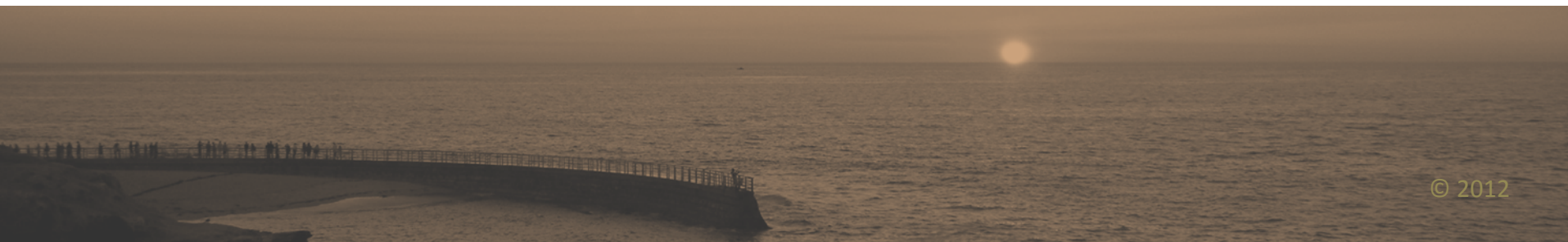


Fiatech Delivers

Faith B. Junghans PE, Fiatech Project Manager

Oct 29, 2012

Brisbane, Australia



2012 Members Meeting San Diego Oct 15-17

- Meeting Objectives
- New Members, Fiatech Board
- 2012 Highlights – Global Activities & Projects Delivering Value
- Strategic Direction & Member Feedback



Fiatech Mission

Fiatech is a global community of passionate stakeholders working together to lead development and implementation of innovative practices and technologies to achieve the highest business value throughout the life cycle of capital assets.

Fiatech's Members are united by one goal

“.....to make a step change improvement in the design, procurement, engineering, construction, and maintenance of large capital assets.”



Fiatech 2012 Members Meeting Objectives

Review Current Activities & Projects, Develop 2013 Priorities and Agenda



- **Process** Participative format throughout meeting
- **Objectives**
 - Update on 2012 Fiatech activities and review current projects
 - Dialogue on industry developments and opportunities
 - Develop actions and recommendations for 2013
- **Program & Workshops**
 - Presentations on key topics for the capital project industries & selected Fiatech current projects and key activities
 - Focused sessions on Roadmap elements
 - Workshops (Productivity Improvement, ISO 15926, Roadmap)
- **Networking with Fiatech Members & Invited Guests**



New Members

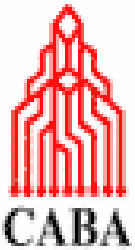
- Burnham Nationwide
- CCT
- Clemson University
- EPRI
- Intellwave Technologies
- Iowa State University
- MADCAD
- Metalforming
- Systemation
- Thomas
- University of Queensland

And Guests

Our Members



Fiatech Partners



Fiatech Board of Advisors

J. P. (Peter) Blake
Director, Project Delivery Group
Hatch

Zuhair Haddad
Vice President Corporate Affairs & CIO
Consolidated Contractors Company

Patrick Holcomb
Executive VP, Business Development
Intergraph PPM

Bill Muldoon
Executive VP, North America
AVEVA

Cameron Rezai
Director, Engineering Solutions Tech
Center
The Dow Chemical Company

John Sanins
Solutions Executive, Process
Manufacturing
Bentley Systems

Ray Simonson
CEO
Coreworx

Tom Hannigan (Chair Emeritus)
President
Zachry Nuclear

Dave Anderson
SVP, Chief Information Office
CH2M HILL

Reg Gagliardo
Senior Vice President
Burns and Roe Enterprises

Lisa Grayson
Project Department Program
Advisor
**ExxonMobil Research and
Engineering**

Kevin Hart
Vice President, BIO
Kaiser Permanente

Jorge Vanegas
Dean, College of Architecture
Texas A&M University

Andy Verone
Vice President, Engineering and
Construction
Oracle

Harry Daglas
VP, Distributed Systems & Structures
Dassault Systems

Roger Freeman
Vice President of Project Services
Development
Emerson Process Management

Stephen H. Makredes
Director, Construction
Target Corporation

Frank Matthewson
CET Engineering Manager
Bechtel Corporation

Mike Pye
Director Project Automation
Fluor Corporation

Jerry N. Gipson, Jr. (Chair Emeritus)
Senior Director, Manufacturing & Engineering
IT
The Dow Chemical Company (retired)

Nicole Testa Boston
Deputy Director
Fiatch

Wayne Crew
Director
Construction Industry Institute

Fiatech Delivers – 2012 Outstanding Year of Progress and Achievement



www.fiatech.org

- Over 20 active projects in 2012 - driving both large industry advancements and short term benefits
- Emphasis on delivering business value, implemented by Fiatech members
- Annual Technology Conference & Showcase – open to all (PCA & MIMOSA-OpenO&M) and Awards Program



2012 Global Activities

- 24 international members
- Members and partners in Australia, Brazil, Canada, Finland, France, Greece, Korea, Israel, Norway, Russia, Sweden & the United Kingdom
- NIST sponsored, Fiatech led, 2012 CIB IDDS Innovation Conference with CIB Board of Directors (researchers from around the world)
- Fiatech – European Advisory Council (EAC)- 2012 Meeting held in July, hosted by AREVA in Paris
- Participation in PCA Australia Meeting in October
- Participation at RFID Europe 2012 in October in Oslo, Norway
- Fiatech co-located meeting with SPAR Europe, November in The Hague, Netherlands



Fiatech™
Europe & Middle East Meeting
12 November 2012
The Hague, The Netherlands



FIATECH

Technology Roadmap Vision

Autocodes
 Digital Seals and Signatures
 Replicable Building Guidelines
 Code Clouds
 *PM Information Exchange
 *Quantity Life Cycle
 *Integrated Project Awareness

Real Time Field Reporting Using Smart Devices
 RFID Access Control System international Case Studies
 *Mobile IT Community of Interest
 *Advanced, Fully Integrated Workforce Planning & Control
 *Augmented Reality Vis for Excavator Control
 *Robotic Total Stations and Digital Cameras for Industrial Modular Construction
 *Integration of RFID with Wireless Sensor Networks for Critical Construction Resource Tracking

ISO 15926 Information Patterns (IIP)
 Managing Material Libraries & Catalogues
 Supplier Information Exchange with Design to Support Construction Specification Automation
 *Collaborating with a 3D Neutral Model
 *Lab of Collaboration for Spec Modeling

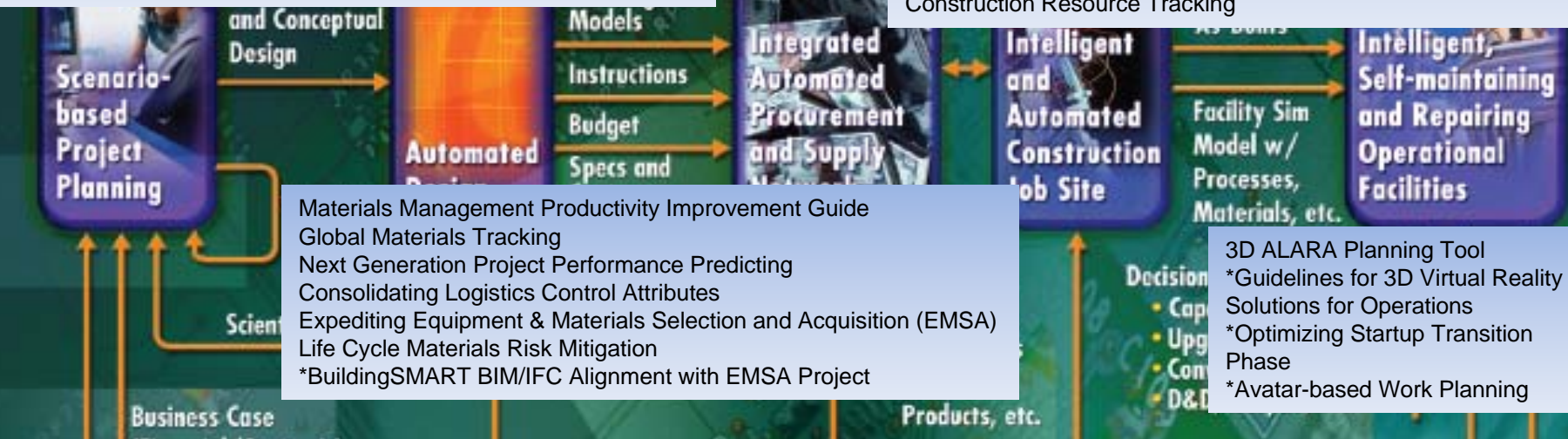
Materials Management Productivity Improvement Guide
 Global Materials Tracking
 Next Generation Project Performance Predicting
 Consolidating Logistics Control Attributes
 Expediting Equipment & Materials Selection and Acquisition (EMSA)
 Life Cycle Materials Risk Mitigation
 *BuildingSMART BIM/IFC Alignment with EMSA Project

3D ALARA Planning Tool
 *Guidelines for 3D Virtual Reality Solutions for Operations
 *Optimizing Startup Transition Phase
 *Avatar-based Work Planning

Advancing Asset Knowledge through the Use of Augmented Reality
 *Mobile IT Community of Interest
 *BIM for Mobility
 *Augmented Reality and RTL Technologies on Major Projects

JORD
 ISO 15926 PIF
 Structural Steel Interoperability
 Harmonizing Industry Standards to Exchange Equipment Data
 *Capturing Equipment Data Requirements Using ISO 15926 & Assessing Compliance
 *PIF Year 2: Piping ISO 15926 Modeling for Construction

Fiatech Prize Challenge
 *Information Management Personnel
 *New Training System for NPP Employees
 *BIM – Connecting Academia and Industry



Strategic Focus for Projects

- Blend of projects - big advancements and projects providing short term gain
- Project delivery with a high level of member in kind services - project results that are implemented by our members with recognized value added benefits
- Operate with a projects office for effective development, leadership, management, measurement, reporting and results for projects
- Increase our partnering with industry leaders to collaborate and leverage resources



PROJECTS

Member Area

Project Collaboration Site



Interoperability

Planning

Design

Procurement & Supply Networks

Construction

Operations & Maintenance

Project Management

New Materials & Methods

Workforce & Training

Information Management

Fiatech is an international community of passionate stakeholders working together to lead global development and adoption of innovative practices and technologies to realize the highest business value throughout the life cycle of capital assets.

Fiatech is Accepting Project Ideas for 2013
Submit Yours Now!



METALFORMING

Architectural Machines

2012 NEW MEMBERS

Interested in
becoming a **member?**

MEMBERSHIP BENEFITS + ONLINE APPLICATION

Join our **mailing list.**

RECEIVE NEWS, INFO ABOUT WEBINARS,
CONFERENCES AND TECHNOLOGY PROJECTS.

Fiatech Strategic Direction Driving Business Value

Fiatech – Driving Value in Capital Projects by advancing *the implementation of technology and innovative practices*

Fiatech 2012 Priorities

1. Demonstrate & Deliver Value Contribution and Differentiators
2. Strategically Develop and Deliver Projects
3. Advance Roadmap Elements
4. Advance & Enable Interoperability
5. Advance Technology Deployment/Implementation
6. Annual Conference and Members Meeting
7. Knowledge Transfer
8. Grow Industry Participation



Industry Game Changers

Up-Dated Discussion List

- From Document Centric to Data Centric
- From Construction to Assembly
- Field Automation, Mobile Devices
- Robotics
- Project Enterprise Resources Systems
- Automated Code Reviews
- Rules Based Design and Enhanced Design Analysis
- Augmented Reality
- Avatars
- Integrated Procurement, Materials Management
- Integrated Operations including Integrated Handover/ Turnover
- New Materials & Methods
- Sustainability



Key Messages / Learnings (from Member after meeting)

- ISO 15926 is not just a data standard to transfer data
 - It is an overall data model approach
 - Flexible enough to handle current and future user scenarios & technology
- The work done by this organization is impressive given the challenge
 - Competing O/O, EPCs, subs, software vendors: What is the incentive to share?
 - Turf guarding, strong personalities, sales opportunities → sound familiar?
 - **If the O/O can collectively clarify requirements, we can drive the software to catch up with what we need MORE QUICKLY than if we do it independently with the vendors**
 - Need O/O to take more of a leadership position
- Critical Success Factors for a ‘rollout’ of ISO 15926
 - Standardized Business Processes & document / data types (...and management of associated culture changes)
 - Pilot small pieces at a time and build on successes

What value do members get?

- Projects
- Anti-trust protection
- Leveraged funding
- Competitive edge
- Project deliverables
- Equal voice and vote
- Knowledgebase of technical experts
- Networking and team building

