

Project 7: Maximising the Value of Data and Drilling Through Cover

Program Leader:

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Project Leader:

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Timing:

Phase 1:

1 January 2019 - 31 December 2021

Cash Funding:

\$806,500

Project Participants:

Research Participants:

- CSIRO

Geological Survey Participants:

- Geological Survey of New South Wales
- Geological Survey of South Australia
- Geological Survey of Western Australia
- Geoscience Australia
- Geological Survey of Queensland
- Geological Survey of Victoria
- Mineral Resources Tasmania
- Northern Territory Geological Survey

Project Objective:

The mission of the National Drilling Initiative (NDI) is to drill multiple holes in several case study areas to map the regional geology and architecture and define the potential for new mineral systems in 3D.

The NDI will generate a vast amount of new data and add value to existing data. These data will need to be appropriately managed throughout the life of the MinEx CRC to maximise the value from the NDI. Current methods

for managing drilling data require multiple software packages and data delivery systems and are generally undertaken after the completion of the program.

A streamlined approach to managing and integrating the many layers of complex drilling data, which provides an objective analysis of the data, would result in significant efficiency gains and the ability to modify drilling programs in real time. Project 7 aims to deliver a single point of access to NDI drilling data for all stakeholders, inclusive of a data management and delivery system, geospatial and data analytical tools and drill target optimisation algorithms.

Phase 1 Objectives:

- Deliver the tools and data infrastructure to facilitate upload and management of legacy data and NDI drilling data and information so that it can be delivered to stakeholders and researchers in near real-time, and to the broader geoscience community in efficient time frames.
- Incorporate advanced geospatial data analytics (informed by mineral systems science conducted in Project 9) so that the maximum amount of geoscientific information can be extracted from legacy data and the NDI drilling program.
- Maximise the efficiency and value of drilling by incorporating algorithms and software tools into the online delivery system, to optimise drill program design and provide drill target rankings relative to end-user defined questions.