



**Parallel Session on Other Users' Requirements**

**Discussion Paper  
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Introduction: Inclusiveness Issues

Increasingly, research and education networks (at national, regional and local level) connect not only researchers, teachers and students in research institutes, universities and other institutions of higher education, but also other kinds of users (in the public sector). This "greater inclusiveness" of the research and education infrastructure and services in Europe is a development of strategic value.

In SERENATE, a number of case studies have been produced to highlight these new types of users and their requirements, and the consequences of the greater inclusiveness for the organisation and operations of (national) research and education networks. Examples were schools at all levels of the education system, students at home, public libraries and museums, and government institutions.

It is now about three years later. Not all of the types of users referred to above are served by (all) NRENs in Europe. Some new user groups may have surfaced in the past three years. Some new types of user requirements may have appeared. Therefore EARNEST will revisit this area. EARNEST will try to identify new kinds of users. More generally, EARNEST will analyse in greater depth the user groups outside research and higher education, their needs and how NRENs respond to those needs.

1. Who Are the "New Users"?

SERENATE has tried to find as many examples as possible of people and institutions outside research and higher education that were using the services of research and education networks. Only relatively few examples were found, and they came in a limited number of categories:

- schools (primary, secondary and further education)
- students' homes (dormitories)
- institutions for the arts (educational)
- museums
- libraries (especially public libraries, because university libraries are usually connected via the university and can be considered part of the research and higher-education system)
- ministries and other government services.

All these categories have been covered by SERENATE case studies.

The healthcare sector was another potential user community of research and education networks that SERENATE was particularly interested in. However, at that time, apart from a few incidental connections to hospitals (other than university hospitals) with little or no impact, no examples could be found of NRENs offering services to the health sector. This may have changed in the past three years, and there may now be interesting examples in this area, either already in operation or planned. If so, then it would be very interesting for EARNEST to collect information from the healthcare sector about connectivity and services provided to that sector by research and education networks, and about the specific requirements of the health sector and how those can be met by NRENs.

Are any examples from the healthcare sector known? How could one find information about examples of research and education networks offering services to health institutions? What is known about the specific requirements of this sector?

In the area of research and education networks connecting schools, there have been significant developments in the past three years. Many more NRENs are interested in this subject than three years ago. In 2005, TERENA has organised two successful workshops where a lot of information has been exchanged between countries.

Are there recent examples of new kinds of schools or of new kinds of requirements from schools that have an impact on NRENs? Would it be useful to analyse the difference in services offered to schools by NRENs in different European countries? Would it be useful to study what schools in different European countries actually use their connectivity for?

Besides the categories mentioned above, are there any examples known of new kinds of institutions that have been connected to research and education networks in the past three years?

Within the categories mentioned above, the use that people within the connected institutions make of research and education networks, and the requirements of these end-users may have evolved and new user profiles may have developed. Can any examples be given of such an evolution?

## 2. Can/Should the "New Users" All Be Served by NRENs?

It would be very important to the EARNEST study to obtain reports from NRENs highlighting both success stories and failures of ways to approach different types of "new users". It is also worthwhile to analyse both the infrastructure and the services provided in these cases. Can any examples be given?

Users' needs are certainly an important factor when explaining why certain users should be served, or should not be served, by NRENs. But there may be other factors. If so, which ones? Can examples be given of institutions in the public sector that should preferably be served by NRENs and of institutions in the public sector that should preferably not be served by NRENs?

For example, the disciplines covered by Grid projects show a great diversity. Is there a case for, or an example of, a Grid in the arts sector?

## 3. What Are the Internal /External Factors to Include "New Users"?

There are a number of internal and external factors regarding the inclusion of new types of users of research and education networks. Looking at those factors may help NRENs in defining their strategy for the future.

Internal factors include: size of the network and the networking organisation (staff, budget, geographic coverage etc.), maturity of the network (is it time to think about economies of scales?), types of services provided (e.g., end to end?), .....

External factors include: political situation, market development, economics, laws and regulations etc

Which other factors are relevant? What can be said about each of these factors?