Insert the following clause after the last clause introduced by P802.1ag, P802.1ah, P802.1aj, or P802.1ak:

27. Shortest Path Bridging (SPB)

27.1 Protocol design requirements

27.2 Protocol support requirements

27.3 Protocol design goals

27.4 SPB Configuration

The configuration mechanisms used by MST Bridges to allocate each VLAN to a specified MSTI or the IST within an MST Region and used to allocate VIDs for PBB-TE (*25.10*) can be summarized as follows:

a) The VID to FID allocation table (8.8.7) is used to allocate each VID to a FID.
b) The FID to MSTID Allocation Table is used to associate an MSTID with each FID (8.8.7, *12.2.2*):
    1) The IST is identified by the reserved MSTID value 0.
    2) The use of PBB-TE is identified by the reserved MSTID values TE-MSTID (0xFFE)
    3) Each MSTID in the MSTI List identifies an MSTI. The reserved MSTID values 0 and TE-MSTID are never used in the MSTI List.

SPT Bridges extend these configuration mechanisms as follows:

c) The VID to FID allocation table is used to allocate Base VIDs to FIDs, and to allocate VIDs for use as SPVIDs. Potential SPVIDs are allocated to the reserved FID value 0xFFF. SPVIDs in use are reported by management as allocated to a FID supported by the implementation (see 27.12).
d) The MSTID value 0xFFF identifies FID values, including 0xFFF, that are not used to filter frames.
e) The following MSTID values identify both the FIDs used by SPB, and the method used to support the VLANs identified by the Base VIDs allocated to those FIDs:
    4) 0xFFC—SPBM.
    5) 0xFFD—SPBV

This standard recommends default VID to FID and FID to MSTID allocations (27.2, 8.9.4) for STP Bridges that enable plug-and-play support of both the CIST and shortest path bridging using SPBV.

Table 27-1 shows the VID to FID allocation table and Table 27-2 shows the FID to MSTID allocation table for the configuration example shown in Figure 27-1 for an SPT Region.

(or alternatively:) Table 27-3 shows the VID to FID and the FID to MSTID allocation tables in a single table for the configuration example shown in Figure 27-1 for an SPT Region.

Base VID 0x005 is allocated to the IST and VIDs from 0x100 to 0x1FF form the SPVID Pool. Base VIDs 0x00B, 0x00C and 0x00D are configured to operate in SPBM mode. Base VIDs 0x01A, 0x01B and 0x01C operate in SPBV mode in the example.

Table 27-1—Allocation of VIDs to FIDs in an SPT Region (example)

VID	FID
0x005	0x005
0x00B	0x00B
0x00C	0x00C
0x00D	0x00C
0x01A	0x01A
0x01B	0x01B
0x01C	0x01B
0x100 - 0x1FF	0xFFF

Table 27-2—Allocation of FIDs to MSTIDs in an SPT Region (example)

FID	MSTID
0x005	0x000
0x00B	0xFFC
0x00C	0xFFC
0x01A	0xFFD
0x01B	0xFFD
0xFFF	0xFFF

Table 27-3—Allocation of VIDs to FIDs and FIDs to MSTIDs in an SPT Region (example)

VID	FID	MSTID
0x005	0x005	0x000
0x00B	0x00B	0x00B
0x00C	0x00C	0x00C
0x00D	0x00C	
0x01A	0x01A	0x01A
0x01B	0x01B	0x01B
0x01C	0x01B	
0x100 - 0x1FF	0xFFF	0xFFF

27.5 SPT Region and ISIS-SPB adjacency determination

27.6 ISIS-SPB Information

27.7 Calculating CIST connectivity

27.8 Connectivity between regions in the same domain

27.9 Calculating SPT connectivity

27.10 Loop prevention

27.11 SPVID and SPSourceID allocation

27.12 Allocation of SPVIDs to FIDs

27.13 SPBV SPVID translation

27.14 VLAN topology management

27.15 Individual Addresses and SPBM

27.15.1 Loop Mitigation

27.15.2 Loop prevention

27.16 SPBM Group Addressing

27.17 Customer service instance topology management

27.18 Equal cost shortest paths, ECTs, and load spreading

27.19 PBB shortest path load balancing

27.20 Using SPBV and SPBM

27.21 Security considerations