

PODS ESRI Spatial Sub-committee Update

February 27, 2007



Agenda

- PODS Spatial Working Group
- ESRI Spatial Sub-Committee
- ESRI/PODS/APDM MOU
- Organizational Relationships
- Summary of Industry Benefits
- Questions

PODS Spatial Working Group

- Initial Working Group Kick-off Meeting 03.14/15.06
- PODS Technical Committee approved Charter 04.18.06
- PODS Board of Directors approved Charter 04.21.06
- Development of industry Standard PODS Compatible database model(s) or extension(s) that will spatially enable the PODS database to facilitate proprietary applications and PODS GIS integration.
- Maintain “vendor neutral” open concept (PODS Relational Model) but also recognize the need to integrate with proprietary spatial technologies
 - Formation of ESRI sub-committee focused on an ESRI Geodatabase solution compatible with ArcGIS 9.x and beyond.
 - Formation of an Oracle Spatial sub-committee focused on an Oracle Spatial solution that will support implementation with SmallWorld, Intergraph, and Autodesk.

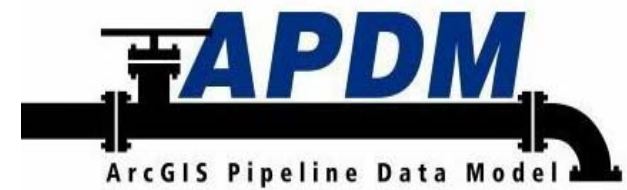
PODS Spatial Working Group

- Steering Committee
 - Chairman: Mike King, BP America
 - Co-Chairman: Ron Brush, New Century Software
 - PODS Technical Committee Liaison: Costas Kotzabassis, Business Industrial and Technical Software, International
 - ESRI Sub-Committee Chairman: Scott Moravec, Eagle Information Mapping (2006); Tracy Thorleifson, EIM (2007)
 - Oracle Spatial Sub-Committee Chairman: Brad Grabowski, GE Energy
- Established an industry-wide collaborative environment



ESRI Sub-Committee Guidelines

- Seek participation of PODS members and non-members
- Seek participation of members with hands-on Geodatabase knowledge and PODS knowledge
- Seek to pull best in industry to enhance PODS functionality & capability
- Seek participation of pipeline operators, vendors, software service providers, consultants and related parties
- Seek contributions from participants, utilizing existing mature data structures where practical and applicable.
- Inclusive design – incorporating best practices from PODS, APDM and recommended practices from ESRI
- Extensible design – providing users the ability to extend (add to) as necessary
- Leverage diverse industry think tank



ESRI Sub-Committee Membership

2006 Membership

- Scott Moravec, Eagle Information Mapping (Chair)
- Keith Cote, MOORE Resource Systems
- Hai-Li Wang, Chevron
- David Frye, ESRI/EIM
- John Alsup, ESRI
- Doug Thorpe, Duke Energy Field Services
- John Minassian, Geofields
- Jennifer Flax, Petris
- Daniel Barry, American Innovations
- Rene Ramirez, Blue Sky Development
- Robert Maggio, Petris
- Benny Guo, Enghouse
- Ron Brush, New Century Software

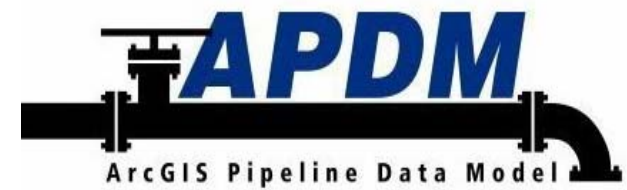
2007 Membership

- Mike King, BP America (Chair)
- Tracy Thorleifson, EIM (Co-chair)
- Jennifer F. Bonnin, EIM (Secretary)
- Darrell Donaho, Kinder Morgan (PODS)
- John Minassian, Geofields (PODS)
- Ron Brush, New Century Software (PODS)
- Luke Hutmacher, El Paso (APDM)
- John Spangler, GE Infra, (APDM)
- John Utley, El Paso (APDM)
- John Alsup, ESRI (APDM)

ESRI Sub-Committee Scope of Work

Phase I – PODS ArcSDE Existing Implementations

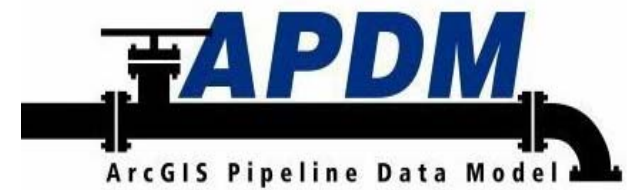
- Focus on documenting and providing a comparison of existing ESRI spatial implementation(s) of PODS databases.
- Tasks/Deliverables:
 - Identify methods for spatially enabling PODS based on existing implementations using stand-alone ArcSDE layers.
 - There are three ways
 - Spatial attributes on all PODS event tables.
 - Add the spatial data outside the PODS tables with link to the event.
 - Add the spatial data outside the PODS tables and allow a one to many relationship between the events and the spatial characteristics.
 - Develop a comparison of the advantages and disadvantages of each identified method for spatially enabling PODS using stand-alone ArcSDE layers
 - Develop documentation presenting results of compilation and comparative analysis and submit to the PODS Technical Committee



ESRI Sub-Committee Scope of Work

Phase II – PODS Geodatabase Specification

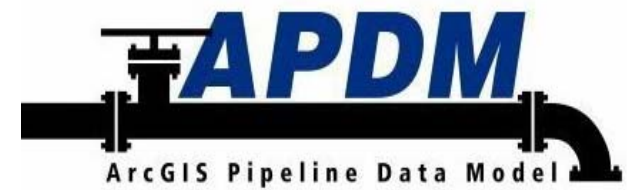
- Build upon the concepts identified in Phase I to develop a stand-alone ESRI Geodatabase implementation.
- Tasks/Deliverables:
 - Suggestions/review by ESRI
 - Review of PPDM Lite, APDM and other similar Geodatabase models
 - Draft of PODS Geodatabase – Logical Core Model (conceptual)
 - Draft of PODS Geodatabase – Physical Core Model (implement)
 - Pilot test implementation by Working Group members
 - Review results of Pilot test implementations
 - Recommendations for PODS Geodatabase Implementation
 - Develop documentation describing recommended practices of defined processes
 - Submission of deliverables to PODS/APDM Technical Committee(s) for approval
 - Submission of deliverables to the PODS/APDM Board of Directors/Steering Committee for approval and inclusion



ESRI Sub-Committee Scope of Work

Phase III – PODS Geodatabase Implementation Processes

- The development of processes that will define the extraction and/or replication of data between the PODS data model and the PODS Geodatabase.
- Tasks:
 - Determine processes and procedures for extracting and/or replicating data
 - Develop DDL and/or other scripts as required
 - Develop documentation and submit to Technical Committee for approval as Best Practices
- Deliverables:
 - PODS Logical Geodatabase UML Model - Visio format
 - PODS Physical Geodatabase UML Model - Visio format
 - Sample PODS Personal Geodatabase
 - Sample PODS Multi-user Geodatabase
 - PODS Geodatabase User documentation
 - PODS Geodatabase Technical documentation
 - Working Group report suitable for publication



ESRI/PODS/APDM - MOU

- Collaborative industry initiative between ESRI/PODS/APDM
- Initial meeting between parties 06.21.06
- MOU officially signed by all parties 10.02.06
- “This is an important event,” says **Craig Wilder, APDM Steering Committee Chair**. “It creates greater commonality between the two organizations and offers operators a greater choice of GIS vendors. This is a significant step for the pipeline industry.”
- “The PODS Association is dedicated to providing the best solutions possible to its members and the GIS community as a whole. This joint effort gives PODS the opportunity to further its commitment to building the standards which bring our industry success,” states **Alan Herbison, President PODS Board of Directors**.
- “This agreement to work together is great news for the pipeline industry. It will allow operators to adopt an industry-standard data model that PODS provides plus take advantage of the full benefit of the spatial geodatabase of APDM,” notes **Bill Meehan, director of Utility Solutions for ESRI**.

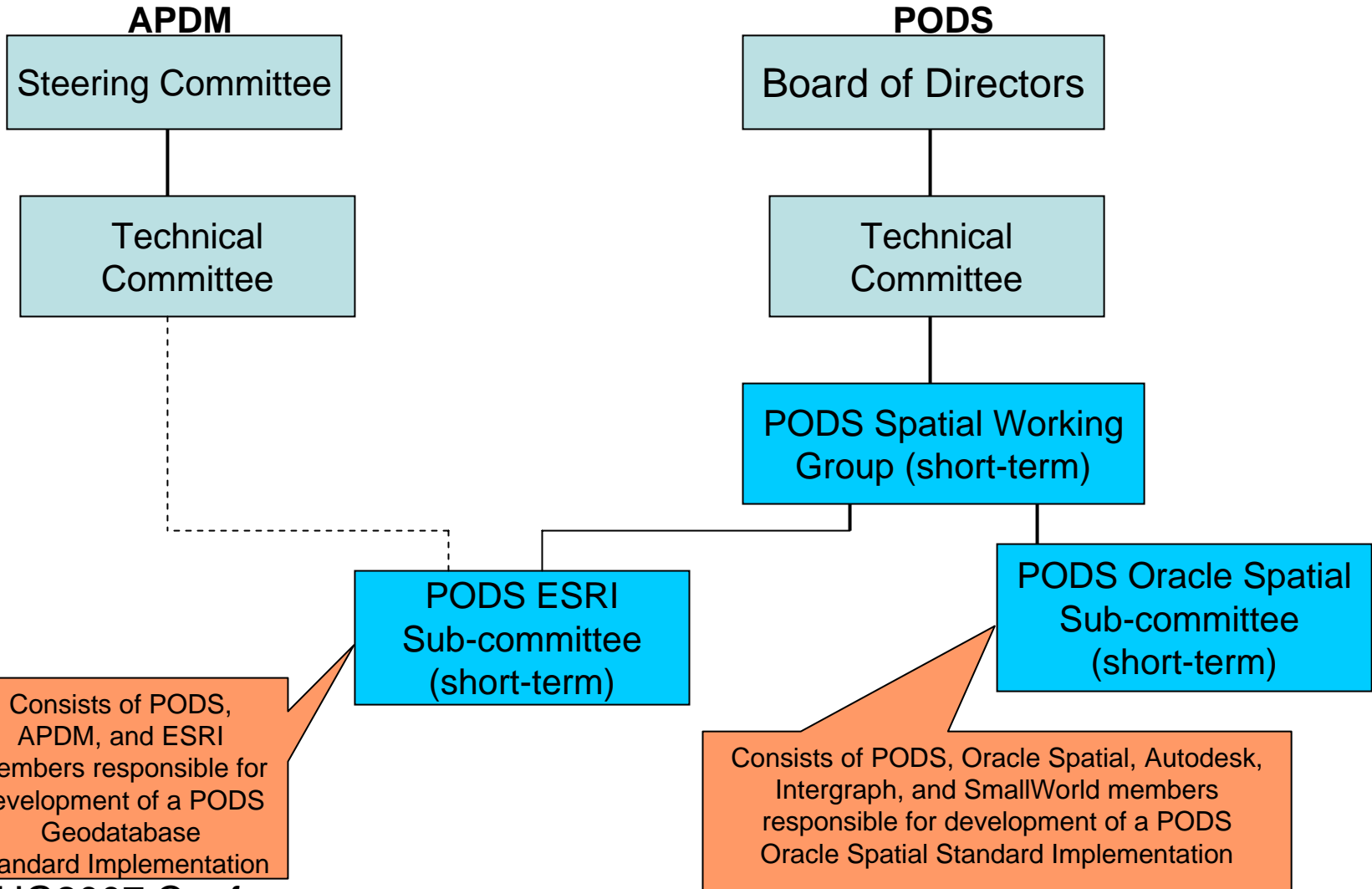


ESRI/PODS/APDM - MOU

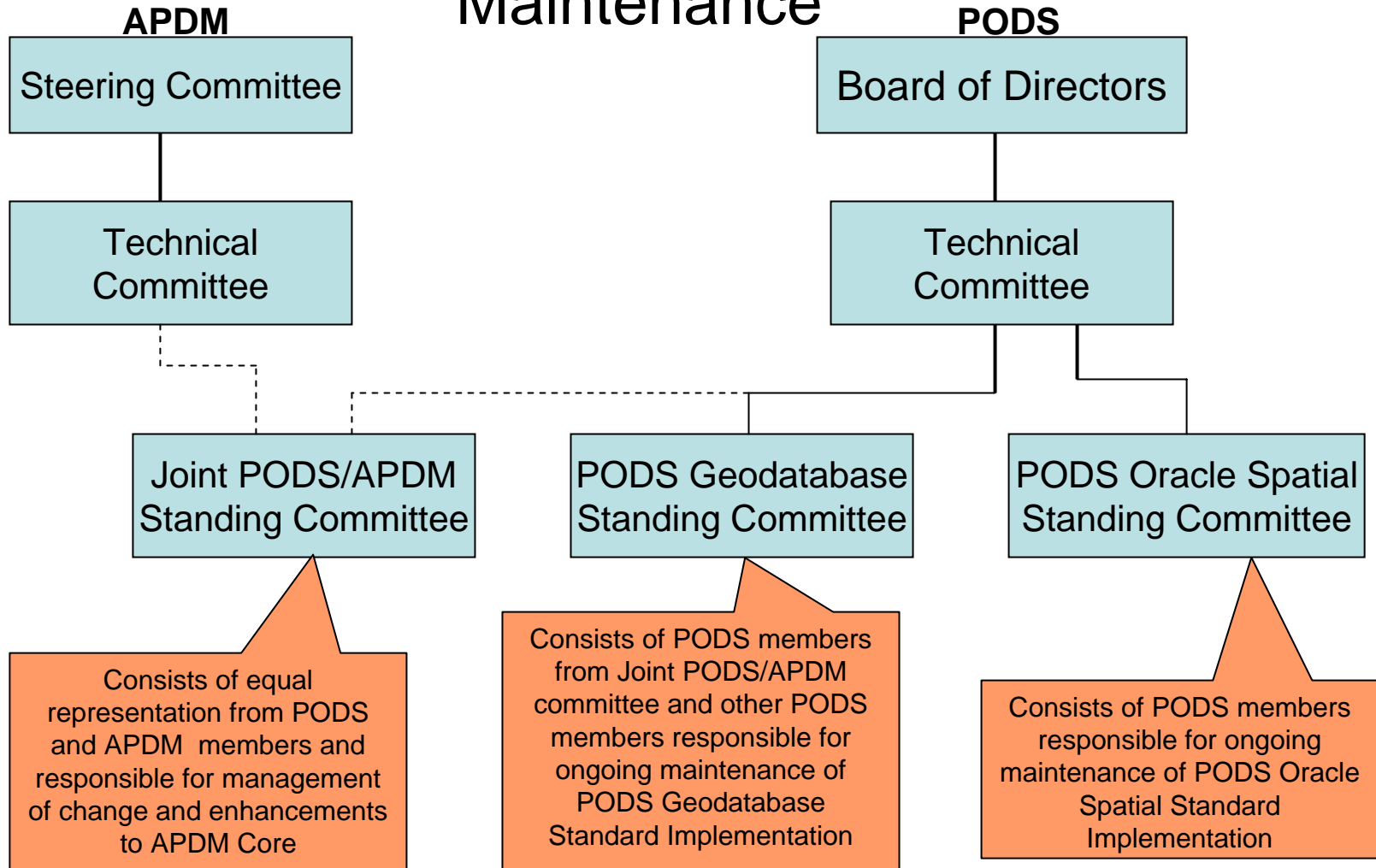
Key Features

- PODS ESRI Geodatabase Lite (Targeted Completion end of 3Q07)
- PODS ESRI Geodatabase (Heavy) (Targeted Completion end of 1Q08)
- The intellectual property (IP) of the APDM is exclusively owned by ESRI
- A licensing agreement between PODS and ESRI will enable the PODS Association to own and maintain the PODS ESRI Geodatabase and Geodatabase Lite models
- The PODS ESRI Spatial Sub-committee membership to include APDM representation (temporary)
- Formation of a standing joint committee with co-chairs consisting of equal representation from PODS and APDM members (permanent)
- To assure the interest of the PODS Association is preserved, the PODS Board of Directors will appoint an ex-officio member to the APDM Steering Committee.
- PODS and APDM will maintain their exclusive and respective branding.
- PODS and APDM will continue to operate under their existing charters and bylaws

PODS Spatial Implementations Development



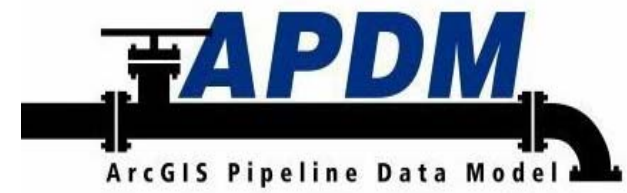
PODS Spatial Implementations Ongoing Maintenance





Benefits to Industry

- Increase power of the data in the hands of the users
 - Gives PODS users the benefit of latest Geodatabase technology
 - Gives APDM users access to the richness of the PODS model
- Provide a standards based implementation of an ESRI Pipeline Geodatabase
 - Greater interoperability
 - Wider choice of vendors



Thank You

Questions?