

DIGGS Organizational Overview

AGS Data Format Conference

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DIGGS Structure Development

- ▶ What is the DIGGS organization:
 - An international organization developed to create and maintain the schema
- ▶ DIGGS developed from a need for:
 - Standard interchange formats
 - Growing use and existence of XML formats
 - Need to unify instead of translate
 - Globalization of engineering work
 - Ubiquitous networking and data transfer
- ▶ Started by a “Pooled Fund” study

[illegible]

\$52 million per year



DIGGS Organization Development

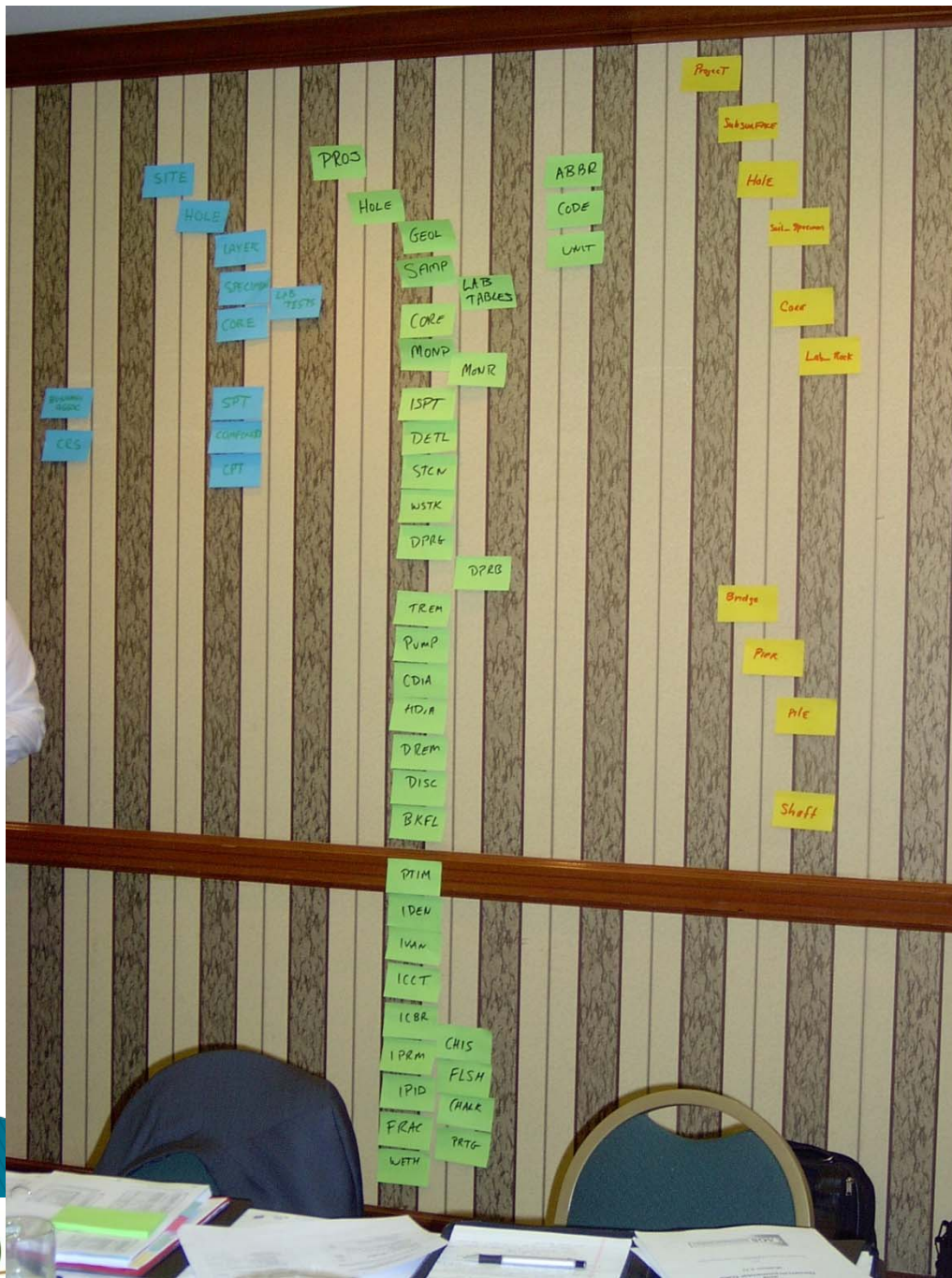
- ▶ Inception came from international meeting in San Francisco June 2004
- ▶ US state transportation representatives developed idea for a “pooled fund” study
- ▶ AGS, COSMOS and UF (FDOT) agreed on method to team for development (May 2005)
- ▶ Project launched in Fall 2005 with University of Florida as lead
 - Project supports travel for workshops
 - Effort volunteer and no salary compensation

USA Pooled Fund Project TPF-5(111)

- ▶ Started in 2005
- ▶ \$643,000 in funding (contributions from US agencies)
 - Base schema – \$173K (4 workshops, translator, examples and UML)
 - Environmental – \$22K (3 workshops)
- ▶ Combine existing geotechnical data standards (AGS, UF, COSMOS)
- ▶ Expand to include other data (i.e. geo-environmental, 2-D, geohazards, geotechnical assets)
- ▶ Develop international organization to manage and enhance standard

Project Timeline

- ▶ May 2005 – Pre-planning meeting
 - Agreement on skeleton structure and path forward
- ▶ August 2005 – Schema and dictionary draft development
 - Base Draft developed
- ▶ November 2005 – Finalize dictionary
 - Complete dictionary merger
- ▶ January 2006 – Draft dictionary and schema
 - Distribute drafts for comment to management team
- ▶ May 2006 – Internal review of draft
 - Perform an internal review of the proposed draft
- ▶ February 2007 – Decision to rework in UML
- ▶ September 2007 – Review by core team for final change
- ▶ February 2008 – Internal review versions
- ▶ June 2008 – Draft public review candidate



AGS, COSMOS & UF Commonalities (From May 05 Workshop)

Project
Administration

Excavation

Face

Sample

Specimen

Layer

In-Situ
Test

Hole

Sample
(Type Core)

Specimen

Tests

Layer

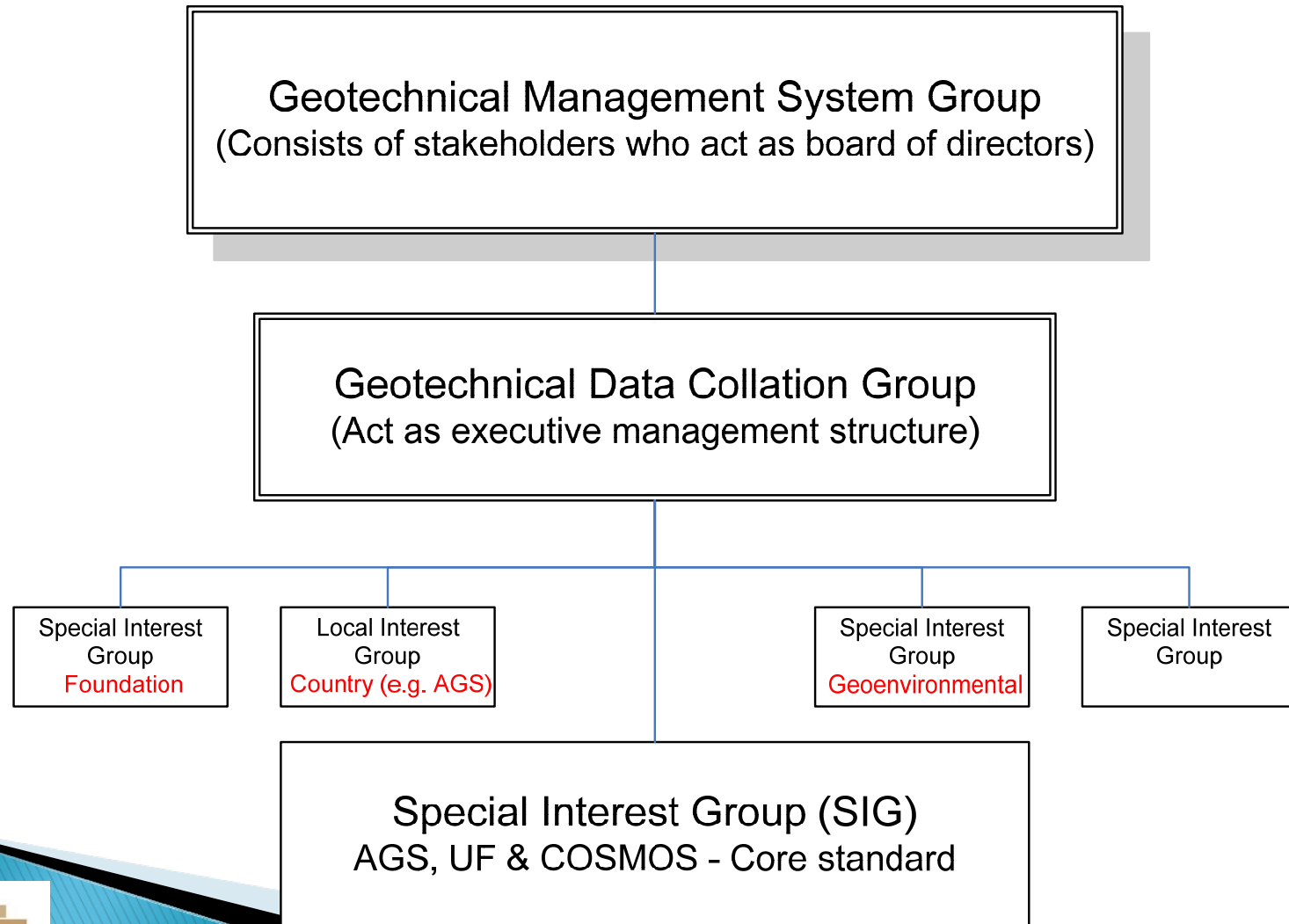
In-Situ
Test

"Surface
Line"

Line

Unified Common Structure

Pooled Fund Organization Structure



GMS Group Activities

- ▶ Oversee pooled fund project
- ▶ Develop scope and direction of work
 - Consider new features to fund (Karst, Geophysical, walls, etc)
- ▶ Provide direction to Geotechnical Data Coalition (executive team)
- ▶ Review and approve products
- ▶ Provide access to technical assistance
- ▶ Assist in needs surveys

Geotechnical Data Coalition Group

- ▶ Act as executive management team for new standards
- ▶ Membership includes leader of SIG's (or groups of features)
- ▶ Consolidate existing standards into unified standard
- ▶ Review, direct, and accept work of Special Interest Groups

Geotechnical Data Coalition Members

- ▶ University of Florida
- ▶ Consortium of Organizations for Strong Motion Observation Systems (COSMOS)
- ▶ Association of Geotechnical and Geoenvironmental Specialists (AGS)
- ▶ Construction Industry Research and Information Association (CIRIA)
- ▶ Federal Highway Administration (FHWA)
- ▶ Ohio Department of Transportation
- ▶ Future: Special Interest Group Managers

Special Interest Groups

- ▶ New SIGs funded by *Pooled Funds* are formed for features to be added
- ▶ Task: Develop schema for features compliant with DIGGS
 - Conduct surveys, compile and assess data, conduct reviews, meetings and workshops, develop the proposed standards
- ▶ Membership and proposal for new features is approved through GDC and GMS hierarchy
- ▶ Membership composed of appropriate GDC members and other domain specific experts

Local Implementation Group

- ▶ Represents a country or group within a country.
 - Each country will require at least one local implementation group
- ▶ Group that maintains local needs and version of the schema
 - Maintains a change process for updates and corrections
 - Maintains local namespace
- ▶ Interfaces with DIGGS organization to consider changes for next release
- ▶ May fund projects to launch a SIG or enhancement project



Pooled Fund Project Deliverables

- ▶ Internationally developed:
 - Phase I
 - Data Dictionary
 - Schema
 - Base AGS Tables
 - UF Pile tables
 - COSMOS Geophysics (subset)
 - Environmental (include EPA SEDD)
 - Allow local extensions and customizations
 - Electronic data structure for the metadata
 - Website for namespace (DIGGSml.org)
 - Phase II – New SIGs

Website with Namespace Documents

http://DIGGSml.org

DIGGSML | The number one source of DIGGSML, geotechnical, geoenvironmental and related data tra - Windows Internet Explorer pro

http://www.diggsml.com/

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RoboForm Search Logins Diggsml-Blog-UK Marc Hoit Save Generate

DIGGSML | The number one source of ...

Home Login

DIGGS
DATA INTERCHANGE FOR GEOTECHNICAL
AND GEOENVIRONMENTAL SPECIALISTS

International geotechnical and geoenvironmental data interchange framework based on XML and GML.
Written by geotechnical professionals for geotechnical professionals

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User login

Username: *

Password: *

Data Interchange for Geotechnical and GeoEnvironmental Specialists (DIGGS)

DIGGS is a coalition of government agencies, universities and industry partners whose focus is on the creation and maintenance of an international data transfer standard for transportation related data. The coalition came into existence through coordination from the US Federal Highway Administration sponsoring meetings and eventually forming the pooled fund study project. The initial base schema consists of geotechnical data including Borehole, soil testing, site information and more. The first SIG is extending the schema to include Geo-Environmental testing. More SIGs and expanded membership are in the works.

Pooled Fund Project TPF 5(111)

The Pooled Fund Project is a US Federal Highways Administration project administered by the state of Ohio. Multiple states commit funds to create a larger project under which all organizations receive the benefit from the project. The DIGGS project was created to develop an international standard interchange format for geotechnical data. The project brought together the existing formats created by Association of Geotechnical and Geoenvironmental Specialists in the United Kingdom (AGS), Consortium of Organizations for Strong-Motion Observation Systems (COSMOS) and Florida Department of Transportation (FDOT) created by the University of Florida (UF). The project has a governance structure for developing the base schema as well as Special Interest Groups (SIG) to create extensions. The result of the project is the DIGGS schema. [Pooled Fund Project >](#)

Public Review

The draft DIGGS standard is will be available soon for review and comment. In order to act as a reviewer, you must create an account. You will then have access to download the schema and documentation as well as participate in the online review forum. The forums will be monitored and the DIGGS team will answer questions to help in the understanding and implementation of the schema and will be the main point of contact for review comments. [Review Forum >](#)

Recent Blog Entries (Full Blog Listing)

Electronic Transmission and Storage of Data – Site Investigation to Piling

Tue, 03/06/2008 - 10:00 — DIGGSML.COM

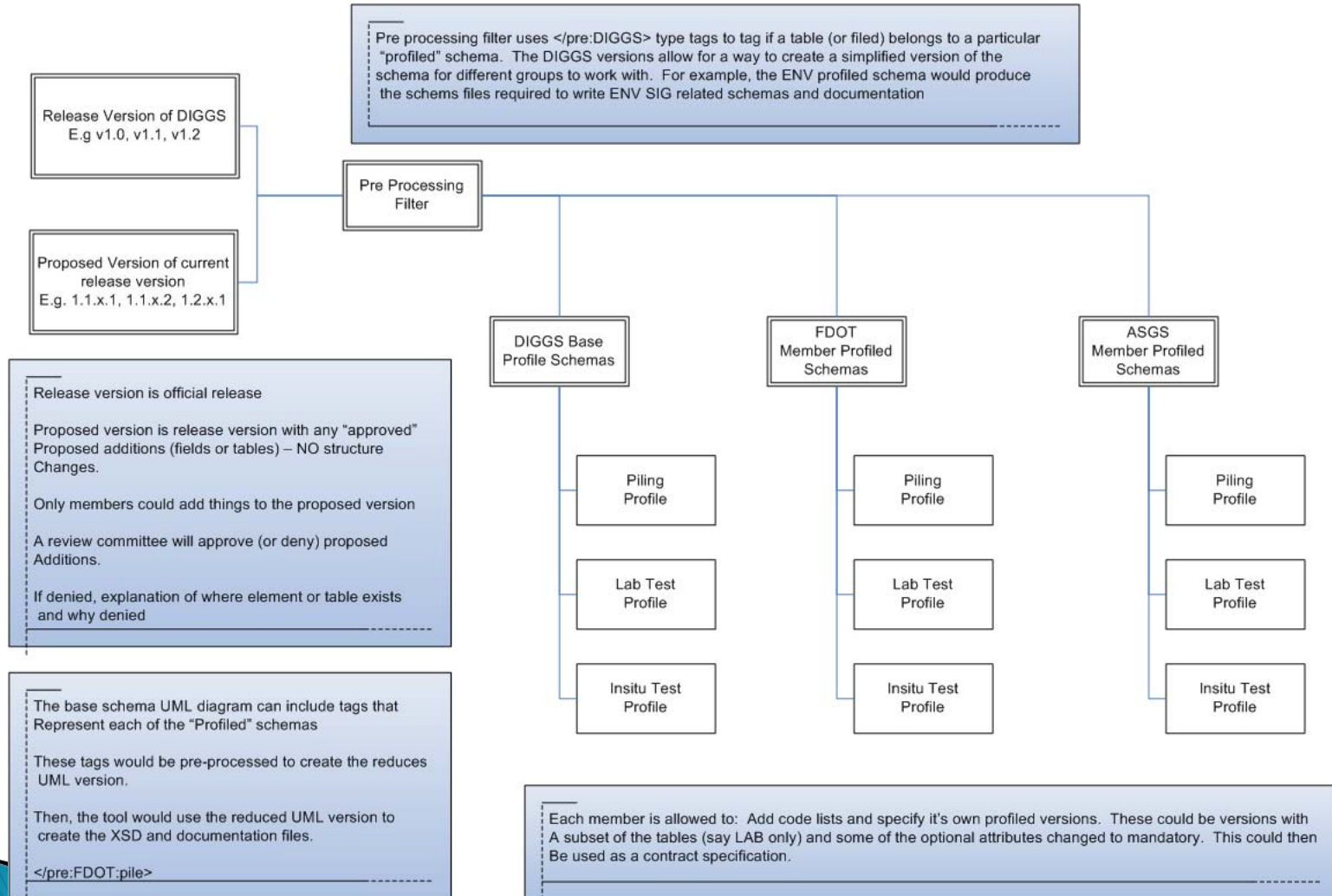
On the 18th June 2008 the Association of Geotechnical Specialists (AGS) and the Institution of Civil Engineers (ICE) will present "Electronic Transmission and Storage of Data – Site Investigation to Piling" The National Motorcycle Museum, Birmingham, UK.

This international event will showcase DIGGS and how the AGS continue to support its development, and will include four sessions as detailed below all of

Internet | Protected Mode: Off 100%

Presentations DIGGSML | The nu... Inbox - Microsoft ... AGS User Piling H... AGS User DIGGS ... Grip-database_20... 2:11 PM

Proposed Release Structure



Organizational Needs

- ▶ Inclusive structure that can grow and expand
 - Include more international groups
 - Allow method for industry to participate
 - In place by Fall 08
- ▶ Maintains the namespace and website
 - Pooled Fund will support for initial release
- ▶ Responsive staff that provides support and help for developers
 - Pooled Fund will support for initial release
- ▶ Maintains schemas and has rapid method for sharing new developments (Jan 09)
- ▶ Offers contracts services to customize and validate schemas (Jan 09)

Summary

- ▶ Current structure is based on project focus to develop core standard from pooled funding
 - One SIG has been created and incorporated for environmental data (also funded)
- ▶ Schema requires a management structure that is inclusive and responsive
 - Needs system for unique ID assignment
 - Group responsible for updates and responses to questions
 - Structure for development of new SIGs and extensions internationally
 - Still retain independent control of funding and issues local to a country or organization