

## CMS FORUM ACHIEVEMENTS 2004

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The CMS Forum has achieved many of the goals set in its fifth year of operation. These accomplishments include: recruited six new members, convened four successful CMS workshops, published the 2004 Industry Report, introduced CSP and the CMS business model to a wide variety of interested stakeholders in several industries and internationally, and conducted extensive outreach through various publications, conferences, and targeted presentations.

A set of priority activities for CSP and the CMS Forum was agreed upon by the Executive Committee in December 2003. A summary of achievements is outlined in the table below with a full description of achievements following the table.

PRIORITY ACTIVITIES	COMPLETED
1. Convene 4 workshops	1. Completed. (Singapore, South Korea, Dallas and Yorkshire, UK)
2. Continue communications campaign: <ul style="list-style-type: none"> <li>a. Targeted placement of articles and strategic presentations at conferences and trade associations</li> <li>b. Continue to publish quarterly newsletters</li> <li>c. Continue to upgrade website and promote the CSP Manual and Industry Report</li> <li>d. Outreach to key multipliers (e.g., mgmt. consulting firms, government)</li> </ul>	2. Communications highlights: <ul style="list-style-type: none"> <li>a. Directed outreach to Asia, Europe, universities, and forest products, automotive, aerospace, and air transport sectors</li> <li>b. Published or contributed to 7 articles and spoke at 9 conferences</li> <li>c. Published four quarterly newsletters</li> </ul>
3. Update the CMS Industry Report 2000	3. Completed. Researched and completed 2004 CMS Industry Report, published September 2004.
4. Recruit new CMS Forum members	4. Recruited 6 new members: 2 customers (Dana Corporation and Rockwell Collins), and 4 CMS providers (Dolphin Software, Fisher Scientific, Houghton International, and Solution Recovery Services).

PRIORITY ACTIVITIES	COMPLETED
5. Engage CMS Forum members in committees and increase networking	5. CMS Forum committees included the following: <ul style="list-style-type: none"> <li>a) 2004 Workshop committee</li> <li>b) Automotive benchmarking committee</li> <li>c) Committee on the 2004 Singapore conference</li> </ul> Networking opportunities were provided both through these committees and at all workshops.

### 1. Convene Four Workshops

#### *Implementing Effective CMS Programs in Asia*

##### **The Oriental Hotel, Singapore- February 24, 2004**

This CMS workshop in Singapore showcased the implementation of CMS in different industries in Asia and assisted participants in evaluating the potential for CMS in their companies. Held as part of the Chemical Logistics and SCM World Asia 2004 Conference, the workshop provided an opportunity to discuss the burgeoning supply chain management industry in Asia with participation from key procurement executives. Speakers included representatives from leading companies such as Haas TCM, Novartis Health Care, and Rockwood Electronic Materials.

#### *Advancing Cleaner Production and Optimizing the Chemical Supply Chain in South Korea*

##### **Keimyung University, Daegu, South Korea- March 25, 2004**

This workshop was organized in conjunction with Hyundai Motor Company in South Korea as part of CSP's pilot project work. The CMS workshop in Korea examined CMS through the Korean context and assisted participants in evaluating the potential for CMS in their companies. Topics included an overview of CMS, a discussion of corporate sustainability, and a panel conversation on opportunities and challenges for CMS in Korean industries.

#### *8<sup>th</sup> Annual CMS Workshop- CMS: The Fundamentals and the Future*

##### **Dallas, Texas – October 14, 2004.**

Held at the Wyndham Arlington Hotel, this year's annual workshop attracted a total of 81 participants. Attendees heard presentations on different perspectives on CMS throughout various stages of the implementation process. This workshop incorporated suggestions from the workshop committee to expand the number of breakout sessions available to participants and to add supplier-focused sessions. The supplier sessions included a workshop on EPA tools for suppliers and a presentation on CMS and waste management. The six breakouts included sessions on successful CMS contracts, CMS in universities, getting started, fostering a strong minority supply network, creating value in a mature program, and international expansion. The day provided opportunities for participants to engage in discussions about the CMS model and, more broadly, the CMS industry and its trends.

#### *Adding Value Through Chemical Management Services*

##### **Yorkshire, UK- October 21, 2004**

CSP's inaugural workshop for its Yorkshire pilot project drew 23 participants to discuss challenges and opportunities for implementing CMS in the Yorkshire region. Attendees represented potential CMS customers as well as business development/commercial roles interested in exploring CMS as a new business opportunity. PPG, Castrol, and TRW presented case studies based on their experiences, and provided tips on best practices and getting started with CMS.

## **2. Continue Communications Campaign**

### ***A. Directed outreach to key multipliers***

CSP and CMS Forum staff held meetings and made presentations to the following key multipliers in 2004:

- US Environmental Protection Agency (Region 9, Region 5, Region 1, Office of Pollution Prevention and Toxics, and the Office of Solid Waste.) Additionally, CSP worked with the EPA to coordinate a workshop session for CMS suppliers.
- Department of Defense, Office of the Deputy UnderSecretary for Materiel and Logistics.
- Stakeholders in Asia (Singapore Ministry of Manpower; Singapore National Environment Agency; Singapore Economic Development Board; Singapore Confederation of Industries; Korean Institute of Technology's National Cleaner Production Center (KITECH); Korean Ministry of Environment; Keimyung University: Korea; LG Environmental Strategy Institute: Korea.) For more information on Asia, see section 6.
- Stakeholders in Europe (Government of Austria, OECD delegates from six different countries, TNO: Netherlands, The Joannum Institute: Austria, Green Alliance: UK, and Suspronet (an EU Network of experts in the field of product service systems.) For more information on Europe, see section 6.

### ***B. Continue targeted placement of articles and present at key conferences***

Published or contributed to the following 7 articles about CMS:

- Atkinson, William Ilsey. "Keeping Tabs: Chemical Management Services Open the Door to Greener Industrial Chemistry" *Today's Chemist at Work*: February 2004.
- Smith, Dale. "Industry Focus: PPG Offers Chemical Service" *Aviation Maintenance*: March 2004.
- Giles, Jim. "Suppliers Step in to Manage Chemical Use" *Nature*: September 9, 2004.
- Sullivan, Tim. "CMS: A \$19 Billion Market?" *Lube Report*: September 29, 2004.
- Kauffman Johnson, Jill. "Report Highlights Benefits of Chemical Management Services" *Business and the Environment*: October 2004.
- Toloken, Steve. "Teresa Heinz Kerry Has 'Green' History" *Plastics News*: October 25, 2004.
- Kauffman Johnson, Jill. "Chemical Management Services: Reexamining the Supply Chain" *Pollution Engineering*: November 1, 2004.

Presented at the following 9 conferences (CSP Staff and/or CMS Forum Members):

- CMS workshop in Singapore: February 24, 2004
- Business and Sustainability Conference at Dartmouth College's Tuck School of Business: February 27, 2004
- IGES International Symposium on Business and the Environment in Kobe, Japan: March 5, 2004
- 2004 Global Chemical Regulations Conference: Living with TSCA and International Chemical Controls, Arlington, Virginia: March 9-10, 2004
- CMS workshop in Korea: March 25, 2004
- SAE Aerospace Manufacturing Conference, St. Louis, MO: September 21-23, 2004
- CMS workshop in Dallas, Texas: October 14, 2004
- CMS workshop in Yorkshire, UK: October 21, 2004

**C. *Continue the CMS Insider quarterly e-newsletter***

The newsletter is distributed via email to approximately 850 subscribers. Average viewing rates are: 43% open the newsletter and 22% click through to the CSP or CMS Forum website.

Additionally, this year we have actively sought to commission lead articles from experts in CMS and related fields. Topics covered include waste management, REACH regulations, and CMS in smaller facilities.

**D. *Continue to upgrade website and promote the CSP Manual and Industry Report***

CSP's website continues to see a large volume of traffic, averaging around 4,000 visitors to the site per month (as compared to 3,000 visitors per month in 2003). The CMS Forum site also receives a fair number of visitors, averaging 2,000 each month (as compared to 1,200 per month in 2003). The site is constantly being upgraded with new articles, conferences, tools, and case studies.

**3. Update the CMS Industry Report 2000**

In Spring 2004, CSP and the CMS Forum undertook the project of researching and compiling an updated CMS Industry Report. The CMS Industry Report 2004 was released in September and posted for free download on the CSP and CMS Forum websites. The second industry-wide study reveals that CMS is now used in more than eleven sectors, up from approximately five sectors in 2000. The report also finds that the CMS market has grown roughly 50 percent since 2000 to approximately \$1.22 billion (FY1999-2003) and all indicators point to continued steady growth. Since its release, over 200 individuals and companies have downloaded the Report off of the CMS Forum / CSP website.

**4. Recruit New CMS Forum Members**

The CMS Forum attracted a total of 6 new members in 2004, bringing the total membership roll to 24 members.

- Four CMS providers joined: Dolphin Software, Fisher Scientific, Houghton International, and Solution Recovery Services.
- Two customers joined: Dana Corporation and Rockwell Collins.

**5. Engage CMS Forum Members in Committees and Increase Networking**

CMS Forum members were engaged on a variety of committees throughout 2004, including:

- a) 2004 Workshop committee
- b) Automotive benchmarking committee
- c) Committee on the 2004 Singapore conference

The Singapore conference and 2004 workshop committees were ad hoc committees that lasted approximately four months each. The input of Forum members was instrumental in developing the agenda for the October workshop in Dallas. The 2004 Workshop committee was very engaged and created a new workshop structure while also brainstorming on strategic workshop topics. The Singapore conference workshop committee assisted in the planning and outreach for the Singapore workshop. The automotive committee is ongoing, and includes GM and DaimlerChrysler. Currently, it is in the process of finalizing the metrics and scope of the benchmarking initiative. Additionally,

there are benchmarking committees in the aerospace and universities sectors which met after the workshop in October and will continue to meet around select events. We look forward to continuing and expanding our committees in 2005, including committees on creating the 2006-2008 Strategic Plan and planning the 2005 workshop.

## **6. Additional Activities**

The CMS Forum was able to leverage CSP activity to achieve some of the CMS Forum goals through 1) an initiative to introduce CMS to universities, 2) an initiative to introduce CMS to the forest products industry, and 3) three international initiatives to introduce CMS to Korea, Singapore, and throughout Europe.

### ***1. Educational Institutions Initiative***

The goal of this project is to explore the viability of the CMS model for the educational and research institution setting (based on criteria such as cost and effectiveness). CSP developed two case studies and conducted two pilot programs to further research in this area.

- Case studies of the chemical management systems at the University of New Hampshire (UNH) and Dartmouth College were developed. These case studies document the cost and structure of their current chemical management systems. The UNH case study is publicly available on CSP's website. Dartmouth College is currently reviewing bids for launching a CMS program and their case study will be publicly available after an award has been made.
- Pilot programs were conducted with Dartmouth College and the University of California, Merced. These pilots included baseline cost analyses of their chemical management systems and explored whether a CMS program could more cost effectively facilitate chemical management. CSP also helped them develop and release a Request for Proposals for a CMS program. Currently, both universities are reviewing bids for launching a CMS program.

In late 2004, CSP was awarded a grant to test the viability of CMS in K-12 schools in the Lansing Public School District. This is a unique pilot program where General Motors is partnering with the Lansing School District to assist in assessing and possibly launching a CMS program. This pilot program will begin in January 2005.

### ***2. Forest Products Industry Initiative***

CSP has entered into discussions with Weyerhaeuser and Glatfelter companies to participate in our pilot project. We plan to launch a demonstration project with one of the companies in 2005, and dependant on funding, we may conduct demonstration projects with both companies.

### ***3. South Korea***

CSP continued its CMS initiative in South Korea during the first half of 2004. With funding from the Korean Institute of Industrial Technology's National Cleaner Production Center, CSP completed a demonstration project with Hyundai Motor Company and provided consulting services for their RFP release in early 2004. Additionally, CSP and the CMS Forum hosted a workshop at Keimyung University in March of 2004 to examine CMS through the Korean context and assist participants in evaluating the potential for CMS in their companies. CSP continues to work with scholars at Keimyung University in Taegu, South Korea, to develop their capacity to conduct activities similar to CSP's in order to promote the model in the Korean context.

#### ***4. Singapore***

CSP continued to promote CMS in Singapore, meeting with a variety of manufacturing firms, suppliers and logistics providers, and government officials in 2004. John Claussen, CSP's Asia Programs Director, relocated to Asia in October 2004 and will continue to coordinate CSP Asia outreach. As part of this outreach, CSP organized meetings and a CMS workshop as part of the Chemical Logistics and SCM World Asia 2004 Conference in February 2004. CSP and the CMS Forum will continue to explore potential collaborations in Asia with organizations like The Logistics Institute - Asia Pacific and the Singapore Ministry of Manpower.

#### ***5. Europe***

CSP's 2004 work in Europe was primarily centered around our joint project with Yorkshire Forward and International eChem to promote CMS in the Yorkshire region of the United Kingdom. After laying the groundwork for a successful initiative, CSP jointly coordinated a successful kick-off workshop for potential CMS providers and customers in October 2004. The project's next step will be to identify a pilot company in the Yorkshire region to test the CMS model in Yorkshire. Based on the workshop, we have developed three potential partnerships and hope to begin a pilot in February 2005. Additionally, CSP has continued to work with an EU-based team with skills and expertise similar to CSP in North America with the hope of eventually developing a CSP Europe. CSP is working with TNO (Netherlands research institute), Johannum (Austria research institute), Green Alliance (UK policy organization) and InternationalEchem (UK consultancy) to explore possibilities for such an endeavor.