

SEMI® Enters The New Frontier MEMS

An Invitation to Join the SEMI MEMS Initiative

SEMICON Europa 2004

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Content

- SEMI – Who Are We?
- 2002-2003 MEMS Initiative Review
- Opportunity and Challenge: SEMI Strategic Approach to Emerging Technologies
- Building the Foundation
- SEMI International MEMS Steering Group
- SEMI Membership gives you access!
- Future plans

SEMI —Who are We?

- SEMI is **the** international industry association of equipment, material, and service suppliers to the worldwide semiconductor, MEMS/Nano, flat panel display (FPD) and related industries.
- Purpose: To help SEMI members (~ 2,200 companies) achieve their common corporate objectives by providing means that address industry issues collectively.

SEMI Core Services

- Exhibitions
- Standards
- Technical and educational seminars
- Industry data
- Industry advocacy
- Newsletters
- Trade missions
- Symposia
- Workshops

SEMI Strategic Approach to Emerging Technologies

- **How can we best respond to industry needs?**
 - Enhance value for existing and new corporate members
 - Offer an attractive portfolio of products/services for new members with special focus on MEMS
 - Provide opportunities for exhibiting in all regions
 - Partner with other associations in critical areas that are not served

SEMI Strategic Approach to Emerging Technologies

- **The Opportunity**

- Worst downturn ever forces us to investigate alternative revenue streams
- SEMI core competencies may not be strong enough to withstand economic long-term pressure
- MEMS/nano technology closely related to existing products/services
- Member and industry-driven MEMS/nano initiative and guidance are available means for success

MEMS – The New Frontier

- MEMS manufacturing technology very similar to semiconductor technology and offers promising opportunities to SEMI member companies and prospective members
- Industry downturn challenged SEMI member companies and others to explore alternative/related technologies and revenue models
- Since as early as 1994, SEMI has executed numerous MEMS conferences; MEMS exhibit “pavilions” have been a constant at SEMICON Europa and SEMICON Japan for several years

MEMS Mission

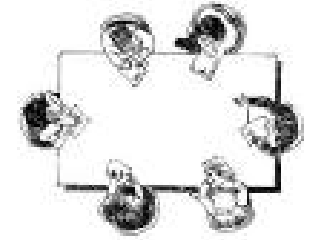
Building the foundation for the path ahead

- The Global MEMS Initiative will provide leadership within SEMI to identify strategies and implement actions by which SEMI will achieve its Corporate Mission and Vision statements in the MEMS sector.

2002-2003 SEMI MEMS Initiative

Responding to Industry Push

- Since ~1994, SEMI Japan and SEMI Europe have successfully organized MEMS programs and exhibits
- MEMS interest rose sharply in Q2 2002, starting in Standards; quickly spreading to other SEMI core competencies
- Severe downturn in the semiconductor industry challenged SEMI member companies and others to explore alternative/related technologies and revenue models
- MEMS: obvious fit due to similar manufacturing process and materials used



A Concerted Volunteer Effort

- North American MEMS Advisory Group formed in September 2002
- >35 volunteers (suppliers, users, academia, associations)
- Task: Identify SEMI products and services valuable to MEMS industry
- Identified four key areas for SEMI activities
 - **Standards** (global MEMS Committee now formed)
 - **Expositions** (MEMS Pavilions at SEMICON Europa, SEMICON West, SEMICON Taiwan, SEMICON Japan)
 - **Technical Conferences** (SEMICON Europa, SEMICON West, SEMICON Japan)
 - **Market Statistics** (challenge but great opportunity)

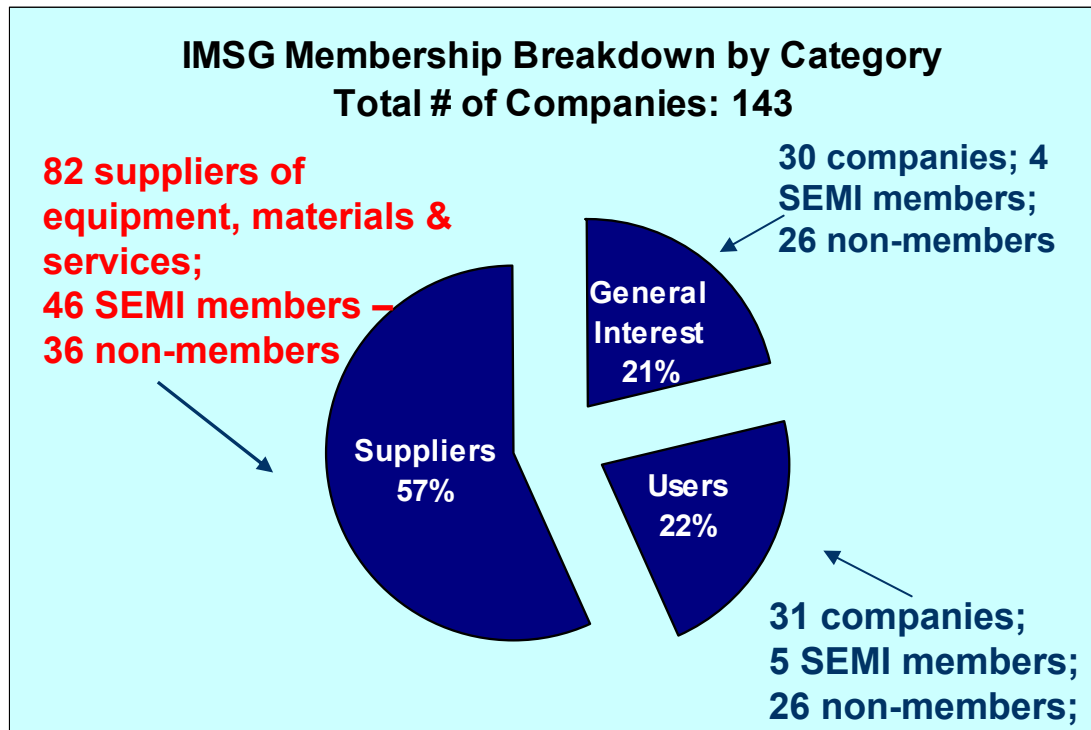
Going Global

- Disjointed worldwide SEMI MEMS activities called for global umbrella to address MEMS association-wide on a global scale
- April 2003: N.A. MEMS Advisory Group disbands and is absorbed in new **International MEMS Steering Group (IMSG)**
- >180 individual members (143 companies), from N.A., Europe, Japan, Asia-Pacific
- 4 focus areas remain top priority, **nanotechnology** added in N.A. as new activity and exciting opportunity; Austin Nanotechnology TF active!

I M S G



IMSG Membership Breakdown



IMSG Member Companies per Region



IMSG Activities

SEMI



SEMI®
International
Standards

Standards

SEMI



Advanced Semiconductor
Manufacturing Conference and Workshop



World Class Manufacturing

STS

Technical Programs

SEMI

Expo CIS2003 Taiwan2003
SEMICON®
China2003 West2003
Singapore2003

Expositions

SEMI



WORLDWIDE CAPITAL EQUIPMENT TRENDS
(3 month average)

Billings Bookings

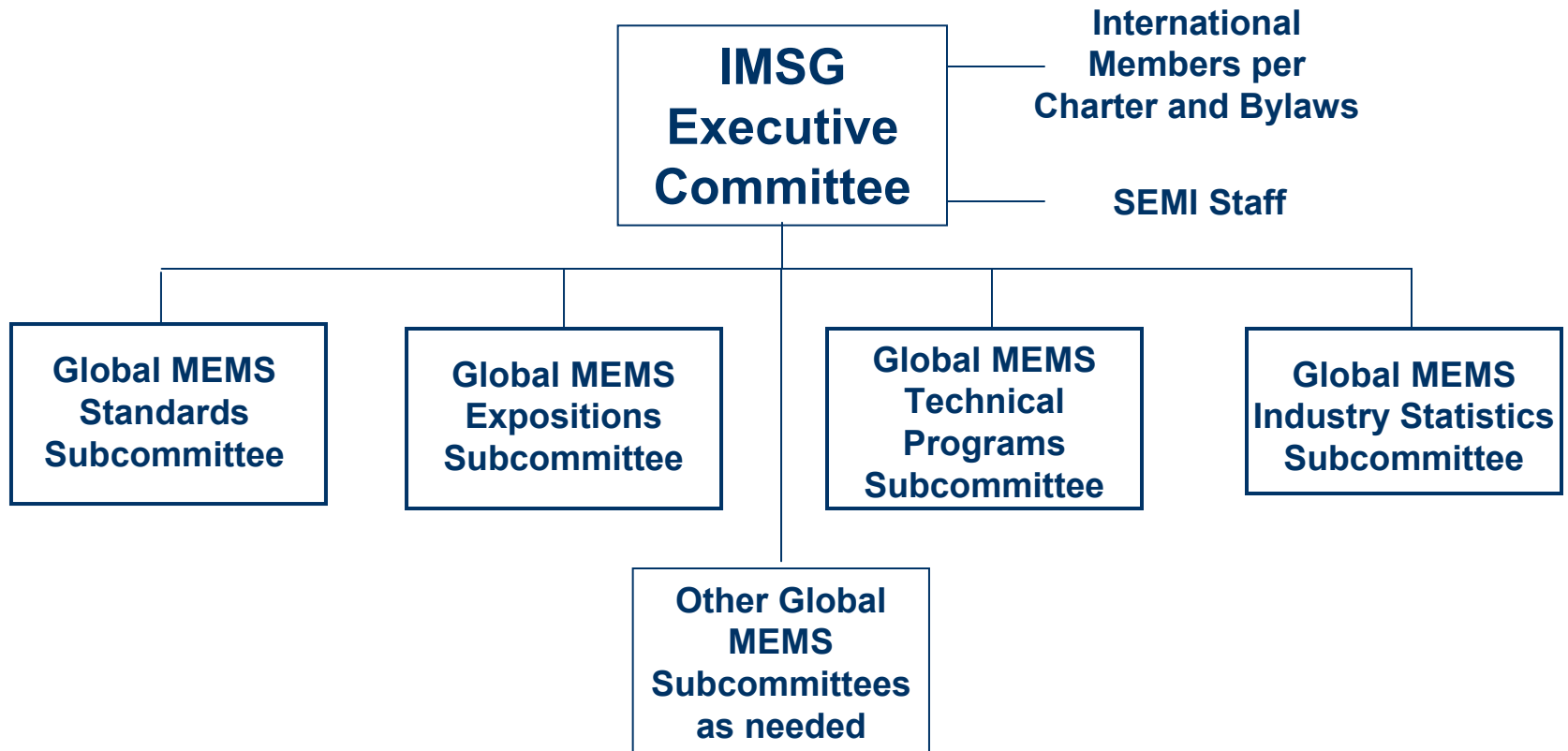
Market Statistics



IMSG



IMSG Organization



IMSG Executive Committee Members

- Chair – Joe Brown, Suss MicroTech
- Vice-Chair – Uwe Behringer, UMC Microelectronics
- Regional Representatives
 - Europe – Martin Walker, Oxford Instruments
 - Japan – Prof. Masayoshi Esashi, Tohoku University
 - N.A. – Winthrop Baylies, BayTech Group
- Members-at-Large
 - Europe – Viorel Dragoi, EV Group
 - Japan – Susumu Kaminaga, Sumitomo Precision Products
 - N.A. – Curt Ward, Glimmerglass Networks

IMSG Executive Committee Members

- Global Subcommittee Chairs
 - Exhibitions – Ellen McDevitt, MEMS Ind. Group
 - Technical Programs – Uwe Behringer, UBC (acting)
 - Standards – Robert Scace, Klaros
 - Market Statistics – Jean-Christophe Eloy, Yole Developpement

IMSG Goals

- Leverage industry and SEMI resources to support key MEMS industry local & global initiatives
- Foster member-to-member contact
 - Establish long-term global MEMS strategy through frequent and streamlined communication
- Build on regional experience and interests to advance MEMS programs across all regions

The First Success Stories

- Successful **MEMS Pavilions** at SEMICON shows around the world – SEMICON West pavilion premiered in 2003
- Worldwide **MEMS technical seminars** and conferences, often co-sponsored with other MEMS related organizations
- **Global MEMS Technical Committee** formed in April 2003 as part of the SEMI International Standards Program; first drafts under development

IMSG Asia-Pacific

- IMSG is your path to global exposure
- Successful outreach activities to Asia-Pacific zones and regions in 2003 and 2004
- One local group already established in September 2003
- Make MEMS part of SEMICON China 2005
- Reach out to regional producers
 - Introduce themselves and their work to world players
 - Establish contacts
 - Develop business relationships
 - Steer important issues

Joining SEMI and the IMSG: What's In It For You?

- SEMI global infrastructure and regional presence
- Proven excellence in core competencies over 33 years
 - Members take advantage of “main stream” activities and exposure
 - Expositions; Standards; Market Statistics; Information Products; Education; strong industry advocacy initiatives
- Attractive dues structure for small companies (predominant in the MEMS market)
- SEMI Portal – a new www.semi.org, tailored to our customers' needs
- Monitor MEMS industry trends and market developments worldwide aided by SEMI resources

MEMS Value Proposition

A closer look at what it takes to be successful

- Excellent MEMS technical, business and education programs
- Expanded MEMS exhibits in all mature markets; small pavilions in emerging markets
- MEMS Standards as enablers for emerging technology
- MEMS market statistics and other critical services
- Liaisons/partnerships with other MEMS associations
- Providing opportunities for networking and information exchange, enhancing business opportunities

How can you join the fun?

- Sign up for IMSG membership – it's free!
 - Receive all IMSG related information automatically
- Become a champion and support one or more of the 4 focus groups
- Coordinate with Carlos Lee/SEMI Europe
- Send us your ideas, suggestions and concerns
- We can make it happen together!

And In Conclusion...

IMSG needs YOUR Participation !

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