1722a D8 Questions I

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Date	Comm #	Name	Category	Page	Subclause	Line	Comment	Proposed Change	Disposition Status	Disposition Detail
2/20/2014	D7-277	Rakoslaw Kudaj	Technical	11	5.2.2.2	6	Ignoring version field on receive side is inconsistent with AVnu test expectation which says that listener should not record data when AVTP version number is not 0. See Avnu document: AVnu Alliance Pro Audio End Station Certification Program Test Plan for IEEE 1722. Test AVTP.c.2.1 – 1722 Listener Pro Audio Baseline Format Support. Part B. The above refers also to page 12, line 31.	The version field specifies the version of the subtype. This field shall be set to zero (0) on transmit and shall be verified to be 0 on receive. Or Leave line 6-7 as it is and in section 6.2 IEC 61883/IIDC Stream Data Encapsulation add explicit definition as follows: The version field specifies the version of the 61883_IIDC AVTPDU. This field shall be set to zero (0) on transmit and shall be verified to be 0 on receive.	Revise	Version field is moving to the common header. Use definition from 1722-2011. It needs to say that versions are defined by the subtype. NOTE: I don't remember what we decided here. Does each subtype need to now say what version it is? Doesn't that defeat the purpose of having it in the common header? I thought that's why we had the "Unless explicitly defined by the subtype..." verbiage?

5.3.1.3 version field

The **version** field specifies the version of the subtype. Unless explicitly defined by a **subtype**, this field shall be set to zero (0) on transmit and ignored on receive.
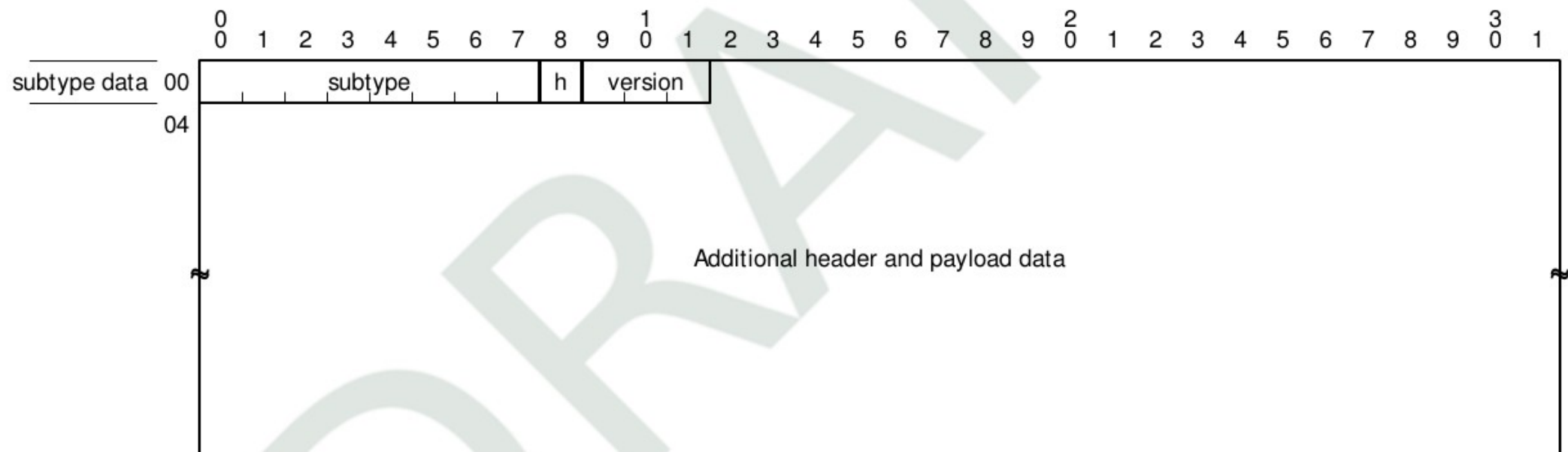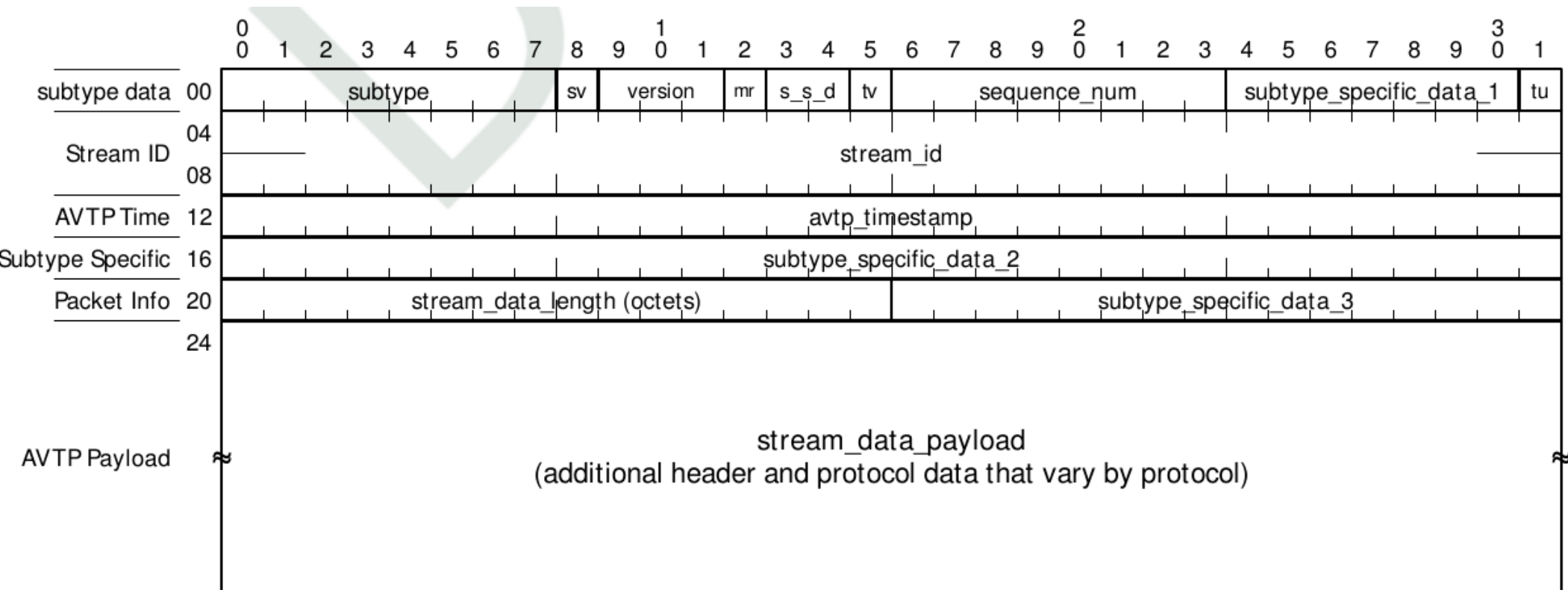

Figure 5.1. AVTPDU common header fields

Comment #	Name	Category	Page	Subclause	Line	Comment	Proposed Change	Disposition Status	Disposition Detail
D7-15	Steve Follen	Technical	11	5.2.2.5	32	It is common to require unused fields to be set to zero.	Rather than say "AVTP end stations receiving control AVTPDUs with the sv bit set to zero (0) shall ignore the entire contents of the stream_id field regardless of its value.", it should say "If the sv bit is set to zero, the stream_id field should be set to zero on transmission and ignored or receipt."	Revise	If the sv bit is set to one, the stream_id field shall be a valid stream identifier. If the sv bit is set to zero, the subtype defines the usage of the stream_id value. NOTE: The old text says that stream AVTPDUs shall always set the sv bit to one, and that control AVTPDUs can decide the value of sv. However, we've removed sv from control AVTPDUs (see D7-11). So basically, sv is always set for stream AVTPDUs, but the field is reserved (set to zero) for control?

Bit positions: 0 1 2 3 4 5 6 7 | 8 9 10 1 2 3 4 5 | 6 7 8 9 20 1 2 3 | 4 5 6 7 8 9 30 1

- subtype data (00): subtype | sv | version | mr | s_s_d | tv | sequence_num | subtype_specific_data_1 | tu
- Stream ID (04, 08): stream_id
- AVTP Time (12): avtp_timestamp
- Subtype Specific (16): subtype_specific_data_2
- Packet Info (20): stream_data_length (octets) | subtype_specific_data_3
- AVTP Payload (24): stream_data_payload (additional header and protocol data that vary by protocol)

5.3.2.1 sv (stream_id valid) field

The **sv** (stream_id valid) field is used to indicate whether the 64 bit **stream_id** field contains a valid StreamID. The options for the value of the **sv** field are defined in Table 5.4 .

Table 5.4. sv field values

Value	Description
0_{16}	The **stream_id** field is not valid
1_{16}	The **stream_id** field contains a valid Stream ID

For more details on valid combinations of the **stream_id** and **sv** fields, see 5.3.2.7 .

5.3.2.7 stream_id field

If the **sv** field is set to one (1), then the **stream_id** field shall contain the 64 bit StreamID associated with the AVTPDU. The **stream_id** field is used for stream identification.

All stream data AVTPDUs shall contain a valid StreamID in the **stream_id** field and shall set the **sv** (StreamID Valid) bit to one (1).

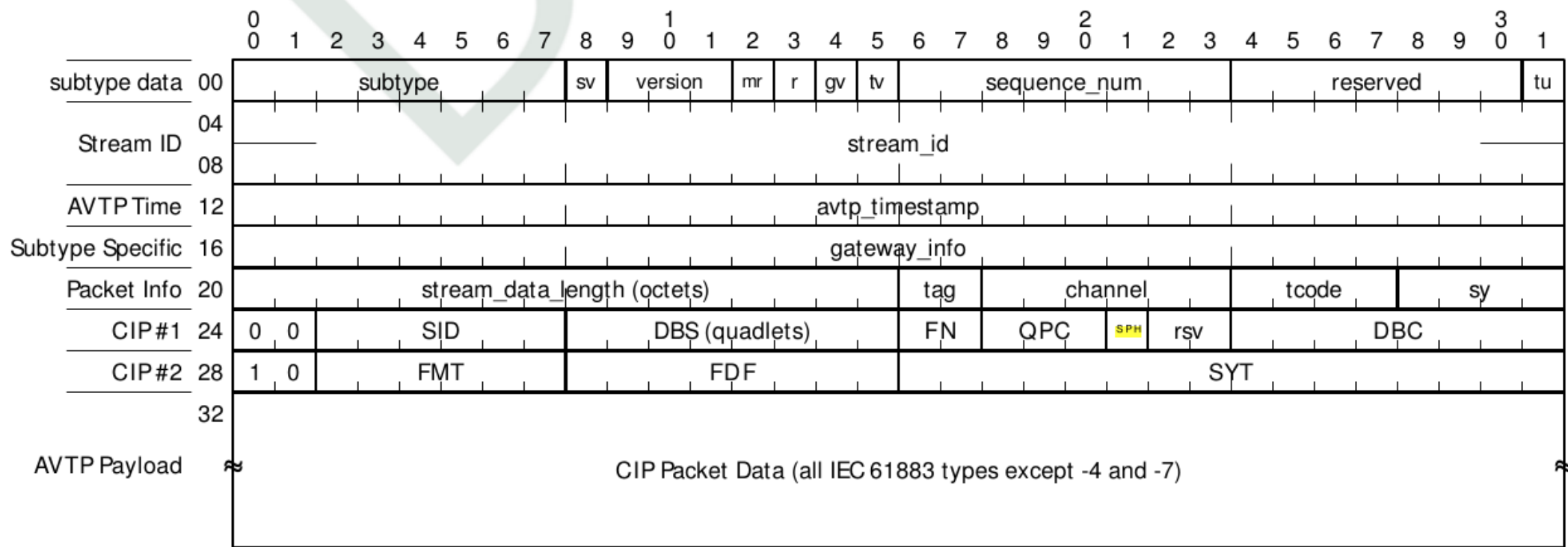| Comm #	Name	Category	Page	Subclause	Line	Comment	Proposed Change	Disposition Status	Disposition Detail
D7-213	Don Pannell	Editorial	19	6.2	33	SPH (0) is too small	Not sure how to fix this easily. Maybe just call the field 'S' and then later define 'S' to map to 61883's SPH?	Revise	Workgroup decided to remove static number designation in diagrams and to remove graying of fields (see D7-29). NOTE: still very small with static assignment removed, need to discuss.

Figure 6.3. CIP header and data fields, tag = 1, SPH = 0

Comment #	Name	Category	Page	Subclause	Line	Comment	Proposed Change	Disposition Status	Disposition Detail
D7-41	Dave Olsen	Technical	34	9.2.2	43	Add AAC Formats (RFC5691) to Table 9.10	This is a request from a user of 1722		The appropriate place for encoded audio formats is in the new encoded audio subtype

- Has this been addressed?

- If not, what should the resolution be?

Comm #	Name	Category	Page	Subclause	Line	Comment	Proposed Change	Disposition Status	Disposition Detail
D7-289	Mark Hu	Technical	64	11.2.2.2.2	40-56	don't understand where and what these value of the Multipiler come from and is for?	more explaination	Revise	Add Meaning field

11.2.2.2.2 clock_multiplier field

The **clock_multiplier** field contains one of the values defined in Table 11.3 which represents a multiplier. The nominal frequency of the audio sample clock is the **clock_frequency** field multiplied by the multiplier specified by the **clock_multiplier** field.

Table 11.3. clock multiplier

Value	Multiplier
0_{16}	1.0
1_{16}	1/1.001
2_{16}	1.001
3_{16}	24/25
4_{16}	25/24
5 - FF_{16}	Reserved

Comm #	Name	Category	Page	Subclause	Line	Comment	Proposed Change	Disposition Status	Disposition Detail
D7-81	Aaron Gelter	Technical	67	11.3	35	As it is currently written, clause 11.3 specifies rates that BOTH talkers and listeners must be able to support. Is it really necessary to require these rates for the talker? It seems like we could make this a listener-only requirement. A talker could support only a subset of these ranges, but a listener must be able to support the whole range for interoperability reasons.	Discuss.	Revise	Use packets per second instead of Hz. This is a listener requirement not a talker requirement. We should tightly bound the required CRF streams not only in packets per second but TSPP and TSPS with a tight range. The desired range is somewhere around 100 Packets Per second. Do not limit what you can do. Verify if one set for all media is sufficient

11.3 CRF Transmission Rates

CRF AVTPDUs can be transmitted at various rates based on the requirements of specific installations or vendors. For interoperability reasons, a device shall be capable of transmitting or receiving CRF AVTPDUs within the ranges given in Table 11.4 . Rates outside of these ranges are permitted, but interoperability is not guaranteed.

Table 11.4. CRF Required Transmission Rates

Type	Minimum Required Rate	Maximum Required Rate
CRF_AUDIO_SAMPLE	10 Hz	8000 Hz
CRF_VIDEO_FRAME	1 Hz	120 Hz
CRF_VIDEO_LINE	10 Hz	4500 Hz

- Volunteer to write this?

- If not, please help me understand exactly what needs to be included.

Comment #	Name	Category	Page	Subclause	Line	Comment	Proposed Change	Disposition Status	Disposition Detail
D7-312	Gordon Bechtel	Editorial	68	11.4	21	Is max transit time the longest time between the CRF talker and all the network listeners? The wording here needs to be tightened up to provide the reader with a better idea of what the max transit time is and how to determine it. It's OK to not exactly specify it, but we need to give a clear description of how the CRF talker determines this value.			

The CRF timestamp represents the time at which the media sample was presented to AVTP at the Talker plus a constant, Max Transit Time, to compensate for network latency. Network latency is dependent on the network configuration and speed. Max Transit Time represents the worst-case network latency assumed for a given configuration. It is possible for a Talker and a Listener to determine the Max Transit Time value to use in a given stream. The mechanism for a Talker and a Listener to negotiate Max Transit Time is outside the scope of this standard. Unless otherwise negotiated between the Talker and the Listener, the Max Transit Time to calculate the AVTP presentation time is defined by the Default Max Transit Time in Table 5.3.

- What was the disposition?

Comm #	Name	Category	Page	Subclause	Line	Comment	Proposed Change	Disposition Status	Disposition Detail
D7-235	Don Pannell	Technical	53	10.4.11	43	Where is the dlc field?	Add a dlc field to figure 10.3 or remove this and the next paragraph.		GLB: Discuss at F2F. I propose to make this a note for implementers. The dlc field is a CAN field and may need to be recreated upon receipt of a CAN message. The note would provide guidance on how to do this.

10.4.11 can_data field

The **can_data** field is a variable length field that contains from 0 to 64 octets of message data. The overall size of the **can_data** field shall always be an integer multiple of quadlets.

The overall size of the **can_data** field is determined by subtracting 2 (to remove the two (2) quadlets occupied by the **mtv, rtr, eff, hdr, edl, esi, can_bus_id, message_timestamp, can_identifier**, and **reserved** fields) from the **message_length** field.

If the **edl** field is set to zero (0) then the **dlc** field indicates the number of valid octets of the **can_data** field. Valid octets are packed into the lower octet locations of the **can_data** field. All octets remaining up to the overall length of the **can_data** field shall be zero (0).

If the **edl** field is set to one (1) then the **dlc** field shall be ignored, and all octets in the **can_data** field carry valid data.

- ## What was the disposition?

Comm #	Name	Category	Page	Subclause	Line	Comment	Proposed Change	Disposition Status	Disposition Detail
D7-172	Ashley Butterworth	General	141	I.2	20	This section needs to be restructured to better allow definition of the stream format and to allow for expansion in the future	J.1 should be AVTP Vendor Defined Stream Format and should contain avtp_outi, subtype and subtype_specific fields.

J.1.1 should be AVTP Video Stream Format and should specify the subtype_specific field as being split into format and format_subtype fields

J.1.2 should be Clock Reference Stream Format and should find some way of specifying both the type and some type specific info. | | |

- ## What was the disposition?

  – I seem to remember Ashley "volunteering"