The Swedish University computer network gives students and staff access to the computer communication they need for their work. At present, all universities and university colleges have access to a bandwidth of 155 Mbps.
SAME HIGH CAPACITY FOR ALL UNIVERSITIES

The university network is based on a backbone network between the cities of Sundsvall, Stockholm, Göteborg and Malmö. From these nodes, access links go to all universities and university colleges in Sweden. All cables are doubled, except for two of them.

As the infrastructure stands at present, SU NET has not been able to double its lines to Kiruna and Visby.

SU NET currently offers a bandwidth of 155 Mbit/s to all universities and university colleges.

MORE THAN JUST SUNET

The Network Operation Centre at the Royal Institute of Technology, KTHNOC, is responsible for the operation of SU NET.

KTHNOC is also responsible for the operation of the Nordic University Computer Network, NORDUnet, which has a 310 M bit/s link across the Atlantic.

At present (1999), links in the Nordic area have a bandwidth of 155 M bit/s except for the line to Iceland, which is dimensioned for 4 M bit/s. Links eastward are also being extended.

GROWTH FIGURES

SU NET’s capacity is upgraded continuously. In simple figures, growth has been as follows:

1989: 64 kbps
1992: 2 M bps
1994: 34 M bps to universities
1999: 155 M bps to all universities and university colleges

During a ten year period, the bandwidth has been increased more than 2,400 times.

The growth of the university computer network can also be measured by the number of computers connected each year:

1989: 2,900 computers
1990: 4,200 computers
1991: 14,000 computers
1992: 18,000 computers
1993: 28,000 computers
1994: 40,000 computers
1995: 55,000 computers
1996: 82,000 computers
1997: 120,000 computers
1998: 138,000 computers
1999: 185,000 computers

So far, no signs of a fall in growth rates can be seen.
A WORLDWIDE WEB OF COLLABORATION AND KNOWLEDGE

SUNET was constructed by Swedish universities and university colleges – for Swedish universities and university colleges.

The National Agency for Higher Education holds the administrative responsibility.

Umeå University is responsible for the development of SUNET.

The Royal Institute of Technology is responsible for the operation of the network.

In addition, all the universities and university colleges have their own SUNET contact staff – who looks after security, network operation and other important functions.

FINANCING

SUNET is financed partly by government grants, partly by contributions from the connected universities and university colleges.

At present, the contributions from the connected universities and university colleges are considerably larger than the grants received from the State.

FILES AND CATALOGUE

SUNET has developed some of its own Internet services:

The File Archive (ftp.sunet.se) was built up by SLU in Uppsala. It is one of the most frequently used file archives in the world.

The Web Catalogue was created by KTH. It contains the majority of Sweden’s web pages.

E-mail addresses of all university employees in Sweden may be searched for on the SUNET site, www.sunet.se

ETHICAL AND USAGE RULES

The SUNET Board adopted new ethical rules on March 30th, 1999.

The rules say that it is unethical when somebody:

• attempts to gain access to network resources without having the right to do so
• attempts to conceal his/ her user identity
• attempts to interfere with or interrupt the intended use of the network
• obviously wastes available resources (staff, hardware or software).
• attempts to damage or destroy computer-based information
• intrudes in other people’s private lives
• attempts to insult or humiliate others.

The rules for permissible use include the provisions that:

• use which conflicts with SUNET’s ethical rules is not permitted
• SUNET may be used for business purposes, but not in a way which is important or unwanted by other organisations.

It shall always be clear who has provided each piece of information on the network.
ON THE WAY TO 100 PERCENT
A survey carried out by the National Agency for Higher Education showed that about 90 percent of all university employees in Sweden had access to the Internet via SUNET.

In other words, 10 percent of university employees have professions such that Internet access is not deemed to be necessary.

80 percent of university students answered that they had access to the Internet.

About 50 percent of the students use university computers for access to the network.

30% have Internet access
50% use university computers
20% are regular users
10% use a modem connection
5% have leased links to their student homes

ADRESSES AND TELEPHONE NUMBERS
Contacts with SUNET mostly go via the Web or by e-mail – but there are of course other contact paths, as well:

SUNET/
Högskoleverket
Box 7851
SE-103 99 Stockholm
Phone +46 8-56 30 88 76
Fax +46 8-56 30 88 50
E-mail sunet@hsv.se

You find the SUNET web site at http://www.sunet.se

SUNET/
UMDAC
U meå U niversity
SE-901 87 U meå
Phone +46 90-786 69 69
Fax +46 90-786 67 62
E-mail sunet@umdac.umu.se

BOARD AND REFERENCE GROUP
SUNET is managed by a Board which is appointed by the National Agency for Higher Education.

At present (1999), the Board has the following composition:

Chairman:
Anders Flodström,
Royal Institute of Technology

Members:
Lennart Bergström, Mid Sweden University
Lars-Elve Larsson, Uppsala University
Frans Lettenström, The Royal Library
Berner Lindström, Gothenburg University
Kerstin Malmqvist, Halmstad University
Staffan Särbäck, Luleå University of Technology
Arne Sundström, Lund University
Barbro Thomas, Cultural Advisory Board
Sven Tafvelin, Chalmers University of Technology
Per Wernheim, Karolinska Institutet

Secretary:
Olle Thylander,
National Agency for Higher Education

Speaker:
Hans Wallberg, U meå U niversity

The board is assisted by a technical reference group with the following delegates:

Chairwoman:
Kerstin Malmqvist, Halmstad University

Members:
Jan Engvall, Lund University
Christer Holgersson, U meå U niversity
Magnus Höglund, D alarna U niversity
Börje Josefsson, Luleå University of Technology
Johan Sandfeldt, Karolinska Institutet

+ one person from KTH NOC

NOTE: Board members are appointed by the National Agency for Higher Education.