

New Zealand Volcanic Science Advisory Panel (NZVSAP) Terms of Reference

December 2023

1. Purpose

- 1.1. To ensure the provision of authoritative readiness, reduction, response and recovery science advice when volcanic activity is affecting New Zealand, through trans-disciplinary and multi-institution collaboration.
- 1.2. Members of the Panel have a strong working relationship with area-specific volcanic groups and programmes, including the Caldera Advisory Group (CAG), the Central Plateau Volcanic Advisory Group (CPVAG), Determining Volcanic Risk in Auckland (DEVORA), and the Taranaki Seismic and Volcanic Advisory Group (TSVAG). These groups and programmes coordinate planning for area-specific volcanic activity, but may not activate in response to volcanic activity.

2. Objectives

- 2.1. Ensure timely, high-quality, well-communicated and consistent science advice during volcanic activity to:
 - inform response agencies, and
 - support consistent public messaging.
- 2.2. Provide advice on the coordination of monitoring, science investigations and data collection during volcanic activity in support of objective 2.1.
- 2.3. Act as the national focal point for international science liaison (if required) during volcanic activity.
- 2.4. Develop and maintain collaborative, trans-disciplinary, multi-institution, Standard Operating Procedures (SOPs), plans and capabilities for science monitoring, investigation and communication during volcanic activity.
- 2.5. Develop and maintain effective, collegial relationships between New Zealand-based scientists with expertise in volcanology, volcanic impacts and science communication.
- 2.6. Assist with establishing national and volcanic zone-specific priorities for planning across readiness, reduction, response and recovery.

3. Membership

- 3.1. The Chair will keep a roster of membership and will ensure this remains up to date, in line with the following principles:
- 3.2. Members of the NZVSAP includes representatives from:
 - National Emergency Management Agency (Chair)



- GNS Science¹
- Sub-group Chairs or delegates

3.3. Two representatives from each of:

- Massey University
- University of Auckland
- University of Canterbury
- University of Otago
- University of Waikato
- Victoria University Wellington
- MetService
- National Institute of Water and Atmospheric Research

3.4. And representation from:

- Department of Conservation (Volcanic Science Advisor)
- Toka Tū Ake EQC
- Resilience to Nature's Challenges (Director)

3.5. Guests may be invited to panel meetings for their subject matter expertise in consultation with NZVSAP Members and agreement of the Chair.

4. Sub-groups

4.1. The NZVSAP may form specialist sub-groups (as required). Sub-groups are permanent groups and have two core functions:

- Undertake and/or identify relevant research.
- Provide specialist advice to support to the emergency management system.

4.2. A Sub-group Chair (who will be an NZVSAP Member) will be appointed by the NZVSAP Chair in consultation with NZVSAP Members. Sub-group membership shall be decided by NZVSAP Members and can include external stakeholders.

4.3. Sub-groups will meet at least once a year (outside of a response to volcanic activity), and will report back at each NZVSAP meeting.

4.4. Sub-groups operate both during a response to volcanic activity and outside of response.

4.5. Current sub-groups include:

- Primary Industries
- Health
- Critical Infrastructure

¹ GNS Science is at the core of the NZVSAP because it runs the GeoNet programme, has a contractual obligation to monitor the status of the volcanoes, and has a statutory obligation to provide advice on natural hazards (earthquakes, volcanoes, landslides and tsunami) to the National Emergency Management Agency (NEMA) and the Civil Defence Emergency Management (CDEM) sector.

5. Working Groups

- 5.1. The NZVSAP may form Working Groups (as required). Working Groups are established to complete a specific task(s) and disband when that task(s) is complete.
- 5.2. A Working Group Chair (who will be an NZVSAP Member) will be appointed by the NZVSAP Chair in consultation with NZVSAP Members. Working Group membership shall be decided by NZVSAP Members and can include external stakeholders.
- 5.3. Working Groups can be established both during a response to volcanic activity and outside of response.
- 5.4. Working Groups will present their findings to the NZVSAP once their task is complete.

6. Meetings

- 6.1. The Chair will encourage free and open discussions. Decisions are by consensus, if possible, and by a majority vote if consensus cannot be reached. The Chair has a casting vote.
- 6.2. Regular planning meetings will be held at such frequency as agreed among the Members. The NZVSAP should meet at least annually.
- 6.3. The Chair shall poll members for suitable dates and nominate the location (either in person or virtually) of meetings.
- 6.4. Members should aim to be present at all meetings, or assign an alternative person to attend in their place.

7. Response to volcanic event

- 7.1. A decision to convene the Panel during a response to volcanic activity, and its operating arrangements, will follow its Standard Operating Procedure (SOP).
- 7.2. In line with GeoNet monitoring arrangements, GNS Science will chair the Panel during a response to volcanic activity.
- 7.3. Science advice coordination may be undertaken through video/teleconferencing and access to online shared workspaces.

8. Responsibilities of members

- 8.1. Members freely and openly exchange relevant ideas, information, expertise and experiences within NZVSAP meetings.
- 8.2. Members act in a timely way on commitments made in both planning and response modes.
- 8.3. Members act in accordance with the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) [guidelines on the roles and responsibilities of scientists involved in volcanic hazard evaluation, risk mitigation, and crisis response](#).
- 8.4. Members act as point-of-contact for their organisation.
- 8.5. Members will inform the Chair if their contact details change and if they need to be replaced, and will provide contact details of their replacement.

8.6. Members and their organisation will be responsible for their costs of participation in the NZVSAP, including meeting attendance.

9. Administration

- 9.1. The Chair is responsible for distributing meeting minutes to Members.
- 9.2. Any Member may seek clarity and review of the NZVSAP purpose, objectives, roles, and responsibilities. An amendment to the Terms of Reference is to be agreed by the full core membership.
- 9.3. The contact list for NZVSAP Members will be held by the NZVSAP Chair and GNS Science. Contact details will be checked for accuracy at least annually by the Chair.
- 9.4. The Terms of Reference will be hosted publicly on the National Emergency Management Agency website, and will be kept up to date by the National Emergency Management Agency.