## 7-204. Video and audio compression standard for synchronous distance learning and videoconferencing.

- (1) Purpose. The purpose of this section is to establish video and audio protocol standards that will enable all existing and future synchronous distance learning and videoconferencing facilities in Nebraska to achieve interoperability and maintain an acceptable quality of service.
  - (2) Standards.
- (a) Video protocol standards for synchronous distance learning and videoconferencing: (i) for data rates above 384 Kbps, H.263; and (ii) for data rates at or below 384 Kbps, H.264 (MPEG-4 Part 10). The CODECs selected for purchase or use should be capable of accommodating both standards and be capable of manual rate selection and/or automatic rate selection. The interconnecting CODECs should be allowed to automatically negotiate the best data rate.
- (b) Audio protocol standards for synchronous distance learning and videoconferencing: (i) for data rates above 128 Kbps, G.722; and (ii) for data rates at or below 128 Kbps, G.722 or G.722.1 or G.728. The CODECs selected for purchase or use should have the ability to use G.722 at all speeds and one or both of the other two standards listed for lower speeds. If any two CODECs do not have a common protocol at or below 128Kbps then they should continue to use G.722. The CODECs selected for purchase or use should be capable of accommodating audio standard G.722 and be capable of manual rate selection and/or automatic rate selection. The interconnecting CODECs should be allowed to automatically negotiate the best data rate.
- (3) Applicability. This section applies to synchronous distance learning and videoconferencing facilities as follows:
- (a) If utilizing state-owned or state-leased communications networks: (i) any synchronous distance learning facility or videoconferencing application which utilizes state-owned or state-leased communications networks must comply with the compression standards listed in this section; or (ii) the entity must provide, or arrange for, the necessary gateway technology to transcode to the adopted standards.
- (b) If using state funding: (i) all new facilities or applications receiving state funding must comply with the compression standards listed in this section; and (ii) all existing facilities or applications receiving state funding for ongoing operations must convert to the standards listed in this section as soon as fiscally prudent or upon renewal of any existing communications service contract, whichever comes first.

 $URL: \underline{https://nitc.nebraska.gov/standards/7-204.pdf}$