

ANSS Earthquake Response for Significant U.S. Earthquakes

RSN/NEIC Action Items

Purpose. During routine operations, critical elements of the Advanced National Seismic System (ANSS), namely the Regional Seismic Networks (RSNs) and the National Earthquake Information Center (NEIC), perform smoothly and well, out of the public view. However, following a significant earthquake or other seismic event in or near the United States, immediate and unexpected stress can be put upon these elements along with a dramatic rise in public interest and exposure. It is essential that these elements of the ANSS adopt common procedures for operations and coordination for these situations. The purpose of this document is to set down these procedures (others may be added in the future). A key challenge is to have RSNs prepared for effective earthquake response when crises are relatively infrequent, in contrast to the response posture routinely exercised at NEIC

Operational requirements and timeline. When a seismic event of broad public and media interest occurs, the RSNs and NEIC must quickly establish effective lines of communication for coordinated response and the development of post-event products. This demands that RSNs and NEIC meet certain operational requirements, ideally within 20 minutes but not more than 60 minutes following the event. If an RSN is incapacitated or fails to meet these requirements, NEIC will take independent supportive action to provide earthquake information needed by the public and media and by state and federal institutions involved in emergency response and coordination.

- **Event Coordinators.** Following a significant event within the region of an RSN, the manager of the network will appoint a qualified event coordinator to communicate with the NEIC. The RSN coordinator can be designated on an event-by-event basis or through a pre-established watch schedule. The event coordinator will call the NEIC (303-273-8500 or 303-273-8502) immediately upon being appointed to this position for coordination purposes. NEIC will appoint a staff seismologist as the NEIC event coordinator to work with regional coordinator. These coordinators will work together, throughout the period of interest for the event, on the distribution of earthquake information and products to the media, federal response and coordination facilities, and to ANSS websites (e.g. earthquake.usgs.gov). For large events with extended periods of media interest the primary coordinators should be provided relief through appointment, on a temporary basis, of replacement coordinators.
- **Posting a reviewed solution.** RSN and NEIC will establish clear technical guidelines on timelines for the posting of review earthquake solutions and other earthquake information products and coordinating the deleting of bogus earthquakes from the web.
- **Earthquake graphics and text.** If the RSN does not have GIS capabilities, NEIC will have the responsibility for assembling graphical and text-based information for the web and for briefing purposes (e.g. Earthquake Summary Posters). The type of information needed will be determined in consultation with the regional event coordinator.

- **Talking Points.** In an ANSS response to a seismic event, it is helpful, if not essential, that USGS and State and regional official spokespersons “speak from the same page” in discussing the event with the media. The regional and NEIC event coordinators will work together to assemble talking points to be provided for distribution to relevant State, local, and regional officials and to all USGS and Earthquake Program officials through the NEIC Earthquake Executive Summary Message system. The event coordinators will revise these talking points as necessary for simultaneous re-issue to relevant officials.

Serving national news media. When a seismic event becomes a major national news story, RSNs can expect to be overwhelmed by national news media (a far greater challenge than interacting with local news media). The NEIC coordinator can facilitate the involvement of USGS personnel in helping the RSN serve the national news media, whose expectations in an era of 24/7 news coverage can become massive and whose critical reporting potentially can be damaging both to the RSN and ANSS. RSNs should anticipate involving media coordinators from their own institution to help meet media requests for interviews and information.

- **Tectonic summaries.** Summaries of the tectonics and earthquake histories of an earthquake source region are needed for the public to understand the geologic cause and seismological context of the event. In the stress of the immediate post-event period, it is difficult to prepare these summaries in the thoughtful state they deserve and the writer may require. Regional networks will prepare – **in advance** – tectonic summaries of major geologic fault zones in their region. These summaries will be entered into the NEIC RATS (Rapid and Accurate Tectonic Summaries) database for use in rapid response. The network staff will consult with the NEIC RATS coordinator on the construction of these summaries to follow the current format. The goal will be to use these as a placeholder until such time as a more detailed and informed event specific tectonic summary can be prepared. To help the RSN develop tectonic summaries for their region, NEIC can provide the RSNs with the “canned” tectonic summaries already developed for different parts of the country.
- **Routine advisory.** RSNs should advise their website users, as a contingency, to access <earthquake.usgs.gov> if the RSN website is incapacitated or overloaded. This can be done, for example, by including a simple notice on the website homepage.