

GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS**DEPARTMENT OF MINERAL RESOURCES AND ENERGY**

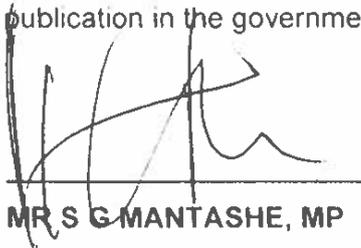
NO. 1940

30 March 2022

**PUBLICATION OF THE GEOSCIENCE ACT REGULATIONS, 2022 FOR
IMPLEMENTATION**

I, **SAMSON GWEDE MANTASHE, MP**, Minister of Mineral Resources and Energy, hereby Geoscience Act Regulations, 2022 for implementation.

The Geoscience Act Regulations, 2022 will become effective on the date of publication in the government gazette



MRS G MANTASHE, MP

MINISTER OF MINERAL RESOURCES AND ENERGY

DATE: 28/03/2022

SCHEDULE

ARRANGEMENT OF REGULATIONS

CHAPTER 1

1. Definitions

CHAPTER 2

**SUBMISSION OF GEOSCIENCE DATA AND INFORMATION IN TERMS OF
GEOSCIENCE ACT**

2. Lodgement of geoscience data and information in respect of prospecting and reconnaissance
3. Lodgement of onshore and offshore geoscience data and information, not related to prospecting and reconnaissance
4. Lodgement of historical geoscience data and information
5. Classification of lodged geoscience data and information

CHAPTER 3

**PRESCRIBED SPECIALISED AND OTHER SERVICES RENDERED BY THE
COUNCIL FOR GEOSCIENCE**

6. Services rendered to public and private institutions

CHAPTER 4

**GEOSCIENCE DATA AND INFORMATION IN POSSESSION OF THE
COUNCIL FOR GEOSCIENCE**

7. Dissemination of geoscience data and information

CHAPTER 5**NATIONAL ADVISORY AUTHORITY FUNCTION IN TERMS OF
GEOHAZARDS**

8. Advisory function of the Council in relation to geohazards

CHAPTER 6**COUNCIL FOR GEOSCIENCE BOARD**

9. Board committees, procedures, and functions

CHAPTER 7**CONFIDENTIALITY ON THE AFFAIRS OF THE COUNCIL FOR
GEOSCIENCE**

10. Preservation of secrecy in respect of the affairs of the Council

CHAPTER 8**EXECUTION OF MANDATE OF THE COUNCIL FOR GEOSCIENCE**

11. Authorisation for the execution of the Council's mandate

CHAPTER 9**SANCTIONS**

12. Contravention of the Geoscience Act Regulations

CHAPTER 10**APPEALS**

13. Procedure for appeals against administrative decisions

ANNEXURES

14. Annexure "A" and Annexure "B"

CHAPTER 1

DEFINITIONS

1. Definitions

In this schedule any word or expression to which a meaning has been assigned in the Act shall have that meaning so assigned unless the context indicates otherwise –

“anthropogenic” means any condition or state brought about by human activities;

“competent person” means any person who is qualified by virtue of his or her qualifications, knowledge, expertise, skills, and experience in a specific geoscience discipline and registered as a Professional Natural Scientist in terms of the Natural Scientific Profession Act, 2003 (Act No.27 of 2003) or as a Professional Engineer or Professional Engineering Technologist in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000);

“Department” means the Department of Mineral Resources and Energy.

“dolomite” means a calcium-magnesium carbonate rock and its associated weathering products of which the properties make the rock susceptible to dissolution, leading to subsurface voids and collapses at surface known as sinkholes and subsidence.

“dolomite instability events” means sinkholes, subsidence, and ground cracks on dolomitic land.

“dolomitic land” means land typically underlain by dolomite residuum or bedrock (or both) at depths of no more than 60m in areas where no de-watering has taken place and where the

Local Authority has jurisdiction, is monitoring and has control over the groundwater levels or at depths of no more than 100m in areas where de-watering has taken place or where the local authority has no jurisdiction or control over the groundwater levels.

“engineering geological report” means geotechnical report as defined in these Regulations.

“geo-environmental pollution” means any degradation to the natural environment brought about by human-induced activities, such as mineral exploration, exploitation and other activities, in the course of the production of geoscientific information.

“geology” means the study of earth, the materials of which is made, the structure of those materials, and the processes acting upon them.

“geoscience data” means data associated with any investigation of the natural environment associated with the Earth.

“geoscience information” means information associated with any investigation of the natural environment associated with the earth.

“geotechnical report” means geotechnical site investigation report, inclusive of all geohazard-related investigations, prepared by a competent person. A geotechnical report provides information on soil, rock and groundwater conditions in respect of structures and infrastructure.

“infrastructure” means installations, structures, facilities, systems, services, or processes, which are part of the National Infrastructure Plan, as per Schedule 1 of the Infrastructure Development Act, 2014 (Act No. 23 of 2014). Infrastructure typically includes:

(a) National, provincial and international airports.

- (b) Communication and information technology installations.
- (c) Education institutions.
- (d) Electricity transmission and distribution facilities.
- (e) Health care facilities.
- (f) Human settlements and related infrastructure and facilities.
- (g) Economic facilities.
- (h) Mines.
- (i) Oil or gas pipelines, refineries or other installations.
- (j) Ports and harbours.
- (k) Power stations or installations for harnessing any source of energy.
- (l) Productive rural and agricultural infrastructure.
- (m) Public roads.
- (n) Public transport.
- (o) Railways.
- (p) Sewage works and sanitation facilities.
- (q) Waste installations.
- (r) Water works and water facilities.

“land” means in terms of the geoscience legislative framework all areas of the Republic and its territories, both onshore and offshore regions within the Exclusive Economic Zone, the subsurface and the airspace. This definition of “land” includes any erf, agricultural holding or farm portion.

“land development” means any change of land use or any deviation from the land use or uses permitted in terms of an applicable land use scheme providing for activities such as agriculture and/or the erection of buildings or structures.

“landowner” means the person registered in the Deeds Registry as the owner of the land or the person who is the beneficial owner in law.

“MPRDA” means the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002).

“occupier” means a person residing on land which belongs to another person, and who has on 4th February 1997 or thereafter had consent or another right in law to do so, but excluding:

- (a) a labour tenant in terms of the Land Reform (Labour Tenants) Act, 1996 (Act No. 3 of 1996).
- (b) a person using or intending to use the land in question mainly for industrial, mining, commercial or farming purposes, but including a person who works the land himself or herself and does not employ any person who is not a member of his or her family.
- (c) a person who has an income in excess of the prescribed amount.

“problem soils” means any soil, rock, or associated layer of the Earth’s shallow surface, which can cause instability and/or hazards to infrastructure, any structure, portion of land, or human life, typically including expansive or soft clays, collapsible soils, erodible or dispersive materials.

“Republic” means the Republic of South Africa.

“seismological data” means information on ground motion produced by seismic disturbances (both natural or induced) recorded by seismological equipment.

“State Owned Entity” denotes any entity of the state provided for in terms of the Public Finance Management Act 1 of 1999 (Act 1 of 1999).

“structure” means a building or construction of any kind, or any manmade work built up or composed of parts joined together in some definite manner, which occupies a permanent location on the ground or attachment to an entity having a permanent

location on the ground, with the exception of paved areas, walkways, sports field, and similar outdoor areas.

CHAPTER 2

SUBMISSION OF GEOSCIENCE DATA AND INFORMATION

2. Lodgement of geoscience data and information in respect of prospecting and reconnaissance

- (1) Geoscience data and information related to prospecting right must be submitted to the Regional Managers of the Department of Mineral Resources and Energy in line with the applicable legislative framework.
- (2) Geoscience data and information related to reconnaissance permit must be submitted to the Designated Agency in line with the applicable legislative framework.

3. Lodgement of onshore and offshore geoscience data and information, not related to prospecting and reconnaissance

- (1) Owners of onshore and offshore geoscience data and information not related to prospecting and reconnaissance must submit geoscience data and information to the Council. These must be delivered to any of the nominated addresses (**Annexure A**). Owners of geoscientific data and information may include:
 - (a) Organs of State as defined in the Constitution., public institutions, State Owned Entities, private institutions, companies, individuals, and Non-Government Organisations.

- (b) Any foreign government, public entities, and private institutions or individual.
- (2) South African and foreign governments, public entities and private institutions or individuals intending to undertake geoscience research within the Republic must notify the Council in writing prior to commencement of the intended research.
- (3) Researchers as contemplated sub-regulation (2) must submit results of their geoscientific research to the Council within an agreed timeframe after the completion of the research.
- (4) The lodgement of geoscience data and information must be marked for the attention of the Chief Executive Officer of the Council for Geoscience.
- (5) The lodgement of geoscience data and information in terms of the Geoscience Act, must be submitted in line with the prescribed data requirements and formats (**Annexure B**), and should typically include:
- (a) Geology;
 - (b) Geochemistry (including geochronology);
 - (c) Geophysics (including seismology and geomagnetism);
 - (d) Engineering geology;
 - (e) Economic geology;
 - (f) Palaeontology
 - (g) Palynology;
 - (h) Geohydrology;
 - (i) Marine geology;
 - (j) Geohazards;
 - (k) Environmental geoscience;

- (l) Borehole profile logs; and
- (m) Physical borehole materials (including percussion chips or core) when specifically requested by the Council.
 - (i) All physical core materials recovered from boreholes drilled for research purposes can only be discarded after obtaining consent from the Council; and
 - (ii) All physical materials recovered from boreholes drilled for infrastructure development purposes can only be discarded after consultation with the Council.

4. Lodgement of historical geoscience data and information

- (1) All holders of historical onshore and offshore prospecting and reconnaissance geoscience data and information preceding the year 2004 must notify the Council of all such data and information in their possession within 18 months of coming into operation of these Regulations. The Council will make arrangements with the owners of historical geoscience data and information on appropriate timelines and logistical arrangements for the collection of the required geoscience data and information.
- (2) All geoscience data and information not related to prospecting and reconnaissance preceding the coming into operation of these Regulations will be classified as historical data. Owners of historical geoscience data and information not related to prospecting and reconnaissance must notify the Council of all such data and information in their possession within 18 months of coming into operation of these Regulations. The Council will make arrangements with the owners of historical geoscience data and information on appropriate timelines and logistical arrangements for collection of the required geoscience data and information.

- (3) Costs related to the collection and transportation of historical geoscience data and information specifically requested by the Council will be paid for by the Council.
- (4) All notifications and arrangements must be marked for the attention of the Chief Executive Officer of the Council for Geoscience.

5. Classification of lodged geoscience data and information

- (1) Any geoscience data and information lodged in terms of a prospecting right and a reconnaissance permit shall be treated as confidential by the Council until such time that the prospecting right or reconnaissance permit has lapsed or had been abandoned.
- (2) All geoscience data and information not related to prospecting and reconnaissance including historical data lodged with the Council will be treated as confidential by the Council, unless:
 - (a) Confirmation allowing third-party access to the geoscience data and information is obtained in writing by the Council from the owner.
 - (b) It is accompanied by a written condition stipulating the duration of the confidentiality arrangement.
 - (c) The lodged geoscience data and information is older than 15 years.
- (3) All notifications and arrangements must be marked for the attention of the Chief Executive Officer of the Council for Geoscience.

CHAPTER 3
PRESCRIBED SPECIALISED AND OTHER SERVICES RENDERED BY
THE COUNCIL FOR GEOSCIENCE

6. Services rendered to public and private institutions

- (1) The Council offers prescribed specialised and other services to public or private institutions and individuals either at mutually agreed rates with clients or as outlined in the Council's Data and Information Pricing guidelines and catalogue freely obtainable from the Council's offices or its official website.

- (2) The following prescribed specialised services are rendered to clients based on Services Level Agreements:
 - (a) Geological mapping;
 - (b) Geochemical mapping;
 - (c) Mineralising systems delineation;
 - (d) Geohazards mapping;
 - (e) Geophysical modelling;
 - (f) Seismic monitoring and analysis;
 - (g) Groundwater sustainability studies;
 - (h) Hydrogeological modelling;
 - (i) Geotechnical investigation;
 - (j) Marine geophysical surveys;
 - (k) Structural geological mapping;
 - (l) Remote sensing and spatial data analysis; and
 - (m) Geoscience integration.

- (3) Other services rendered by the Council include:
 - (a) Analytical services.

- (b) Scientific services includes review of geotechnical reports in respect of geohazards.
- (4) Any client who paid the Council for services rendered may be reimbursed due to the following:
 - (a) If the Council fail to render services as provided for in sub-regulations (2) and (3).

CHAPTER 4

GEOSCIENCE DATA AND INFORMATION IN POSSESSION OF THE COUNCIL FOR GEOSCIENCE

7. Dissemination of geoscience data and information

- (1) Geoscience data and information generated by the Council may be made accessible through digital and non-digital media. Available geoscience data and information is outlined in the Council's Data and Information Pricing guidelines and catalogue.
- (2) Geoscience data and information submitted to the Council not classified as confidential may be disseminated through digital and non-digital media for free, and where applicable the Council may charge for administrative costs.
- (3) Geoscience data and information requests can be made by visiting any of the Council's offices (**Annexure A**), or through written request to the office of the Chief Executive Officer.

CHAPTER 5

NATIONAL ADVISORY AUTHORITY

8. Functions of the National Advisory Council

- (1) All Organs of State that are planning to undertake infrastructure or land development must consult with the Council in a timeous manner to obtain their written opinion on the safety and proper use of that land with respect to geohazards including:
 - (a) Dolomitic land;
 - (b) Under-mined areas;
 - (c) Regions prone to slope stability problems;
 - (d) Regions prone to seismicity;
 - (e) Areas prone to flooding;
 - (f) Regions prone to significant erosion or land degradation linked to geohazards;
 - (g) Areas underlain by problem soils;
 - (h) Geo-environmental pollution related to past, present, and/or future mineral exploration, exploitation and other activities (anthropogenic and/or natural processes) that might lead to geo-environmental pollution; and
 - (i) Regions prone to Tsunamis.
- (2) Organs of State and the general public with existing infrastructure which is prone to geohazards may seek advice from the Council.
- (3) Organs of State and the general public may seek advice from the Council on the geoscientific aspects of risk management strategies.
- (4) Organs of State and the general public are encouraged to report all geohazard occurrences to the Council.

CHAPTER 6 COUNCIL FOR GEOSCIENCE BOARD

9. Board committees, procedures, and functions

- (1) The Council's Board may establish a committee that shall, subject to the direction of the Board, perform such functions of the Board as determined from time to time. Furthermore, in terms of the Public Finance Management Act (Act No 1 of 1999) provides that some Board responsibilities may be delegated to Board committees and the management of the Council without depriving the Board of its roles and responsibilities. The Board committees are required to make recommendations to the entire Board before strategic decisions are implemented by management of the Council.
- (2) The Board constitutes four committees and appoints the Chairpersons and committee members. The Board delegates some of its functions to the following four Board committees:
 - (a) Audit and Risk;
 - (b) Finance;
 - (c) Technical; and
 - (d) Personnel, Remuneration and Transformation committees.
- (3) Board committees shall be convened in line with the committee charters as approved by the Board.
- (4) The members, competence, and operating procedure of any Executive Committee appointed by the Board shall be determined by the decisions adopted by the Board in accordance with the requirements set forth in the applicable laws.

- (5) The Board's Executive Committee meetings shall be held at least once every month but may be held at any time in case of urgent circumstances.
- (6) The Board may, without abdicating its responsibilities, delegate any of its functions to committees of the Board by consulting each committee in terms of the Geoscience Act.
- (7) The Board may, as and when necessary, appoint an ad hoc Board Committee, which shall, subject to the direction of the Board, perform such functions of the Board as the Board may determine from time to time.
- (8) Each Committee shall be governed by its own respective charter which shall provide for the membership, purpose, powers, and authority of the committee as well as the scope of its mandate.
- (9) The Board shall annually review the performance of each committee to ensure that their composition, mandate, and authority enable them to provide effective assistance to the Board in the key areas in which they function.
- (10) Committees of the Board are required to report on their activities and make recommendations to the Board, either written or oral. Such reporting shall form the basis for the assessment of their performance.
- (11) Procedural matters relating to the Board meetings include:
 - (a) The Board must establish an annual work plan to ensure that all relevant matters are covered by the agenda of the meetings planned for the year, to be held at least once a quarter;

- (b) The established annual work plan must ensure proper coverage of the matters laid out. Most of the compliance matters shall be standing agenda items to be attended to on a quarterly basis, whilst other matters may be dealt with only when necessary;
- (c) A detailed agenda, together with supporting documentation, must be circulated at least seven days prior to each meeting to the Board members and other invitees;
- (d) Any member who cannot attend a meeting may submit to the Chairperson and/or the Company Secretary his/her written inputs on the agenda items to be discussed at the meeting;
- (e) The minutes must be formally approved by the Board at its next scheduled meeting;
- (f) The quorum for Board meetings shall be constituted by a majority of its members as well as member participating telephonically (50% of the members plus one);
- (g) The Board alternate members may attend Board meetings on behalf of the main Board members. The Board alternate members shall form part of the quorum for the committee meetings and have authority to exercise a vote in the committee;
- (h) A decision of the Board shall be taken by a majority of the votes of the members present. In the event of an equal votes on any matter, the Chairperson shall have a casting vote in addition to his or her deliberative vote; and
- (i) No decision taken by or act performed under the authority of the Board shall be invalid by reason only of a casual vacancy on the Board or of the fact that a person who was not entitled to sit as a member sat as a member at the time the decision was taken or that the act was authorised, if the decision was taken or the act was authorised by the requisite majority of the

members who were present at the time and were entitled to sit as members.

CHAPTER 7

CONFIDENTIALITY ON THE AFFAIRS OF THE COUNCIL FOR GEOSCIENCE

10. Preservation of secrecy in respect of the affairs of the Council

Any person is prohibited from engaging in any conduct detrimental to the affairs of the Council, which includes improper disclosure of information without consent of the Council or its Board.

CHAPTER 8

EXECUTION OF MANDATE OF THE COUNCIL FOR GEOSCIENCE

11. Authorisation for the execution of the Council's mandate

- (1) The Council may undertake research in the Republic, which includes:
 - (a) Onshore land and properties within its borders;
 - (b) Offshore regions within the Exclusive Economic Zone of the Republic and its territories;
 - (c) The subsurface; and
 - (d) The airspace.

- (2) Where the execution of this mandate requires access to land or restricted airspace, the Council must notify and consult with the landowner and/or occupier of the land or the relevant Regulatory

Authority to inform them of the intended activities to be undertaken by the Council.

- (3) The landowner or occupier must allow officials of the Council entry to the land/property or access to restricted air space and desist from any conduct that will hinder the Council from executing its mandate.

CHAPTER 9 SANCTIONS

12. Contravention of the geoscience act regulations

Any person who contravenes or fails to comply with the provisions of these Regulations, shall be guilty of an offence and liable on conviction by a court of law to a fine or imprisonment not exceeding two years, or to both a fine and such imprisonment.

CHAPTER 10 APPEALS

13. Procedure for appeals against administrative decisions

- (1) Any person who intends to appeal against an administrative decision in terms of the Geoscience Act, must within 30 days after becoming aware of or should have reasonably become aware of the administrative decision concerned, lodge a written notice of appeal with the Chief Executive Officer of the Council for Geoscience.
- (2) The notice of appeal must state the following:
 - (a) the actions appealed against; and
 - (b) the grounds on which the appeal is based.

- (3) A notice of appeal must be lodged with a deposit of R5000.00 (Five Thousand Rand) to the Council, which can be refunded on successful appeal of an administrative decision.
- (4) The Chief Executive Officer of the Council for Geoscience, may in his or her discretion and on such terms and conditions as he or she may decide, condone the late noting of an appeal.
- (5) After receipt of the notice of appeal, the Chief Executive Officer of the Council for Geoscience, must:
 - (a) Dispatch copies thereof to:
 - (i) the Appellant who for the lodged of a notice of appeal; and
 - (ii) any other person (third party) whose rights maybe in the opinion of the Chief Executive Officer of the Council for Geoscience, be affected by the outcome of the appeal.
 - (b) Request the Official of the Council involved in the administrative decision or have knowledge to respond as provided for in sub-regulation 2.
- (6) The Appellant must, within 21 days from receipt of the notice of appeal, submit a respond to the to the Chief Executive Officer of the Council for Geoscience and written reasons for the administrative decision appealed against.
- (7) The third-party person who has interest or may be affected by the appeal on administrative decision of the Council must within 21 days from receipt of the notice of appeal, submit to the Chief Executive Officer of the Council for Geoscience, a replying submission indicating:

- (a) the extent and nature of his or her rights;
 - (b) how the outcome of the appeal may affect his or her rights;
and
 - (c) any other information pertaining to the grounds as set out in the notice of appeal.
- (8) The Chief Executive Officer of the Council for Geoscience to the Appellant must by registered post and request him or her to respond thereto in writing within 21 days from receipt.
- (9) The Chief Executive Officer of the Council for Geoscience, must within 30 days from the date of receipt of the written response as contemplated in regulation 8, must either:
- (a) confirm the administrative decision concerned;
 - (b) set aside the administrative decision concerned; and
 - (c) amend or substitute the administrative decision concerned.

Short title and commencement

This Regulation shall be called the Geoscience Act, Regulations, 2022 and shall come into operation on a date of Gazette by the Minister.

ANNEXURE A**ADDRESSES FOR THE COUNCIL FOR GEOSCIENCE REGIONAL
OFFICES AND HEAD OFFICE**

CGS OFFICES	PHYSICAL ADDRESS	CONTACT NUMBER
Council for Geoscience Gauteng Province (Head Office)	280 Pretoria Street, Silverton, Pretoria, 0184	+27 (0)12 841 1911
Council for Geoscience Limpopo Province	30A Schoeman Street, Polokwane, 0700	+27 (0)15 295 3471
Council for Geoscience KwaZulu-Natal Province	139 Jabu Ndlovu Street, Pietermaritzburg, 3200	+27 (0)33 345 6265/6
Council for Geoscience Eastern Cape Province	16 2nd Avenue, Walmer, Port Elizabeth, 6065	+27 (0)41 581 164/1156
Council for Geoscience Western Cape Province	3 Oos Street, Bellville, 7535	+27 (0)21 943 6700
Council for Geoscience Northern Cape Province	24 Josling Street, Upington, 8800	+27 (0)54 332 1403
Council for Geoscience National Borehole Core Depository Gauteng Province	Plot 188, Donkerhoek, Pretoria, 0184	+27 (0)12 841 1911

ANNEXURE B

PREScribed REQUIREMENTS AND FORMATS FOR DATA / INFORMATION SUBMISSIONS

Data and information not relating to prospecting and/or reconnaissance must be submitted to the Council for Geoscience from the coming into operation of the Geoscience Act Regulations in digital format, accompanied by the required minimum metadata as outlined below.

Submitters of digital geoscience data and information must notify the Council at the following email address:

regulationsubmissions@geoscience.org.za

Physical materials requested by the Council, must be submitted to the following address: Council for Geoscience National Borehole Core Depository as detailed in **Annexure A**.

B-1 Data and information requirements:

(1) Physical materials, upon request by the Council:

- (a) Physical drill core, percussion drill chips, rock samples or other samples

(2) Digital (soft copy) data and information:

- (a) Text-based documents:

MS Word, RTF, PDF, HTML

- (b) Numeric data:

XLS, DBF, ASCII-delimited, TXT, CSV, WKS, PDF

- (c) High-resolution Image data:

GEOTIFF, JPEG, PNG, GIF, BMP, PDF, BIL, IMG AI, GRD

- (d) Spatial data:
 - SHP, DXF, DWG, KML, KMZ*
 - (e) 3D geological data:
 - Any suitable file format*
 - (f) Point data:
 - SHP, DXF, TXT, ASCII-delimited, DBF, CSV, KML, KMZ*
- (3) Minimum metadata:
- (a) Identification / criteria:
 - (i) Dataset title
 - (ii) Subject
 - (iii) Publication / dataset reference date
 - (b) Author / responsible party:
 - (i) Author / creator of dataset
 - (ii) Publisher responsible
 - (c) Usage, restrictions & constraints:
 - (i) License and user rights
 - (d) Technical parameters:
 - (i) Scale / resolution
 - (ii) Distribution format(s)
 - (iii) Spatial reference system and projection
 - (iv) Data quality
 - (v) Maintenance
 - (e) Coverage / dimensions of dataset:
 - (i) Geographic identifier / location / name
 - (f) Metadata custodian:
 - (i) Metadata contact / individual
 - (ii) Organisation
 - (iii) Address
 - (iv) Position / role
 - (v) Contact details

(4) Dataset projection:

- (a) Data to be submitted with a defined spatial reference system and projection

B-2 Description: onshore and/or offshore geoscience data and information

(1) Borehole profile logs typically including (as relevant to the purpose of drilling):

- (a) The x, y, z information of borehole drill position
- (b) Lithological descriptions
- (c) Drilling method(s)
- (d) Drilling depth
- (e) Assay information detailing the unit values (e.g., ppm, g/t, wt.%)
- (f) Groundwater strikes and depths
- (g) Borehole yields
- (h) Geotechnical parameters / measurements
- (i) Sampling positions
- (j) Notes
- (k) Physical materials (where available and requested by the Council - to be retained for up to 1 year after drilling, or as agreed to between data collectors and the Council)

(2) Sampling data typically including:

- (a) Sample position x, y, z information
- (b) Sampling methods
- (c) Sampling media (e.g. soil, soil, rock, stream sediments, water, gaseous etc.)
- (d) Laboratory test certificates / results
- (e) Sample results data tables

- (3) Geological data and information typically include:
- (a) Technical data, maps and reports
 - (b) Structural measurements and any other spatial data, with x, y z information
 - (c) Cross sections
 - (d) 3-dimensional models
- (4) Geochemistry data and information typically include:
- (a) Technical data, maps and reports
 - (b) Description of analytical techniques (e.g. XRD, XRF, ICPMS, petrography, etc.)
 - (c) Sample position x, y, z information
 - (d) Raw data containing the geochemical elements and concentrations (e.g., ppm, g/t, wt.%)
- (5) Geophysical data and information typically include:
- (a) Airborne and ground geophysics data, maps and report
 - (b) Unprocessed geophysical data detailing the x, y, z positions and data collection intervals (e.g. magnetic, radiometric, gravity, electrical resistivity, electromagnetic, magnetotelluric, ground penetrating radar, spectral data, geomagnetic, down-hole geophysical surveys etc.
 - (c) Laboratory test results of soil, rock and water
 - (d) Seismology data, maps and reports
 - (e) Waveform data (when requested)
 - (f) Parametric data (x, y and z locations, magnitude, magnitude scale, uncertainties in location)
 - (g) Instrument response files

- (6) Engineering geology / Geotechnical (including geohazard assessments) data and information typically include:
- (a) Technical data, maps and reports
 - (b) Field investigation data detailing the x, y, z positions (e.g. Test pit profile logs, borehole profile logs, *in situ* test results, sampling positions, depths, and material sampled)
 - (c) Cross sections
 - (d) Laboratory test results
 - (e) 3-dimensional models
- (7) Economic geology data and information typically include:
- (a) Technical data, maps and reports
 - (b) Ore deposit research data, maps and statistics
 - (c) Mineral economic studies (e.g., mine production, supply and demand, export and import information etc.)
- (8) Palaeontology and/or palaeontology data and information typically include:
- (a) Technical data, maps and reports
 - (b) Data points detailing the x, y, z positions
 - (c) Laboratory test results
- (9) Geohydrology data and information typically include:
- (a) Technical data, maps and reports
 - (b) Cross sections
 - (c) Hydrogeological data, with point date indicating x, y, and z coordinates (e.g., pump tests & results, in situ tests, water chemistry etc)
 - (d) 3-dimensional models

- (11) Environmental geoscience data and information typically include:
- (a) Technical data, maps and reports
 - (b) Field investigation data detailing the x, y, z positions
 - (c) Cross sections
 - (d) Laboratory test results
 - (e) 3-dimensional models
- (12) Geochronology data and information typically include:
- (a) Technical data, maps and reports
 - (b) Field investigation data detailing the x, y, z positions
 - (c) Unprocessed data
 - (d) Laboratory test results
- (13) Marine geoscience data and information typically include:
- (a) Technical data, maps and reports, on for example:
 - (i) Interpreted seafloor geology
 - (ii) Offshore magnetic data (including processed and unprocessed data)
 - (iii) Bathymetrical data (including Qps db files, or other file types (e.g. Konsberg.all), sound velocity casts, recorded motion data (e.g. pos mv), asci or txt files, grid files, etc)
 - (iii) Side-scan sonar / backscatter data (including processed and unprocessed sonar data (e.g. sdf / jsf / xtf / qps db / hypack etc), towing configurations with offsets etc)
 - (iv) Offshore seismic data (including, SegY, xyz picks, isopach grids, etc)
 - (v) Offshore sediment samples