



WCNI Advisory Committee Meeting June 28, 2007

ISSUE: Is VOIP an eligible service for TEACH subsidized data/video lines

TEACH = Technology for Educational ACHievement

1. TEACH enabling legislation defines general principles and two types of telecom service eligible for subsidies:

- a) S.16.99(1m) defines a "data line" as a "...direct circuit that provides direct access to the Internet"
- b) S.16.99(6) defines a "video link" as a "...2-way interactive video circuit"
- c) S. 16.99(3) defines "educational technology" as "...technology used in the education or training of any person or in the administration of an elementary or secondary school and related telecommunications services"
- d) do other statutory language (PSC), administrative rules or TEACH Board Policies exist that specifically prohibit voice circuits/voice applications over TEACH subsidized data/video lines?

2. If VOIP uses the same basic H.323 protocol as video service on the BCN, does this application fit on the video side or the data side of the BCN? Does the data side of the BCN accommodate H.323 protocol transactions?

- a) will the current BCN infrastructure need to be reconfigured to accommodate this high priority application? Who will pay for these changes?
- b) if this transaction runs on the video side only, must a school/library purchase video services in addition to data service if they don't already have them?
- c) will bandwidth prices subsidized by TEACH increase because of this new application?

3. If VOIP is just another "data packet," does TEACH have the right to question whether it is eligible for TEACH subsidized data/video circuits?

- a) VOIP is not just another data packet -- it is in effect "data on steroids" because it has the highest QOS on the circuit
- b) because of this high QOS, a VOIP packet takes precedence over all other data traffic that is not VOIP
- c) if a school or library has 1.5M of data bandwidth, how many VOIP transactions (i.e., conversations) can take place at the same time as all other data transaction
 - 1. if a typical VOIP transaction takes 16K of bandwidth, this circuit can support 96.5 VOIP transactions. If data transactions for educational achievement are mixed in, how many VOIP transactions should be allowed and still have adequate bandwidth available for the educational achievement traffic to the Internet?

2. if we need to double the amount of bandwidth to accommodate this VOIP and educational achievement traffic, and TEACH has allocated all of its available resources, who pays for the additional bandwidth over and above that already subsidized by TEACH.

3. could this place TEACH in a position where all of its resources are used to subsidize VOIP transactions -- what does this do to the original educational achievement intent of the legislation?

4. who decides how much TEACH subsidized bandwidth can be used for VOIP and still be able to report to the legislature that the original intent of the TEACH legislation is honored?

5. would separate VOIP circuits be created so there is no contention between VOIP and educational achievement packets? Does this preserve the original intent of the legislation and accommodate VOIP on the BCN?

4. If VOIP is judged eligible for transmission over TEACH subsidized data/video lines, do statutory language changes need to be made to specifically allow this?

5. Is the VOIP contract being negotiated with ATT by DOA under the umbrella of the WBAA contract under which TEACH is directed to make its purchases of subsidized bandwidth? If it is not, can TEACH funds, if available, be used to cover costs contained in a DOA contract other than the WBAA contract?

6. If TEACH has limited funds, does TEACH have the right to define limits on what portion of those funds can be used to subsidize high priority VOIP transactions and what portion for educational achievement transactions. At what point does the original educational achievement intent of the legislation become lost to the high priority VOIP application?