Female employees in intermediary organisations: tasks, careers and networks

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1. Introduction

The role of women in science and technology is in many EU countries characterised by the so-called glass ceiling. Women do not rise to the upper levels of highly qualified expert jobs, and they are substantially less likely than men to appear in the statistics of top professors, management of businesses and public sector managerial positions. Women also tend to be less represented in more prestigious fields (e.g. electronics and electrical products) and conversely more represented in lower prestige service sector occupations (She Figures 2006). The under-representation of women in science and technology and the potential loss of women’s contribution to the economic development of the national innovation areas have been recognised as central themes in EU research and innovation policies (e.g. Helsinki Group for women and science, European Parliament 2000, Etzkowitz et al. 2008).

During their nearly 30 years of existence in Finland, the intermediary organisations have been aiming at supporting the dialogue between science and society by bringing together actors from universities, enterprises, policy making and societal services, for example, by helping researchers in turning their research results into commercial products and services or by supporting new kinds of university-industry alliances. The objective of our project was to scrutinise whether the intermediary organisations, providing support services for commercialisation and utilisation of scientific research, offer possibilities for women to work with issues related to science and technology development and whether these organisations will open up new opportunities for women in top positions of research leadership and management.

The focus of our research was to analyse the professionalisation of intermediary activities in Finland and especially the practical working environments and actual possibilities of women from within the intermediary organisations. Previous research has focused on the macro-level of these organisations. They have been analysed as part of the national innovation system (Kutinlahti 2005), as agents in regional development (Kautonen 2006; Luoma 2005) and within the framework for the commercialisation of university research (Pelkonen 2003; Kutinlahti and Kankaala 2004; Tuunainen 2004; Lehenkari 2006). Some studies have looked at the role and functioning of science parks more specifically (Valovirta & Niinikoski 2005; Halme 2005, 86). The intermediary organisations have also been analysed from the perspective of their potential and actual clients, namely researchers, academic entrepreneurs and spin off companies (Konttinen et
al. 2009). Thus, there is a lack of studies emphasising the perspective of employees of intermediary organisations and women in these organisations in particular.

Our research was conducted as part of an EU-funded research project titled Women in Innovation, Science and Technology (WIST), the focus of which was to analyse women’s participation and career advancement in the transfer, incubation and entrepreneurship professions. The project was led by Professor Henry Etzkowitz, and the other partners came from Germany (Institute for Employment Research), Romania (National Centre for Programme Management) and the UK (Institute for Policy and Practice). The UK partner acted as the coordinator of the project.

This report pays particular attention to the institutional practices in emerging occupations that are promoting the success of research results and business development, namely the various occupations in intermediary organisations. We aim at answering the following questions: How is the professionalisation of intermediary work emerging? What are the organisations like in terms of managerial practices and working conditions? What kinds of experiences do the female employees in intermediary organisations have regarding their tasks, careers and networks? How do the women characterise their working conditions?

This report first outlines the development of the intermediary field and the basic types of intermediary organisations. Then the empirical data are presented by first analysing the top manager perspective on professionalisation of intermediary activity together with administrative and management practices of the organisations. Then, women’s tasks and the contents of their work, networking as part of the intermediary actions and work-life balance in the organisations are analysed from the perspective of the female employees of the organisations.

2. Background of the study: Intermediary organisations as actors in science and innovation policy

The Finnish intermediary organisations have been developed as part of science and technology policy since the 1980s. The development has been connected with increasing pressures for the social relevance of science and commercialisation of research (Nieminen & Kaukonen 2001, 30-31). After the economic recession at the beginning of the 1990s, many policy interventions have sought to enhance networking between companies, universities and society. According to Kutinlahti (2005, 75), three main policy lines aiming at encouraging the commercialisation of academic research can be distinguished: 1)
Co-operation between industry and universities has been promoted by several policy measures. One important governmental intervention aimed at developing the innovation environment was the Centre of Expertise Programme established in 1994, extended in 1998 and 2002, and continued in 2007. The aim of the programme has been to strengthen the knowledge base and to prepare and launch joint projects between companies, universities, research institutes, science parks and public administration. In 2007 Finland had 22 Centres of Expertise nominated by the government (Vilhula et al. 2006, 17). Also the Tekes support schemes (technology programmes and start-up loans) aimed at increasing industry-university collaboration, promoting business start-up and helping small and medium enterprises utilise new technology-based methods and research (Kutinlahti 2005, 76).

Developing better conditions for knowledge utilisation has been promoted by several actions contributing to the creation of new businesses and enhancing the progress of existing ones. The support schemes of the Finnish Innovation Fund provided funding for companies to enable them to produce business plans in order to attract, for example, Tekes funding. These schemes also aimed at acquainting companies with private investors and experts in international sales and marketing. The Employment and Economic Development Centres were focusing on entrepreneurship via several funding schemes and training services for supporting new businesses. (Kutinlahti 2005, 76).

The IPR by universities has been promoted by legal reforms. The University Act was reformed in 2004, emphasising the societal and economic service function of the universities. This “third function” besides teaching and research meant that universities were expected to adopt a more active role in commercialisation of research. The IPR of university-based inventions limited the university researchers’ ownership of the IPR rights of their inventions, and thus gave universities more possibility to gain profits from the inventions of their researchers. (See e.g. Edquist et al. 2009, 36).

The main types of intermediary organisations are 1) the research and innovation services of the universities, 2) science parks and 3) different types of social innovation intermediaries. Most Finnish universities have units for research and innovation services, expert service in starting up research projects, collaborating with business and supporting entrepreneurship. The units provide services also in research administration, project planning, cost calculations and collaboration agreements. These units help researchers in
funding, invention and immaterial rights applications. The bigger units have about 30 employees while the smaller ones may only have 2-3 employees.

Science parks are owned by cities, municipalities or companies together with private and public foundations or other investors. In 2007 there were about 60 science parks in Finland, most of which had been established at the end of the 1980s and at the beginning of the 1990s. According to Halme (2005, 81), science parks have three main functions: 1) developing knowledge clusters regionally and nationally (typically coordinating programmes, such as the Centre of Expertise Programme and Tekes Programmes), 2) developing new businesses e.g. incubation, funding, company planning and management consultancy and 3) various real estate investment activities (office services, communication). The science parks collaborate with Employment and Economic Development Centres, invention agents, Tekes, ministries, local venture capitalists and business angels. The science parks can be divided into three groups based on their size: 1) big centres (100 companies and older, more established), 2) middle range centres (dozens of companies) and 3) small and newer centres concentrated on one or a few areas of technology. (Halme 2005, 75).

By social innovation intermediaries we mean actors that aim at commercialisation of social innovations, which are, for example, service innovations and organisational process innovations. These organisations may be owned jointly by regional actors (universities, cities and private companies) or they may be entirely private companies. Like science parks, also the social innovation intermediaries have network coordinator functions. They may coordinate Centre of Expertise Programmes and Tekes Programmes. Furthermore, they act as links between various actors from higher education institutions, companies, public services, public administration, ministries and local venture capitalists. Differing from the science parks, the social innovation intermediaries often also conduct or coordinate actual research projects, utilise research concepts to address present practices and problems in companies, offer new solutions and enhance commercialisation and utilisation of research-based knowledge.

Today, intermediary organisations are specialist organisations that are expected to reinforce the development of innovations. They attempt to promote innovations and diminish the risks of innovation processes. They also work to generate collaboration between different actors of the innovation process, develop the structures of innovations and provide specialist services for different phases of innovation processes. Different organisations are tied to the market mechanism in different ways: some organisations are entirely public, some are purely commercial while others lie somewhere in between these two types. The organisations also act to a different extent on national, regional and local
levels (Koskenlinna et al. 2005, 12, 29, 30). Of course, the importance of these organisations for different businesses varies. Some do not need the services, while others do, at least at some stage of the company’s life span. The need for services may come with new business operations or when starting up business while the need for the services may end when the company has received the needed information and assistance. (Konttinen et al. 2009; Koskenlinna et al. 2005, 11).

All in all, the role of intermediary organisations in the Finnish public research system has been recognised and they are seen as technology and innovation policy actors. The intermediary organisations are mediating between universities as knowledge producers and businesses as knowledge users. However, these organisations do not form a clear field of activity. On the contrary, several organisations have overlapping intermediating tasks, and the same function may be addressed by several organisations (Konttinen et al. 2009, 28). A recent evaluation of the Finnish innovation environment saw the role of intermediary organisations in the national innovation system as limited (Edquist et al. 2009, 24). During their approximately 30 years of existence the intermediary organisations have not been a stable structure. On the contrary, the organisations are comparatively new and they have been facing many changes regarding their structure, tasks and role on the national, regional and local levels.

The unstable nature of the intermediary organisations also poses challenges for research which attempts to capture the sphere of activity of the organisations, as was practically evidenced also in our research material. Only after two years from the interviews, many of the researched organisations had been merged, enlarged or downsized. The operations of one organisation were totally reformed and one organisation was cut down completely and the employees found new jobs in other organisations. Nevertheless, our study contributes to the discussion about the changing role of intermediary organisations by analysing their internal practices and organisational cultures and thus gives new perspectives to understand the intermediary work and field.

### 3. Research design

*Case selection.* In order to capture the variety of working experiences in the intermediary organisations, we have chosen organisations from all the main organisational types, from research and innovation services of the universities, science parks and social innovation intermediaries (both private and public). We included two research and innovation
services, one from a university of technology and the other from a multi-faculty university. The two science parks selected were from the fields of biotechnology and engineering. The social innovation intermediaries were represented by one semi-public organisation and one private organisation. We paid special attention to regional balance by selecting organisations from high-tech growth areas and progressive areas. Some older and some newer organisations were included.

**Interview strategy.** Firstly, we conducted five interviews with key experts in the intermediary activities sector. Secondly, we conducted six interviews with top managers (both women and men) of the case organisations (see interview outline in Appendix 1). In two organisations the interviewee was a vice director of the organisation while the rest of the interviewees were directors of the organisations. All of them were responsible for staff recruitment and allocation of tasks of the employees. Thirdly, we conducted 26 interviews with women employed in various expert positions in the case organisations (see interview outline in Appendix 2). We did not include women in secretarial positions. We paid special attention to finding women with different starting points, with varied basic education and different length of experience in the field.

The interview questions were sent in advance and the interviewees were well prepared and motivated to participate in the study. The prepared interview questions acted as a guideline for the interview, but the interviewer was actively involved in the interviews and posed further questions when needed. The key expert interviews were conducted by the whole research team. The top manager interviews were conducted with more than one interviewer, however, this was not always possible. All the employee interviews were conducted by Pia Vuolanto. The top managers were interviewed during spring 2007 and the individual women during summer and autumn 2007. The interviews lasted from one to two hours, the most common duration being one and a half hours.

The interviews were recorded and transcribed. The transcribed data were analysed using Atlas-TI software for qualitative data analysis. The interview data were first analysed for work packages of the EU project the objective of which was to create a basis for quantitative studies of employees in intermediary organisations. This report was developed on the basis of the work packages, but the aim instead is to describe the qualitative data as richly as possible to capture the employees’ perceptions and aspirations within the intermediary organisations.

**Background of the interviewed employees.** Most interviewees had a Master’s degree. In Finland, the Master’s degree provides basic skills for understanding research concepts and research logic, which was also pointed out as important by the top managers of the organisations in order to gain the clients’ confidence. One-third of the interviewees had a
PhD. The fields of education were varied (Table 1), most usually the interviewees came from engineering, followed by management studies and other social sciences. Natural sciences, law and humanities were represented by a few interviewees. The MBA seemed to be one option for further education, since two interviewees had an additional MBA degree and one was about to finish it soon.

Table 1. Educational backgrounds of the interviewees

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Number of individual interviews</th>
<th>BA and other university degrees</th>
<th>Master's degree</th>
<th>PhD</th>
<th>Field of education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and innovation services</td>
<td>9</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>Engineering, law, humanities, social sciences, natural sciences</td>
</tr>
<tr>
<td>Science Parks</td>
<td>9</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>Social sciences, natural sciences, engineering</td>
</tr>
<tr>
<td>Social innovation intermediaries</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>Management studies, engineering</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>4</td>
<td>14</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

The interviewees had on average been on the field for about 5 years and some had a long experience in intermediary work. The work histories of the interviewees were fairly evenly distributed between academia, business and the public sector with the exception that in science parks nearly all interviewees also had a business background. There were only 6 interviewees with work history in both academic and business settings. The salaries of the employees mostly seemed to fall in the usual category of the experts of natural sciences and engineering (male salaries 3533 Euros on average, female 3225 respectively; Statistics Finland 2005). In all organisations the salaries were most often in the category of 3000-3999 Euros per month.

4. Results

4.1 Professionalisation of work in intermediary organisations

There is a long tradition of the study of professions and professionalisation in sociology. The level of training, requirements for formal training and academic status of the field are regarded as symbols of professionalisation (see e.g. Torstendahl & Burrage 1990).
analysed the professionalisation of intermediary work by asking the key experts and top managers of intermediary organisations to describe the professionalisation of the field, to define the training and knowledge base of their employees.

In Finland there seem to be some early signs of professionalisation in the intermediary field. However, neither universities nor polytechnics have any specialised programmes in intermediary work and thus, it is not possible to gain a professional degree for this work in Finland. Instead, there are courses that are suitable for intermediary work organised by many different actors: Finnish Science Park Association, Association of Finnish Lawyers, National Board of Patents and Registration in Finland, Chambers of Commerce and Project Management Association. Universities also occasionally organise extension education that is suitable for work in intermediary organisations, for example, in project management, regional development, product development, commercialisation, patenting, management, EU project management and marketing. The IPR University Center coordinates and promotes education of and research into issues of intellectual and industrial property rights. It organises Master's and doctoral level courses together with the member universities: University of Helsinki, Swedish School of Economics and Business Administration, Helsinki School of Economics, University of Turku, and Helsinki University of Technology.

From these courses organised by different actors it is possible to build specialisation or expertise in intermediary work, but there are no clear study paths, instead one has to individually construct studies from available courses. A top manager of one organisation saw the professionalisation of the field of intermediary organisations in Finland as follows:

*About 5-10 years ago in USA, they had this discussion on whether the field [of tech transfer] is professionalised or not and they came to the conclusion that there is a profession of intermediary work with some basic qualifications that are not required in other fields... In Finland, it [profession] has been growing more slowly, and my opinion is that this has to do with the fact that in Finland companies and universities have been in close collaboration with each other. There has been no need for such a profession in Finland; knowledge has spread out in other ways... And now in Finland we see that some development is emerging, the personnel move from one intermediary to another, and there are expert areas that are valued by intermediaries.*

There are no Finnish professional associations neither for intermediary professionals nor science park personnel. The research and innovation services have an annual meeting which aims at networking the research and innovation services personnel with each other. In addition to this meeting, the university lawyers, innovation managers, research funding and application services personnel are fairly well connected with each
other, and they arrange also separate meetings within their specialisation area. The science parks belong to the Finnish Science Park Association, established in 1988. It is a nationwide network of science parks, which coordinates cooperation among science parks and acts as a mediator between policymakers and science parks.

4.2 Administrative and management practices in intermediary organisations

To analyse the administrative and management practices of the intermediary organisations, we asked the top managers to tell about the personnel management practices, employment conditions and gender equality promotion in their organisation. We also asked about their perceptions of the necessary educational backgrounds, qualifications and competencies of new recruits.

There is variation in the way that the organisations can offer permanent employment for their personnel. We found at least two different ways concerning this: 1) In research and innovation services, the top managers said that permanent employment contracts are the ideal of the organisation and they try to give personnel permanent contracts as soon after they have been employed as possible, but sometimes this logic is not working well, for example, during the last couple of years, the development of the university structure of Finland had an effect on the stability of research and innovation services. 2) Many organisations relied on project-based instable funding, which made it difficult to hire permanent personnel. The organisations have sought a solution for this situation and thus, most of their employees had an employment contract for an unspecified term, because they want to keep good personnel. A top manager of a science park pointed out:

Due to our funding structure, we now have a lot of personnel with fixed-term contracts. One EU-funding period is ending at the end of this year, and quite many have a contract ending then, if we do not get more projects before that. But in the Centre of Expertise Programme, funding is for seven years, and many involved in it have employment contracts for an unspecified term, because it is no use making fixed-term contracts for seven years.

This applies well also in another science park, where the top manager reported:

It is our ideal to extend the contracts after they have been on fixed-term contracts, because training for the personnel to become productive takes about 2-3 years. That is why we do not like to have high turnover of employees so that we hire someone and toss them away right after, we like to have persons that can stay with us. In sum, we prefer longer contracts.
Fixed-term contracts were rare among our interviewees, as only four interviewees worked on a fixed-term contract. In Finland, working on fixed-term contract is more usual for women than for men, because 21% of employed women and 14% of employed men were on a fixed-term contract, which especially among women is far more usual than in Germany or the UK (12% and 7%, respectively, Eurostat 2005).

Part-time work seemed unusual in intermediary organisations. Of the interviewed women, only one was working part-time, which is even lower than the Finnish average. In general, part-time work is more usual for women than for men in Finland. About 17% of all female workforce worked part-time, whereas only about 8% of men worked part-time, which is much lower than in Germany (women 39%, men 6% of employees) and the UK (women 44%, men 9%) (Eurostat 2005).

The top managers agreed that in order to survive in the field of intermediary organisations, the employees need an academic degree. Knowledge of English was also seen as essential for the work. The top managers look for persons who have the ability to understand research logic, to be acquainted with funding organisations and funding principles and the ability to understand business logic, because in order to get on in the field and advance one’s career, one has to be able to look into these three directions. A top manager of a social innovation intermediary pointed out:

*One has to be open both to the business side and to the university researcher side, and the administration and researchers are also different worlds. So, one has to be open to three directions. But if one looks at things only from one viewpoint, it does not work.*

A top manager of a science park commented on the same effect:

*What we do does not exist as such anywhere else. Typically people are educated to work in linear chains, where the process starts from raw material and becomes a product. Our action model is nothing like that. In our field there are arrows that point to all directions, from business to research and vice versa, from intermediary to intermediary, or to all directions simultaneously. It is not a one-way process, and that is exactly the thing that is not easy to absorb. If one gets stuck in the linear model, it is terribly difficult to orientate oneself to the apparent chaos going on here in this multi-direction activity.*

In research and innovation services there are some tasks where work history in business was considered more useful than in others. However, in science parks and social innovation intermediaries business experience was considered important for most employees. A top manager of a science park stressed the importance of business experience when asked about the previous work histories of the employees:

*They have been in business, mostly, some in research, but mostly in business. We cannot become top researchers, so the expertise and understanding about business and business processes help in the intermediate role maybe more than being in the laboratory for a long time. Laboratory experience is a positive thing, but it is not a merit as such, because*
typically those with laboratory experience are oriented to research, and our role is to identify commercialisation potential, build partner relationships, and that is in a way a more social field, I think.

One of the top managers of science parks stressed the importance of previous business experience:

I would say that business experience is the most important thing. If a person has experience solely in the public sector, we will not employ them. Since we operate on public funding and our results are measured with indirect effects, I believe we need persons with knowledge about how business really is done, I mean real business... The more we have such persons that have experience from business reorganisation proceedings the better, because then the person really has experienced what business is all about. Because we should know how to help businesses, and if the person has the experience that everything does not always go so smoothly, then they know what they are talking about.

A couple of top managers pointed out that a PhD is not necessary for work in their organisations but they considered it very beneficial in the field. There was some variation in this. In large research and innovation services, there were development tasks in which a PhD is necessary (and three of the interviewed five women had a PhD), but in small research and innovation services, the top manager thought that in order to work in his organisation, the researcher-type employee “must be a very administration-oriented researcher”. In many organisations the top managers felt that a PhD creates street credibility in clients:

In one case we thought that we would send a person with a Master’s degree to conduct interviews, but it did not work that way, the interviews were part of a project and the clients wanted the interviewer to have a PhD. They wanted the certain expertise the PhD gives, and from the client point of view the Master’s degree was not credible enough.

Similarly, the top manager of a social innovation intermediary said:

It is important for us to have PhDs working with us. As we work with the academic world, we have to have the same qualifications as they have. We need to have personal experiences and understand what stimulates the academic world.

In science parks the top managers were willing to support PhD work of their employees if it was related to the daily work, for example:

Quite a few of our employees have an academic degree and that is why we think it’s right to encourage them to go further in their studies and complete dissertations, take a PhD. They have to do it while working, but we urge them to go on, but we say that it would be nice if it had some relation to the daily work.

Another top manager pointed out:

We have the possibility that if a person wants to educate herself further, we take a sympathetic attitude towards it and the person can even use a certain proportion of the monthly working hours to do that, but it has to lead to a degree. Some connection with
the intermediary work is favourable. If one does a dissertation about poetry or literature, then we will probably not support the idea, but if it is connected with our work, we will support it.

In research and innovation services working time was monitored with the clock card while in the other organisations monitoring was usually project-based follow-up of hours worked for each project. The top managers in research and innovation services stressed the regularity of working hours, whereas in the other organisations they pointed out that the working hours must be adjusted to the needs of the clients and the organisations are flexible, but they also require a certain amount of flexibility from their employees. For example, one top manager of a science park elaborated on the situation:

As we work in the customer-oriented projects, we cannot always make the schedule as we wish. The client will decide, and we have situations in which the family life has to show flexibility. It is no illusion that sometimes we have to work long evenings, sometimes several evenings in a row, sometimes even too many evenings. That puts a strain on family life for sure, but as a counterbalance we try to be flexible in other matters so that it’s not unfair to the individual employees.

Gender equality was promoted by at least three different ways in the organisations studied: 1) the organisation was by law obliged to prepare a gender equality plan, when the organisation has at least 30 employees, 2) the employees were expected to take up gender equality issues voluntarily when needed and 3) gender equality was a principle that was applied throughout all activities of the organisation. Some top managers stated that the intermediary field is neutral when it comes to gender equality. However, some of them pointed out that men and women may be selected for different tasks, for example, one top manager of a science park said:

It would seem that women are sometimes better suited for tasks that require a sort of methodical approach. In contrast, men generally seem more inclined to rapid progression with less attention to details. This may have influenced the fact that women have been selected for certain types of tasks and men for some other types of tasks.

One of the case organisations was led by women who had hired a trainer to do systematic analysis of their organisational practices. As part of this analysis, also gender relations between science, technology and innovations were scrutinised. This helped the organisation develop appropriate practices to handle the difficult situations of male domination and even misogyny in the field. Furthermore, they developed practices of systematically supporting women working in science, technology and innovations. They also strove to make women’s competence acknowledged.

Based on our key expert and top manager interviews the field of intermediary work requires high-level qualifications. In order to work in the field, one has to have a broad education and work experience from different organisations and institutional
contexts. A PhD is also valued. Therefore, the employees in the field must at the same time be scientifically competent and have an understanding of business principles. Furthermore, a good employee in the field has good networks and willingness to build new networks.

As for management practices, the top managers describe them to be as favourable to the employee as possible. However, they cannot guarantee that the employee will be able to adhere to normal working hours. Instead, they call for flexibility from both the employee and employer side. In the top manager talk, the effects of constant organisational changes and uncertainty are visible but they present themselves as trying to struggle against the instability of the field and defending their employees against it. The gender equality issues were in general well recognised by the top managers, but the actual gender equality actions taken varied greatly from organisation to organisation.

4.3 Women’s tasks and contents of their work

The female employees were asked to describe the contents of their everyday work, tasks, requirements and roles in the organisation, e.g. whether they were involved in managerial issues, whether there was an international dimension in their work etc.

The organisational tasks and functions of the organisations differed greatly from each other, as was noted above in the report, where the basic organisational types were introduced. This is why also the main tasks described by the interviewees differed greatly by the type of organisation. The main tasks of the interviewed women in research and innovation services were:

- Support for research funding applications, patenting and licensing
- Spreading out information about domestic and international research funding instruments and practices of funding applications

The main tasks that the interviewed women in science parks performed in collaboration with the business and research actors were:

- Planning, marketing and coordinating research and development projects
- Matching business and research partners in research and development projects, in particular when coordinating large Centre of Expertise programmes
- Planning training for business and research actors
The main tasks performed by the interviewed women in social innovation intermediaries in collaboration with public and private sector actors were:

- Development of public sector services via new (technological) innovations
- Networking SMEs and public sector partners with researchers
- Coordinating and marketing R&D programmes with companies, higher education institutions and other public sector actors
- Conducting research and reviews and doing consultations
- Consulting services for business management, especially to large and medium-sized companies
- Strategic development, management, administration and marketing

In science parks networking with business and research actors was at the core of the tasks, but research and innovation services were part of university administration, and the work mainly involved support for university researchers. In social innovation intermediaries, the scope of activity was broader than in the other organisations, involving business, higher education institutions, municipalities, cities and other public sector actors. In all the organisations some interviewees had, based on their expertise in the field, more demanding tasks and greater responsibility, for example responsibility for strategic planning or management of the organisation, international collaboration with funding bodies, identifying best practices for the whole organisation or actively commenting changes in legislation for the field in Finland.

The PhDs interviewed had a broader scope of tasks than those with a Master’s degree, for example, demanding coordination and development tasks. Also, a PhD was seen as helpful in adapting oneself to the world of intermediary work, as an interviewee with a PhD in engineering told:

*I think my research experience has been fundamental to having in such a short time been able to cope with the work here. I know the world in which the researcher and professor work, what duties they have and also the atmosphere, in which they, for example, collaborate with other research groups. Those things are not found in books, but as I have the experience myself, I am able to judge the spirit in which they operate and make decisions and I understand their decision-making patterns.*

Another interviewee with a Master’s degree in engineering pointed out:

*I think that it [a PhD] is significant, especially when you think about core competence areas and know-how. Quite many here are thinking about pursuing a PhD. And this organisation is flexible, it is possible to do PhD studies here, and especially from the core competence point of view it is significant, also for the organisation’s development, the intermediate role and its functions, to some extent.*
Especially in science parks, the interviewees differentiated the tasks by identifying some tasks as belonging more to the “core competence” and the other tasks as being more administrative “project management” tasks, the former involving project planning and networking, the latter requiring more generic and assisting skills. Some interviewees claimed that men were more likely than women to be seen as “core experts”, especially in engineering fields. For example, one interviewee from a science park pointed out:

*This kind of technological environment we have here, somehow it is assumed that men have core competence and the engineering education in itself holds a certain benefit for them.*

The tasks often included an international dimension. The extent to which the interviewees considered their tasks to be international varied greatly. Some interviewees perceived their tasks to be indirectly international. Some reported that they had no intention of building personal networks abroad, and others told that the international features came to their work via researcher or company contacts. Some interviewees told that they built their own contacts and networks abroad, which meant travelling and contacting various international partners. One science park interviewee told:

*The international dimension is included in the projects. We do not differentiate between international and non-international positions. In the EU and ESR projects, the EU is an internal market and there is an international design in all the projects.*

Some were hesitant to take part in international tasks, for example, one interviewee with children from research and innovation services said:

*If one showed an interest in international tasks, one could get more out of them. But it requires more investment, time and travelling, so I have not been involved in them… Now I have such a big work load. I think that when one goes for an international project, one must be able to work for it and not only say that I go for it and then do nothing. In a way it is also about prioritising my resources.*

It was also seen possible to do international work without leaving one’s own country. For example, one interviewee with young children told:

*I kind of made a conscious decision that as I cannot go abroad, I will internationalise myself here as much as I can. It was quite nice in a way and natural, when I adopted the attitude, it is nicer and richer to work with these people, rather than just working with Finns.*

Only a few of the interviewed women were involved in top management of their organisation. A couple of interviewees had been offered managerial roles and they had refused. They said that the reason for this was that as a director they would have been forced to unnecessary “boss-subordinate” relations and having responsibility of the
management operations that did not interest them. One interviewee expressed that she had “no thirst for power like many men do”.

We asked for the extent to which the interviewees can influence organisational matters and decisions. There seemed to be a clear difference in how interviewees in science parks and in research and innovation services see their possibilities to influence matters. Most interviewees in science parks reported that they can choose their tasks, influence the contents of their work and be quite self-directive, whereas in the research and innovation services, the interviewees did not seem as self-directive, and their tasks seemed to come more from other people.

In the same way as the key experts and top managers emphasised, the interviewees also stressed that the employees’ tasks had a wide scope and work in intermediary organisations required broad competencies. However, this differed greatly by organisational types. Some of our interviewees pointed out that the field has internal hierarchies that are not visible outside the organisations or even noticeable to all employees of the organisations. The interviewees mentioned that some tasks were more important than others and that not all employees in intermediaries have all these competencies and networks. It seems that those with the strongest hybrid competence and strongest networks are considered most important. Often the visible networking and international tasks were ascribed to the male workers of the organisations.

4.4 Work-life balance

Compared with many other European countries, women’s participation in working life is high in Finland. The social benefits and the public services have enhanced women’s participation in working life. However, the Finnish labour market is heavily segregated both vertically and horizontally. Thus, when analysing the working conditions and careers of female employees, it is also important to scrutinise their abilities to reconcile work and other life areas (see e.g. Sutela 1999, 78). In the interviews we asked the women to describe their life circumstances, work-life balance, flexibility of the organisations and their possibilities to influence their own tasks and organisational decisions.

As can be seen in Table 2, a total of 12 interviewees had children, 11 were childless and under 40 years of age while three were childless and over 40 years of age. The average age of women giving birth for the first time was 28 years in 2006 and about 10% these deliveries were by women over 35 years of age. (Health 2007). Thus, taking into
account that the interviewees were highly educated, had children or potentially wanted to have children seemed to be in balance with the average numbers in Finland. Also, in Finland it has been typical that women with children are gainfully employed to a great extent, since about 80% of women with children were participating in the workforce. Also, the proportion of children in the age group 0-6 were in full-time or part-time day care (46%) to a greater extent than in other European countries. (Statistics Finland 2005).

Table 2. Number of interviewees by age groups and number of interviewees with children.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Individual interviews</th>
<th>Under 30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>Number of interviewees with children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and innovation services</td>
<td>9</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Science Parks</td>
<td>9</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Social innovation intermediaries</td>
<td>8</td>
<td>-</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>3</td>
<td>14</td>
<td>6</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>

The interviewees told about different career challenges for women. A childless interviewee from a science park compared her situation with women that have children in the following way:

If I had children, it would be much more difficult to work like this. I mean all these researcher meetings and project planning meetings in Finland or abroad, they basically are organised during weekends. These meetings come in addition to the normal work load. It means that my own use of time must be flexible. But you should also have some common sense, I do not have to participate in all occasions, I do not have to be flexible at all times.

One interviewee with children analysed women’s career challenges as follows:

The career advancement problematics, it means child care support services and home care support services, and having personal support networks trusted personal confidants... maybe even a second home, which would make it possible to set aside the motherhood role at times... If there were more of these services that one can pay for - food, maintenance, child care and child transport - women could make more career decisions. We have to talk about these services in Finland.

The length of working days and work load varied by organisational types. In research and innovation services, the interviewees mostly worked during the office hours. When the deadlines of large funding programmes were approaching, they might do more hours during the day, but they can take it off as free-time, because working hours are monitored by clock card. Work was done at the office, because the services were expected
to be available for the researchers during office hours. The interviewees usually did not work during weekends and holidays. One childless interviewee from research and innovation services told:

*The length of the working day is usually the normal eight hours, but sometimes I might spend ten hours at work. When it is busy, we do a little more, but not to an unreasonable extent, I do not sit nights at the office.*

In science parks and social innovation intermediaries, the working days were longer than in research and innovation services. Work was also done outside the office, at home or in meetings with business and research partners. Occasionally the working days were very long, due to project management duties or the needs of the clients. In these organisations, the hours worked were monitored within the project, so that all projects received the hours that were promised in the project contract, but the overall working hours of the employee were not monitored. Many of the interviewees worked during weekends and holidays when projects required it. An interviewee with older children from a science park told:

*Yes, practically I work 10-15 hours per day. Sometimes I would work day and night, when it is very busy or some deadline is near. And I am very much used to working on the weekends. During the last year I have limited that, I do not like to work on the weekends, only if it is necessary for an international partner. And I try to limit it to just some hours.*

Access to flexible work schedules within the organisations also varied by organisational types. In research and innovation services, the interviewees reported that there were certain reasons which restrict the employees from taking days off as they wished, for example, there would be meetings whose schedules cannot be influenced or services that have to be available during office hours. Apart from these restrictions, working hours can be negotiated within the unit quite flexibly. In the science parks and social innovation intermediaries, the employees were able to decide their working hours quite freely, but the desires and wishes of the clients placed restrictions on them.

Work-life balance was in different ways challenging in the different organisational types. In research and innovation services the interviewees reported that they can leave earlier or come later, and the clock card monitored the working hours accordingly. However, there were some challenges in the system, for example, one was not able to take work home, the work had to be done at the office and there was no possibility to work only half a day. Thus, in research and innovation services the work was more regular, and that was a good point for women who had children, for example, regarding children’s day care, but the work was also more rigid. A childless interviewee from research and innovation services told:
The public sector may be less flexible than the private sector, even though also there the employee is expected to show flexibility. In fact our work is more rigid with all these clock cards than in the private sector. In the private sector it is so that as long as the work gets done, nobody cares where and when you do it. Working from nine to five is a bit conservative for my taste, and on top of everything else, you have to do it at the office at your desk.

In science parks and social innovation intermediaries the interviewees reported that they could work flexibly wherever and whenever, as long as the wishes of the clients were taken into account, but the challenges came from the work load and pressure to work evenings and weekends. One interviewee with children from a science park told:

My work has not been a hindrance to me. I think it is a benefit that I can work at home and evenings and weekends… In a way my work is flexible and I am flexible too. My work does not have a negative effect on my family life.

The interviewed women problematised the work-life balance in multiple ways. The organisations differed in their strategies for balancing work and other life areas. The organisations that had closer collaboration with private companies and more networking functions, required much flexibility from the employees, also working on weekends and evenings. Simultaneously, they also gave more freedom to the employees in terms of working hours, weekends and holidays. On the other hand, the university research and innovation services were less flexible when it comes to working hours but easier regarding the work load required during weekends or evenings.

4.5 Networking in intermediary organisations

We planned the employee interviews on the basis of findings from the key expert and top manager interviews, which revealed that networking skills were highly relevant in intermediary organisations. Therefore, we asked the women employed by the organisations about their networks, most important collaborators, allies and competitors. We also explicitly asked whether they have recognized men’s or women’s networks in the field.

All interviewees considered networks a significant part of work, but the extent of networks varied by organisational types: i) In research and innovation services, it was important to have networks within the university, with researchers, the secretaries of the departments and administrative officers. It was also important to know and operate with different research funding organisations. Nationally, one had to have connections with respective actors in other higher education institutions and ministries. Internationally,
especially the EU and the ESF funding mechanisms generated contacts with similar organisations in other EU countries. ii) In science parks, the interviewees mentioned four main network types: researcher networks, industry networks, education networks and funder relations. Building networks was seen as a central requirement in work, “a condition of life”. iii) The interviewees in social innovation intermediaries had similar networks than those in science parks. They also seemed to rely much on networks gained in previous workplaces, for example, from universities or business settings. Also here, networking was a central requirement in work: you had to know networks and be involved in them in order to survive. One interviewee from a social innovation intermediary elaborated on the networks as follows:

In intermediaries networks are important and I think one has to be involved in the various networks as much as possible. Sometimes the networks are project-based, sometimes not. All these are important: other intermediary organisations nearby, the city, and universities and polytechnics both regionally and nationally. Then there are funding bodies, economic and employment development organisations, provincial federations, Tekes, the Finnish Innovation Fund, the Academy of Finland, financing companies, investors and business angels.

Networking brings with it a requirement of being able to modify one’s expertise according to different contexts and projects. One has to be able to look at things from different angles in different situations and adjust one’s expertise accordingly. One has to see the matters in question from several actors’ viewpoint and moreover, one needs to draw different arguments from the expertise. In science parks, changing roles and adjusting one’s expertise were central, whereas in research and innovation services the roles were more stable and the roles of the employees were specified already in the job description. One interviewee from a science park told:

Especially in all these networks, the expertise is very important: you have to know how to adjust your role to the different situations… During one day, I have different roles in and attitudes towards different situations. Sometimes I act like a project manager, sometimes I support another project and sometimes I manage inter-organisational projects. One has to interpret different situations, and that is probably because of our overlapping and crossing networks.

The coordination and co-operation in the Centre of Expertise programmes and Tekes programmes were not just about building local networks, but they also helped in building regional and national networks. In this way the programmes helped the interviewees become “network virtuosos”, which are required in the field.

The interviewees reported many types of male networks in the field, such as leaders of science parks, Chambers of Commerce and Rotary-type organisations, local government officers and executive groups of large companies, personal contacts and
circles of acquaintances. The sauna also divided women and men, and in part created male networks in the intermediary organisations. An interviewee from a science park elaborated on male networks as follows:

When we think of the chief executive officers of the science parks, it is quite an old boys’ network in itself. In this region, most of the CEOs are men; so many issues are pinned down and settled while sitting in the sauna. Like the other day, we had a strategy day and afterwards there was sauna, well… the disproportion is great, a woman can feel that the most important things are told when going to the lake or sitting in the heat… the evening can continue much longer into the night with men and among them.

Many interviewees considered male networks significant for success in the field, and in them the members promote each other’s careers. If a woman wanted to advance in the intermediary field to the most important issues and have more power to decide, she has to be aware of the male networks and struggle in order to gain access to them. One interviewee from a science park (set up fairly recently) told:

This work is based on personal contacts and when plans are made, it is very important to know the right people. You cannot call the telephone exchange of a company and ask who is responsible for this or that, it just isn’t done, it will not lead to a good result. It is better to know them personally... But since my networks are rather limited I deal with very practical things.

Coping with male networks is a competence for women in the field. For example, two different interviewees from science parks pointed out:

Once in a while you do come across situations where there are these old boys’ front lines, sort of parallel to the organisations, where men act together. I’ve noticed that there are clients who try to dictate why a certain person should work with them, but normally I have just walked through these all the same.

Yes, there are male networks, certainly there are. Who knows who and which projects are introduced and in what ways and to whom. It would be advantageous to know them [the male networks]! But they do not have a direct effect on my work as such. Only when you try to get involved in something bigger, to have an effect on something great, it would be good to know the old boys’ networks, just simply to get one’s message through to some specific people.

Also from research and innovation services the interviewees elaborated on the situation:

Men are very good in this, you know, in a way they would decide on issues and tell you only half of the issue, not all is told, it is not necessary. But when you ask more specific questions, you get more information, but it takes a lot of persistence.

Yes, certainly there are those old boys’ networks, and an outsider seldom even notices them, they just suddenly have an effect on something that one could not foresee. On the other hand, I think that by working hard you can force your way into them... but I think...
they do not have an effect on our work, well they do not make it easier, but they don’t make it more difficult either.

I have met old boys’ networks, those networks certainly exist, and they have an effect on my work. The persons in them promote each other’s careers. The networks are unidentifiable and in some situations the connection can be found, for instance, the people have known each other since childhood or school, have been work colleagues, or something like that. They can be collaborative networks... And it is natural in this field, people work on tasks that are closely related, many things are related to each other and many networks meet. It is therefore very natural that the old boys’ networks also meet here.

It seems that male networks were more significant in some organisations than in others, as interviewees from science parks and social innovation intermediaries listed more types of male networks and perceived them to be more significant than did those from research and innovation services.

The interviewees also mentioned many types of female networks. The most frequently mentioned were friendship-based female networks rooted in the previous workplace, education, former colleagues and researcher colleagues. The interviewees felt that these networks helped them survive at work because they could discuss difficult situations at work, feelings about working life and balancing work and family life. Some sub-areas of intermediary field – such as education and training, communications and marketing and clinical research activities - have female networks because nearly all those involved were women. In these networks women strengthen their expertise and share working experiences. Many interviewees also mentioned associations of women professionals at universities of technology or offshoots for women within professional associations, but the interviewees themselves were not actively involved in these. Nevertheless, they stressed the importance of the fact that these networks existed.

The interviewees also pointed out some thematic, inter-organisational female networks, in which they could discuss, for example, equality issues, environment issues, subject areas, working in engineering fields, everyday use of technology and gender in different organisations. The interviewees reported that these networks were highly significant for their work. For example, one interviewee with long experience in the field elaborated on the issue as follows:

\textit{In our region, we have consciously built up sisters’ networks, and now there are two groups. We set our own work in comparison with the work of others and our own organisation with other organisations. It is a good thing: it is such tacit knowledge, which is very beneficial... As in old boys’ networks, we concentrate on work issues and do not discuss our free time. We might mention it at some point, but work issues are the main focus. But it is somehow lighter because we bring emotions with us. In some}
meetings one can discharge one’s feelings and in other meetings we try to discuss a specific theme. One person will introduce it and then we will discuss it. I recommend [these networks] because men have traditionally had more of them and they must consciously be built up.

In some organisations the interviewees had consciously and actively created thematic female networks of their own, whereas in other organisations this was not common. Based on our data, it seems that the higher the number of women in the field in general (bio fields), the less frequently the interviewees mentioned separate female networks, and the lower the number of women in the field in general (engineering fields), the more they stressed the importance of female networks. The reason for this might be related to the fact that in bio fields there are more women’s communities at the workplaces and there is not so much need for separate female networks.

Women working in intermediaries need to have competence to work with various networks, and they also need to have a special competence to work with male networks, male cultures and male worlds. Nearly all the interviewees recognized that there were numerous male networks present in their daily practices. The existence of these networks undermines the actual competencies held by women and legitimises men’s competencies as the core professional competence. The interviewed women had also built their own women’s networks and these were considered beneficial for work in intermediary organisations.

5. Conclusion

The case organisations defined intermediary work in different ways. The work in research and innovation services was more stable and regular, but also more rigid and lower paid. The proportion of women employed in these case organisations was about 60% and so seemed a more accessible environment for women, and there were women in top management positions in these organisations. As for science parks, where the work involved a great deal of networking, work appeared to be more hectic and better paid. In these organisations about half of the employees were women and they were to a certain degree accessible for women. The case science parks had male top management. The private intermediaries, where there seemed to be more opportunities for openness, different solutions and alternative thinking, were also more stressful. In these settings, there were some women involved, but the access required a great deal of work.
The competencies required in intermediary work found on the basis of our data were manifold: one needs to understand research logic, have experience and understanding of the business world, and understand the mechanisms of funding for research and development. Networking skills were perceived to be crucial in the field. A woman will be more successful if she manages to gain access to male networks and build effective female networks. In generating this experience, an academic degree is the basis, and it is supplemented by various courses in, for example, project management, regional development, product development, commercialisation, patenting, management, EU-project management and marketing. A doctoral degree was perceived to be beneficial to work in intermediary organisations.

Even in science parks, female employees often held lower level positions which did not involve as much developing new ideas and generating new projects as did higher level positions. Instead, women were typically responsible for the practicalities and supported the men in higher positions. In the organisations studied, men’s tasks involved knowledge about the core of technology and networking, whereas women’s tasks required deep knowledge of a specific area such as legal rights or funding mechanisms. However, some women had more responsibilities, involving broad development of the field regionally and nationally. The division of labour, as far as we know, had to do with the strong male networks that evidently are significant in the field. Women’s access to these networks was limited and difficult in all the organisational types studied.

In the field of science and technology in Finland, gender has usually not been well articulated. However, our female interviewees took up the issues of gender in a natural way and many were aware of the significance of gender in working life. Together with other initiatives to promote gender awareness, our research can provide resources to bring into light and articulate gender in the field of intermediary work.

On the whole, intermediary organisations seem to open up possibilities for highly educated women in the fields of science and technology. Although the work is not well-respected research work and as such does not offer the rewards of research and innovations, it is work where a person can influence and enhance the development of commercialisation of research and simultaneously be involved in research policy. The prestige in intermediary work comes from giving merit to the work of others. A paradox of the work of intermediary organisations is that prestige comes from building high-quality expertise and hybrid competence, but at the same time depends on networking skills and coping with various impenetrable networks, which is possible for women in science and technology to a limited extent (Vehviläinen 2009).
References


Appendix 1. Interview outline for top manager interviews

Tasks of the organisation
- How would you characterise the most important tasks of your organisation?
- What are the main services offered by the organisation?
- Does the organisation take part in the funding of new companies?
- How does the organisation take part in regional and national development programs?
- What kind of companies does your organisation have as clients? Please specify the fields of science or technology.
- Has the gender dimension come up in your organisation? If possible, please mention some examples.
- Do you have special services for women?
- Is gender significant in carrying out the tasks of your organisation?

Ownership and management
- Who are the owners the organisation?
- To what extent is the organisation publicly and/or privately owned?
- What kind of strategic planning does the organisation have? Who takes part in it?
- To what extent are women involved in strategic planning in your organisation?

History and future of the organisation
- When was the organisation established?
- Which factors affected the development of the organisation locally, regionally, nationally and internationally?
- What have been the main turning points in the history of the organisation?
- How have the tasks and services of the organisation changed during the years?
- Has the main focus of the organisation changed since it was established? If so, in what ways?
- What kind of role has your organisation played in regional and national development?
- What directions do you expect your organisation to take in the future?
- How do you see the future of the transfer and incubation activities in this country in general?

Networks of the organisation, collaboration
- What kind of networks do you have:
  - with other intermediary organisations?
- with universities?
- women’s networks?
- other?
- What/Who are your main collaborators?
- Which organisations do you see as the main competitors of your organisation?
- How well do you think the supply of intermediary organisations’ services matches the demand in this region (is there an oversupply, a shortage, etc.)? How would you describe the competition among organizations providing such services?
- In what kind of international collaboration is your organisation involved?

Personnel of the organisation
- How would you describe your employees? Please specify their education, qualifications, personal characteristics etc.
- What kind of basic education do employees have in your organisation?
- What aspects do you emphasize when recruiting new personnel?
- What qualifications should a person have when working in intermediary organisations?
- What competencies are necessary and what is important for getting on in this work?
- Is specialised education for these tasks available in this country or abroad?
- How would you characterise the personnel management practices in your organisation?
- In your opinion, do intermediary organisations provide a favourable working environment for women?

Career and work conditions
- What kind of career advancement is possible in your organisation?
- Have your employees changed to another organisation? If so, where have they left (to a university, a company, the public sector or elsewhere)? Could you give some examples?
- What kind of employment contracts do you have in your organisation?
- How stressful do you consider the work in your organisation when compared with work in private companies and universities?
- Do many of your employees have children? How easy is it for your employees to combine family life with working in this organisation?
- Do you take actions to promote equality? Do you have equality plans as part of your strategic planning?

Women’s tasks and career in the organisation
- What kind of tasks do women have/have had in your organisation – in intermediary tasks, services, administration, managerial positions, expert positions?
- Are there tasks/positions that are seen as especially suitable for women, for which especially women are recruited? Are there certain tasks which are “women’s work” or “men’s work”?
- To what extent does gender matter in work and career advancement in your organisation?
- What is required of women in order to reach managerial positions?
- How would you promote women’s career advancement in your organisation?

**Personal experiences and contacts**
- What has your own career been like: what have been the main turning points in your career? How did you come to work in this organisation?
- Has gender affected your career?
- Are there women’s networks in intermediary organisations in our country? Are you personally involved in them?
- Could you recommend some persons we could interview in your organisation or in similar organisations in our country?
Appendix 2. Interview outline for female employee interviews

Separate sheet to be filled in before the interview (or during it, if desired)

Your age group
   Under 30
   31-40 years
   41-50 years
   51-60 years
   Over 60

Qualifications
   Bachelor’s level in ________________________________
   Master’s degree in ________________________________
   Doctoral degree in ________________________________
   Other (incl Professional) ____________________________

Your average monthly earnings
   Under 2999 euros
   3000-3999 euros
   4000-4999 euros
   5000-5999 euros
   6000-6999 euros
   Over 7000 euros

Working experience in years ________________

Working experience in intermediary organisations in years ________________________

Do you work full-time or part-time? ________________

Do you have a permanent or temporary contract? ____________
**Working history**
- What is your educational background (degrees, additional education, studying abroad etc.)?
- Describe your working history: turning points, most important workplaces and changes of working environments. What were the reasons to change the workplace right then?
- When did you come to this organisation?
- How were you recruited?
- What has been important for success in work?
- Have you had some barriers to employment? What kind of barriers?
- What kind of thoughts do you have about your future working life?
- Is there anything that you would have liked to go differently?
- Which career options could you imagine for yourself?
- What kind of thoughts do you have about your future working life?
- When did you come to this organisation?
- How were you recruited?
- What has been important for success in work?
- Have you had some barriers to employment? What kind of barriers?
- What kind of thoughts do you have about your future working life?
- Is there anything that you would have liked to go differently?
- Which career options could you imagine for yourself?
- What kind of thoughts do you have about your future working life?
- Would your career look different if you were a man? Could you now function in the same position if you were a man?

**Contents of work**
- What are your tasks like?
- Have there been changes in your tasks? What kind of changes?
- Which tasks do you find most interesting? Which tasks do you find inconvenient?
- What skills and characteristics does your work require?
- What kind of education does your work require?
- Does one benefit from further education or research experience in your field?
- What competencies are necessary and what is important for getting on in this work? What is essential, what unavoidable?
- How does work in an intermediary organisation differ from work at the university or work in industry?
- How would you describe your work for a young person, who is planning her career? What kind of education would you recommend? What working places would you recommend before work in this organisation?

**Intermediaries as working places**
- How does information flow in this organisation? Do you think you know enough about future plans and decisions?
- How would you judge working climate of your organisation?
- Can you influence organisational matters and decisions?
- How does one climb up the career ladders in this organisation?
- Is it easier or more difficult for women to go ahead in one's career than for men?
- Can you recall a situation in which the fact that you are a woman would have influenced the client relationships, your action or your position in this organisation?
- Has your organisation taken actions to promote equality (equality plans etc.)?
- Which factors promote and which hinder women’s success in this field?
- Can female careers in intermediaries be promoted? How?

**Networks and contacts**
- Describe your most important contacts: working community, most important collaborators, other contacts, best allies, competitors.
- Are you internationally networked? How?
- Which conferences or seminars do you take part in in our country or abroad?
- Which persons support you at work?
- What kind of contacts do you find stressful?
- Are there old-boy networks in this field?
- Are there women’s networks in this field? What are they like?
- Have you sometimes felt yourself to become an outsider? Please describe the situation.

**Work life balance**
- What is your employment contract like – permanent or temporary? How do you feel about it?
- What is your typical working day like? How long is it?
- How do you cope between work and freetime? How flexible is work in intermediary organisations?
- Is the work load decent, too small or too big?
- In which situations do you get stressed? How do you cope with the situations?
- What kind of role does work have in your life?
- Can you choose your tasks and decide about them?
- Can you recall a situation in which the fact that you are a woman has influenced to you tasks or distribution of your work?
- Which things or aspects do you see as good counterbalance to your work?