



**International Society for  
Soil Mechanics and  
Geotechnical Engineering**

**Time Capsule**



## **AGS Data Format**

*Jackie Bland<sup>1</sup>, Stephen X. Walthall<sup>2</sup> and David G. Toll<sup>3</sup>*

<sup>1</sup> Structural Soils, Coventry, UK

<sup>2</sup> Independent

<sup>3</sup> Durham University, Durham, UK

### **Introduction**

The AGS Data Format, formally titled “Electronic Transfer of Geotechnical and Geoenvironmental Data” provides a standard way to transfer ground investigation, laboratory testing and monitoring data between the contributing parties of a project which involves geotechnical or geoenvironmental elements. A Data Dictionary approach is adopted in which the data is divided into Data Groups within which a series of headings are defined. The Data Groups were chosen to relate to specific elements of data which are obtained during an investigation, such as project information, exploratory hole details and strata details.

The data format emerged from a meeting convened by AGS (Association for Geotechnical and Geoenvironmental Specialists) in 1990 to discuss the proliferation of different file forms and formats that was emerging in the 1980s as digital processing of data became commonplace. A first version of the data transfer format was published in 1991. This was reported in a paper by Threadgold and Hutchinson (1992) and further versions have been published at intervals since (Bland *et al.*, 2014). The current version is AGS 4.1.1 released in March 2022 (AGS 2022).

The format has been adopted throughout UK industry and has had a hugely significant impact on how geotechnical data is exchanged between organisations. The BGS (British Geological Survey) uses the format for importing of data for the National Geoscience Data Centre. It has also been adopted world-wide for the practising construction industry in Australia, China, Germany, Greece, Hong Kong, India, Italy, Netherlands, New Zealand, Romania, Singapore and the Gulf States (in particular UAE and Oman).

### **References**

- AGS (2022) *Electronic Transfer of Geotechnical and Geoenvironmental Data AGS4 Edition 4.1.1* <https://www.ags.org.uk/content/uploads/2022/02/AGS4-v-4.1.1-2022.pdf> (Accessed 28 April 2022).
- Bland, J., Walthall, S.X. and Toll, D.G. (2014) *The Development and Governance of the AGS Format for Geotechnical Data*, Proc. 2nd International Conference on Information Technology in Geo-Engineering, Durham. Amsterdam: IOS Press (Millpress), pp. 67-74.
- Threadgold, L. and Hutchison, R. (1992) *The Electronic Transfer of Geotechnical Data from Ground Investigations*, Colloque International Géotechnique et Informatique, Presse de l'Ecole National des Ponts et Chaussées, Paris, pp. 749–756.