

The Consultant's Role IN DISPATCH CENTER DESIGN

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Consultants play a vital role in public safety that, unfortunately, gets overlooked. A well-designed dispatch center and radio system is the central hub of effective public safety communications. The consultant can play a strong role in organizing and facilitating that design.

"The consultants have more credibility and knowledge than I have," asserted Captain Newman of the Pennsauken (NJ) Police Department. According to Sergeant Brightly from the Madison Police Department, "In today's day and age, a dispatch center is loaded with so much technology that a police department needs assistance in integrat-

The Burlington (NJ) 9-1-1 Center. A well-designed dispatch center is the product of a variety of vendors, products, decisions, and choices. Having a consultant manage the process alleviates much of its complexity and brings to bear a wide-ranging expertise that not all Comm Center managers possess - or have time to analyze.

ing all the systems." In short, the successful implementation of a PSAP relies on the expert knowledge and experience of the consultant.

When it is time to upgrade equipment or redesign a dispatch center, some agencies think it's sufficient to contract a vendor from whom they can order the parts required without any concern. Unfortunately, this is a misconception. "A vendor knows their products, but not your needs; a consultant knows both," declared Chief Emann from the Prince-

ton Township (NJ) Police Department.

In fact, several government agencies have determined that consultants are actually a waste of money. That is, until they realize that their new equipment and redesigned dispatch center is incompatible. A consultant knows that there are many potential roadblocks on the path to creating a new dispatch center. They know that the first step along the path to a functional facility must be a feasibility study, which allows the consultant to review all equipment and

facilities to determine how best to proceed.

DEALING WITH THE VENDOR

While the vendors' products are technologically advanced, without proper engineering there is no guarantee that the products you purchase will be completely compatible with your existing systems. When an agency orders new equipment with the hopes of solving a problem, it may not work unless a consultant is involved in the design and equipment decisions from the beginning. "You don't realize how important they are until something goes wrong, and you realize you can't fix it yourself," said Chief Emann. Imagine you are receiving interference on a few streets in your town, but the vendor's propagation map shows that your coverage is fine. A consultant will take a fine-tooth comb and wade through the myriad of variables for the lack of service. They he or she will list and explain how the problems can be resolved. Subsequently, you will be taken through the steps to correct the problems and develop reliable coverage.

If the vendor tries to contradict what is written in the specs, a consultant provides justification, thereby making any legal challenges difficult for the vendor. More importantly, the consultant keeps the vendor honest. You hire the consultant to look after the government's best interest. Suppose you purchase new radio equipment and, within one month of the purchase, 25% of the radios no longer work or have parts broken off. If you don't have a consultant, the vendor might tell you that there is nothing that can be done. However, a consultant would get on the phone and make sure that the equipment was replaced and working properly before the final payment was made. Often, the best tactic in negotiations is to have someone else represent your interests to keep you and your people out of the direct negotiations. A consultant can always "check with the client" before making decisions, thereby providing more checks and balances within the process.

ENGINEERING THE SYSTEM

With a careful eye for detail, the consultant's role is to take the project of redesigning the dispatch center and system from start to finish. Building upon

the already developed feasibility study, the consultant can move forward with the development of a more effective and efficient communications system. The design of the new facilities requires a focus on key technical, operational, and legislative issues such as the regulations dictated by the FCC.

Sergeant Brightly, Madison (NJ) Police Department, stated, "The most important thing is paying attention to the details. That's why things have worked so well for us." For example, if the equipment does not record data properly or if the radios receive interference from neighboring channels, it is not up to the government agency to make the correction; it is up to the consultant. The consultant is familiar with handling these kinds of problems and can have the issues resolved promptly.

HANDLING EQUIPMENT

The rapid pace of advancements in technology can make it nearly impossible to keep up. Numerous agencies find themselves with legacy telecommunications systems such as CDPD data systems, analog backhaul, and two-way systems. The switch to wireless, VoIP, the transition to an IP-based connection, interoperability, and next-generation technologies have made using a consultant a critical component of any system upgrade. "With technology today, there are things out in the market that we've never seen before. [A consultant will] do all the research to ensure that the system is going to perform properly and then coordinate with vendors to make sure it definitely works," said Sergeant Brightly. It is the consultant's, not the agency's, role to stay abreast of technology.

When customers purchase a computer, by the time they walk out of the store, install the software, and connect to the Internet, their computer is already outdated. The average person will purchase a new computer every three to five years because it becomes incompatible with the current technologies. Imagine how much you would be spending on your dispatch center and communications system if it was purchased under the same concept. Depending upon the agency's feasibility study, the consultant may "leapfrog" the PSAP from their old systems to the most innovative one available to date, for a more economical price.

A consultant engineers the dispatch center and communications system in such a way that allows for advancements. Future advancements will not have to be purchased as often as buying that new computer. The consultant will be able to design and construct a center that will save a municipality hundreds of thousands of dollars by allowing for future innovations.

FOCUS ON THE JOB

One major concern when contemplating the redesign of a dispatch center is the multitasking required by government employees. Being employed in a profession that already faces a great deal of responsibility, these employees would be forced to take on the daunting task of developing and implementing a new dispatch center or system. "Redesigning a dispatch center can be a job in itself," said Chief Emann. "That's why you bring in the experts."

Secondly, developments in technology would require the expertise of an individual adept with tackling technical issues. While some of the agency personnel may have a technical background, the successful execution requires the attention of an expert dedicated to devoting a great deal of concentration to the intricacies of the project. Consultants offer the knowledge of the technical aspects of the project, allowing them to not only aid in the development and management of the project, but create the specifications that the vendors must follow. "The consultant was invaluable when it came to the bid specs and designing the system," explained Captain Newman, Pennsauken PD.

It is impossible for employees to handle their everyday job and be expected to become communications experts in equipment and engineering overnight. "My job is not easy, and neither is theirs; but we have one common goal - to make sure we keep the community as safe as both of our jobs allow," said Princeton's Chief Emann.

We are all experts in our own fields and no one would expect truck drivers to have the knowledge and capabilities to fix a vehicle the way mechanics do, even though they drive for a living. They may have knowledge of certain parts of the truck; however, you would never ask them to create blueprints of a newly designed truck and expect it to work



The Gatton County (NC) 9-1-1 Center. PSAPs both large and small can benefit from a consultant's expertise during an upgrade or redesign. Independent consultants bring experience and expertise without the burden of trying to make a sale at the same time.

perfectly. But if you asked them to test the equipment, they would have valuable input into what works, what doesn't work, and suggestions for improvement. In the same way, consultants ask what qualities and functionalities the agency wishes in their dispatch center.

STAYING IN BUDGET

Keeping your budget in mind, the consultant has the ability to fashion a newly designed and more functional center. "The best part is that consultants stay in budget; in other words, they do what they promise at the price that was agreed upon," explained Chief Emann.

Utilizing a bidding process allows for more competitive pricing. Not only do you get to comparison shop on prices, but also on the quality. This is done by examining, in detail, the vendors' bids. If you aren't sure what the difference is, your consultant can offer recommendations and explanations. According to Sergeant Brightly, "The consultant tracks, manages, and guarantees that your cost will meet the budgeted amount." Ethical consultants are independent of equipment vendors, allowing them to offer a completely objective view of your options to generate the best possible system for your budget.

YOUR BEST INTEREST

The truth is, consultants are not trying to sell products. They are there to ensure that the client is happy and receives the most cost-efficient products from the vendors. Pennsauken's Captain Newman stated, "I didn't trust the vendors; I trust the consultant. [The consultant was] hired to look out for my best interest."

When the new systems are being built, consultants make sure that all the specifications are being met. This process includes such simple tasks as taking inventory, to the more complex tasks of running tests on all equipment, ensuring functionality. As far as construction is concerned, they make sure that all rules and regulations are being followed and are up to code. They guarantee that the building will function correctly with the proper electricity, plumbing, and security needed.

Those governments that have done jobs like this in the past without a consultant typically come to find the value in hiring one. They learned their lesson by squandering money and being left stranded with a system that is not fully operational. When asked, Chief Emann answered, "The consultant's role is vital to your dispatch center's design; I can't stress that enough."

By hiring the consultant, you can guarantee that your dispatch center will be fully functional. The experts are out there for a reason, and countless agencies have learned that it is highly beneficial to use them. **9-1-1**

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