<< NOTE FROM BOB SULTAN: This document supplies additional text and modified figures for portions of 802.1Qbg subclause 41.1.8 for the resolution of comment #738 (http://www.ieee802.org/1/files/private/bg-drafts/d1/802-1Qbg-D1-3-dis-v1.pdf). This material is also described in the slides http://www.ieee802.org/1/files/public/docs2011/bg-gu-pcp-in-vdp-rsp-0111-v02.ppt presented at the January 2011 interim meeting. Features added are:

1) A Priority Code Point (PCP) value can accompany any, or all, VID values specified in a VDP Response;
2) The 2-octet field of the VDP TLV that was called the VID field is no longer called the VID field and is replaced by a 1-bit PCP Significant (PS) field, a 3-bit PCP field, and a 12-bit VID field;
3) A PS field having the value zero indicates that the PCP field that follows does not contain a significant value of PCP;
4) The value of the PCP field, when significant, is adopted by the EVB Server as the 'default PCP' value associated with the specified VSI and VID;
5) For a given (VSI, VID) pair, any frame sent by the EVB Server towards the EVB Bridge can contain any valid PCP value (i.e., 0 - 7) as locally determined by the EVB Server. Thus, in general, frames associated with a particular (VSI, VID) will carry frames whose PCP values vary from frame to frame. For example, the PCP associated with a frame may be determined by examination of higher layer information identifying the associated application. If a 'default PCP' is established on the EVB Server, by provisioning or via the VDP Response, then that PCP value is assigned to any frame for which the PCP cannot otherwise be established. Thus the data stream associated with a given (VSI, VID) might be expected to contain frames with various PCP values, with some frames containing the 'default PCP' value. It is possible that if the EVB Server specifies no algorithm for the determination of the PCP value in the frames it sends, then all frames associated with a given (VSI, VID) could carry the default PCP associated with that (VSI, VID). The paragraph added to 41.1.8 is intended to convey this, but comments are welcomed to provide wording that would further clarify or to make the description more concise;
6) This description is based on the text of D1.3; it does not include other comments made during D1.3 comment resolution; >>

<< Add a paragraph at the end of subclause 41.1.8 as shown below. Note that only *one paragraph* has been added as indicated by the changebars. The rest of the text is included for context. >>

41.1.8 Filter Info field

The Filter Info field contains information from which a filter can be contructed. The filter is a set of VID values or a set of MAC/VID values. The MAC address in a MAC/VID value is an individual MAC address. The filter is applied to an EVB Station-facing Bridge Port in order to identify traffic associated with a particular VSI. This allows a VSI-type, for example, to be applied to the identified VSI.

The Filter Info field can also contain information that is not part of the filter. In particular, the Filter Info field can contain GroupID values. Like the VID, the GroupID identifies a VLAN. When the number of VLANs in the network is less than 4095, each VLAN can be assigned a VID value that is global within the network.

When the number of VLANs in the network exceeds 4094, a VID can be associated with a VLAN in one region of the network and with a different VLAN in another region of the network. In this case, the VLAN is uniquely and globally identified by a GroupID. The VLAN is locally identified by a VID in each region of the network in which the VLAN is present.

When VLANs are identified by GroupID, the EVB Station has knowledge of the GroupID but it does not, in general, know the corresponding VID to be used by traffic associated with the VLAN. The EVB Bridge is aware of, or can obtain knowledge of, the VID associated with the specified GroupID. Thus, the EVB

Station can send GroupID values to the EVB Bridge via the Filter Info field of the VDP Request. The EVB Bridge can map GroupID values to local VID values. The VID is included in the filter constructed by the EVB Bridge and is returned with its corresponding GroupID to the EVB Station via the VDP Response.

Additionally, the Filter Info field of a VDP TLV in a VDP Response can specify a Priority Code Point (PCP) value associated with any, or all, of the VID values carried by that VDP Response. The PCP value, if specified, is used by the EVB Server as the default PCP value associated with the VSI and VID. The Filter Info field contains a PCP Significant (PS) bit associated with each PCP field, indicating whether the PCP field carries a PCP value (binary 1) or does not carry a PCP value (binary 0). If the PCP field carries a PCP value, then the EVB Server can adopt that value as the default PCP value associated with the VSI and VID. When sending data frames associated with a given VSI and VID, the EVB Server can determine the PCP value associated with each frame by using an algorithm local to the EVB Server. For example, the PCP value can be based on the identity of an application associated with the frame as determined by examining higher layer information. For any given frame, it is possible that the algorithm does not provide a specific value of PCP. In such cases, the PCP field is assigned the value of the default PCP associated with the VSI and VID.

NOTE—Specification of a PCP value in the VDP Response does not imply that all frames sent by the EVB Server, associated with the VSI and VID, carry the specified PCP. It implies only that, if the EVB Server has no other information regarding the PCP value that should appear in that particular frame, then the specified default PBC value is used.

<< Note that in the following subclauses *only* the figures 41-2 through 41-5 have been modified. No text has been modified (as indicated by the change bars).>>

41.1.8.1 VID Filter Info format

The VID Filter Info format specifies that the Format Info field contains a set of VID values to be associated with the VSI Instance (41.1.6).

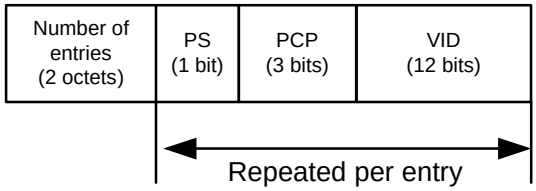

Figure 41-2—VID Filter Info format

The number of VID values in the sequence is specified by the Number of entries field. Figure 41-2 illustrates the VID Filter Info format.

The Filter Info field can specify a VID value of 0x000 which is known as the null VID (see Table 9-2). When the null VID is specified, it is the only VID specified in the Filter Info field (ie., the Number of entries field is assigned the value one). Use of the null VID indicates that the set of VID values associated with the VSI is supplied by the EVB Bridge. The EVB Bridge can obtain VID values or GroupID values from the VSI-type whose identity is specified by the VSI-type information in the VDP Request. If the VSI-type specifies GroupID values, each GroupID is mapped to a corresponding local VID. For this purpose, the EVB Bridge maintains, or has access to, the mapping between GroupID values and local VID values. The set of VID values is returned to the EVB Station via the VDP Response.

The Filter Info field can specify a VID value of 0xFFF which is known as the wildcard VID (see Table 9-2). When the wildcard VID is specified, it is the only VID specified in the Filter Info field (ie., the Number of entries field is assigned the value one). Use of the wildcard VID value indicates that the VSI-type specified by the VDP Request is designated as the default VSI-type applied to the EVB Station-facing Bridge Port associated with the S-channel.

41.1.8.2 MAC/VID Filter Info format

The MAC/VID Filter Info format indicates that the Format Info field specifies a sequence of MAC/VID value pairs to be associated with the VSI Instance (41.1.6).

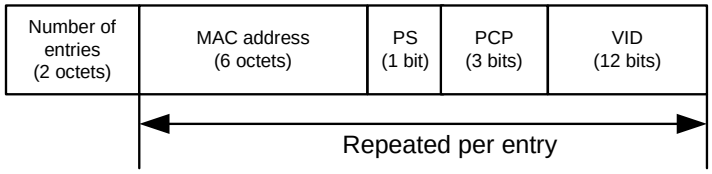

Figure 41-3—MAC/VID filter format

The number of MAC/VID pair values is specified by the field Number of Filter Info entries. Figure 41-3 illustrates the MAC/VID Filter Info format of the Filter Info field.

The Filter Info field can specify the null VID for any entry. When the null VID is specified, filtering is based only on the MAC address. That is, the filter entry is ‘MAC-only’.

41.1.8.3 GroupID/VID Filter Info format

The GroupID/VID Filter Info format indicates that the Format Info field specifies a sequence of GroupID/VID pairs to be associated with the VSI Instance (41.1.6). The number of GroupID/VID pairs is specified by the Number of entries field.

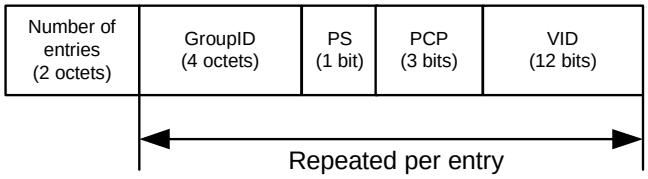

Figure 41-4—GroupID/VID filter format

Figure 41-4 illustrates the GroupID/VID Filter Info format of the Filter Info field.

The null VID (0x000) can be associated with the GroupID value when the GroupID/VID filter format is specified in the VDP Request. In this case, the EVB Bridge is expected to supply the corresponding local VID value in the VDP Response. For this purpose, the EVB Bridge maintains, or has access to, the mapping between GroupID and local VID.

41.1.8.4 GroupID/MAC/VID Filter Info format

The GroupID/MAC/VID Filter Info format indicates that the Filter Info field specifies a sequence of GroupID/MAC/VID triples associated with the VSI Instance (41.1.6). The number of GroupID/MAC/VID triples is specified by Number of entries.

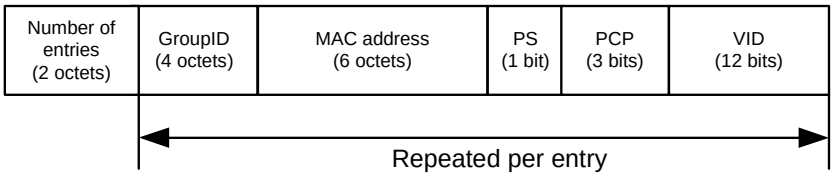

Figure 41-5—GroupID/MAC/VID filter format

Figure 41-5 illustrates the GroupID/MAC/VID Filter Info format of the Filter Info field.

The null VID (0x000) can be associated with a GroupID value when the GroupID/MAC/VID filter format is specified in the VDP Request. In this case, the EVB Bridge is expected to supply the corresponding local VID value in the VDP Response. For this purpose, the EVB Bridge maintains, or has access to, the mapping between GroupID and local VID.