

IEEE 1722a Draft par 0.2 Sandy 2/10/2011

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Title (2.1)

- Standard for Layer 2 Transport Protocol for Time Sensitive Applications in Bridged Local Area Networks – Amendment 1

Misc.

- Number of people expected to work on standard (5.1)
 - 20
- Stakeholders (5.6)
 - Developers and users of bridged LAN and end-point systems supporting audio/video and other low latency streaming applications.

Original PAR Scope (5.2)

- This standard specifies the protocol, data encapsulations, and presentation time procedures used to ensure interoperability between audio and video based end stations that use standard networking services provided by all IEEE 802 networks meeting QoS requirements for time-sensitive applications by leveraging concepts of IEC 61883.

Questions

- We are going to have to change the scope of the original 1722, is that change required to be defined for the amendment PAR?

PAR Scope (5.2)

- This standard specifies extensions to the IEEE 1722 protocol to expand the range of supported audio/video formats, define additional services to provide interoperability, and add support for other low latency time sensitive applications.

PAR Scope - Option 2

- This standard specifies extensions to IEEE 1722 – 2011 to add extensible streaming formats that support media types that are not included in the previous standard and define media clock selection and synchronization services.

New PAR Scope (5.3)

- Is the completion of this document contingent upon the completion of another document?
 - No

Original PAR Purpose (5.4)

- This standard will facilitate interoperability between stations that stream time-sensitive audio and/or video across LANs providing time synchronization and latency/bandwidth services by defining the packet format protocols and synchronization mechanisms.

New PAR Purpose (5.4)

- This standard facilitates interoperability between stations that stream time-sensitive media across LANs providing time synchronization and latency/bandwidth services by defining additional packet format protocols and synchronization mechanisms.

Original Need (5.5)

- Increasingly, entertainment media is digitally transported. Streaming audio/video and interactive applications over bridged LANs need to have comparable real-time performance with legacy analog distribution. There is significant end-user and vendor interest in defining a simple yet common method for handling real-time audio/video suitable for consumer electronics, professional A/V applications, etc.
- Technologies such as IEEE 1394, Bluetooth and USB exist today but each has their own encapsulation, protocols, timing control, etc. such that building interworking functions is difficult. The use of a common audio/video transport over multiple IEEE 802 network types will realize operational and equipment cost benefits.
- By ensuring that all IEEE 802 wired and wireless devices share a common set of transport mechanisms for time-sensitive audio/video streams, we lessen the effort of producing interworking units between IEEE 802 and other digital networks.

New Need (5.5)

- IEEE 1722 - 2011 has experienced rapid adoption in applications that stream audio/video. There is significant end-user and vendor interest in providing additional media formats that are not currently in the 1722 defined set of supported formats. New media formats include switch on the fly media and formats that are used in specialized applications. These new media formats address limitations including channel count and encoder/decoder complexity that are required by the current standard.
- Additional functionality is also needed to provide services that are not currently addressed in IEEE 1722 such as system wide media clock selection and synchronization.
- These additional features and formats are necessary to ensure continued vendor interoperability among devices that support IEEE 1722.