The History, Development and Future of the AGS Data Format (AGS XML format developments; British Geological Survey GeoData management and dissemination system; and Borholes.com: a GIS-based geotechnical data recovery system)

Stephen Walthall

Chairman AGS Data Format Subcommittee
Bechtel
sxwaltha@bechtel.com

The presentation will describe the history, development, use and future of the AGS data format. In order to describe the format it is necessary to look at the history of geotechnical data management, the origin of the need for a format, the early discussions and decisions which were made about the format and how these were incorporated into the system. A number of decisions were made which have been very important, these include the use of a data dictionary, the rules which said that only 'Engineering Information' would be included, that no data which could be derived from other data would be included and that all data would be in text format are examples. Their significance in terms of the applications and data management will be discussed.

The second part will describe how the format has been revised over the 12 years it has been in use, in particular emphasis will be placed on the flexibility of the format as demonstrated by the development of AGS-M module for use with monitoring data which is fully compliant with the rules of version 3. The AGS Format has stood the test of time and forms a sound foundation from which a XML version is at present in the final development stages to enable future computer applications to be written whilst protecting the substantial investment in the existing format.

The third part will describe how the format has been implemented within the geotechnical and geoenvironmental industry. This has been the painful part of the project and despite the fact that the system was developed by the industry for the industry by people involved geotechnical information in their daily work it has taken a significant amount of effort to gain general acceptance. It is now considered a major success, the contractors in the UK are able to provide information in the format, it is specified on most large jobs and is used routinely on small projects. The major steps along this road to successful implementation include the availability of at least 20 commercial software programs which can read and write the format, the training of Engineers and Geologists it is use and the education of project and company managers as to the commercial advantages of using a data system. The format is not restricted to the UK or just to British Standard methods of working and is used in many countries world wide. Adaptations have been made for ASTM soil classification and for bilingual descriptions, all within the rules of AGS3.

The final part will describe some of the applications which use the format and set the scene for later presentations. These include the development of hand held field data capture systems on PDA's, the British Geological Survey (BGS) and Highways Agency (HA) data management system (HAGDMS to be described later), and web

based projects like ‘boreholes.com’ and ‘monitoringpoint.com’ for the management and dissemination of data.