Seismology studies earthquakes and the propagation of seismic waves through the Earth or through other planet-like bodies. Seismic waves are used to derive information about structure and dynamics of the Earth’s interior, and investigating the origin and the mechanics of earthquakes is crucial to assess their hazards and mitigate the risks inherent to seismic events.

The EPOS SEISMOLOGY TCS provides access to seismological and earthquake-related information through standardized services and APIs, and coordinates the integration of these services on the EPOS Data Portal.

The EPOS SEISMOLOGY TCS is built on European community infrastructures in seismology that coordinate and operate data services in their respective domains of expertise.

SERVICES
The services offered by the EPOS SEISMOLOGY TCS encompass the community data access portals operated by ORFEUS (waveform data and related products and services), EMSC and AHEAD (earthquake parameters and other seismological products), and EFEHR (seismic hazard and risk products and services).

https://www.epos-eu.org/tcs/seismology
Seismologists have a long tradition in openly sharing data. The EPOS SEISMOLOGY TCS benefits from this tradition and collects seismological information from academic institutions, observatories and agencies. The information is harmonized and integrated, and scientific products are elaborated and provided for free and open use.

As part of EPOS, the EPOS SEISMOLOGY TCS fosters the use and sharing of data from different disciplines of the solid Earth, contributing to expand societal knowledge of earthquakes and of other physical phenomena of the Earth.

EPOS, the EUROPEAN PLATE OBSERVING SYSTEM, is a multidisciplinary, distributed research infrastructure that facilitates the integrated use of data, data products, and facilities from the solid Earth science community in Europe. EPOS ensures the long-term access to solid Earth science data and services, with the goal of answering some of the most pressing societal questions concerning geo-hazards and those geodynamic phenomena relevant to the environment and human welfare.