

US ports set sail for ISO/PAS 28000

by Faith Leavitt, President of FLW Enterprises, Inc. and Principal with the Global Environment & Technology Foundation (GETF), and Stephen R. Wassersug, Vice President of FLW Enterprises, Inc., and Principal with GETF.

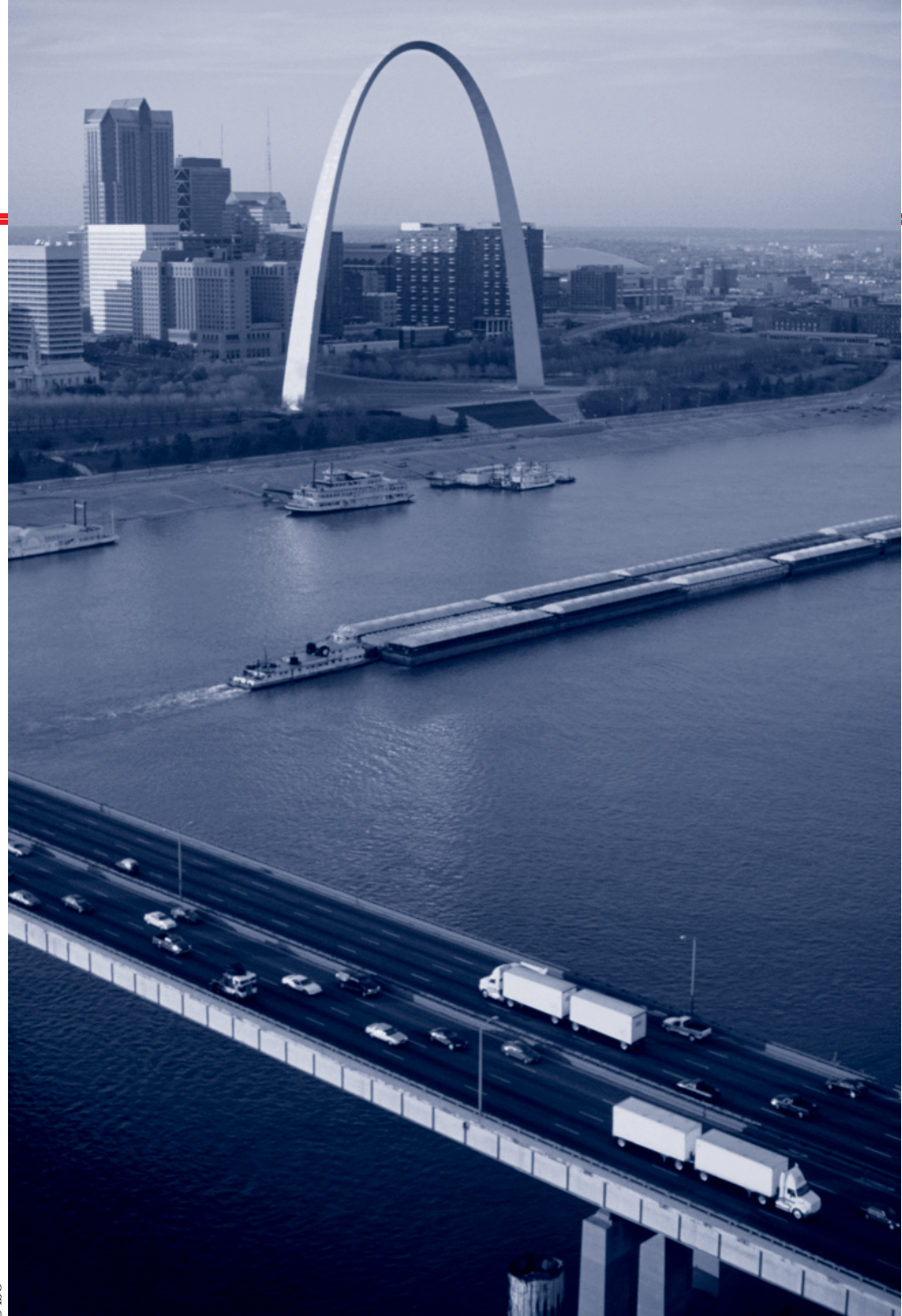
Four US seaports and one international airport have joined forces in a unique cost-share consortium to develop a security management system (SMS) based on a new ISO publicly available specification for the security of the supply chain, ISO/PAS 28000.

This ground-breaking programme is the first of its kind to field-test the new security specification and report on its organizational benefits. ISO/PAS 28000:2005, *Specification for security management systems for the supply chain*, integrates the risk management approach of ISO 14001:2004.

Seaports and airports have a complex array of operations that they manage on a 24-hour basis, and these multiple responsibilities quite naturally follow a systems-based management approach.

The good news is ports and airports can easily integrate a security management system into existing supply chain operations. Just as ports have effectively utilized ISO's environmental management system, this system offers ports a realistic and cost-effective manner to manage their specific security needs. For that reason, ISO/PAS 28000 with its Plan-Do-Check-Act (PDCA) methodology is a compelling tool for any organization, whether large or small, to have in its security toolbox.

The American Association of Port Authorities (AAPA)¹⁾ and the Global Environment and Technolo-



gy Foundation (GETF)²⁾ partnered to support the programme and to provide programme design and technical assistance to the participants.

Using environmental management for inspiration

The idea for the current SMS initiative got its start more than two years ago when AAPA, GETF and the US Environmental Protection Agency sponsored an environmental management system (EMS) assistance programme for ports involving 11 seaports³⁾. Before ISO/PAS 28000 appeared, one of the 11, the Port of Houston, who came to

1) The American Association of Port Authorities (AAPA) is an alliance of leading ports in the Western Hemisphere that protects and advances the common interests of its diverse membership of public port authorities from throughout the Western Hemisphere as they connect their communities with the global transportation system.

2) The Global Environment and Technology Foundation (GETF) is a not-for-profit organization that provides EMS training and support to public entities, and manages the National Public Entity EMS Resource (PEER) Center, a national EMS clearinghouse (www.peercenter.net) made possible through a cooperative agreement with the US Environmental Protection Agency EMS Programmes at www.getf.org.

3) See www.peercenter.net for the Ports EMS Assistance Programme Final Report.



Maritime security

The technical assistance strategy model includes the following elements:

Intensive training

A two-and-a-half day workshop begins each phase and prepares attendees to train and lead their SMS teams through each of the requirements in ISO/PAS 28000.

Hands-on activities

Document samples

Individual team work sessions

Site visits

Individualized training and technical assistance

SMS document preparation assistance

Internal desk and field audits

Troubleshooting

Verifying closure of nonconformances

Monthly all hands conference calls

Participant-generated agenda

Information sharing: lessons learned and keys to success

Opportunities for collegial discussion and mentoring

Bi-weekly individual technical assistance calls

Accomplishing implementation milestones

Developing SMS documentation

Addressing and resolving barriers

Electronic access to information

A password protected Intranet site facilitates communication and document/data sharing (where security requirements permit)

Information posting: training manuals, security articles, etc.

the programme with a certification to ISO 14001:2004, wanted to build a security management system on the EMS platform.

Russell Whitmarsh, POHA's Chief of Police remarked, "We developed a security management system based on ISO 14001:2004. The PDCA model has already verified that we are in compliance with security requirements, and provided us with organizational structure and responsibility for more efficient use of resources. It has also provided an ongoing process to monitor and measure key security parameters, and guided us to reallocate resources to highest security priorities."

At the completion of the environmental management system initiative, a number of ports wanted assistance in implementing an SMS using a field-tested and proven plan, and the current SMS consortium was formed. Faith Leavitt, who assisted Port of Houston in SMS development, and who provides technical assistance to the current participants, says, "As the country's gatekeepers, ports already incorporate security management as part of everyday business. Their need is not only to manage existing security risks, but also to institutionalize systematic processes that manage and where possible eliminate those risks."

"The security management system offers ports a system to manage their specific security needs in a realistic and cost-effective manner."

ISO/PAS 28000's proven PDCA model and systems approach allow ports to identify vulnerabilities, establish action plans, implement continuous monitoring and measuring, and benefit from continual improvement opportunities – all in coordination with the organization's strategic objectives and legal requirements." She adds, "the SMS helps ports allocate human and financial resources more appropriately,

and confirms that they are addressing the 'what if' scenarios that are today's post 9-11 realities."

In the spring of 2005, AAPA surveyed the ports community and validated the need and timeliness of an SMS initiative⁴). AAPA provided resources to defray some start-up costs, helped GETF develop a concept and scope for the programme, and participated in the applicant evaluation process.



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A competitive selection process

The number of participants had to be limited to provide optimal training and technical assistance, so the selection process was a competitive one. Lessons learned in four previous management system initiatives involving multiple organizations using a consistent implementation plan and schedule helped GETF and AAPA develop selection criteria, which included:

- Top management commitment, involvement and visibility;
- Sufficient resources to complete the project;
- A plan to obtain employee support and participation;
- Information technology capabilities for participants to exchange information electronically;
- Agreement to collect and information and make it available quarterly about SMS implementation and costs; and

⁴) Ibid.

Main Focus

- Previous process management system knowledge/experience (e.g. quality systems or EMS).

Interested port authorities submitted a letter of application to AAPA and GETF, signed by the port director and containing the following information :

- a brief description of the port authority, its management structure and activities ;
- the name of the management representative ;
- a description of how the project manager intends to work with the relevant port departments in developing and implementing the SMS ;
- a preliminary indication of the fence-line (e.g. geographic and operational boundaries) for the SMS ;
- a description of the reasons the port wishes to participate and some of the benefits it hopes to realize ; and
- a clear assurance that top management will provide the necessary visibility, staff time and resources to successfully develop and implement the SMS.

Programme description

Phase 1	Phase 2	Phase 3	Phase 4	Final
Plan	Do	Do	Check and act	Meeting
March-Sept. 2006	Sept.-April 2007	April-Sept. 2007	Sept.-March 2008	March 2008
Establishing the programme	Managing risks	Performance improvement	Verifying the system	Outreach and information
<ul style="list-style-type: none"> ✓ Defining and documenting the scope ✓ Organizational goal ✓ Programme leadership ✓ Policy ✓ Risks/threats ✓ Legal and other requirements ✓ Evaluation and compliance ✓ Metrics ✓ Audit – find and fix ✓ Management review ✓ SMS manual ✓ Create/manage documents and records 	<ul style="list-style-type: none"> ✓ Resources, roles, responsibilities and authorities ✓ Operational controls ✓ Competence, training and awareness ✓ Communication ✓ Documentation ✓ Control of documents and records ✓ Emergency preparedness and response ✓ Metrics ✓ Audit management review ✓ SMS manual 	<ul style="list-style-type: none"> ✓ Objectives, targets and programmes ✓ Metrics ✓ Audit nonconformities and corrective actions ✓ Management review ✓ SMS manual 	<ul style="list-style-type: none"> ✓ Monitoring and measurements ✓ Internal audit ✓ Preventive actions ✓ Management review ✓ SMS manual 	<ul style="list-style-type: none"> ✓ SMS manual ✓ Qualitative and quantitative benefits ✓ Barriers ✓ Keys to success ✓ Lessons learned ✓ Case studies ✓ Final report

Figure 1

The SMS Assistance Programme is an 18-month, four-phased implementation plan.

About the authors



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security management system tools and implementation strategies and provides training and technical assistance to industry, government entities, seaports, and small and medium-sized businesses as they develop and implement process management systems based on ISO 14001:2004 (fleavitt@earthvision.net).



Stephen R. Wassersug, Vice President of FLW Enterprises, Inc., is past President of GETF. After a 27-year career with the US Environmental Protection

Agency as a Senior Executive, Steve served as the Programme Director of the Regional Environmental Center for Central and Eastern Europe in Budapest, Hungary, from 1990-1994. He currently provides services to US federal and state agencies and industry in innovative environmental technology application, facilitation and remediation, and community-based environmental and security management systems (steve.wassersug@getf.org).

GETF and AAPA scheduled interviews with individual applicants to discuss in detail the information contained in the application letter. AAPA announced the roster of participants selected for the SMS assistance programme and the kick-off workshop, hosted by one of the participants, was scheduled.

Participants equally share the costs for the workshops, mentoring, coaching, auditing, and technical assistance (provided by GETF) during the term of the programme, in order to leverage best practices and to achieve economies of scale among the community.

What's expected of participating ports ?

- management commitment, visibility and involvement ;

- designation of a security management representative and SMS leadership teams ;
- assignment of resources to attend project workshops and undertake port-based SMS activities ;
- adoption of measurable performance objectives and targets ; and
- communication and information sharing with local stakeholders, regulatory agencies and other seaports as security considerations allow.

Security management system assistance programme

The SMS assistance programme is an 18-month, four-phased implementation plan described in **Figure 1** (opposite).

The development and implementation plan and the technical assistance strategy model is the one used in the first ports initiative, improved with lessons learned and suggestions from past participants. Over the past 10 years, GETF has field-tested and continually improved the model with more than 50 US organizations⁵⁾ who have implemented process management systems for quality, environment, safety and health and security (see box on **page 19**).

“As the country’s gatekeepers, ports already incorporate security management as part of everyday business.”

Each quarter, participants track and report the number of hours and costs expended in the SMS development and implementation in that phase of activity. They also report benefits, barriers and keys to success, and other information of interest to the group and to the AAPA.

At the time of this writing, participants are completing phase one

milestones. In order to ensure that the management system gets off the security management representative’s desk and moves from development to implementation, each organization conducts an internal audit and management review of the milestones in the current phase before moving on to the next. As a result, the programme stays reasonably on track and on time, and management is better able to align the programme goals with the organization’s strategic mission. Additionally, nonconformances, corrective and preventive actions are tracked and closed throughout the process.

At the completion of the 18-month programme, a final report will aggregate the data that will be publicly available at **www.peercenter.net** and on the AAPA Web site.

The added value of participating



Greater effort in an existing framework is not always the answer

While each port had its individual reasons for wanting an ISO/PAS 28000 based security management system, the following goals were common :

- provide a safe work place for all employees and customers through the implementation of effective security measures ;
- implement security measures to enhance supply chain safety and effectiveness downstream and upstream ;
- full employee involvement in implementation, awareness and acceptance of security measures ;

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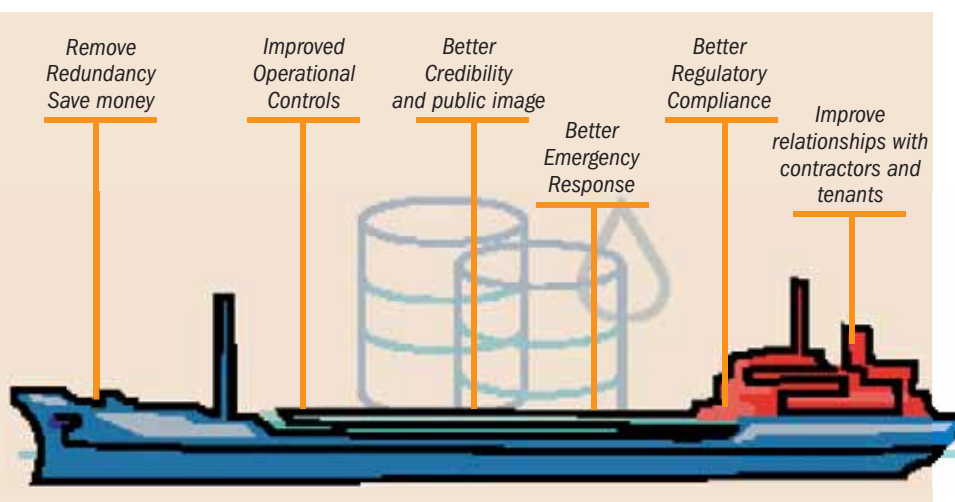


- empowered high performance security teams ;
- customers and vendors understand their unique roles in the security and safety of the port facilities, staff and their own well-being ;
- save money ;
- improve confidence in security management ;
- participate in a “think tank” about security management with other ports in the programme ;
- formalize how to measure success in security management ;

5) **www.peercenter.net**

- demonstrate that we are successful security managers;
- promote public confidence;
- ensure regulatory compliance;
- enhance business value;
- promote positive media coverage and reporting;
- streamline and consolidate security in operating areas wherever possible.
- corrective and preventive actions close gaps and produce “low hanging fruit”⁶⁾ benefits;
- minimizes/manages risk (money saved, avoided) from actual/potential security mishaps;
- promotes strong public image of security consciousness and competence;
- minimizes employee succession issues;
- leverages best management practices;

Expected benefits



There are a multitude of benefits expected from the use of ISO/PAS 28000 including:

- a compliance-focused system is critical with newly promulgated laws and regulations;
- helps track accountability and progress for millions in security grant funding;
- facilitates consistency, reduces redundancy and inefficiency among security forces;
- improves and verifies management confidence;
- models leadership in the industry;
- aligns resources to priority vulnerabilities;
- security awareness improves, and more staff are watchdogs;
- improves clarity about security roles and responsibilities;

- minimizes communication barriers between police and security forces and operational staff;
- regular analysis of vulnerabilities keeps assessments current and management programmes responsive to emerging threats;
- participate in the validation process of ISO/PAS 28000.

Expected challenges

The ports in the SMS assistance programme look forward to the benefits the SMS will bring them, but they are realistic. They accept that organizational change will bring some of the following challenges:

- buy-in from managers who are unfamiliar with the process approach or the benefits it offers;
- union concerns if standard operating procedures are changed;

- A “need to know” security mentality makes it hard for employees outside of the security staff to have a role in the SMS;
- Security and police forces are often under separate management (two sets operational controls, two sets documentation/records) and not accustomed to sharing information;
- Burgeoning regulations. Security staffs are concerned about one more set of requirements to complete;
- Communication channels are often lacking between operational and security staffs;
- Focus on the Maritime Transportation Security Act requirements with no understanding of how ISO/PAS 28000 supports compliance;
- Ports are half of the supply chain – what about global trading partners?
- Cuts in staff; who will complete the SMS activities; will there be sufficient funding?

Next steps

A great deal has been achieved so far but much remains to be done:

- Collect and disseminate programme information to ports and security sectors and to the general ISO community;
- Develop case studies;
- Apply lessons learned to improve the implementation strategy;
- Continue to track costs, benefits, barriers and keys to success;
- Attempt to attract global trading partners to be part of the current ISO/PAS 28000 implementation experiences;
- Continue to participate in the ISO/PAS 28000 verification process. ■

⁶⁾ “Low hanging fruit” are basically those improvements and innovations that can be suggested and implemented during the measure phase when they become apparent. It is not necessary to wait for the improve phase for the implementation as it would be an opportunity loss.