Interex Paper #5015

HOPALONG CHASTITY: Ethical Planning for School Districts and Cities, but at a Gallop!

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With apologies to William Boyd and the other early TV cowboys, there is too much situational ethics in systems planning and procurement in the public sector; too much "hopalong" and not enough "chastity!" "Hopalong Chastity" is KCG's fast, three-step, ethical process for overworked, under-funded public entities. School districts and cities are inundated with confusing, contradictory advice regarding re-wiring for the future technology highway; let alone for a tested, common sense migration path for installed systems in the buzzword-laden world of client/server. All K-12s and municipalities have obsolescence in their current infrastructures and systems, and have more needs than dollars.

Rather than speculating on which technologies will emerge, KCG recommends a planning/acquisition process that results in non-obsolete, standards-based decisions where building a communications infrastructure is a necessary prerequisite. There are seven critical communications technologies for schools today, most of which apply to municipalities:

- ◊ Local Area Networks
- ◊ Wide Area Networks
- ◊ Audio/Visual
- ◊ Voice Communications
- ◊ Energy Management
- ◊ Security
- ◊ Clocks/Bells

Taking an honest, efficient assessment of current data/voice/video communication capabilities is the first critical step in technology needs assessment. As Allen Merten, CIO of Cornell University, said: " . . . recognize the difference between the impossible dream of planning the future and the performable task of getting ready to exploit the future." (Computerworld, "The myth of long term planning," 12/13/94, p. 13).

The next step is in how to describe present, interim and long term needs to the vendor community in a structured fashion that allows vendors to fairly demonstrate their capabilities and public entities to evenly evaluate those capabilities quickly in a standardized, electronic format.

The third step is focused on the contract. After in-house acceptance/reliability testing, the end result must be a balanced, fair contract that distributes risk and assigns

responsibility in writing that ties vendor payment to delivered and tested value received.

These three steps—infrastructure, needs, and contract--mimic Webster's definition of a gallop—" a natural, three-beat gait of a horse, faster than a canter and slower than a run."

Public sector organizations that canter treat their major expense—salaries and benefits—as if their employee costs were free. They allow antiquated, inefficient procedures to waste employees time. They foster mounds of paperwork, in which the answer to any problem is to create a form or ask DP to write more custom programs. Other organizations are "on the run," never stopping to set standards, out on the leading (or better, bleeding) edge, constantly making employees unproductive, but with the latest technologies.

We have found that you must start (and end) with communications. There is little value to a standalone computer today. You must assume that everything will somehow be connected to everything else eventually, and plan accordingly. There are seven critical communications technology areas for schools today, at least five of which apply to municipalities:

- ◊ Local Area Networks
- ◊ Wide Area Networks
- ◊ Audio/Visual
- ◊ Voice Communications
- ◊ Energy Management
- ◊ Security
- ◊ Clocks/Bells

Each of these technologies is complex, struggling for standards, and provided by companies that are being acquired and divested at a galloping rate. Unfortunately, you still must spend your precious dollars carefully in the midst of this twister. The eye of the storm is normally the standard, backed by a financially stable company. But the eye seldom holds the best technology. The best is swirling out there at hundreds of miles per hour. Market share, however, is determined by marketing, not by what's best. Buying the best is often a dead end. Remember VHS and Beta—Beta was technically superior; but lost to VHS superior marketing and market share. VHS became the standard by size not by quality or functionality. Recall the Commodore Amiga—a 1985 DOS/Mac machine that never sold. How about Banyan, with VINES, glorious technology that pales in market share to Novell Netware or the up-and-coming Microsoft Windows NT. With data, voice and video technologies, you simply must stay near the eye of the storm—with adopted standards, market share, and companies that will survive.

Let's look at the technology areas and their interrelationships:

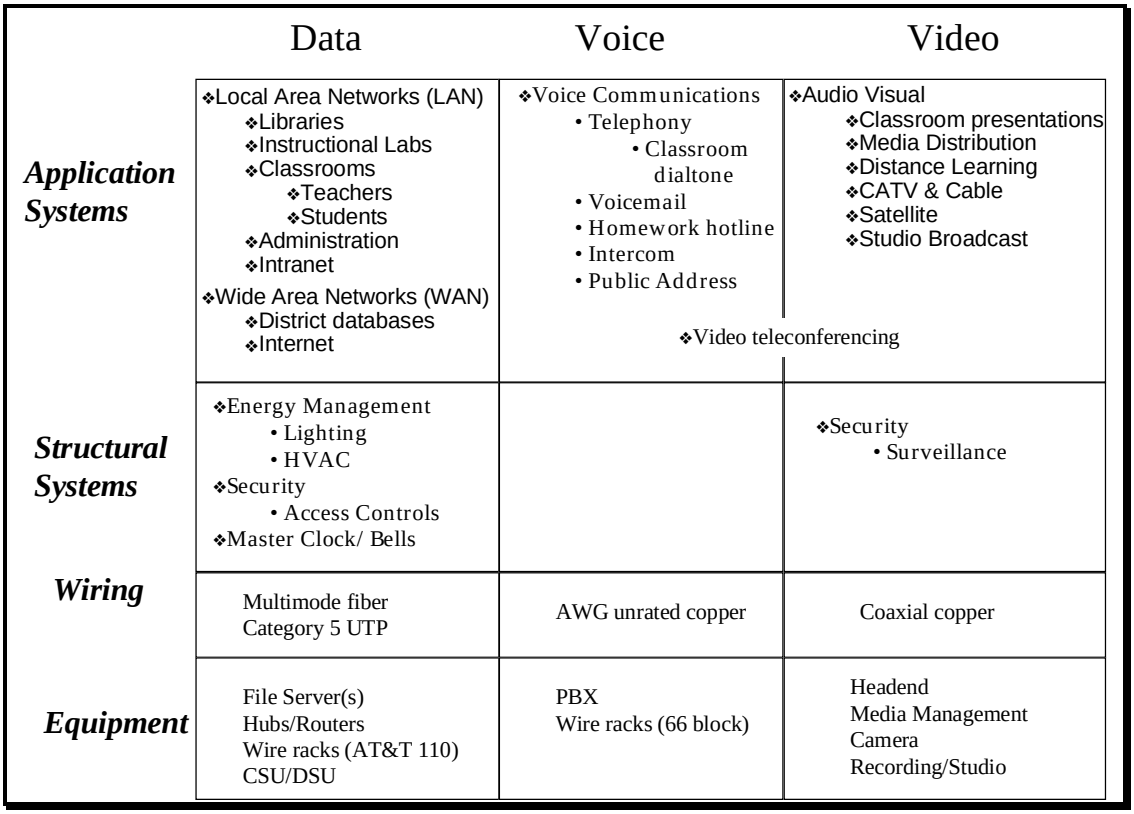

Figure 1 - School Communication Systems

As shown in the chart in Figure 1 above, the communications systems for a typical school facility can be divided into two categories—Application Systems which are usually added after construction, and Structural Systems which are usually built in and more difficult to retrofit. Of course, designing these systems as part of the architectural design of a facility is always preferable to retrofitting. In addition, there are significant savings in the integration of the systems as opposed to putting them in one at a time.

What is important to note is that the current "state of the art" specifications require that different wiring strategies be used for data, voice, and video systems. Within the next two years, it will be possible (and practical) to merge the data networks with the telephone systems using Computer-Telephony Integration (CTI). This will mean that telephones will be plugged into the computer workstations rather than a separate walljack. The same wires that support the LANs will support the telephones. This means that the wiring for telephones today will ultimately be superfluous, so either use cheap standard unrated copper (standard telephone wires) or go the Category 5 rated UTP so that it can eventually be used for high speed data LANs when the phones migrate to CTI. Using Category 3 as an interim solution for telephones may be

expensive overkill for today's telephone systems and woefully inadequate for tomorrow's data systems.

Even though there are three distinct wiring strategies for the different types of communications requirements, in new facilities and to the extent possible in existing facilities, there should be a main closet that will house the equipment, wiring hubs, and external feeds (e.g. telephone dmarc, cable & satellite feeds, etc.) for the entire facility. Again, the infrastructure wiring project must be approached from an understanding of all the potential system requirements, even if only some will be deployed initially.

The second step is the often overlooked needs assessment. Too often public sector organizations use the procurement process to buy, instead of its purpose: to shop! Committees are formed that perhaps view a few systems, talk to similar organizations briefly, and then write specifications tailored to the choice after less than thorough research. We see the RFP as the definition of the problem to be solved that describes the constraints—the existing budget, facilities, equipment, and staff. In identifying these needs, committees are formed and meet to define needs in the form of specific functions then set priorities, since there is always more need than resources to meet those needs. These organizations are at a canter; thinking ahead, but going too slowly. Rather than reinvent the wheel, organizations who want to go to bid should look for good examples of successful products and projects in similar organizations, and of effective, efficient RFP development cycles. The resulting RFP is designed to accurately describes the existing hardware, software, communications, staffing and budget and ask all responding vendors what current equipment can be used or is appropriate. Secondly, the RFP describes, in prioritized order, the organizations application needs. Third, the RFP describes the legal terms for contract, for acceptance and reliability testing and a suggested calendar. Finally, the RFP must have a tailored set of standard forms on which all vendors must respond. If, in addition, these forms are both electronic and paper-based, the evaluation can be conducted at a gallop. Vendors are notified in advance as to when the RFP will be released, its basic scope, the date of the vendor conference and tour, proposal due date, etc. The KCG process looks like this:

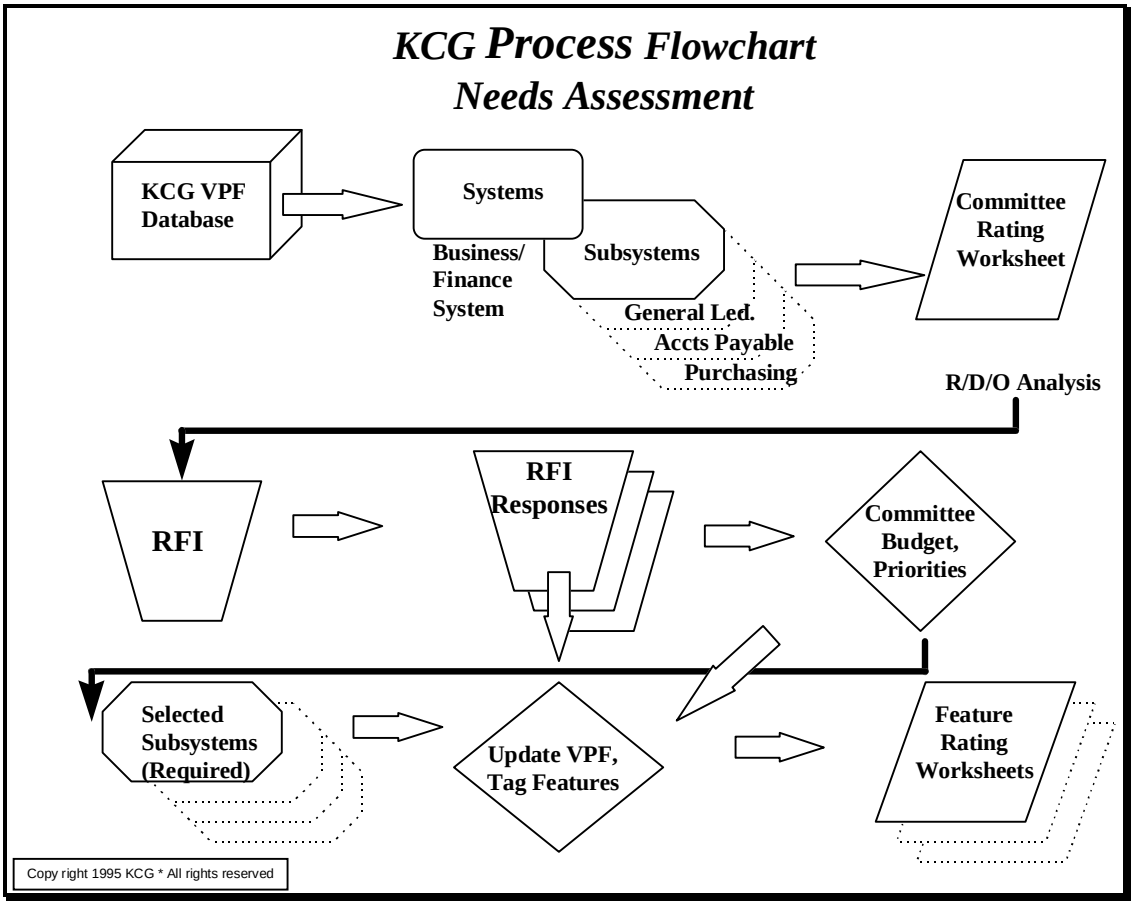

Figure 2 - Needs Assessment

The needs assessment process must consider the current available technologies and sometimes calls for a formal or informal Request for Information (RFI) which can help to define current available solutions to a list of specific defined problems. But the focus must always remain on the functions, not the technology. In the 'KCG Process' shown above in Figure 2, this results in a list of specific features and functions for each application area (called subsystems) that are rated as to their relative importance to the organization. This Feature/Function Checklist will then become the centerpiece of the RFP—it is the expression of need by the users, definition of system requirements and priorities for the vendors, and the specifications for performance and delivery for the attorney's and purchasing agents.

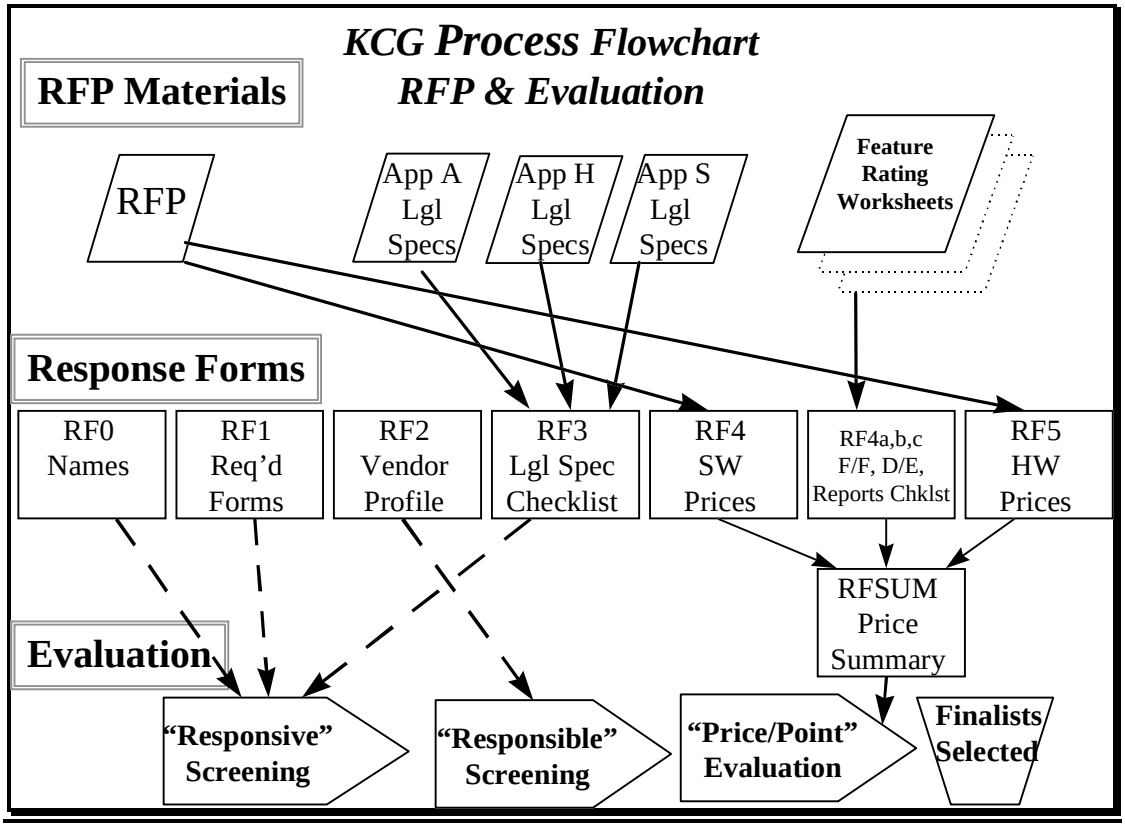

Figure 3 - The RFP

Once the needs and priorities are determined, the RFP can be developed. The main purpose of the RFP is to force full and complete disclosure from all vendors in a common format so that their products and services can be fairly compared. Lowest cost is not the objective of the competitive bidding process—best value is. We have developed a scoring formula based on the Feature/Function Checklists that computes a vendor's relative ability to meet the defined requirements using a "price per point" formula. This must be combined with their 'responsiveness' (i.e. their ability to follow the instructions of the RFP process), and their 'responsibility' (i.e. their proven ability to deliver what they propose), to narrow the field to three or four finalists.

The evaluation process is conducted on these three progressive levels: first, legal responsiveness; second, company responsibility; and third, determination of best value. Legal responsiveness is nothing more than determining if the format was adhered to, were the certificates of insurance and bonds in order, etc. Firms which pass the initial screening are then evaluated for "Responsibility," which is more difficult yet vital to define in advance. We recommend that the responsibility criteria be identified in the RFP for each vendor to evaluate before investing many hours in writing a proposal. Criteria such as financial health, local (or proximate) support, commitment to and functional knowledge of your market, good installed references that are similar to your organization, compatible technical infrastructure, etc. are all considerations. Vendors

found to be legally responsive and responsible are then rated by value. KCG pioneered price per point in the public sector more than a decade ago. Our clients embed a value rating in each feature or function requested. Points are assigned, and total points are divided into a normalized price to determine best value.

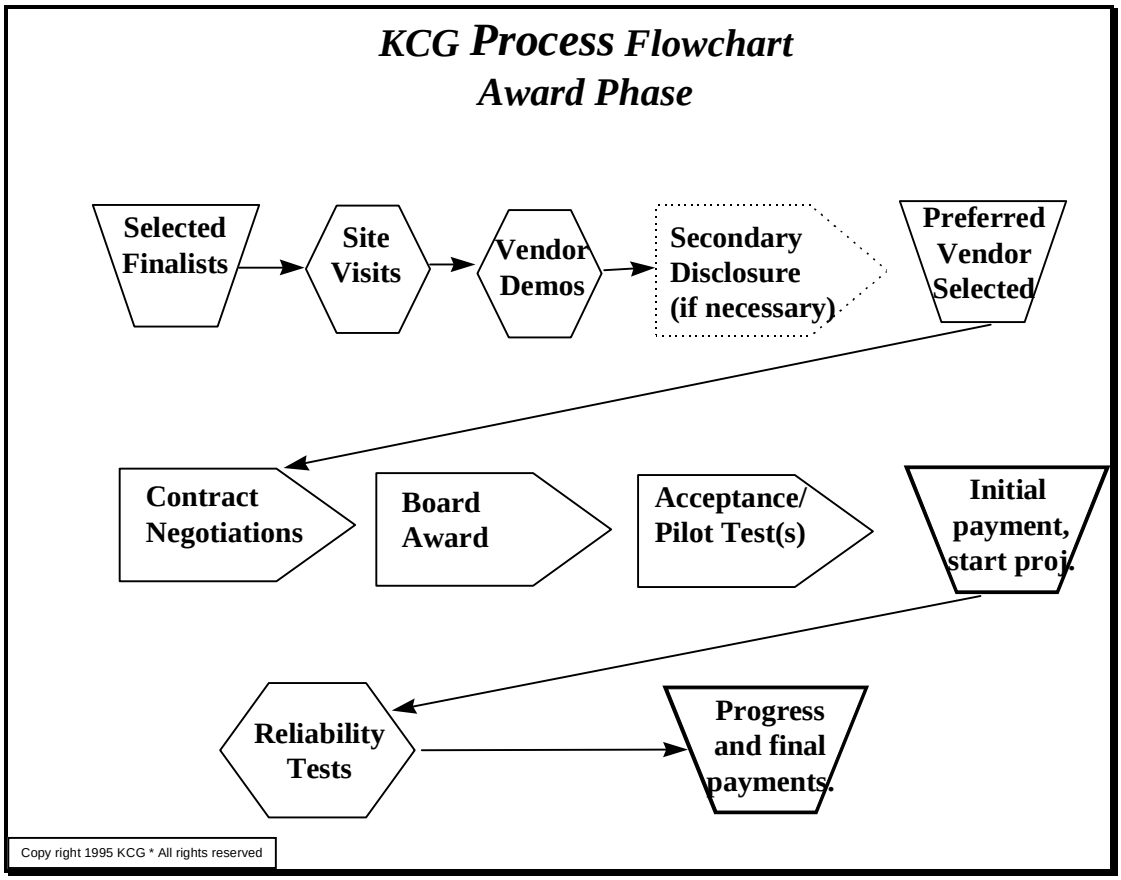

Figure 4 - Evaluation and Award

The top three or four finalist vendors with good installed references and the best value "price per point" scores are invited in for non-sales demonstrations after the evaluation committee visits at least one installed site without the vendor present. Following the steps shown in Figure 4, the job-alike site demo matches individuals of similar job function for an in-depth, real world look at the system under consideration. The final oral and demo, then, is not a sales pitch, but presented by the vendor's staff who will actually train, configure and install the product. The feature/functions list is the subject matter, with the vendor demonstrating, on the same hardware configuration as proposed, the functionality of the system.

But even at this point organizations can be fooled. A quality paper proposal, with a slick demo, and sheltered, pre-prepped references, can occasionally fool a selection committee. That's why step 3 is critical—the contract. Simply stated, "if it's not in

your contract, it's not in your deal." The RFP should state the legal terms that the organization will buy under, and ask the vendor to cross-reference its standard agreements to your legal protections. The RFP should state that the RFP, the proposal, and all written correspondence during the evaluation process are included documents in the final contract in order of precedence. But even at this point, with a seemingly good cross-referenced contract, organizations are still vulnerable. The real glue that fastens the contract to the RFP process tightly is acceptance and reliability testing.

Vendors are understandably reluctant to agree to any kind of formal acceptance process simply because customers change their minds and alter the scope after the award is made. Our process is intended to use the pre-defined Feature/Function Checklist and the vendor's responses to it as the basis for acceptance. The implementation process can be viewed as one of constantly changing risks between the customer and the vendor, shifting each time a payment is made. The purpose of the Acceptance/Reliability process is to keep the risks evenly balanced and ensure that what was proposed (not requested) is delivered and operating as promised.

The key point here is that payment is for value received. Cities and school districts receive no value for contract signing, or PO release or even hardware delivery or software installation. Value begins to accrue only after acceptance testing. A "take out" payment schedule keeps the vendor interested and the organization in control. In any deal, if you follow the wallet, you'll know where the crux of the deal really is. Vendor's deserve prompt payment and an acceptable profit, but not until value passes to the organizations. So, pay for training after it's successfully given and evaluated. Pay for hardware only if the software you purchased functions per the proposal and has been internally tested and signed off. Pay for the communications after they are installed and reliability tested. Withhold a significant amount for final acceptance, but pay promptly upon acceptance.

Finally, there is one last key "success" element. We see cities and school districts buy well, and still fail. They fail because of what the Big Six call BPR—or business process reengineering. We simply call it appropriate proceduralization. From the needs assessment forward, you must embed in the RFP and its evaluation the need to update and change how people do their jobs, or will do their jobs, with the new system. Training often stops at what button to push; and misses the success quotients—when, why, and what effect that button push has on the entire process. The proceduralization process is the ultimate measure of success. If the new system is simply newer, but does not save you time, perhaps its was the wrong system, or the right system burdened by the old procedures.

In conclusion, ethical procurements require planning, but not immense amounts of time. Ethical procurements start with committee members who sign "no conflict of

interest" forms and end with vendors, who were not selected, learning in writing why they lost so they can do a better job next time; and winning vendors knowing why they won. Ethical procurements end with a reasonable budget and timeframe, and an understanding of what the new systems will—and won't do. Ethical procurements take into account early the need for connectivity and support, while identifying the subtle but vital procedural and cultural change needs to successfully install any new system. The three-step process—infrastructure, needs and contract—mimic the horse's gallop—quick, yet efficient.