

Priority 7
CITIZENS AND GOVERNANCE
IN A KNOWLEDGE BASED SOCIETY

Call identifier FP6-2002-Citizens-1 **FP6-506237**

NETWORK OF EXCELLENCE

Science and Technology Research network
In a Knowledge based Economy
(STRIKE)

April 15, 2003

List of participants

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| 2. Institute for Economic Policy Studies,
Athens University of Economics and Business | Greece |
| 3. Center for Economics Research and Graduate Education,
Charles University, Prague | Czech Republic |
| 4. Centro di Ricerca sui Processi di Innovazione e
Internazionalizzazione, Università Bocconi | Italy |
| 5. CREST-IMRI-EUREQua/Paris I-CHDT | France |
| 6. CWTS, University of Leiden | The Netherlands |
| 7. University of Essex | UK |
| 8. Helsinki School of Economics | Finland |
| 9. Institut D'Economie Industrielle, Université de Toulouse | France |
| 10. The Institute of Fiscal Studies | UK |
| 11. Katholieke Universiteit Leuven | Belgium |
| 12. Laboratory of Economics and Management, Sant' Anna
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| 14. MERIT, University of Maastricht | The Netherlands |
| 15. Magyar Tudományos Akademia, Budapest | Hungary |
| 16. Ludwig Maximilians Universität, Munich | Germany |
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| 19. Universidad Carlos III de Madrid | Spain |
| 20. University College London | UK |
| 21. ECARES/Université Libre de Bruxelles | Belgium |
| 22. University Pompeu Fabra | Spain |
| 23. Wissenschaftszentrum Berlin | Germany |
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Co-ordinator organisation name: Centre for Economic Policy Research (CEPR)

Proposal Part B
Summary Page

Proposal full name:

**Science and Technology Research network In a
Knowledge based Economy**

Proposal acronym: **STRIKE**

Proposal reference number: FP6-506237

Strategic objectives addressed:

*1) **World class excellence so as to improve the conduct and governance of science:** Achieve a bundling of the best research expertise in Europe, covering different approaches to the analysis of science and technology so as to ultimately bring about better science and technology policies in Europe and worldwide.*

*2) **A long term, sustainable research network of excellence in the broad area of science, technology and innovation studies:** The NoE STRIKE addresses the fragmentation of European research in science, technology and innovation in geographic, disciplinary, and methodological terms, by bringing researchers currently working in relative isolation across Europe together, while also laying the groundwork for a durable disciplinary collaboration.*

*3) **Opening up social sciences to analytically rigorous, systematic evidence based research so as to achieve world leadership:** By making effective use of new micro-data availability in Europe and confronting in a systematic and integrated way research expertise in the field of analytical, conceptual and theoretical research and more applied, empirical research, STRIKE will contribute to the further opening of European social sciences and humanities to micro-based, empirical research.*

Abstract

In light of the Lisbon objective, the Barcelona 3% R&D investment target and the EU Science & Society Action Plan, policy-makers in Europe have an urgent need for evidence-based recommendations regarding appropriate strategies for the governance and conduct of science, to support both knowledge creation and its transfer into technological developments that can fuel growth in the years to come. While this area of research is not new, there is still excessive fragmentation in geographic, disciplinary, and methodological terms. At the same time, the increased availability of micro-based datasets on scientific, technological and innovative activities opens up new possibilities for science and technology studies, with the promise of analytically rigorous, systematic evidence-based research output.

The Network of Excellence on Science and Technology Research In a Knowledge-based Economy (STRIKE) represents a pan-European collaborative effort, intended to develop the necessary integrating infrastructure and critical mass of expertise, so as to ensure better coordination of activities, and a progressive and durable structuring of research in science, technology and innovation (STI) policy. Its output will support the formulation of evidence-based STI policy recommendations at local, national and European levels.

STRIKE will bring together researchers in bibliometrics and the econometrics of technological change, management studies, law, engineering, sociology, political science, history and the economics of science and technology. It will integrate theorists with empiricists, across geographic and disciplinary lines. STRIKE's research is centred on five themes: science creation; technology creation and its relation to basic science; dissemination of knowledge; intellectual property and the legal framework; and the link with institutions, markets, and cultures. The Joint Programme of Activities has been designed so as to permit the STRIKE Network of Excellence to deliver a durable integration and structuring of the research effort in STI studies, while also establishing a collaboration culture whereby standardised methodologies and databases for evidence-based research are built up and diffused.

Gender Action Plan

Networks of Excellence have an opportunity to significantly advance the situation with regard to women's participation in research, as a result of their structuring and integrating effect. STRIKE's Gender Action Plan has several components, intended to assure this outcome:

- A focus on maximising the number of women researchers involved in the project, and particularly those involved in leading aspects of research
- Ensuring that women are represented at all levels of the governance structure, including the overall Governing Assembly
- Integrating women into the ongoing activities of the Network, beyond those already involved as participating researchers
- Mainstreaming gender in the work of the Executive Board
- Utilizing the existing gender dimension expertise of the Network
- Linking with networks of women scientists in the field of the project, e.g. "Women & Science".
- Teaming with programmes already running at several participating institutions, intended to promote women in science and research
- Running the Network with family-friendly policies

Focus on maximising the number of women in the Network and leading research

An over-riding element of the Network's Gender Action Plan will be to increase the number of female researchers playing an active role in the project. STRIKE has already applied a "pre-proposal gender action plan" in constituting the provisional participant list, set forth in Section 1, to have as many women researchers as possible. Within the STRIKE Network, 27 (19%) are women. For named PhD students, the ratio is 45%. The overall Scientific Coordinator of STRIKE is a woman (Professor Dr. Reinhilde Veugelers). Five of the 19 Workpackages are led by women, and five of the 23 institutional nodes are led by women. While there is always room for improvement, the STRIKE Network is proud of this result, particularly in light of the broader statistics on women in science.

Ensuring that women are represented at all levels of the governance structure

However, improving gender equality extends well beyond the number of women included. This nominal participation must translate into genuine equality in involvement in running the Network and implementing the JPA. To this end, STRIKE's governance structure has been designed to include and promote the active contribution of women. Women are in positions of power within the organisation, thus ensuring their voice, despite the fact that their numbers are smaller than their male cohort.

As was discussed in Section 7, the governance structure has several bodies. The non-executive Governing Assembly will comprise 12-15 members. Two of these are already known to be women: Reinhilde Veugelers, as overall Scientific Coordinator, and Hilary Beech, as CEO of CEPR. We have also received provisional willingness to serve from Baroness Hogg, Chair of 3i. We will actively recruit additional qualified women for this Assembly, thus permitting women to be involved at the highest level of oversight of the Network. The Executive Board is already assured of strong involvement from women, since several of the institutional academic leaders are women, along with the CEO of CEPR. The Scientific & Training Steering Committee will be chaired by Reinhilde Veugelers. This assures that women will have a voice at all levels of the Network, since this Committee is responsible for the detailed implementation of the JPA.

Integrating women into the ongoing activities of the Network

In addition to efforts made at the proposal stage to target female participants, we aim to increase this proportion still further by the time the project reaches the end of the Commission's period of funding. Efforts to target female researchers will be made both on a Network-wide level, and at the level of individual teams. It needs to be stressed that this search for female researchers did not require adjusting our quality standards, since all female researchers in STRIKE are equally excellent as the male researchers.

Examples of Network-wide measures include:

- Conference participation: we will pay particular attention to ensuring that young female researchers can participate in the Network's workshops and conferences, are encouraged to present papers, and to act as discussants and session chairs.
- Electronic collaboration: since virtual conferencing minimizes the need for physical transportation, this is a family & gender friendly option.
- Training: the Network is planning a cross-network PhD programme. Female researchers will be encouraged to apply and receive training that is particularly relevant to the stage they are at in their career. Many of the teams are already very active in promoting gender equality in their programmes. As point of reference, the majority of the PhD programmes in the STRIKE NoE (e.g. CREST, MERIT, Pisa) already have 50% women participating, highlighting the importance of women to Europe's future knowledge based society and the renewal of a rapidly aging academic staff.

Mainstreaming gender in the work of the Executive Board

In order to ensure that gender issues are high on the agenda at every level of the Network's implementation, the Executive Board will mainstream gender issues. Rather than establish a separate Committee to work on gender, a member of the Executive Board will have ownership for the implementation of the Gender Action Plan, and this will be reviewed with all other matters of the Executive Board's agenda. The Network has nominated Hilary Beech to serve in this capacity, because of her experience gained through more than 20 years of involvement in promoting gender equality in engineering, business and economics. Equally, as a member of the Scientific & Training Steering Committee, Ms. Beech will be able to ensure that the Gender Action Plan is being considered and implemented in the scientific decisions of the Network as well.

Utilizing the existing gender dimension expertise of the Network

The STRIKE Network is fortunate to have a wealth of expertise on gender equality within its membership. For example, as was described above, Prof. Reinhilde Veugelers is highly involved in an effort at K.U. Leuven to achieve a better gender balance in the university. In 1999, the university created a Center for Equal Opportunities & Gender Mainstreaming. The main aim of the Center is setting up an equal opportunities strategy for all segments of personnel and students of the K.U. Leuven through mainstreaming gender equality. To achieve this goal, the Center designs managerial policies for gender awareness management. Prof. Veugelers serves as the advisor to the rector for this Center. Hilary Beech, CEO of CEPR, has been active in the working to enhance the participation of women in both technology and business for 25 years. As an electrical engineering student at UCL, she founded the Society for the Promotion of Women in Engineering (SPOWE), which aimed to educate girls about the possibilities of engineering careers. She organized a series of events, linking female engineering undergraduates with secondary school classes for presentation of exciting activities related to engineering disciplines. She worked for nearly 20 years in an engineer and a business person before joining CEPR, and was very active in encouraging women to enter and stay in careers in technology and business, as a member of the US Society for Women Engineers; the Student Admissions Advisory Committee, the Diversity Task Force and the Women in Management groups (all during her time at Stanford University's Graduate School of Business); the Silicon Valley Women in Consulting Group; and Women in Technology. She has recently been nominated to serve on the Committee for Women in Economics of the Royal Economic Society.

STRIKE will call upon the expertise of these and other individuals with the Network, who can significantly enhance both the planning and the implementation of gender programmes.

Linking with networks of women scientists in the field of the project

Many of the participating institutions within STRIKE already operate programmes focused on gender equality. We will link with these, looking for opportunities to host joint events, or share best practices. Some examples of teams' programmes include:

- The University of Essex has a network of local structures to support the implementation of gender equality, including the focus groups on Women's Progress in Academic Life. These have led to the establishment of a Working Party on the Progression of Women Academics, which reports to the University's Equal Opportunities Steering Group. By this means, recommendations are made to Senate and the University Council that promote gender equality.
- K.U. Leuven's Center for Equal Opportunities & Gender Mainstreaming has two researchers and a consultant permanently working on gender projects. Some internal networks have been set up, such as Network of Mainstreaming promoters across faculties, The Center has already built links with existing external networks such as the European network "Women and Science", European network "Families and Work", Federal network Equal Opportunities, Provincial Fair Play Network. More information is available at: <http://www.kuleuven.ca.be/gkg/>. The collaborators of the Center are the authors of the "Manual on gender mainstreaming at universities" in a first attempt to elaborate a coherent set of guidelines, tools, instruments and good practices to support specific actions to realize gender mainstreaming at universities.
- The University of Maastricht established the Centre for Gender and Diversity on September 1st 1998. The Centre for Gender and Diversity initiates, inspires and coordinates education and research at all Maastricht University's facilities in the field of studies of gender and diversity. The central aim is to develop insight in the different manners in which categories like gender, ethnicity, class, sexuality, age, religion, -often combined-, can result in social differences and inequalities. Furthermore, the Centre has a social task in developing and propagating knowledge in this field for the benefit of specific target groups, policy makers and politicians.

Running the Network with family-friendly policies

One of the objectives of the network will be to increase the presence of female researchers working in science, technology and innovation policy. This will, of course, require the Network to adopt measures that will properly address gender and equal opportunity issues in the implementation of the JPA. The teams will together aim to optimize the involvement of female researchers in the planning and the decision-making activities of the network as a whole. This will also be evident in the Network's policy when inviting female participants to Network conferences and summer schools, through the timing of activities and the format of working practices, including flexible working hours.

Following consultation with its researchers, CEPR has recently changed its travel guidelines to make its research conferences more family-friendly. This enables researchers to return from conferences on a Saturday rather than a Sunday. The EC's desire to change working practices even further would result in a further revision of this policy, so that European Commission funded conferences would take place during the working week. This will have a positive impact on both sexes, but it will have the greatest positive effect on women.

Gender Issues

Within the STRIKE research agenda, there are specific areas in which the Network will take gender issues into account, particularly with respect to career decisions by women to participate in science and technology. Workpackage 2 “Research Productivity” (detailed in Section 8) has a specific research objective, in which differences in research productivity between the US and Europe will be studied, with an explicit reference to gender as a discriminating variable. Similarly within Workpackage 8 on “Human Capital” and in particular the analysis of the growing shortages within Europe of scientists and engineers, the particular contribution increased female participation could make will be a focal point of attention. Workpackage 1 on “Basic Research and Education by Universities” will also look at some of the gender issues with respect to the incentive and governance aspects of universities and university research. Workpackage 3 on “Scientometrics” anticipates data collection along a gender dimension, providing possibly interesting insights on gender differences between scientific fields. Workpackages 5 and 6, “S&T by Large Firms” and “S&T by Start-ups”, also have scope to consider the contributions of women and gender dimensions in labour supply and participation.

<p style="text-align: center;">Evaluation Summary Report for NoE Proposal nr 506237 Acronym=STRIKE</p>
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5. Organisation and Management (Treshold 3/5)

An interesting well structured model for a network of excellence. The management arrangements appear to be well set out and comprehensive. Individuals of some stature have been brought in to play a major part in governance. The evaluations were concerned with the numerous hierarchical layers which could hinder creative management.

The gender plan was well conceived, but the evaluators missed the integration of this dimension into the work packages (eg human capital in the scientific labour market)

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