EXPERIENCE OF KAZAKHSTAN NATIONAL DATA CENTRE IN INTERNATIONAL AND REGIONAL MONITORING

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Centre for Acquisition and Processing of the Special Seismic Information that implements the functions of Kazakhstan National Data Centre was created in 1999 as a branch of Institute of Geophysical Researches of NNC RK.

The main tasks of Kazakhstan Data Centre are:

- Acquisition and transmission of data from NNC RK network stations in real time;

- Automated control for operation of registration systems and communication channels;

- Data processing and data storage;

- Data exchange with other organizations;

- Scientific researches to support monitoring of nuclear explosions and earthquakes.

At the present time KazNDC receive seismic data from MKAR, KKAR, ABKAR, BVAR, ZRNZ, VOSZ, CHKZ seismic arrays, from KURK and BRVK seismic stations and also from infrasound stations in real time.

Data processing includes several stages. KazNDC provides information about strong events occurred on the territory of Kazakhstan (delay is 15-20 minuits); makes up an automatic bulletin for the territory of Kazakhstan and adjacent territories (delay is from 40 minuets to 1 hour); compiling of interactive seismological bulletin (delay is 24 hours). Creation of joint bulletin in cooperation with Institute of Seismology of Kazakhstan has been begun in January 2003 (delay is 1.5 - 2 days). Results of automated and interactive processing are provided on KazNDC web-site (www.kndc.kz).

KazNDC takes an active participation in international data exchange. Automated bulletin is transmitted to EMSC (France) in real time. Results of interactive processing are transmitted to ISC (UK). Expedited data about strong events are transmitted to Geophysical Survey of Russia.

Scientific researches include operations on calibration of seismic stations, on discrimination of seismic events, on seismic hazard of Kazakhstan territory.