Date: 18 April 2006
To: T10 Technical Committee
From: Tim Symons
Subject: 06-203r0 SMP REPORT ZONE ROUTE TABLE function.

Revision Information

- Revision 0 : Proposal extracted from 06-019r5 SAS-2 Zoning proposal.

Referenced Document

SAS-2 revision 3

10.4.3.15 REPORT ZONE PERMISSION function

The REPORT ZONE PERMISSION function returns a set of zone permission table entries. This function shall be supported by all zoning devices and may be requested by any SMP initiator.

Table 1 defines the REPORT ZONE PERMISSION request format.

Table 1 – REPORT ZONE PERMISSION request

Byte\Bit	7	6	5	4	3	2	1	0
0	SMP FRAME TYPE (40h)							
1	FUNCTION (03h)							
2	Reserved							
3	REQUEST LENGTH (01h)							
4	Reserved							
5								
6	START SOURCE ZONE GROUP INDEX							
7	NUMBER OF ZONE PERMISSION ENTRIES							
8	(MSB)			CRC				
11								(LSB)

The SMP FRAME TYPE field shall be set to 40h.

The FUNCTION field shall be set to 03h.

The REQUEST LENGTH field shall be set to 01h.

The START SOURCE ZONE GROUP INDEX field specifies the zone group of the first zone permission entry table being requested.

The NUMBER OF ZONE PERMISSION ENTRIES field specifies the number of zone permission entries being requested.

The CRC field is defined in 7.8.1.

Table 2 defines the REPORT ZONE PERMISSION response format.

Table 2 – REPORT ZONE PERMISSION response

Byte\Bit	7	6	5	4	3	2	1	0
0	SMP FRAME TYPE (41h)							
1	FUNCTION (03h)							
2	FUNCTION RESULT							
3	RESPONSE LENGTH ((n - 7) / 4)							
4	Reserved							
5								
6	START SOURCE ZONE GROUP INDEX							
7	ZONE PERMISSION CONFIGURING	NUMBER OF ZONE PERMISSION ENTRIES ((n – 11) / 16)						
8	First ZONE PERMISSION entry descriptor (See Table 3)							
23								
…	…							
n - 19	Last ZONE PERMISSION entry descriptor (See Table 3)							
n - 4								
n - 3	(MSB)	CRC						
n								(LSB)

The SMP FRAME TYPE field shall be set to 41h.

The FUNCTION field shall be set to 03h.

The FUNCTION RESULT field is defined in 10.4.3.2

The RESPONSE LENGTH field shall be set to ((n - 7) / 4).

The START ZONE ENTRY INDEX field indicates the zone group of the first zone permission entry being returned in the first zone permission table entry descriptor.

The ZONE PERMISSION CONFIGURING bit set to one indicates that the zoning expander device is in the process of zone permission table update. The ZONE PERMISSION CONFIGURING bit set to zero indicates that configuring is complete.

The NUMBER OF ZONE PERMISSION ENTRIES field indicates the number of zone permission entry descriptors being returned ((n – 11) / 16).

Table 3 defines the zone permission entry descriptor format. If the zone permission entry indexed from the START SOURCE ZONE GROUP INDEX field does not exist then response shall return a function result of INDEX DOES NOT EXIST in the response frame (see 10.4.3.2).

Table 3 defines the zone permission entry descriptor format.

Table 3 - Zone permission entry descriptor format

Byte\Bit	7	6	5	4	3	2	1	0
0	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	1	0
1	ZP [15,Y]							ZP [8,Y]
…	…			Zone permission entries				…
15	ZP [127,Y]							ZP [120,Y]

The zone permission entry descriptor contains access permission for a zone group (Y) defined in Table 23 (see 4.8.3.3).

The CRC field is defined in 7.8.1.