

Management Information Systems: EHS, Sustainability, Quality



Areas of Expertise

- Requirements Gathering
- Business Case/Return on Investment
- Use Case/Business Analysis
- Systems Selection Support
- System Conceptual Design
- System Implementation and Integrations
- Output Analysis and Report Building
- Training
- Testing
- Operation and Maintenance (O&M) Support

Key AECOM Attributes

- Blended team of subject matter experts and MIS professionals.
- In-depth knowledge of specific clients and industry sectors.
- Global network of 90,000 staff in 150 countries.
- Strategic and tactical teams serve the full range of our clients' MIS needs.
- Our "Technology as a Service" approach mobilizes AECOM's institutional MIS knowledge and resources for the benefit of private industry and government clients.

More Information

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Overview

Environment, Health and Safety (EHS), Sustainability, Quality... all rely on Management Information Systems (MIS) to improve performance and productivity, while saving money and reducing risk. Organizations are struggling with the challenges inherent in the identification of management information systems to support their EHS, Sustainability and Quality programs and eager to leverage the data being collected and processed to influence smart operational decisions. Commercial software systems or custom built applications are typically complex. Ensuring the best "fit for purpose" solution is selected and implemented requires experience with these systems, a proven approach, and a deep understanding of the requirements, the relevant industry and our clients' specific work processes.

At AECOM, we combine our core environment and safety business with information technology expertise to offer complete life-cycle support to our clients. AECOM is an independent advisor with established relationships with leading EHS, sustainability, energy and quality software vendors, and global experience aligning management systems with ISO 9000, ISO 14001, OHSAS 18001 and sustainability requirements.

Our Approach

The AECOM MIS team brings a standard, proven methodology that is both flexible and scalable to address specific client scopes, priorities and requirements. We help you to identify your goals and then work with you to develop requirements for your selected system. Knowing your goals, we can assist in your business case development. Our MIS team is made up of certified and trained professionals who truly appreciate your position because many of them once sat where you may sit now—as an EHS MIS specialist, an EHS professional, or as a business process leader. Over the past 20 years, AECOM has developed a robust, consistent yet flexible and scalable implementation methodology. AECOM's methodology allows our teams to accurately and efficiently design and deliver successful, sustainable solutions while reducing the strain on your resources.

EVALUATE. We help you select the best fit-for-purpose software using our MIS Requirements Library and leveraging our software vendor selection expertise.

IMPLEMENT. Our team helps you meet your emerging market demands with forward-looking planning and execution of enterprise-wide implementations.

MANAGE CHANGE. Critical to the sustainability of the solution is management of change. Whether the change is from legacy systems and tools to your new solution, or changes that may impact your deployed system, AECOM will help you assess the impacts and manage the changes.

Areas of Expertise

EVALUATE

Requirements Gathering. Our subject matter experts, information technology professionals and business analysts work with your team to turn “wish lists” into system requirements. We support your operations by developing programs and working side-by-side with your staff at their facilities. Our real-world exposure enables us to identify, refine, and prioritize client-specific requirements using our proven methodology.

Business Case/Return on Investment. We help you develop the business case required to get the company commitment and alignment on your project vision. As your company moves beyond compliance, we help you “sell” the project internally by identifying how these systems can be used to improve performance and sustainability.

Use Case/Business Analysis. Our team ensures MIS implementation projects are not conducted in a silo, and engage the full range of stakeholders. We believe your system should enable your desired workflows and processes instead of dictating those to you. The key to our process is capturing the types of users and their expected interactions with your selected system. It is through this approach that we are able to deliver on systems with a high degree of user acceptance, ensuring that over the long term, the system will be sustainable.

System Selection Support. We are vendor neutral. Our primary goal is to satisfy our clients. We have established relationships with the leading vendors in this space, thus are able to help you identify the best options, which saves valuable time and resources. Based on your specific requirements and your use cases for the system, we help develop scripted demonstrations, that are designed to help you recognize comparative benefits and potential shortcomings of vendor offerings. We can also provide custom software solutions that build on platforms such as SharePoint, Sitefinity, Drupal, etc., or from the ground up using technologies such as ASP.NET MVC, Java/J2EE, SQL Server, Oracle, Knockout JS, and others.

IMPLEMENT

System Conceptual Design. Once you have made your selection, our team collaborates with you to design your solution. This may include interfaces (to both receive and share data with other systems), custom reports, and external dashboards. Design may focus on determining which modules and elements of those modules will be necessary to meet your requirements. At the design stage, the project team’s ability to efficiently and cost effectively make changes is greater than at any other time in the project, so our team works closely with yours to identify use cases and the design focuses on delivering on those.

AECOM offers creative solutions for all of the major mobile device platforms, including iPhone®, iPad®, Android™ phone, Android™ tablet, and Windows® 8 for monitoring greenhouse gases (GHG), collecting data for Title V reports or NPDES permits, tracking and reporting safety incident, collecting and analyzing data from quality audits, and other compliance activities.

System Implementation. During this configuration phase, AECOM works to set up the solution to model your company hierarchy, business entities, user profiles, and to embed required business logic necessary to process and report the data. We leverage tools provided by the vendors and ones that we have developed in-house to facilitate and expedite this process. We work diligently to avoid customizations that can jeopardize your software warranty and your ability to upgrade as product enhancements become available.

Content Development, Integrations and Migrations. AECOM has decades of experience with migrating our clients’ historical data, developing new content or standardizing existing data. We work with you to integrate or link existing systems with the MIS to enhance data flow and take advantage of software already in place (e.g., Human Resource systems, air emissions data) and valuable historic data.

Report Building. Our specialists design and build tailored reporting and dashboard systems that integrate with existing reporting software – for quick, cost-effective business enhancements.

MANAGE CHANGE

Training. Nothing is more important to the success of the project than a knowledgeable project team. AECOM starts the training process during the initial steps of the project and this continues throughout. Our training approach is to focus on the way you want to use the system, not on generic vendor provided documentation. We provide training for all levels/roles, from database administrator and system administrators to end users. We want our clients to be comfortable and confident that they can maintain their systems independently.

Testing. AECOM can either take the lead on testing, or support your internal team in the development of test cases and test plans. Like our training, the test cases reflect your desired workflows and business rules. We use a “traceability matrix” approach that allows you to verify and validate that the agreed to requirements have been met. Test instances are populated with real world data to make it easier for clients to sign off on the delivered solution.

Operation and Maintenance (O&M) Support. Although our philosophy is to train client teams to be able to operate and maintain their own system, we are always willing to provide post implementation O&M support as a transitional or longer term service. Many of our clients take advantage of this in periods when their resources are over-committed and/or for the less frequent but more advanced activities that we can perform more efficiently. Our post-implementation support also includes conducting an impact analysis for proposed changes including software patches and upgrades and configuration changes to align with changes to your organization, staffing and operations.