Granta Design is a Cambridge-based company active in Materials Information Management, providing commercial users with an industry proven platform for the secure, traceable management of their often highly complex and valuable in-house materials knowledge. Granta also provides industry- or material-specific data modules from reputable sources ensuring that this high-quality reference data sits dynamically alongside a company’s own proprietary knowledge. Granta data modules are commonly focused on physical, chemical, structural, and regulatory properties of materials and manufacturing processes, providing leading reference data for materials selection and engineering design, as well as for the management of corporate risks associated with restricted substances legislation (e.g. REACH), critical and conflict minerals legislation, and eco-design activities. NOMAD has little to offer in these areas, due to the nature of the NOMAD Repository data. However, Granta also provides a nexus for the combination of characterized properties and simulated material properties for demanding applications and is increasingly being applied as a means of collaborating on materials research and development. The NOMAD project is a potential future source of reference data.

Granta’s software is designed to offer maximum portability, allowing integration of diverse sources, data types and materials (including data from simulations) and provides the means to integrate this data within established engineering workflows. Dr. Goddin identified data quality and traceability as important requirements for industry, as a common requirement of Granta customers is the full traceability of the ‘pedigree’ of their data. For simulation data, NOMAD aims to meet this requirement by providing appropriate metadata defining: simulation software and version, methodology, approximation, link(s) to reference(s), link to the raw data stored by NOMAD to have full access to input and output files.

The possible integration of NOMAD as a reference source for Granta customers was also discussed. Granta’s software is designed to support the widest variety of materials data. Users of GRANTA:MI can access materials and property-driven searches via a secure browser. From here, a user can identify appropriate data, down-select, and optimize based on properties, create materials cards for simulation, and trigger internal business workflows to generate additional supporting data whilst maintaining full traceability over the origin, rationale and versioning of the data. In principle, the NOMAD metadata database could be hosted in GRANTA:MI, which would make integration more effective as the leading set of efficient and industry tested tools would then be available to users to make use of the NOMAD data. However, relying on a proprietary tool does not currently align with the open access approach of NOMAD. Nevertheless, other ways of integrating NOMAD data within Granta’s framework may be possible and are worth exploring. Developing ideas exploring such integration would require further interaction between NOMAD and Granta Design to investigate cross platform compatibility and specific industry user demand for NOMAD data.

Overall, Granta recognized NOMAD as an interesting initiative. Notably, Granta is already a partner in other data/simulation driven endeavors, which NOMAD could leverage to establish new connections and collaborations.