

SYSTEM UPGRADE OR SYSTEM REPLACEMENT? HOW TO MAKE THE BEST DECISION

By Neil Horden

The infrastructure of every technology system—9-1-1 PSAP implementations, computer aided dispatch systems, trunked land mobile radio—will eventually get to the point where a significant portion of the software and hardware will need to be replaced for continued, reliable operation. In almost every case, the current vendor will offer an “upgrade,” at what seems to be a bargain price compared with replacement of the entire system. These upgrades are typically handled as directed procurements (or sole-source) to the original vendor, since in most cases only that vendor is capable of providing the upgrade.

This type of sole-source procurement often begins with an unsolicited proposal from your current vendor. While these proposals are useful to understand the vendor’s perspective on the shortcomings of your current system and provide some insight into the current state of technology, they are rarely a good starting point for a procurement contract.

You, as the procuring agency, are faced with several challenges:

- First, determining whether an upgraded system, versus a system replacement, is actually the best fit for your current and future needs.
- Second, determining if the upgrade is offered to you at a fair price.
- Third, determining if the contract in its entirety (terms and conditions, division

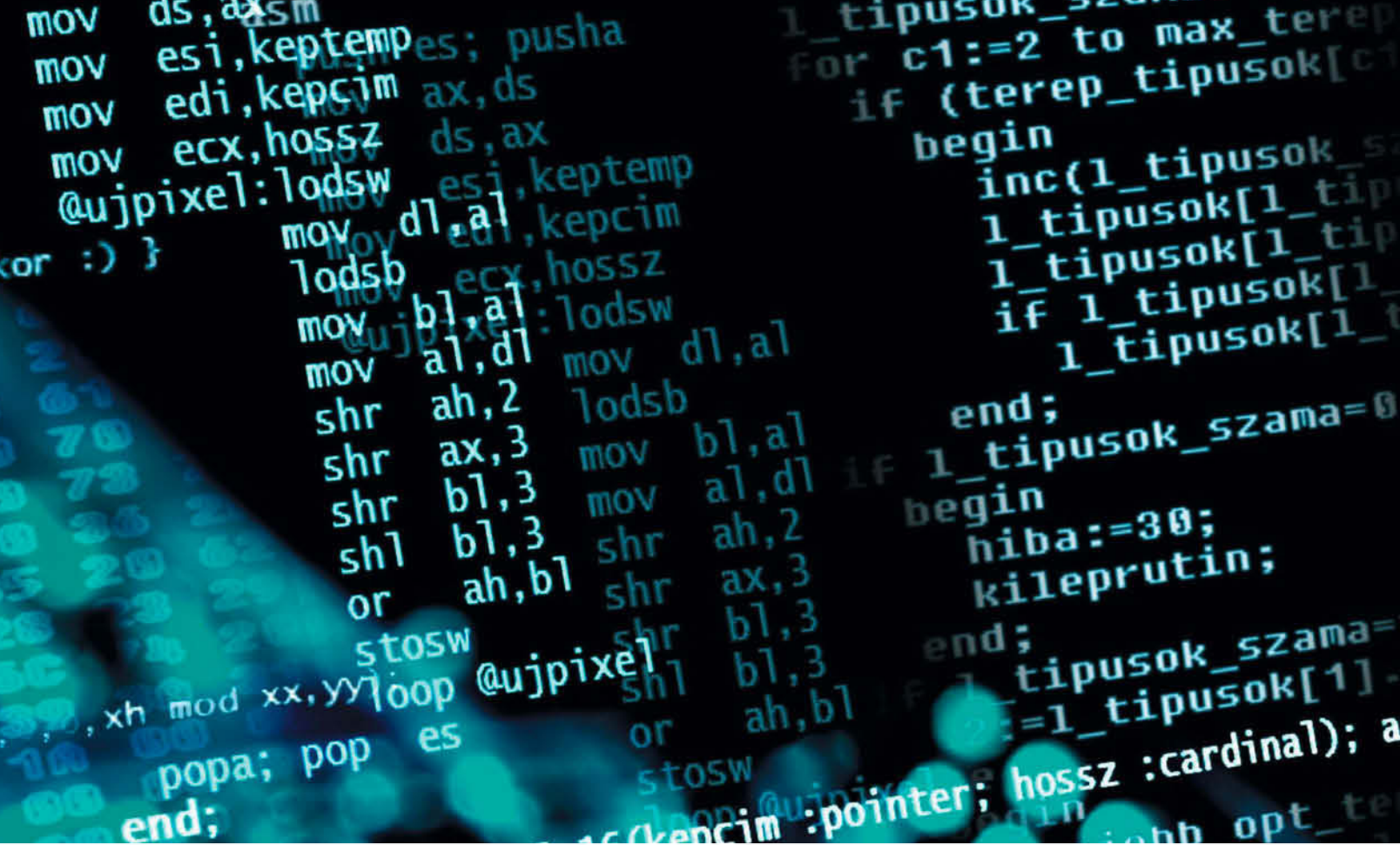
of responsibilities and costs, acceptance of risk, etc.) is appropriate and equitable (or even acceptable).

Far too often, the focus is on the price and the other two issues are ignored until the decision has been made. But, if the current vendor’s proposal is not the best starting point, what is?

Every procurement, whether a new system implementation, a system replacement or an upgrade, should start the same. This common starting point is a thorough requirements-analysis process. Through requirements gathering and analysis, you will be able to catalog and clarify the many interrelated needs of your organization. You will also be able to evaluate the current environment in a more accurate manner, having gathered all of the

pertinent assessment information. Analyzing the environment includes a thorough review of the existing systems and equipment, which often yields valuable system-use information such as how the system is used and what features and functions are critical.

Additionally, information on the anticipated lifespan and maintainability of each critical piece of the existing system is captured. This is especially important if an upgrade is being considered. Since an upgrade, by its very nature, relies on some portion of the existing system, understanding the remaining life and maintainability of that equipment is critical. Much of the cost savings anticipated through an upgrade can be lost if some of the remaining equipment does not have sufficient reliable life remaining. When a piece of the upgraded



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system cannot be maintained for the anticipated system life, you are forced to rely on additional “rolling upgrades” at an unknown long-term cost.

A proper requirements analysis will help you quickly find the best path forward. It may show that the best choice is a system replacement to address your needs through the implementation of a new system, replacing the entirety of your current system. Or, it could show that simply an upgrade to your current system is all that is needed, replacing obsolete equipment and updating software thereby providing a refresh and life extension to your current system, and saving money by retaining significant existing assets. Once this decision is made, the requirements can be developed into a document detailing exactly what is needed.

Some may feel that if their conclusion is to procure a system upgrade, they have wasted the analysis work that led to that result. This is not the case. With the development of your requirements, independent from your vendor’s influence, you are able to ensure that the specific equipment features and functions upgraded match your needs.

Even if you select a directed procurement from your existing vendor as your upgrade method, you will benefit by starting from your requirements, not their assumptions. This requirements-analysis process reduces the chance of spending funds on equipment and features that are not needed or upgrading existing equipment that has relatively little remaining life.

By taking your organization through a well-structured requirements-analysis process, you will have a much better understanding of the use and anticipated lifespan of your overall system. This information will allow you to analyze the cost of any upgrade over its anticipated useful life and compare that with the cost of a system replacement. Not only will going through this process provide you with more confidence in your decision, it will also give you the hard data to justify your investment. No matter which path forward you select, you will make the most informed decision. ●

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