



In the June issue of *AusGeo News* I reported on the Government decision to establish the Australian Tsunami Warning System (ATWS) and how Geoscience Australia is playing an increasing role in the safeguarding of Australians. In line with strengthening Geoscience Australia's ability to monitor and advise on natural hazards in the Australian region, and the increasing recognition of the importance of spatial information, a new Division – Geospatial and Earth Monitoring Division (GEMD) has been created. GEMD is working to improve the safety of communities and the protection of Australia's critical infrastructure, through its comprehensive monitoring, research and mapping programs. The new Division brings together the spatial skills and expertise of the former National Mapping Division and hazard monitoring and risk assessment functions of the former Geohazards Division. The new structure, which is outlined in this issue, will improve the agency's capacity to respond flexibly to current and emerging government priorities. GEMD is headed by Dr Chris Pigram, who brings a wide range of scientific and management experience to the position.

This issue also includes an article outlining Geoscience Australia's contribution to protection of Australia's critical infrastructure (CI) that underpins the nation's social and economic well-being. The Government has identified the protection of critical infrastructure as a high priority and initiated a program involving government and industry to model the risks associated with and the consequences of CI failure. The project relies heavily on modelling and analysis of information in a spatial framework.

Gold is Australia's third most valuable mineral export, worth \$5.5 billion in 2004, and this issue has two articles of relevance to gold exploration. One is a report on the new insights being gained into the potential for intrusion-related gold systems in parts of eastern Australia, particularly North Queensland. This study combines new knowledge on the relationship between granite geochemistry and gold potential with other parameters for the intrusion and country rocks to determine the potential for new gold deposits. There is also a report on the recently completed deep crustal seismic survey in the Tanami gold province in the Northern Territory.

A new assessment of the Dampier Sub-basin and Rankin Platform in the Carnarvon Basin suggest that 167 million barrels of oil, 0.4 trillion feet of gas, and 26 million barrels of condensate could be discovered in these areas in the next 10-15 years. This report is part of an ongoing assessment of Australia's petroleum resources by Geoscience Australia that draws on the best available geoscience information and a risk approach to model the nation's likely undiscovered petroleum resources.

Earth monitoring relies on consistent recording over extended periods of time to detect subtle but important changes. This year the Mawson observatory in Antarctica became the second Geoscience Australia observatory to have provided geomagnetic data over a 50-year time span. The geomagnetic data from Mawson contributes to the global and regional geomagnetic models used for navigation, exploration and research.

In closing I welcome your feedback on *AusGeo News* to ensure that it continues to meet your needs.

Comment

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