

IEEE P1722 D2.4 Audio Video Transport Protocol comments

Cl 00 SC 0 P L # 1 [REDACTED]
Messina, Don

Comment Type **ER** Comment Status **D**

This drafts meets all editorial requirements.

SuggestedRemedy

Proposed Response Response Status **W**
PROPOSED ACCEPT.

Cl 00 SC 0 P42 L # 5 [REDACTED]
Gwinn, Joseph Raytheon

Comment Type **G** Comment Status **D**

In my comments 1 and 2, I used page and line numbers from the tracked-changes version of the draft, which may confuse things. The correct page number is 42 for both. Comments 3 and subsequent use the clean draft D2.4.

SuggestedRemedy

None.

Proposed Response Response Status **W**
PROPOSED ACCEPT.

Cl 02 SC 2 P3 L26 # 9 [REDACTED]
Gunther, Craig HARMAN INTERNATI

Comment Type **ER** Comment Status **D**

802.1Qat is Amendment 14 - This was just assigned by the editorial staff in preparation for publishing.

SuggestedRemedy

Change Amendment 9 to Amendment 14.

Proposed Response Response Status **W**
PROPOSED ACCEPT.

Cl B SC B.2.6 P26 L11 # 3 [REDACTED]
Gwinn, Joseph Raytheon

Comment Type **T** Comment Status **D**

No (partial) response to a message from a higher version than the receiver is permitted, which seems a bit too draconian to work well in a world where all kinds and ages of equipment must interoperate.

SuggestedRemedy

Allow (or require) the receiver to reply with a "Huh?" message specifying the receiver's own version, thus allowing the transmitter to rephrase its request into the older dialect. Only the transmitter can know if such rephrasing is possible.

Proposed Response Response Status **W**
PROPOSED REJECT.

This proposal was discussed with the 1722 task group and decided that it was not needed or desired.

Cl B SC B.2.6 P42 L15 # 4 [REDACTED]
Gwinn, Joseph Raytheon

Comment Type **E** Comment Status **D**

Possessive used when plural is intended.

SuggestedRemedy

Change "PDU's" to "PDUs", dropping the apostrophe.

Proposed Response Response Status **W**
PROPOSED ACCEPT.

Cl B SC B.2.6 P43 L11 # 2 [REDACTED]
Gwinn, Joseph Raytheon

Comment Type **TR** Comment Status **D**

The description of how to handle message versions differing from the receiver's version seems generally correct, but is incomplete and a bit confusingly presented, and so is likely to cause trouble.

SuggestedRemedy

Make into three paragraphs, being titled "Message version less than receiver version", "Message version identical to receiver version", and "Message version greater than receiver version". In each paragraph, say exactly what will happen in that case, without mention of the other two cases, even if some text must be repeated. Also add the requirement that version numbers shall increase monotonically over time, so this scheme isn't undermined by a bad choice of version number.

Proposed Response Response Status **W**
PROPOSED ACCEPT.

IEEE P1722 D2.4 Audio Video Transport Protocol comments

Cl **B** *SC* **B.3.1** *P***45** *L***4** # **10**

Gunther, Craig HARMAN INTERNATI

Comment Type **ER** *Comment Status* **D**

announceTimer! protocol event refers to the announceTimer expiring. B.3.4.1 defines announce_timer, not announceTimer.

SuggestedRemedy

Change "announceTimer has expired" to "announce_timer has expired". I would suggest leaving the announceTimer! protocol event named as it is.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **B** *SC* **B.3.1** *P***45** *L***5** # **11**

Gunther, Craig HARMAN INTERNATI

Comment Type **ER** *Comment Status* **D**

probeTimer! protocol event refers to the probeTimer expiring. B.3.4.2 defines probe_timer, not probeTimer.

SuggestedRemedy

Change "probeTimer has expired" to "probe_timer has expired". I would suggest leaving the probeTimer! protocol event named as it is.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **B** *SC* **B.3.1** *P***45** *L***9** # **12**

Gunther, Craig HARMAN INTERNATI

Comment Type **E** *Comment Status* **D**

maap_probe_count is referenced many times but never defined. We define all the operations that are done on maap_probe_count, but never define the variable itself.

SuggestedRemedy

Add a definition for maap_probe_count. I do realize the name is self explanatory and that may already be sufficient.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **B** *SC* **B.3.2** *P***45** *L***1** # **6**

Gwinn, Joseph Raytheon

Comment Type **TR** *Comment Status* **D**

The implementor has no choice about sequential execution of lines in a state-table cell. It's not a judgement call or matter of opinion, it's an absolute requirement.

SuggestedRemedy

Change "may" to "shall".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **B** *SC* **B.3.6.1** *P***47** *L***21** # **8**

Gwinn, Joseph Raytheon

Comment Type **GR** *Comment Status* **D**

The algorithm is not quite correct, as one limits to 32 bits (or whatever the pseudorandom number generator wants for a seed) after the sum, not before. The best approach is to use a ones-complement (end-around carry) sum, but this should be suggested and allowed, but not required, as not all hardware finds this convenient. Ones-complement sums are used to implement checksums in UDP and IP packet headers.

SuggestedRemedy

Change to "The pseudo-random number generator shall be seeded using the least significant (most rapidly varying) octets of the sum of the requestor's IEEE 802 MAC address and the local real time clock. The use of a ones-complement (end-around carry) sum is suggested but not required."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **B** *SC* **B.3.6.1** *P***47** *L***21** # **7**

Gwinn, Joseph Raytheon

Comment Type **TR** *Comment Status* **D**

Addition of the time to the mac address cannot be optional, as this can cripple the protocol. Addition must be required.

SuggestedRemedy

In line 22, change "may" to "shall".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

IEEE P1722 D2.4 Audio Video Transport Protocol comments

<i>Cl</i> B	<i>SC</i> Table B.2	<i>P47</i>	<i>L2</i>	# 15
Gunther, Craig		HARMAN INTERNATI		
<i>Comment Type</i>	E	<i>Comment Status</i>	D	
There are no primitives (i.e. upper layer API) defined that will allow MAAP to inform an upper layer application of MAAP state. For example, there could be a primitive that would provide a call-back function when an address range is reserved. There could be another call-back function that informs the upper layer when an address range had been taken away.				
<i>SuggestedRemedy</i>				
Do we want to provide a set of primitives to interface MAAP with other layers? Or are we deeming that "out of scope"?				
<i>Proposed Response</i>		<i>Response Status</i>	W	
PROPOSED REJECT.				
This proposal was discussed with the 1722 task group and decided that it was not needed or desired.				

<i>Cl</i> B	<i>SC</i> Table B.2	<i>P47</i>	<i>L2</i>	# 14
Gunther, Craig		HARMAN INTERNATI		
<i>Comment Type</i>	E	<i>Comment Status</i>	D	
Whenever there is an address conflict everybody gives up. At one point we had a tie-breaker based on MAC address. In the current implementation every audio/video stream that is flowing will be torn down if there is a conflict. This could allow SRP to bring up other streams that may have not had enough bandwidth available originally. When the MAAP conflicts are resolved the original streams may not be allowed to come back up because their bandwidth is now gone.				
I also understand that the only scenario we have come up with where this will happen is if we join two networks. Are there other scenarios we haven't considered?				
<i>SuggestedRemedy</i>				
I would prefer to put the MAC address tie-breaker back in. If we don't I just want to make sure we understand the side effects of our choices.				
<i>Proposed Response</i>		<i>Response Status</i>	W	
PROPOSED ACCEPT.				

<i>Cl</i> B	<i>SC</i> Table B.2	<i>P47</i>	<i>L2</i>	# 13
Gunther, Craig		HARMAN INTERNATI		
<i>Comment Type</i>	E	<i>Comment Status</i>	D	
Remove DEFEND state transition from all Events that are already in the DEFEND state (i.e. rProbe! and announceTimer! events)				
<i>SuggestedRemedy</i>				
Remove the two DEFEND state transitions in the DEFEND STATE column.				
<i>Proposed Response</i>		<i>Response Status</i>	W	
PROPOSED ACCEPT.				