



INTERNATIONAL ATOMIC ENERGY AGENCY
UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION
INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS
I.C.T.P., P.O. BOX 586, 34100 TRIESTE, ITALY, CABLE: CENTRATOM TRIESTE



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**FIRST INTERNATIONAL SCHOOL ON COMPUTER
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USER SUPPORT

B. STALS

SURFNET B.V.
P. O. Box 19035
Utrecht NL 3501 DA
The Netherlands

User support: strategies and pitfalls

"No network without user support" is a slogan any network organization should attach paramount importance to, as it is the users who justify the network's existence.

In practice, however, things appear to be different. Sometimes it seems as if networks were designed solely for the benefit of the network experts. Therefore, I will set out to give an explanation about the user support as put into practice by a national network organization. The examples used are drawn from the practice of SURFnet BV in the Netherlands, a network organization catering for institutes for higher education and scientific research.

The description of the strategies is based on a number of assumptions:

- There is a strong national network organization.
- A large number of institutes are linked to the network (such as institutes for higher education and scientific research).
- A (limited) budget for user support is available.
- A nation-wide team, solely concerned with user support, is available within the network organization.
- The network organization is an accepted partner for the participating institutes (no forced shopping).
- The expertise of the network organization is beyond discussion.

The three strategies dealt with here are the following:

- Support of contacts at the institutes (on-site contacts) by a user support team. This team is mainly concerned with coordinating tasks.
- Support of cross-institutional usergroups, which usually have a common field of research; this is referred to as discipline-oriented support, for example lawyers who are developing a legal expert system.
- Support of groups of end-users at one of the member institutes. Referred to as institute-oriented user support, for example crystallographers within the chemistry department of a university.

These three strategies will be discussed in terms of success, pitfalls, cost and, if applicable, criteria.

Support of on-site contacts

Each institute that has a contract with the network organization disposes of a technical contactman and a contact for user support. The size of the affiliated institutes varies considerably. Some only have 25 personnel, while

others have a staff of 5000 and 21,000 students. It will be evident that in case of 25 employees this strategy is likely to be successful, whereas it will run a considerable risk of failing in the latter.

The role of the user support team in the network organization is a coordinating one: supplying information when required. The network organization issues documentation in support of the use of the network. National meetings play a role in the mutual supply of information, as the contacts also serve as eyes and ears for the network organization. This also activates a strong influence from the users' side, although the contacts sometimes hardly have any direct dealings with the actual end-users.

Direct costs incurred through this form of user support are:

- Information and documentation materials
- Personnel costs (the user support team)
- Demonstration aids
- Travel expenses, meeting costs, et cetera

The advantages of this method of user support are the following:

- Good contacts at the participating institutes
- A surveyable field of activities
- Good feedback and assessment of central activities
- Steady growth of network use

The disadvantages are:

- Growth of network use possibly too slow
- Contacts often cannot disengage themselves for this task
- Some institutes never show up at meetings (which means no information)
- Many institutes are too large to be served in this manner
- Contacts do not always have good contacts in their own institute

Support of cross-institutional user groups (Discipline-oriented user support)

Discipline-oriented user support aims at supporting groups which do already communicate with each other in a traditional manner. The participants of such a group are divided over a number of institutes (at least three). Obviously, this method of user support also aims to develop the network use, though in this context applied as a strategy of change. This is because one of the criteria for being accepted as a discipline-oriented user group is that some form of communication should already exist. Meetings are held, papers are exchanged, sometimes use is even made of e-mail. In many cases, nobody ever realized that a considerable part of these

activities can also be carried out through the network.

E-mail or an electronic conferencing system enables users to arrange their communication far more efficiently.

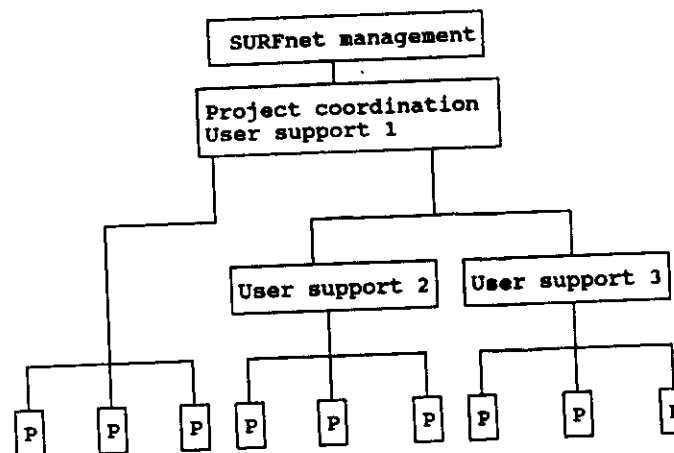
To be eligible for a contribution in the activities, the discipline-oriented group should meet a number of criteria:

- Traditional communication is already taking place.
- The group consists of about 40 people.
- At least three institutes are represented.
- The user group is unique (not ten groups with the same discipline).
- The desires for new forms of communication can be fitted into the existing forms of network communication (mail, file transfer, access).
- A project coach is available willing to pull the project through.
- A project plan must be made.
- The project term is one year.
- Most of the participants dispose of a network link.

Once a project has started, a number of predefined assessment moments are to be adhered to:

- After three months, at least 75% of the participants should be linked.
- After six months, at least 75% of the participants should have received instructions from the project coach.
- After nine months, at least 75% of the participants must be able to prove that they are making use of the services.
- After one year, all individually defined aims of the project should be realized.
- The assessment by the project coach is permanent, on the basis of monthly reports.

Incorporation in the existing user support structure is as follows:



Since the user support team of SURFnet consists of a humanities graduate, a science graduate and a library expert, there is a certain affinity with the various disciplines, so that support can be allocated on the basis of the project request.

At this moment, projects are being executed for:

- Legal expert systems
- The umbrella organization of Dutch Universities for communication with the administrative departments of the universities

The following projects are in the pipeline:

- A group of librarians of public libraries with a scientific support function
- Research information centres (science shops)
- Neural network researchers
- Editors of university weeklies

The final decision of these groups to participate in a project is often taken only after a long period of deliberation. SURFnet does not try to hasten things, because a group should feel ready to embark upon a new form of

communication.

The costs of this form of support involve a fixed amount of 8500 ECU for the project coach, for assistance in the execution of the project. Of course supervision and assessment also claim time of the user support team. The planning is to carry out ten projects each year, over a period of four years. Total project costs, including supervision, will amount to 450,000 ECU for the total period. This project, however, is funded as a development project, so the costs will not be borne by the participants.

The benefits are the following:

- Close-knit user groups with network experience
- Network experience in 40 disciplines
- Publicity in professional journals, with a probable impact on other fields

A typical pitfall with this kind of projects is clinging too long to a project that is bound to be unsuccessful. Once it becomes clear that the project will fail, as a result of loss of interest of the participants or the project coach, it should be cancelled immediately. Therefore, strict adherence to the assessment scheme is essential.

Institute-oriented user support

Institute-oriented user support constitutes a break with the support methods applied until recently. The guiding principle had always been that the contacts at the institutes or in user groups were to instruct others in the use of the network.

With the introduction of institute-oriented support, which will be executed during four years on a project basis, SURFnet will offer direct end-user support.

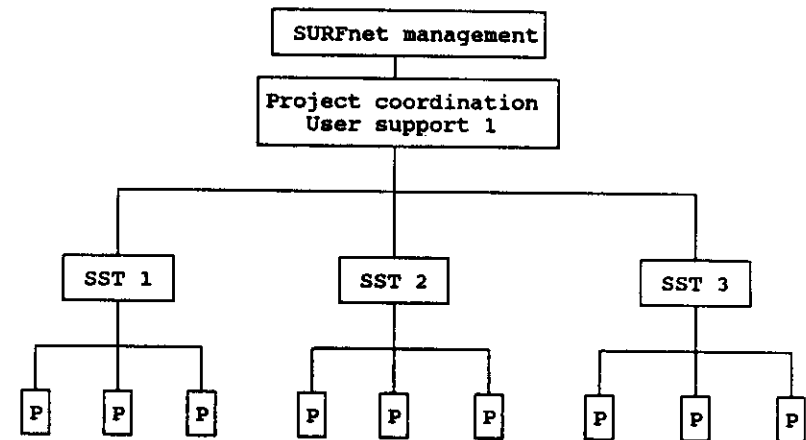
To achieve this, three people were recruited (the support team) during the past few months, who will start a three months training scheme next January.

The aim of this method of support is to create a firm basis of network users at the participating institute.

To this end, one of the members of the support team will work on-site for a period of time, fulfilling three tasks:

- Supplying network information
- Assisting in (the planning for) opening up the local infrastructure
- Setting up a local users' platform

Incorporation of the SURFnet Support Team in the existing user support structure is as follows:



The costs of this project are relatively high due to personnel costs: 250,000 ECU per year over a period of four years, which means one million ECU. This project, however, is funded as a development project, so the costs will not be borne by the participants.

The benefits will be:

- Heavily intensified use of the network
- Complete integration of network use
- Acceptation of the costs involved in good network services
- Strengthening of local SURFnet support

Becoming a victim of one's own success is the main pitfall. Too much demand for support by instruction may jeopardize the creation of a user group at an institute, owing to lack of time.

A failing strategy is another pitfall: If after nine months it appears that the strategy does not work, new ways of providing institute-oriented support will have to be looked for.

Finally, a support team operating in this way heavily relies on the relation network - people, that is - which is created during the course of the project. Intermediate changes in human resources may pose a serious threat.

SURFnet has tried to forestall these problems by paying salaries in accordance with market demand. Since the support team will assume their activities in January 1991, we have no experience yet with this way of working.

Epilogue

Since my story was concerned with the organization of our user support at a national level, the international contacts of SURFnet have not been touched upon. These contacts are very useful because they show us how other network organizations are working, and how they inform their users. These contacts also provide ideas for other services and how these can be realized.

I hope it has become clear that user support should be taken seriously, as it may make a substantial contribution to the consolidation of the network organization.

Therefore, no network without user support.

