

Network of Excellence
Global Governance, Regionalisation and Regulation:
The Role of the EU (GARNET)

GARNET Mobility Programme
Application to the Fifth Call



The GARNET Virtual Network

A study on Benefits and Limitations
of Using a Virtual Network-Platform
in Research Networks

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GARNET Work Package 1

This proposal aims at extending the actual use of the Virtual Network in GARNET. By demonstrating specific potentials of using the VN in common research processes, incentives will be set for adopting of the platform by a wider range of stakeholders. The results serve as an essential part of the implementation strategy of the VN for the upcoming maintenance phase. In addition, promising means for the acquisition of new research funds will be given.

1. Applicant

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2. Hosting Institution

The University of Warwick

CSGR - Centre for the Study of Globalisation and Regionalisation

GARNET - Management Office

3. Research Proposal

Building research networks is considered one of the leading objectives within the EU research policy. In particular networks of excellence (NoE) - like GARNET - are considered to be of strategic importance for achieving competitive advantage in research on a global market. So far, extensive funding has been provided for the establishment of more than 130 projects on networking. However, internal evaluations by the EU show that only 13 % of these projects have proven successful. Essentially, due to the multi-national structures of the consortiums, which is typical for research within the EU, most NoEs fail to establish sustainable research partnerships.

In GARNET, a virtual network (VN) was set up in order to address this problem. The essential part of it is an internet platform that facilitates collaborative research on the web. Work spaces are provided that enable researchers to co-ordinate their work across borders. They can share documents and discuss results in various ways of communication. Chat, newsgroups and Wiki may serve as an example. With this approach, GARNET is unique among other NoEs and thus serves as a pilot for making use of information systems for building virtual networks within the EU.

Along that road, one aspect is critical: Experience from Information System-research during the past decades show that making use of information systems is not just a technical issue. In fact, more than 50 % of information systems projects fail, despite high performance technology, because they are insufficiently accepted by users. Setting up the VN in GARNET, great emphasis was put on analysing the way people tend to adopt the technology. While introducing innovative technology, a particular challenge lies in the fact that users themselves are often uncertain about their demands, since they are not familiar with the new technology. Hence, particular strategies were and are required for facilitating the use of the VN in GARNET.

With respect to the implementation phase, a strategy was developed in GARNET that systematically involved the different stakeholders of the network. On the basis of a prototype version of the VN-platform, a process of continuing evaluation and adaptation was carried out. By December

2006, the final version of the platform was released incorporating further improvements regarding its usability as suggested in the evaluation report. Until now, GARNET has succeeded in establishing a remarkable co-operation between network partners. The adoption of the VN by the management office and the PhD-school are positive examples. However, the actual usage is still a serious concern. Overall, the adoption of the platform is still far behind its potential.

Today, new strategies are needed to expand the adoption of the VN during the maintenance phase. The research proposed in this application aims at developing such strategies. Against the background of new institutional economics, the approach is to set specific incentives for people to use the new technology. In GARNET, such incentives can be built into the use of the platform through the resultant increase in both effectiveness and efficiency of research processes. Thus, the research aims at identifying relevant processes, like 'joint paper writing' or 'organising events', and to analyse how these processes can be conducted using the VN. As part of the analysis, context factors driving different variants of the processes are considered as are regional, cultural and subject-related factors. Taking regional factors, for example, there might be a different need for a VN depending on the distance between network partners.

Hence, a better understanding of both benefits and limitations of the VN are to be achieved. In the following, the proposal will be explained in more detail concerning action, outcome, and contribution, as well as suitability of host institution. The research programme is divided into three main parts which are partly being conducted concurrently.

- *Exploratory Part:* This part is meant to gather input for identifying relevant research processes and to analyse them according to the "state of the art". The work is based on various sources like stakeholder interviews and process observations. The advantage of being hosted at the CSGR is that the perspectives of the researcher and the manager can be taken into account. For that purpose, it has been discussed with Eleni Tsingou that a stay close to the GARNET Management Office is most valuable for the research (see also section 6).
- *Constructive Part:* In this part, the processes identified will be analysed regarding ways of making use of the VN. From a methodological perspective, process models will be constructed using special languages like the event driven process chain (EPC). For each process, a set of context factors will be analysed that may lead to variants of the process, i.e., high or low regional distances between partners. On that basis, suggestions will be made on how to make use of the VN in specific situations. This research will also consider processes that are not entirely run on the VN-platform in cases where this might be applicable. Thus, a hybrid approach combining innovative and conventional process variants might be promising.
- *Empirical Part:* Here, an evaluation of the research processes using the VN will be carried out. For that purpose the processes will be discussed with the stakeholders of various research networks. Essentially, the GARNET members will be analysed. In order to validate findings on a wider empirical basis, adoptions to other research consortiums will be subject of further research. For that purpose interviews and surveys based on questionnaires are to be utilised. People will be asked in how far they agree on the process models and what adaptations might be necessary in order to cover specific requirements within a project. This part is organised in

close cooperation with the Research Support Centre (RSS) at Warwick, where a large amount of research consortiums are being managed. This will provide a useful comparative study for how well the VN developed for GARNET will work in other large projects. No confidential information will be used without permission. The results of these process models will then be used in applying for additional funding, such as the 7 EU-Framework, for further research on developing user-friendly information systems.

Supplementary to this particular action, a stay at the hosting institution will help to develop a deeper understanding of how members and groups within GARNET function. In particular, comparing the GARNET experience with other large research consortiums will provide important insights in the further development of the VN across different cultures, geographical regions and research areas. This understanding is essential for the development of value added use of the VN.