

11.A.2.3. Zone Search

The zone search frame is not used for search zone selection by the user. This search frame is used to identify the search frame of the next level, default language number, and element-specific character information, according to the search zone (desired language) selected by the user as described in Section 11.A.2.2.

Some manufacturers may produce media which allows just single-zone search. Even on that type of media, the zone search frame is not omitted.

11.A.2.3.1. Zone Search Frame

11.A.2.3.1.1. Management Frame of Search Frame

name [Management Frame of Search Frame]

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

11.A.2.3.1.1.1. Search Frame Management Frame Header

name [Management Frame Header of Search Frame]

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

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

11.A.2.3.1.2 Detailed Search Information Record

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'SRZN'	a
2	4	4	SWS	Expansion Field Size	1)	a
3	8	4	D	Offset to Expansion Field	1)	a
4	12	4	SWS	Category Definition Frame Size	2)	a
5	16	4	D	Category Definition Frame Address	3)	a
6	20	4	SWS	Category Data Frame Size	2)	a
7	24	4	D	Category Data Frame Address	3)	a
8	28	4	C	Default Keyboard Designation	NULL	a
9	32	4	SWS	Category Parent Record Size	4)	a
10	36	4	SWS	Category Option Record Size	5)	a

11	40	4	SWS	First-level Category Size	6)	a
12	44	4	N	Number of the Option Items of First-level Category	6)	a
13	48	4	D	Offset to First-level Category	6)	a
14	52	4	C	Keyboard Designation for the First-level Category	NULL	a
15	56	4	SWS	Matching Data Definition Frame Size	2)	a
16	60	4	D	Matching Data Definition Frame Address	3)	a
17	64	4	SWS	Matching Data Frame Size	2)	a
18	68	4	D	Matching Data Frame Address	3)	a
19	72	4	SWS	Size of the Record of Matching Data Frame	7)	a
20	76	4	N	Total Number of the Records of Matching Data Frame	8)	a
21	80	4	N	Default POI Information Serial Number	9)	a
22	84	4	SWS	Next-level Data Frame Size	10)	a
23	88	4	D	Address of Next-level Data Frame	10)	a
24	92	B1		Character Information Data List for Representation Items	11)	a
25	O1	B2		A Sequence of Additional Frame Address(es) (#1 to #n)	2)	c
26	O2	B3		Expansion Field		c
27	O3	B4		Padding Field		c

Note: Positions of items 25 and 26 are optional in this detailed search information record because their areas can be determined by items 5, 7, 16, and 18. However, the detailed search information record size specified in the management frame header of the higher search frame must be satisfied by items 25 to 27.

1) Expansion Field Size and Offset

The field describes the displacement from the top of the detailed search information record to the top of the expansion field as the offset to the expansion field. Since this example does not have an 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 address of the target data frame in the representation format of 7) in Section 11.A.2.1.2.

4) This field describes the size of the category parent record.

5) This field describes the size of a single category option record.

6) Size, Number of Options Records, and Offset of the First-level Category

These fields describe the size, number of option items, and displacement from the top of the category data frame, of the category table to be read first (which contains all the option items). For the second- and subsequent-level category tables, the record size, number of option items, and offset should be specified in the parent record of the actual data.

7) Record Size of Matching Data Frame

Since this example does not require an matching data frame, specify an invalid value.

8) Total Number of the Records of Matching Data Frame

Since this example does not require an matching data frame, specify an invalid value.

9) Default POI Information Serial Number

Since this example does not directly call the POI Information, specify an invalid value 0.

10) Size and Address of Next-level Data Frame

Since this example does not have a next-level search frame, specify an invalid value.

11) Character Information Data List for Representation Item

This field describes a search name, which is determined by the function specifications of the system.

ex) English: "SEARCH ZONE"

11.A.2.3.1.3. Category Data Definition Frame

No.	Usage	Description type	Description type declaration	Number of data items	Additional information	Comment	Remarks	Classification
1	'DCTF'	'REAL'	-	-	(9)	Definition Field Declaration		a
2	'SELN'	'NORM'	'LG'	1	-	Number of Option Items		a
3	'DCSF'	'REAL'	-	-	(7)	Option Definition Field Declaration		a
4	'SZCD'	'NORM'	'UB'	1	-	Search Zone Code	1)	a
5	'LGNO'	'NORM'	'UB'	1	-	Default Language Number	2)	c
6	'DCFN'	'NORM'	'UB'	1	-	Default Character Element Number	3)	a
7	'NXKD'	'NORM'	'UH'	1	-	Next-level Data Frame Type	=0	a
8	'NXFN'	'NORM'	'UH'	1	-	Next-level Data Frame Serial Number	=0	a
9	'NXST'	'OFST'	'LG'	1	-	Offset to Next-level Data Frame	4)	a
10	'NXFM'	'NORM'	'CH'	16	-	Next-level Data Frame File Name	5)	a

1) This field describes a search zone code corresponding to the zone selected as described in Section 11.A.2.2.

2) This field describes a reference language number used in the search frames of the subsequent levels.

Data can be configured using multiple languages in a single search zone.

3) This field describes a default target decode number of the element-specific character information.

The volumes managed under this frame are subjected to string decoding, starting from the specified element-specific language number.

If the number is not specified, specify an invalid value 0:NULL.

4) This field describes a displacement from the top of the file specified with 'NXFM' to the target search frame management frame.

5) For this example, specify the name of the file containing the next-level search frame.

This field can be specified only when the next-level data frame type is 0, or a search frame.

Note: The category tables are placed in ascending order of search zone codes.

11.A.2.3.1.4. Category Data Frame

name [Zone Search Category Data Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	B1		A Sequence of the Zone Search Category Tables		a

11.A.2.3.1.4.1. Category Table

name [Zone Search Category Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	B1		Zone Search Category Parent Record		a
2	O1	B2		A Sequence of Zone Search Category Option Records		a

name [Zone Search Category Parent Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	N	Number of Option Items		a

name [Zone Search Category Option Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	N	Search Zone Code		a
2	4	1	N	Default Language Number		c
3	5	1	N	Default Character Element Serial Number		a
4	6	1/2	N	Next-level Data Frame Type		a
5	6.5	1/2	N	Next-level Data Frame Number		a
6	7	4	D	Offset to Next-level Data Frame		a
7	11	16	C	Next-level Data Frame File Name		a
8	27	1	BR	Padding Field		a

11.A.2.3.2. File Configuration of Zone Search

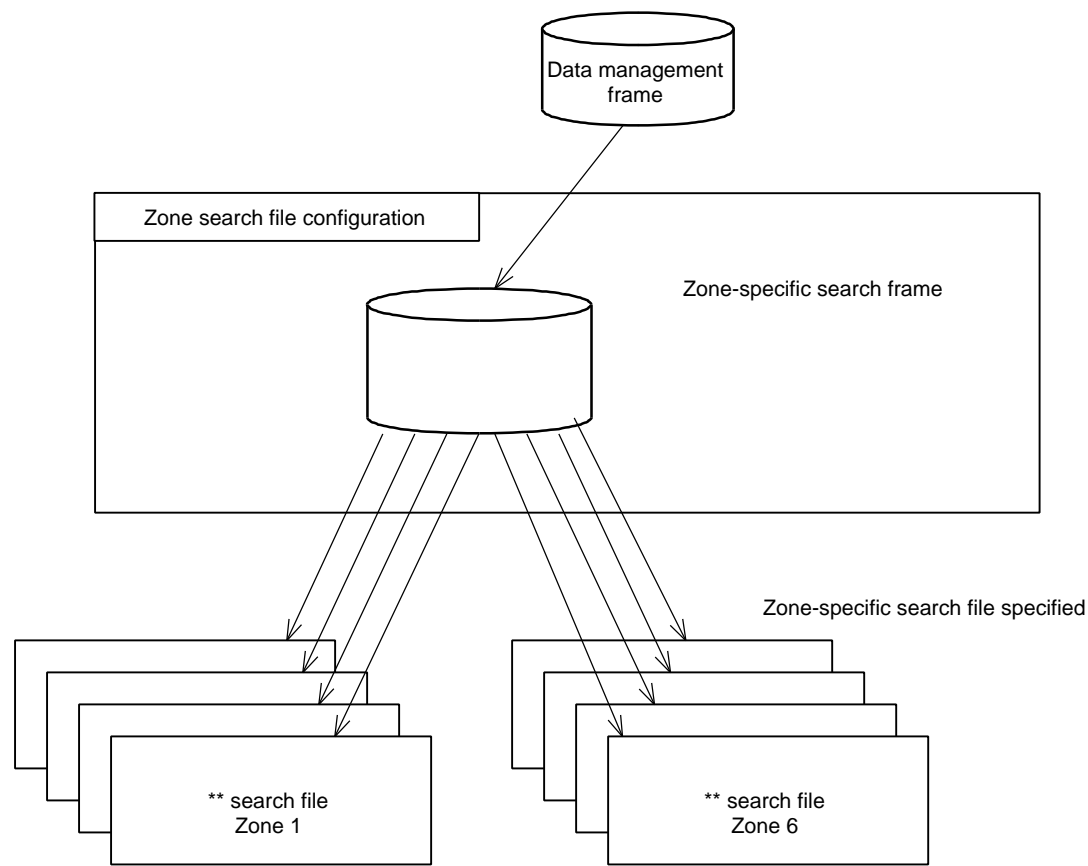


Figure 11.A.2.3.1 File Configuration of Zone Search

11.A.2.3.3. Zone Search Configuration

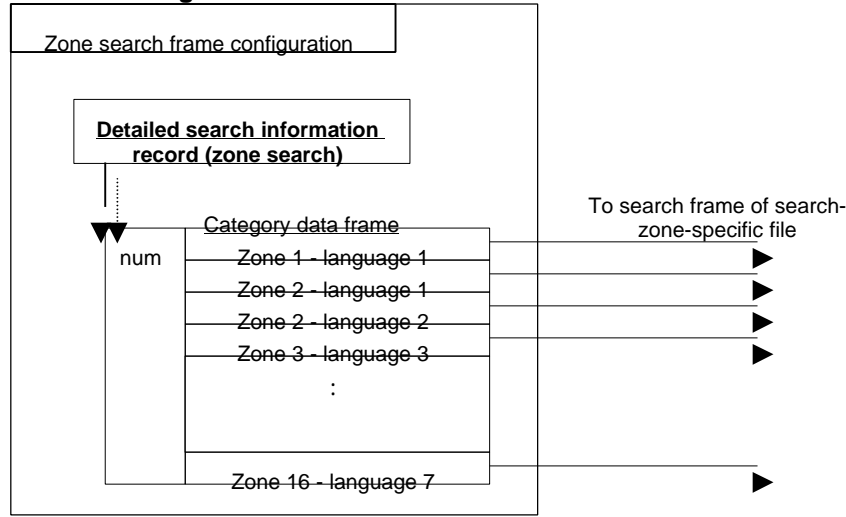


Figure 11.A.2.3.2 Zone Search Frame Configuration