \cdot 2^y$$

Any representations that calculate the same result are allowed. When the expected value is not an exactly represented value such as 13 m, specify a larger value that can be represented (the value that must be closest to the expected value).

5) This field describes information about the navigable link ID as follows:

bits 7 to 4: Dummy

bit 3: Navigable link type. 0: Navigable, 1: Non navigable

A facility that contains the destination point out of the target navigable link is handled as a non navigable facility.

bit 2: Composite intersection flag. 0: Not composite intersection, 1: Composite intersection

bit 1: POI information side information

bit 1: 0: Unknown, 1: Right, 2: Left, 3: Invalid

The direction of a link is defined according to the ascending order of link IDs (from the left to the right).

6) This field describes the navigable POI information latitude and longitude only for a facility that exists.

When no settings are specified and the facility has no navigable link ID, the route is searched using the latitude and longitude (map displayed position) as the latitude and longitude of the navigable final point.

7) These fields describe the telephone number and zip code.

8) These fields describe the address names as follows:

Sort data in order of address names except for names that can be decoded using the area code that is defined in the target record (in U.S., the address name + street name format is normally used, and data is sorted in order of street names and address names).

9) Punning for Telephone Number

This field describes the telephone number represented by alphabet.

name [POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	1		A Sequence of POI Information Records		a

name [POI Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	D	Relation to the Top of the Previous Record Forward Relation from the Top of This Record		a
2	2	2	D	Relation to the Top of the Following Record Backward Relation from the Top of This Record		a
3	4	4	N	Area Code		a
4	8	B1	N:N:N:N	Latitude and Longitude		a
5	O1	1	N	Language Number		c

No.	offset	Data length	Data type	Item name	Remarks	Classification
6	O2	B2	N:C	Name		a
7	O3	2	B:...:B	Storage Data Flag		a
8	O4	1	N	Coordinate Accuracy		c
9	O5	1	N	Displayed Map Scale		c
10	O6	1	B:...:B	Navigable Link Information		c
11	O7	B3	N:N:N	Link ID		c
12	O8	B4	N:N:N:N	Navigable POI Information Latitude and Longitude		c
13	O9	B5	N:N...N	A Sequence of Type Codes		c
14	O10	B6	N:C	Reading (name)		c
15	O11	B7	N:BCD	Telephone Number		c
16	O12	B8	N:C	Zip Code		c
17	O13	B9	N:C	Address Name		c
18	O14	B10	N:C	Punning for Telephone Number		c
19	O15	1	BR	Padding Field		c

11.A.2.14.5. Zip Code POI Information Frame

11.A.2.14.5.1. Management Frame of POI Information Frame

name [Management Frame of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	16		Management Frame Header of POI Information Frame		a
2	16	X		Detailed POI Information Record - #1		a

11.A.2.14.5.1.1. POI Information Frame Management Frame Header

name [Management Frame Header of POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'PINR'	a
2	4	4	N	Number of Detailed POI Information Records - G	=1	a
3	8	4	SWS	Size of Detailed POI Information Record	1)	a
4	12	4	D	Offset to the Top of Detailed POI Information Record	2)	a

- 1) This field describes the size of the detailed POI information record. If there are two or more records, the records must have the same size.
- 2) The displacement from the top of the POI information frame management frame to the first record of a sequence of detailed POI information records is described, as it allows future expansion and manufacturer-specific data description.

11.A.2.14.5.2. Detailed POI Information Record

name [Detailed POI Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'DPOI'	a
2	4	4	SWS	Expansion Field Size	1)	a
3	8	4	D	Offset to Expansion Field	1)	a
4	12	4	SWS	POI Information Definition Frame Size	2)	a
5	16	4	D	POI Information Definition Frame Address	3)	a
6	20	4	SWS	POI Information Data Frame Size	2)	a
7	24	4	D	POI Information Data Frame Address	3)	a
8	28	4	SWS	Size of the Record of POI Information Data Frame	4)	a
9	32	4	N	Total Number of the Record of POI Information Data Frame	5)	a
10	36	B1		A Sequence of Additional Frame Address(es) (#1 to #2)	3)	c
11	O1	B2		Expansion Field		c
12	O2	B3		Padding Field		c

Note: Items 10 and 11 are optional in the target detailed POI information record since their areas can be determined by items 3, 5, and 7. However, the detailed POI information record size specified in the management frame of the higher POI information frame must be satisfied by items 10 to 12.

1) Expansion Field Size and Offset

The field describes the displacement from the top of the target detailed POI information record to the top of the expansion field as the offset to the expansion field.

When there is no expansion field, specify invalid values (0) as the size and offset.

2) These fields describe the total size of the target data frame.

3) Address Representation

These fields describe the storage address of the target data frame as described in Document (1) at 9) of Section 11.2.2 according to the principles described in the "address description declaration" for the target POI information management record.

4) Size of the Record of POI Information Data Frame

Since the record length is variable, specify the maximum record size of the target data frame.

5) Total Number of Records of POI Information Data Frame

This field describes the total number of records in the POI information data frame.

11.A.2.14.5.3. POI Information Definition Frame

No.	Usage	Description type	Description type declaration	Number of data items	Additional information	Comment	Remarks	Classification
1	'DCTF'	'REAL'	-	-	(7)	Definition Field Declaration		a
2	'BFRL'	'FDRL'	'WD'	1	-	Relation to the Top of the Previous Record Forward Relation from the Top of This Record	1)	a
3	'NFRL'	'FDRL'	'WD'	1	-	Relation to the Top of the Following Record Backward Relation from the Top of This Record	1)	a
4	'STFG'	'NORM'	'UB'	1	-	Storage Data Flag		a
5	'ARCD'	'NORM'	'UL'	1	-	Area Code	2)	a
6	'RLXY'	'VRBL'	'BT'	'UH'	'CMP6'	Latitude and Longitude	3)	a
7	'LGNO'	'NORM'	'UB'	1	-	Language Number	4)	c
8	'NAME'	'VRBL'	'CH'	'UB'	'CMMC' or 'CMCH'	Name	5)	a

- 1) These fields describe the displacement from the top of the applicable data record to the previous or following record as the field relation.

When there are no previous and following records, specify 0.

- 2) This field describes the area code for the target object.
- 3) This field describes the navigable POI information latitude and longitude only for a facility that exists.

When no settings are specified and the facility has no navigable link ID, the route is searched using the latitude and longitude (map displayed position) as the latitude and longitude of the navigable final point.

- 4) This field describes the language number corresponding to the META definition.

When one language is used for representation (the additional information 'CMCH' for 'NAME'), specify the language number corresponding to the target record name. It is allowed to omit it when it is the same with the default language number implicitly declared at a higher level. In that case, the classification is 'c.'

- 5) This field describes the zip code as the name.

11.A.2.14.5.4. POI Information Frame

name [Zip Code POI Information Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	1		A Sequence of Zip Code POI Information Records		a

name [Zip Code POI Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	D	Relation to the Top of the Previous Record Forward Relation from the Top of This Record		a
2	2	2	D	Relation to the Top of the Following Record Backward Relation from the Top of This Record		a
3	4	1	B:...:B	Storage Data Flag		a
4	5	4	N	Area Code		a
5	O1	B1	N:N:N:N	Latitude and Longitude		c
6	O2	1	1	Language Number		c
7	O3	B2	N:N:N	Name		c
8	O4	1	BR	Padding Field		c