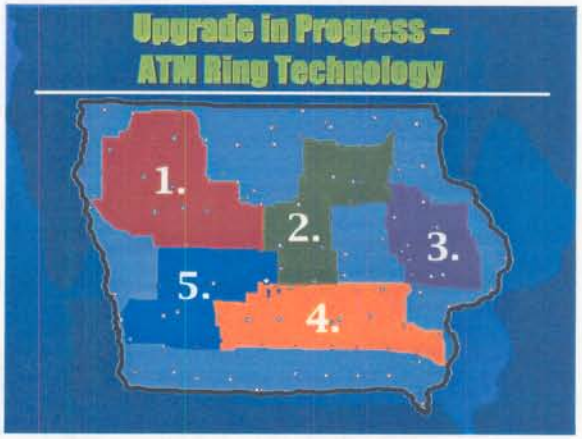
POINT PAPER
ICN NETWORK UPGRADE
FINAL PHASE

PROJECT STATUS: Over the past three years, the legislature has appropriated funds to complete an upgrade of the Iowa Communications Network begun in 1999. The upgrade is nearing completion. Western Iowa (rings 5 and 1) has been completed; North Central, South East, and South East Iowa Rings are partially completed at this point. The final appropriation, requested for FY 03 will provide the Coder/Decoders and the terminal connection devices for the schools and libraries in the partially completed rings.



FINANCIAL HISTORY: The cost of the project was estimated to be $23 Million in 1998. To date, $16 Million has been appropriated with $7 Million remaining.

ONE TIME FINANCIAL OPPORTUNITY: The telecommunications industry is facing a shortage of cash. The supplier under contract for the equipment required to complete the network upgrade has agreed to sell the equipment at a $2 Million discount if purchased in the immediate future. This decreases the amount required to complete the Network upgrade from $7 Million to **$5 Million**.

REQUEST: Since the economy is in a significant downturn and infrastructure money is short, ICN is requesting authority to acquire the equipment needed to complete the upgrade through use of a three-year lease purchase arrangement with an FY 03 appropriation of $1.8 Million to cover the first year payment. This arrangement will result in $311,579.42 in total interest cost. When weighing the interest cost against the $2 Million in savings outlined above, the overall savings to the State from purchasing the necessary equipment at this time will be $1,688,421.

If this strategy is pursued, users will benefit from the upgrade in the following school year and the ICN will have executed the contract at $21,311,579 that is below the estimated $23 Million price estimate established 5 years ago.

IMPLICATIONS OF NOT COMPLETING THE UPGRADE:

- ICN is currently spending more that $500,000 annually on **repair of the old equipment** and the annual cost of repair is rising rapidly. Some of the equipment that has a seven-year life expectancy is now in its 10th year.
    - The old Coder/Decoder (codec) used in the network is no longer available and repair costs are very pricey.
    - Failure rates on the old codecs are increasing and creating many down sessions and class disruptions for the users as well as more frequent interruptions from the same Coder/Decoder following repair.

- Failure to complete the upgrade means we are **operating two completely separate systems** on the network. These systems must be interfaced requiring the use of a new codec and an old codec at the hub of the Network
    - Since the two separate systems must be interfaced, latency (slow response time to switching commands) in the video session plagues users.
    - Interface requires back-to-back codecs to make the connection. This requires one old codec and one new codec at the Hub of the network. The use of two codecs creates a sizable waste of resources that could be deployed to the schools and libraries and reduce the repair costs of the old codecs used in the interface.

- The old system uses obsolete video switches that are no longer supported by the industry. Major portions of the educational community served by the 18 obsolete switches still operating in the network are without service if these old switches fail.

- Not having the network in a completed status could adversely weigh on the **opportunity** to be the homeland defense test bed which could jeopardize significant federal investments in the future which could have been used to retire some or all of the future lease/purchase payments.

- The economy is showing signs of improvement at the national level and the vendor **savings** of $2 Million dollars may not be available by delaying this decision to complete the upgrade.