

## SCEK Project Profile

<b>Project Name:</b>	North East Seismic Array Network
<b>Project Number:</b>	EI-2013-04
<b>Proponent:</b>	Geoscience BC
<b>SCEK Funding Envelope:</b>	Environmental Impacts
<b>Timeframe:</b>	July 1, 2012 to June 30, 2017

### Project objectives

The objectives of this project are to install a state-of-the-art seismic array network and collect data on seismic activity in North East BC.

### Project description

The project is a multi-year phased collaborative initiative between the BC Oil and Gas Commission, the Canadian Association of Petroleum Producers, Geoscience BC and Natural Resources Canada. The project is led by GeoscienceBC and includes the following governance structure:

- Steering Committee—providing operational direction to achieve the project’s objectives. The Steering Committee comprises representatives of the project partners; and
- Technical Committee—providing advice to the Steering Committee on technical matters. The Technical Committee comprises representatives of federal and provincial governments, industry and academic institutions.

The project has a five year timeframe from July 1, 2012 to June 30, 2017. Future usage and ownership of the seismic array network will be discussed and determined during the course of the project.

### Project background

Over the past several years, geologists have been evaluating whether natural gas development may result in seismic activity. Government, industry, communities and First Nations have a common interest in learning more about this issue to support the responsible development of natural gas resources in BC.

## **Project approach**

The project is a multi-phased project covering a 5 year timeframe.

Phase 1 activities covered the initial installation and testing of the six seismometers comprising the network. This phase took place between July 1, 2012 and March 31, 2013.

The network is now fully integrated into the Canadian National Seismic Network (CNSN) and provides real-time data to the Geological Survey of Canada's earthquake location operation. The results from analysis are posted on the Earthquakes Canada website:

<http://www.earthquakescanada.nrcan.gc.ca/index-eng.php>.

Subsequent phases will cover the maintenance of the network and the interpretation of the data. A dedicated seismologist has been engaged to undertake real-time analysis of events within the project area, recommend improvements to the enhanced network and perform project-specific research.

## **Project deliverables**

The deliverables from this project include the following:

1. Network of six seismometers in North East BC; and
2. Information from the Seismic Array Network available on the Natural Resources Canada website.