Development of International Standards for Facility Management

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Representatives of APPA's Standards and Codes Council (ASCC) have been working with representatives from the International Facility Management Association (IFMA) through the American National Standards Institute (ANSI) and meeting with representatives from more than 20 countries, developing a set of international standards for facility management (FM). These standards are being developed under the International Organization for Standardization (ISO) technical committee, known as "TC 267 Facility Management." TC 267's standardization work began over three years ago, and the committee has met several times each year. While progress is sometimes slow, the standards are taking shape and may begin to affect educational facility leaders in the coming years.

Several European and Asian nations have FM standards affecting owners and organizations within their national boundaries; however, there are no international standards and no national standard for FM in the United States. We are catching up now. The ASCC understands the importance of FM standards and has been actively involved in the development to ensure that APPA's members are represented.

WHY

Why are FM standards important and why should APPA be involved? Educational facilities represent one of the largest building owners in the United States. Educational facilities also have some of the most varied building uses, including classrooms, laboratories, animal facilities, healthcare facilities, and residences. In short, APPA members represent a significant footprint in the built environment and should have a corresponding influence on any facility standards. *Perhaps even more important*, as a membership organization of 15,000 educational facilities professionals, APPA's best practices and extensive body of knowledge provide a wealth of contributions for the purpose of creating national and international standards.

There is a hierarchy of requirements within every field that affects its ability and flexibility to operate. Codes are the most stringent of these requirements, and when recognized by a governmental body, become law. Typical examples of codes affecting our facilities are the fire safety codes as promulgated by the National Fire Protection Association (NFPA), building codes by the International Code Council (ICC), and rulings and codes established by the U.S. Occupational Safety and Health Administration (OSHA) regarding worker safety. At the bottom of the scale are guidelines, which are developed to assist with operational decisions but are not a legal requirement.

APPA's own custodial staffing guidelines are a good example. While contributors to the APPA guidelines would like to see them utilized by every educational organization, it is not mandatory. In the middle ground are standards, which may build on guidelines but don't have the requirements associated with codes unless a regulating body chooses to adopt them for that purpose.

In general, standards are voluntary and may be accepted and utilized by an organization to demonstrate a level of quality or value. The ISO 9000 quality improvement standards are a good example; an organization may be certified to comply with ISO 9000, but there is no legal obligation to be certified. From a marketing perspective, it may help an organization to be certified through ISO 9000, but it is not required by law.

CODE CHALLENGES

The challenge with codes is that they often come with cost implications for an organization. For instance, it is cheaper (first cost) to construct a

building without fire sprinklers; but if a community has accepted the ICC without modifications, then an owner may be required to install fire sprinklers to obtain a building permit or to continue to operate a facility. Often, a standards development organization (SDO) such as the NFPA must demonstrate the costs associated with a code change against the benefits resulting from the code. Governments may review the cost/benefit documents when deciding whether to adopt updates or changes to a code. Previous Code Talkers articles have provided comprehensive descriptions of the process followed by different SDOs with which the ASCC complies.

The FM standards work within ISO has focused on three areas to date. The first is clarifying what is meant by "facility management" and defining several terms that describe what the profession does. The definitions are high level, and focus on the profession overall rather than on specific definitions about what is in a facility or defining the services performed by a facility organization. ASCC is developing a separate effort to define those things that comprise facilities.

The *Facility Management—Terms and Definitions* document, ISO 41011, provides standard nomenclature used in FM and will be used in subsequent standards (described below). These definitions concern eight areas: FM, assets, people, sourcing, process, finance, general business, and measurement. Without going into the details of each area or the definitions provided, the terms and definition standard identifies that FM is a complex field incorporating a wide range of knowledge and expertise.

Beyond the complexity and scope of FM, there are also a number of ways of delivering or receiving FM services. As facility operators, we can view this in the form of a matrix: From an ownership perspective, FM services may be self-operating or outsourced; while from an FM perspective, the services may come from an internal service provider or from an outside organization (contractor). All four perspectives and both sides of the issue must be covered via these two approaches. It's no wonder that it took over two years to reach agreement on the Terms and Definitions document.

TERMS AND DEFINITIONS

There are many terms in ISO 41011 whose definitions may be familiar to APPA members: terms such as "contracting," "support service," "end-user," "zero-based budget," and "benchmarking" to name a few. However, while we think we are familiar with a term and know a definition, there may be subtle but important differences between what is presumed to be a common term and how ISO defines the term. APPA members will be generally comfortable with the definitions because they are consistent with the *Body of Knowledge* and other APPA publications.

The next standard is *Facility Management—Guidance on Strategic Sourcing and the Development of Agreements*, ISO 41012, developed concurrently with the Terms and Definitions document. This standard provides a management model for owners of facilities and their FM organizations to assess and determine if certain FM services should be retained or replaced. This is becoming—and will continue to be—an increasingly important issue.

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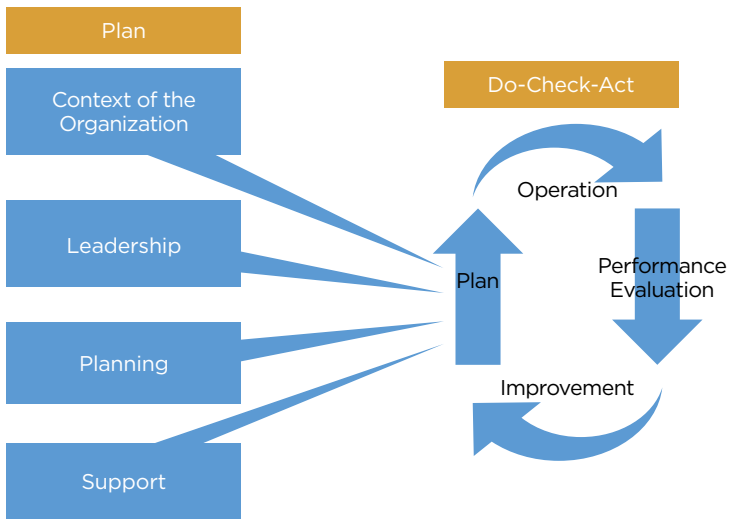
Consider, for example, the rapid changes occurring in facilities technology and the rise of data-driven management practices, leading to more complex and specialized FM requirements that may require external support. Alternatively, an institution may decide to focus on its core mission and obtain all campus housing, for those who want it, from an outside provider. From the perspective of users, the standard supports the FM organization/owner in establishing expectations, defining what services will be delivered, overseeing the management of services, and measuring performance.

The above standards are almost ready for publication and were needed for the next, significant standard, *Management Systems*, ISO 41013. The *Management Systems* standard is in draft form now. It looks at an organization's structure and shows how it can focus on continuous improvement via a Plan-Do-Check-Act (PDCA) cycle. APPA representatives on the committee have been heavily involved in developing this standard, taking advantage of systems that APPA pioneered for FM in 1989 and which it has used to identify campuses for the Award for Excellence and the Facilities Management Evaluation Program (FMEP).

Rather than outline the FMEP, which is described on the APPA website at *www.appa.org/fmep*, it may

Figure 1: PDCA Cycle



be more relevant to tie the goals of the *Management Systems* standard to the significant work being accomplished via the Thought Leaders Series (TLS) and recently discussed by Lander Medlin (July/August 2016, "A Preview of the 2016 Thought Leaders Report: *Remaking the Facilities Organization*"). There she previewed the work of the 2016 Thought Leaders symposium, during which participants discussed two major topics: "Creating the Customer-Centric Facilities Organization" and "Creating a New Facilities Team/Workforce." This is exactly the goal of the *Management Systems* standard: helping an FM organization develop the tools needed to address customer needs and to improve effective delivery of FM services through a coordinated work team that changes as demands change.

THE PDCA CYCLE

The ISO 41013 drafting committee was subdivided into two parts: The first part looked at the four sections of the standard focusing on development of the Plan step; the second looked at three sections addressing the Do-Check-Act steps. Comprising the Plan section are the following: Context of the Organization, Leadership, Planning, and Support. These are further described below.

CONTEXT OF THE ORGANIZATION

Who is the customer? What are the customer's strategic objectives? What services are needed? And how will the system be organized? In simple terms, these can be described as addressing the needs of the programs inside the buildings and not the buildings' needs (materials, components, and systems). These fundamental questions are asked in the FMEP in several places. The TLS preview identified this section as "the organization knows who their customers are, what they need/want." However, within the ISO standard, it gets a little more complex, just like running an educational FM organization. FM customers are both internal and external; they comprise both human and nonhuman (plants and animals) products and services. The organization being served also has goals and objectives that must be understood, legal and regulatory requirements that must be met, and risks that must be managed in some manner. Because the FM organization affects everyone (and everything) working in a facility, it is essential to understand all these elements to develop a meaningful management structure.

LEADERSHIP

This section looks at the leadership of the organization being served as well as the leadership providing the FM services (whether internal or external). Since leadership is more about creating an atmosphere where the entire team can work effectively, this is also the section that looks at policies, roles, and responsibilities. Similar questions are asked in the FMEP and addressed in the TLS report.

PLANNING

This section is not about architectural or master planning; it is about planning for normal operations and responding to the unexpected—in other words, how the FM organization will meet the larger organization's goals and objectives as well as identify and respond to risks and other external influences. Being a standard, it provides no answers or mandates about how to do these things; rather it identifies what to consider and include in an operating plan. The plan also sets up requirements for the next section, by identifying what is required to address the needs of the organization being served.

SUPPORT

While it would be nice to have an outside organization dictate that the FM organization must have a specified level of resources to meet its responsibilities, such a standard would fail and not be adopted. Instead, this section outlines the factors that must be considered to provide the required services. Those factors include people, funding, equipment/tools, training, communication (both internal and external to FM), and metrics (where available).

These four sections of the *Management Systems* standard set up the remaining three sections, which show how to use the Plan step effectively to manage an organization. These three sections follow the three steps in a PDCA cycle of continuous improvement: Do, Check, and Act. They include the following: measuring what occurs and coordinating the operation with customer needs and goals; monitoring the operation and measuring against goals and performance indicators; then addressing nonconformity or opportunities for improvement. These all comprise, in an organized way, an international standard for FM organizations.

At this point the ISO *Management Systems* standard is in the committee draft stage. It will be available for all members of the ISO FM Task Committee. These experts, owners, operators, consultants, and others from around the world will review the draft and comment. In October 2016, there will be a meeting to collect comments and make revisions before finalizing the draft for international distribution and comment. The goal is to have the standard published early next year.

APPA has been well represented with three active participants—Brooks Baker, John Bernhards, and Ted Weidner—utilizing existing APPA tools and documents that have long-term validation in practice by APPA members. We welcome any comments about the standard's contents as described in this article. As the standards are made available through ISO, there will be additional information and presentations so APPA members can better understand their scope and implications for facility maintenance.

Just as with ISO 9000, an organization may or may not choose to utilize them and, when they are available, to be certified. Will an internal FM organization wish to get ISO certified? Maybe. Will a campus that outsources FM services want to see service providers become ISO certified? It's likely. Just as ISO 9000 has "set the bar" for overall quality, ISO 41001 has the potential to set the bar for FM.

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