



## Progress Report No 16

for the project

### Norwegian National Seismic Network

For the period January 1<sup>st</sup> to June 30<sup>th</sup>, 2000

Sponsored by

Oljeindustriens Landsforening

September 2000

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and

NORSAR  
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## 1. Introduction

This 16<sup>th</sup> progress report, under the project Norwegian National Seismic Network (NNSN), covers the first half of 2000. The purpose is to describe the current technical operation of the stations, the data recorded, the costs and the budget for the project for the reporting period. A separate report is given on the seismicity of Norway and surrounding areas in which the data recorded is presented (Appendix 1). A report for the NORSAR arrays is given in Appendix 2.

## 2. Operation

The operational stability for each station is shown in Table 1. The average downtime for all 13 stations is 5.2 % compared to 1.3% for the last reporting period. This is not within acceptable limits, since the goal is to keep average downtime below 2 %. A bug in the Seislog software caused repeated problems at the stations ODD, BLS and TRO. The hard disk was filled up and made it impossible to log in to the station from Bergen, which again made a restart of the station locally, necessary.

Due to heavy working load on the technical staff at the institute it was not possible to detect and fix the problems fast. April and May are the months when most of the offshore data acquisitions at the institute are occurring and the technical staff is not available.

**Table 1.** Downtime in % for the time period January to December, 2000 for each station of the NNSN.

Station	Downtime in %
Karmøy (KMY)	0
Odda (ODD1)	21
Blåsjø (BLS)	17
Høyanger (HYA)	0
Sulen (SUE)	0
Molde (MOL)	5
Florø (FOO)	0
Namsos (NSS)	0
Mo i Rana (MOR8)	0
Lofoten (LOF)	0
Tromsø (TRO)	24
Kautokeino (KTK)	0
Bjørnøya (BJO1)	0

### 3. Field stations and technical service

The technical changes for each seismic station, are listed below. It is noted if these changes are not related to a visit of the UiB technical staff. When a station stops working, tests are made to locate the problem. Sometimes the reason cannot be found and the cause of the problem will be marked as unknown.

#### Bjørnøya (BJO1)

No visits or technical changes.

#### Florø (FOO)

No visits or technical changes.

02.03.00 PC restarted with use of remote control (station down in 3 days).

Unknown reason for the problem.

#### Høyanger (HYA)

No visits or technical changes.

#### Karmøy (KMY)

No visits or technical changes.

#### Lofoten (LOF)

No visits or technical changes.

#### Mo i Rana (MOR8)

No visits or technical changes.

#### Molde (MOL)

No visits.

08.04.00. PC breakdown – station stopped, unknown reason.

17.04.00. New PC installed by the local operator.

#### Namsos (NSS)

No visits or technical changes.

#### Tromsø (TRO)

No visits.

30.03.00. PC breakdown – station stopped.

19.04.00. A new PC was installed by the local operator.

02.05.00. Seislog was restarted by the local operator. Seislog down for 4 days – unknown reason.

31.05.00. Seislog restarted by the local operator. Station had been down in 16 days – unknown reason.

15.06.00. Bug in the Seislog software caused the station to be down for 5 days. The system was restarted by the local operator.

#### Sulen (SUE)

No visits.

08.03.00. The Cisco box damaged by lightning. A new Cisco box was installed by the local operator.

#### Odda (ODD1)

09.01.00. A new PC was installed by the local operator. The station had been down for 5 days due to a PC problem.

29.02.00. The PC was restarted by the local operator. The station was down for 5 days – unknown reason.

22.05.00. PC restarted by the local operator. The station was down for 5 days – unknown reason.

08.06.00. PC problem caused the station to stop. A new PC was installed by the local operator 10.07.00.

#### Blåsjø (BLS)

17.04.00. Station down in 13 days due to a defect PC. A new PC was installed by the local operator.

28.04.00. Station restarted by the local operator. The station had been down in 5 days – unknown reason.

08.05.00. PC system down.

23.05.00. Installation of a new PC.

#### Kautokeino (KTK)

No visits or technical changes.

#### Other technical matters

All stations, except Bjørnøya, are now on internet.

Bjørnøya has worked very well during the reporting period (and still is) with only minor time periods with noise problems. There is a plan for an upgrade visit in October 2000.

## 4. Data

An overview of the seismic activity in Norway and surrounding areas for the first half of 2000 is given in Appendix 1. The data recorded by the seismic stations were collected and monthly bulletins were prepared and distributed. There was no event in Norway of magnitude larger than 5.0 during the first half of 2000. In August 2000 there were three felt earthquakes and several aftershocks located in the outer Hardanger fjord. A report on these earthquakes is in preparation. The report in the Svalbard array, SPITS, is given in Appendix 2.