

EARN Services — a subscription-based program to provide operations and maintenance support for “adopted” EarthScope Transportable Array stations.

What is the Transportable Array?

The Transportable Array is a set of approximately 400 high-quality, broadband seismic stations that are being installed on a 70-km grid across the US from west to east. Following a residence time of about two years, each station is removed and the seismometer re-installed at another location on the eastern edge of the array. About 200 stations are “rolled” every year. While occupying a site, the Transportable Array program operates and maintains the station and provides comprehensive data collection, distribution and archiving.

What is EARN?

Educational institutions, existing networks, and other organizations quickly realized that state-of-the-art Transportable Array stations contribute to their mission and goals. In response to a growing interest to continue recording observations from stations beyond their original commission, the Incorporated Research Institutions for Seismology (IRIS), in cooperation with the National Science Foundation, established the “Adopt A Station” program. This initiative permits the acquisition of one or more Transportable Array stations by a new owner, creating a legacy of permanent stations referred to as the **E**ducation **a**nd **R**esearch **N**etwork (EARN).

Why EARN Support Services?

Not all organizations have the necessary operations and maintenance support infrastructure to keep these newly acquired Transportable Array stations running. An EARN Services subscription provides the necessary technical services to ensure former Transportable Array stations continue operating and contributing data.



EARN Services Provides

- Data collection via the EarthScope Array Network Facility
- Data distribution and archive support via the IRIS Data Management Center
- Continuous monitoring of station status to detect performance issues
- Procurement of replacement equipment or upgrades at EarthScope/IRIS prices
- Installation of replacement equipment or upgrades (\$5,000 limit)
- Telemetry of data from station, including typical link costs
- Access to a limited pool of equipment spares
- Repair of station damage caused by weather, intrusion, or malfunction



Subscriber Responsibilities

- Minor station maintenance
- Property use issues
- Occasional on-site inspection
- Assist with public education and outreach

To qualify for EARN Services, the broadband seismic station must have been originally installed as part of the EarthScope Transportable Array and ownership transfer must have occurred under the “Adopt A Station” program.

Education and Research Network Support Services

Subscription-Based Operations Support for Station Owners

Subscription Rates

Subscription rates are based on the communications technology used at the enrolled station and are subject to adjustment annually. This program leverages the experience of IRIS and its contractors in operating the EarthScope Transportable Array and other seismographic facilities, and is intended to be self-supporting.

Subscription Prices*

Communications Technology	Annual Cost
Internet	\$4,058
Cell Phone	\$4,825
VSAT	\$5,762
Solar VSAT	\$6,850

* Prices are effective October 1, 2008, and are subject to annual adjustment.

About EarthScope

EarthScope is funded by the National Science Foundation. The Incorporated Research Institutions for Seismology (IRIS) is constructing, operating and maintaining the Transportable Array, a component of EarthScope's USArray program. IRIS is a consortium of more than 100 universities dedicated to exploring Earth's interior through the collection and distribution of seismographic data.

Additional Resources

EarthScope - <http://www.earthscope.org>

Transportable Array - <http://www.iris.edu/USArray>

Adopt A Station - <http://www.iris.edu/USArray/researchers/adopt.html>

IRIS Consortium - <http://www.iris.edu>

National Science Foundation - <http://www.nsf.gov>

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