



SND in an International Context

ALMI, ANVAR, Enterprise Ireland, Finnvera and NUTEK

Delrapport 5 i evalueringen av Statens nærings- og
distriktsutviklingsfond gjennomført av Technopolis Group,
STEP og Albatross Consulting 15 september 2000

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15 September 2000

Acknowledgements

Personnel at ALMI, ANVAR, Enterprise Ireland, Finnvera, Forfás, the French Ministries of Industry and Research, KTM, NUTEK, Näringsdepartementet, SITRA, SND and TEKES have generously provided information and comment in compiling this report. We gratefully acknowledge their assistance, while pointing out that the responsibility for the interpretation as well as for any inaccuracies remains entirely with the authors. This document should not in any way be interpreted as an official statement by or on behalf of any of the agencies named.

Summary

This report is intended to provide background information to the overall SND evaluation. Looking across the countries studied, there are clear patterns of regionalisation in service delivery, the definition of clearer points of entry to the support system through the use of 'one door' policies and a shift away from financing instruments and towards services, which develop company capabilities. Agencies are beginning to become more proactive in interactions with their customers and the environment.

The increased importance of the regions and of regional policy in business development is a feature that the countries we have studied here all have in common. This is, of course, part of a wider pattern of regionalisation that has been heavily promoted by the European Union.

The countries we have studied divide into two camps, when it comes to allocating responsibility for industrial and business development among ministries. In Sweden, France and Ireland, the industry ministries handle both national and regional business development policies. In Finland and Norway, this responsibility is split.

All five countries have business development policies which include subsidising capital through selective risk-taking loans by the state and through grants. Newer measures have evolved which shift the emphasis increasingly from capital subsidy towards developing companies' business and technology capabilities.

SMEs have become a much greater focus of policy throughout the OECD in the last 20 years or so, as industrial policies based on structural rationalisation, promoting 'national champions' and subsidising structurally loss-making industries have declined in importance. As the focus has shifted towards SMEs, so all five countries studied have adopted a policy of regionalised delivery for company-directed business development instruments.

Even where services are delivered in a decentralised way, support systems have generally become complex over the years. Countries and regions increasingly seek ways to simplify these systems. Among the five countries studied here, Ireland and Norway have gone the furthest towards a 'one door' policy, where companies seeking assistance are offered a single, clear point of entry to the support system.

The service deliverers in the countries studied differ greatly in the extent to which they are proactive, with respect to national policy, regional development planning and at the level of the individual company (or network of companies).

The French administrative tradition involves comparatively strong ministries, with central analysis and planning capabilities. The Swedish system has a tradition of small ministries and much larger operating agencies. Finnish administration is closer to the Swedish model. In Ireland, policy analysis is separated to a special policy advice and co-ordination board. The division of labour in the Norwegian system is not so clear. Unlike the agencies in the other countries, which answer to a single ministry, SND acts on behalf of five ministries, which specify its tasks in varying

amounts of detail. The balance of analytic effort between SND and the different ministries also varies.

The involvement of national business support agencies in the development and implementation of regional plans is a new phenomenon, which is beginning to move onto the agenda as these agencies decentralise. In no case do regional authorities make project by project allocations decisions about money from national business support agencies. It would be reasonable to expect the role of these national agencies in regional planning to increase further over time. In effect, they provide a standard tool kit which regions can use in support of their own development plans. The national nature of the business support agencies creates economies of scale in the design and implementation of programmes, permits quality control and assures the independence of funding decisions from local political influence.

Proactivity at the level of the individual customer is increasingly understood to be important in business support systems design. This idea of proactivity is taken very seriously in Ireland, where Enterprise Ireland's client executives actively seek out companies with potential for development, and place the business development resources of the state at their disposal. Other agencies are more reactive.

Support infrastructures in the countries studied are very different from each other, as are the agencies which provide innovation and enterprise financing/support. Only a detailed benchmarking of individual functions – which is beyond the scope of the present study – could show the extent to which one organisation performs a function 'better' than another.

International experience demonstrates that radical organisational shake-ups and mergers absorb a great deal of time & energy. Every significant organisational turnaround requires 6 to 12 months advance preparation and the entire transition period can take up to three years. During this time a high proportion of management time will be spent on internal issues rather than business support - undermining the task the agency was set up to do in the first place.

Enterprise and innovation support agencies nonetheless need to adjust to their processes so that they continue to meet the requirements of a changing market place. Constant fine tuning of programme features and organisation need to be integral features of the planning process.

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1 Introduction and Conceptual Framework¹

The aim of this report is to provide a comparative international perspective to SND and its role within the Norwegian business and innovation support system. The collected descriptive data therefore covers a wider set of activities than those of SND activities.

The analysis is mainly based on interviews with the representatives of ALMI, ANVAR, Enterprise Ireland, Finnvera, NUTEK and SND.

To consider how a business support organisation such as SND should work and what its role should be in the support infrastructure, we need a conceptual framework. Here, we use current thinking about how national innovation systems combined with a segmented view of company capabilities. A central principle is that a key job of the support infrastructure is to raise those capabilities.

For almost a decade now the international policy discussion about improving national economic performance has not been about single-point intervention in the economy but about 'National Systems of Innovation' - NIS.² The name is a bit unfortunate, because the discussion of the NIS goes well beyond innovation to consider much of what has conventionally been handled in industry and business support policy.

Exhibit 1 provides a simplified overview of the elements of the innovation system in developed countries. It is clear from this and from the broader policy discussion on NIS that

- Most if not all of the elements of the NIS shown in the **Exhibit** need to be available to the economy. This is the **necessary** condition for economic development
- The individual elements of the system must be of sufficient quality to provide useful outputs and must work together well enough to allow the NIS as a whole to function. This is the **sufficient** condition for self-sustaining economic development³

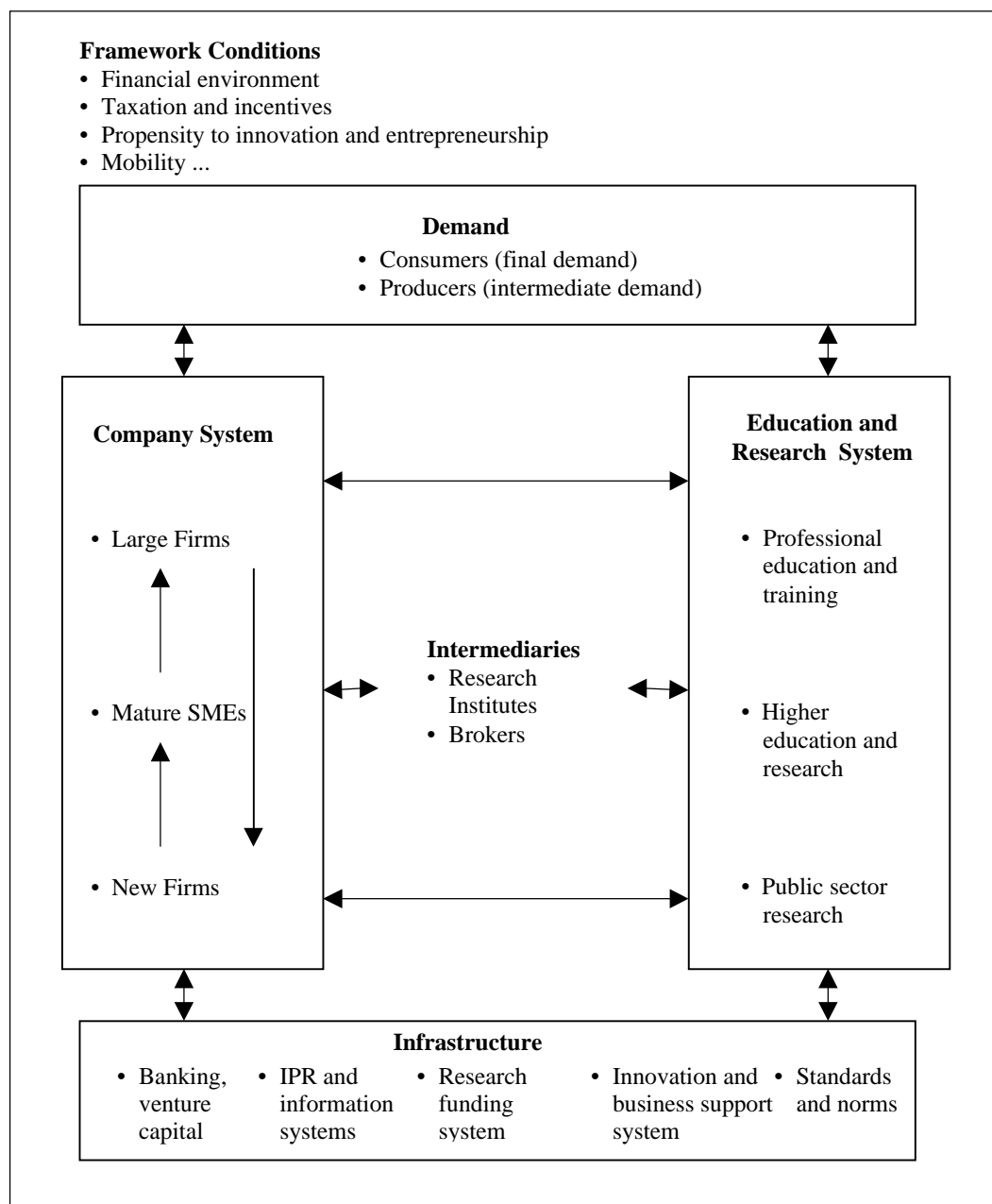
Other aspects, such as natural resource endowments, are also important, but the quality of functioning of the NIS is a major determinant of international competitive performance

¹ This Chapter is based on sub-report 4 of our evaluation of SND, Erik Arnold and Philip Sowden, *SND: Organisation and Structure*, Brighton: Technopolis, 2000. Readers familiar with that report can safely skip this Chapter

² See, for example, Bengt-Åke Lundvall, *National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning*, London: Pinter, 1992; RR Nelson, *National Innovation Systems*, New York: Oxford University Press, 1993

³ We owe this distinction between necessary and sufficient conditions to Miguel Landabaso, DG XVI

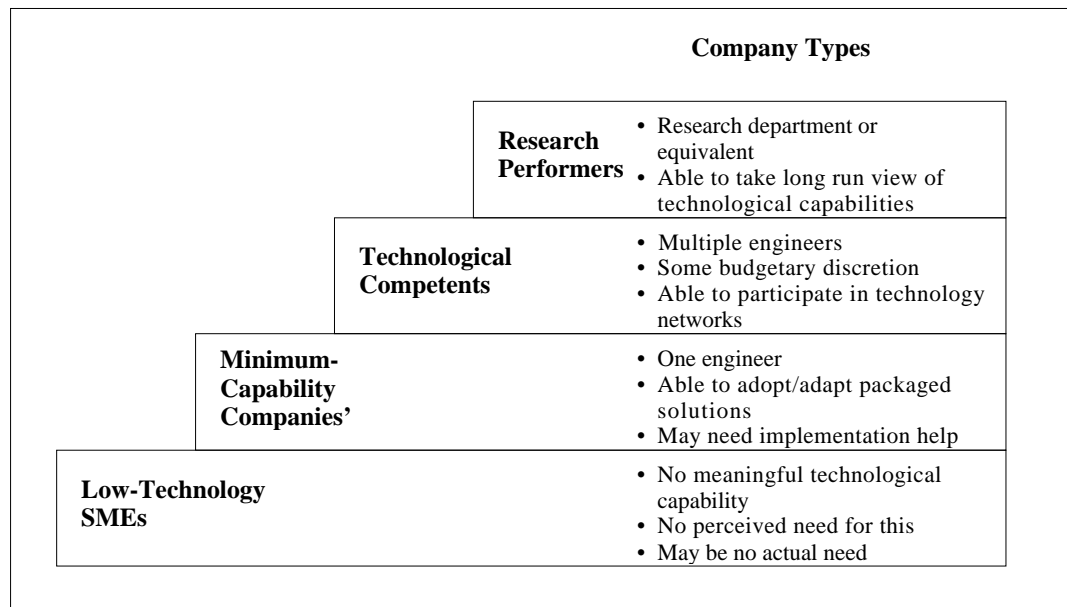
Exhibit 1 Major Elements of a National Innovation System



Since wealth is created in companies rather than in other parts of the NIS, companies' capabilities and their access to the resources in other parts of the NIS are especially important in determining economic performance. It is key to note that the performance of the overall NIS is not only driven by how well the individual components function, but also by the quality of the links between them. This means that a systemic approach is needed in both regional and national policy.

SMEs and others in the company sector have capabilities that are not homogenous. **Exhibit 2** shows a simple hypothesis about a useful way to segment companies according to their level of **research and engineering** capability. More general business capabilities are harder to characterise in this simple way. However, there will tend to be a similar hierarchy. While big, established companies tend to be quite high in both hierarchies, smaller and newer firms can sometimes be highly developed on one axis and underdeveloped on the other.

Exhibit 2 Simple Hierarchy of Company Types



Our segmentation suggests that there are four reasonably distinct levels in the development of firms' engineering and research capabilities. At the bottom level, there is no meaningful capability and there will tend to be a presumption that none is needed. At the next level up, the 'minimum capability' level, the firm acquires at least one person able to speak the language of technology, to monitor and understand the significance of technological changes happening outside the firm. These bottom two levels of firm rarely have much contact with universities. The professors are likely to be interested in things, which are longer-term than they can consider.

In OECD countries, many larger firms belong to the third level of 'technological competents', where there is enough capability to do fairly serious development work and where there tends to be a specialised innovation or development function. The highest level firms - 'research performers' - are of two types. Some correspond to the ideal of the very large company with capabilities in research as well as development and the strength and vision to work for the long term as well as the immediate future. Others are new, technology-based firms such as university or other research spin-offs, many of which exist primarily to do research and will be absorbed by larger companies if their work is successful. Such start-ups may be at the highest level of the 'technological capabilities' staircase, but at the same time be at the bottom of an equivalent business capabilities hierarchy. The highest-level firms' research departments communicate easily with universities. Third-level firms often have difficulties in doing so.

In general, the higher up the capabilities hierarchies that companies find themselves, the less they are affected by structural and market imperfections⁴. These hierarchical ways of describing capabilities provide useful clues about the need to segment and to build hierarchy into policies aimed at developing company capabilities.

The heterogeneity of firms means a simple approach to designing a support infrastructure is not adequate. Policy must **segment** firms into groups with generically similar needs. However, the design of policy delivery systems needs also to take account of the uniqueness of firms as individuals. Some state support infrastructures such as the Irish and British ones are (in our view, rightly) taking an approach of diagnosing needs at the level of individual companies as part of their approach to developing companies and capabilities. Support is then offered to companies, on a selective basis.

The need for such a diagnostic approach is built into the ‘learning paradox’ associated with capabilities. Those with limited capabilities also have limited ability to identify their own problems and opportunities. If it is to help, the state needs to be **proactive** with those who cannot yet decide what to do for the best. Despite the attractions of ‘hands-off’ policies, which do not involve the state in making firm-level decisions (‘picking winners’), it is therefore difficult to imagine many effective ‘hands-off’ measures to improve capabilities (especially among weaker firms). This means that progress in policy depends not only on finding the right economic levers but also on closer engagement with firms and practice.

Generally, quite a number of actors and programmes share the task of developing technology capabilities. However, the support system needs to operate as an effective whole. It is important that individual programmes operate in conjunction with the other parts of the support system to

- Provide a single point of entry and referral for companies unable to navigate the support system
- Obtain cost synergies, especially in needs diagnosis
- Enable cross-referrals to and from other parts of the system
- Enable an holistic approach by the system to company development
- Avoid fragmentation and build the scale necessary to provide high-quality, specialist capabilities

A complete Capability Development system would tend to have services capable of moving firms some considerable distance up the capability staircase. At the top of the staircase, research-performing firms will be integrated well into global sources of science and technology. There is not a necessity for local or regional actors to meet their needs - though it may nonetheless be helpful, for example in influencing company decisions about where to locate R&D. A good innovation support infrastructure would have the following services available

⁴ There will be important exceptions to his generalisation – especially in the case of lock-in failures

- **Proactive mentoring** One of the most difficult problems to be overcome in helping SMEs develop capabilities is caused by the 'learning paradox'. That is that until you have learnt something you cannot properly specify what you need to learn. Someone in the infrastructure is needed who has a brief to guide firms - especially those with limited technological capabilities - in identifying their needs and finding ways to satisfy them
- **Basic, general-purpose capability development services** To raise SMEs' competences, not only in technology but also in the basics of business, there need to be sources of practical help and training close at hand. Issues such as Quality, simple manufacturing strategy and use of IT are generic, yet these are areas where many SMEs need help. Some of these services are useful to firms at the 'Low-tech SME' stage in development; all have relevance to the 'Minimum Capability' stage, and provide an important basis for moving firms up the capabilities staircase
- **Sector- or technology-specific capability development services** may not be more sophisticated than those considered above. However, for reasons of scale, they are certainly more difficult to deliver across the generality of the economy unless target firms are present in 'clusters' - especially where the sectors they address are relatively narrow
- **Technological development services** such as contract R&D can be bought by almost any firm with money to spend. However, adequately specifying and making good use of them requires a fair degree of internal capability. By the time a firm climbs to this point on the staircase, the questions are no longer about creating a level of internal technological capability but about making best use of it
- **R&D services** include collective R&D, research information and services to link companies with capabilities in universities and research institutes. These presuppose quite high levels of technological capability on the part of users. Most SMEs are not in a position even to have a conversation with university or research institute researchers, so users of this type of service are quite special

2 Finland

The Finnish system has undergone significant overhaul during the late 1990s and the agencies have yet to reach their final form and performance levels. The recent changes in Finnish system have been motivated by the EU membership, changes in regional and industrial policy, increasing importance of technology and knowledge intensive sectors, and a need for new types of financing. The aim has been to create a lean and more effective agency structure with less overlap and administrative burden.

In the Finnish system Sitra has a key role in venture capital markets since the publicly owned regional, national and international funds were brought under its control. Finnvera - established in 1999 - is a national risk financing organisation managing the bulk of loans and guarantees granted for SMEs and export projects. Grants and soft supports are mainly delivered through a network of 15 Employment and Economic Development Centres established in 1997. They manage EU, SME, Agri and employment programmes. These centres were modelled roughly the same way as the UK Business Links. However, in Finland the regional centres are direct administrative extensions of the three ministries - Agriculture, Employment, Trade and Industry. To improve the centres functionality their role as independent agencies has been consolidated by treating each centre as a single budget office and by expanding the director's decision making power.

TEKES, the national technology agency has experienced a significant budget growth during the second half of 1990s offering financing through numerous R&D programmes. The aim is that TEKES will also have an increasing role in regional development based on technological capability building. The rapid growth of the budget and task portfolio means that TEKES faces many challenges in its newly established role.

Exhibit 3 Finnish support organisations

| Organisation | Subordinate to /Co-ordinated by | Tasks |
|---|---|---|
| Ministry of interior affairs | Government | Regional development EU-funds co-ordinator -EAKR funds |
| Educational institutes | Ministry of Education | SME measures |
| Finnvera | Ministry of trade and industry 15 regional offices Domestic risk financing between 1 July 1998 – 31 Dec. 1999, 521 MEUR (FIM 3.1 billion) | Financing services, directed towards companies with 10 to 249 employees Has about 24,000 client enterprises |
| Finnish Industry Investment Ltd. | Ministry of trade and industry At the end of 1998, total commitments 57 MEUR (FIM 338 mill) in 20 funds. During the last year eight new commitments, totalling 17 MEUR (FIM 101 mill) | Venture capital financing, FIDE is 'fund of the funds' investing in more than 20 different VC funds in Finland |
| TEKES | Ministry of trade and industry National/regional organisation Total budget EUR 353 million (FIM 2.1 billion) in 2,454 projects. | Tekes, the National Technology Agency is the main financing organisation for applied and industrial R&D in Finland. The funds for financing are awarded from state budget. |
| Sitra | Parliament National organisation Sitra's operations are mainly financed through income from 336 MEUR (2 billion FIM) endowment capital and project finance. | Venture capital, Innovative projects Research Sitra's mission is to invest in technology firms and venture capital funds, both in Finland and abroad, and to finance and implement research, training and innovative projects of significant importance nationally. |
| Employment and Economic Development Centres (TE-keskus), | Ministry of trade and industry Ministry of agriculture Ministry of labour 15 regional centres, one-stop-shops | National Support & subsidies Agri businesses / farms Employment ESR funds, EU SME measures |
| Employment offices | TE-keskus / Ministry of labour | Local outlets for employment services |

2.1 Ministry of Trade and Industry

Entrepreneurship is seen as an engine that drives the growth of the country's economy and the force that renews it. Many sectors of administration are involved in promoting entrepreneurship.

The task of the Ministry of Trade and Industry is to improve the general business environment in which entrepreneurs operate. MTI also exercises an influence on new start-up companies and the growth and development of business ventures. A large-scale project to promote entrepreneurship - "The Decade of Entrepreneurship 1995-2005" - further supports these goals.

Twice a year, MTI publishes an SME barometer that looks at the development needs of SMEs and the outlook for them. It produces an annual SME report that describes the current state of business activities of SMEs.

The industrial policy division is responsible for SME policy at the ministry. An important instrument of MTI in providing services to Small and Medium-sized Enterprises is the Employment and Economic Development Centres (EEDC). Division for EED Centres is responsible for management and supervision of these regional centres.

2.1.1 Technology Department

The Technology Department is responsible for the development of technology policy, quality policy and technological infrastructure. It is in charge of planning, management and follow-up of the policy by setting general guidelines for technology and innovation policy and related measures. The objective is to contribute to a favourable development of Finnish industry and its competitiveness by means of technology policy. The Technology Department has three divisions:

- Division for International Technology Policy
- Division for Research and Foresight Studies
- Division for Quality Policy and Safety Technology

The above divisions are in charge of preparing general policy guidelines for technology, innovation policy and related measures, financing research and development, promoting the utilisation of technology, inventions and innovations and mapping out the needs for training deriving from technology and innovation policy. The Department is also in charge of matters concerning mining, prospecting and the administration relating to the exploitation of mineral resources. It is further responsible for biotechnology and genetic technology issues and industrial property rights relating to technology and innovation policy.

2.2 Finnish Industry Investment Ltd

Finnish Industry Investment Ltd is a government-owned investment company administered by the Ministry of Trade and Industry. The main objectives of Finnish Industry Investment Ltd are:

- to stimulate the development of professionally managed private sector venture capital industry in Finland
- to promote the growth of export oriented and innovative high-tech industry in Finland
- to establish ties with foreign investors and attract foreign private equity investments to Finland
- to promote the restructuring of industries
- to develop secondary markets and encourage co-operation between venture capital investors

2.3 FINNVERA - the Finnish Export Credit Guarantee Agency and Domestic Specialised Risk Financier

Finnvera's aim is to cover all business financing needs from start-up to large export projects and internationalisation. Finnvera supports domestic operations of small and medium sized companies by offering risk financing and guarantees. Financing is granted at commercial rates, but often involves riskier loans than commercial banks and 98% of the loans are granted without collateral. It often aims to share the risk with other banks. This has an important leveraging effect - Finnvera's involvement can be decisive for other banks' positive financing decisions.

Finnvera was formed on 1 January 1999 by merging the activities of the Kera Corporation and the Finnish Guarantee Board. Kera was a state owned company, which originally operated in less developed areas of the country (east and north Finland). Gradually the operation area expanded to cover the entire country and at the same time the regional policy evolved towards SME/economic development policy.

The merger process was initiated by the Ministry of Trade and Industry. At the first stage in 1997, evaluations were conducted in both the potentially merging organisations. During spring 1998 the merger decision was made, and a new managing director was appointed. In the autumn of 1998 Kera Ltd was taken over by the newly established Finnvera Ltd. At the beginning of 1999 the activities of the Finnish Export Credit Foundation were merged within Finnvera Ltd., which started full-scale operations 1.1.1999 under a new identity. At the end of the financial period on 31 December 1999, the Group included the 100% owned companies Spikera Oy and Fide Oy, Tietolaki Oy (85%) and three enterprises providing services in the sector of business premises. The number of partly-owned companies was 11. The Group employed an average of 400 people of which 390 were in the parent company.

Staff integration into the new organisation is a challenging and difficult task. In order to monitor progress, annual studies are being conducted on the organisation climate. These studies show positive developments over the two year period. Some of the progress results from an extensive staff training programme on products and new company management. This was launched immediately after Finnvera started to operate. Salaries and pension structures, holidays, retirement age and other benefits were synchronised by raising the remuneration level for those who had less favourable terms of employment. The fact that a number of people got better salaries and improved benefits helped the new agency formation process significantly.

Common computer networking is an essential part of the management - currently the group has more than one micro computer per employees. However, the two existing networks and databases are not yet fully integrated and transparent. However, integration work is in progress and the network already offers a great deal of information and provides an effective way to communicate. Another integrating feature is that support activities have been centralised in Helsinki. In addition, branch network managers have a monthly meeting where they exchange information and discuss the relevant issues.

2.3.1 Loans and guarantees - decision making and product range

For loan applications worth up to EUR 67.000 (FIM 400.000), existing Finnvera customers get decisions within two days. The actual processing time is a matter of hours. New customers and larger loans take more time. For instance, if a new customer wants to set up a factory he can expect to get a decision in two months time for a loan up to EUR 340.000 (FIM 2 Mill.). The extended time is necessary so that a feasibility study can be conducted. Applicants are classified into risk categories. The lower the risk the more power the regional manager has. The great majority of the decisions are made in the regional offices. Case officers can turn down applications without referring to their superiors, but positive decisions require the agreement of a regional manager. The regional unit can finance one firm up to 840.000 EUR, (FIM 5 Mill.) without referring to head office. At headquarters, decisions are made by the managing director and board of directors.

In the Finnish system loans and grants are handled by separate organisations which can thus develop clear profiles and competences. Finnvera is state owned Ltd. company specialised on high risk loans and export credit guarantees, whereas Enterprise and Employment Centres are the grant awarding body and direct extension of public administration.

Finnvera's domestic development and financing solutions are particularly geared towards small and medium- sized companies, and in this way Finnvera also helps to promote the government's regional policy objectives. Domestic loans and securities are directed to support business start-up and development, domestic supplies and investment. Finnvera is strengthening its role in application of the following EU financing schemes by managing

- The European Union's Growth and Environment Initiative worth EUR 28.6 Mill. (FIM 170 Mill.).
- The EU Joint Venture Initiative (JEV)
- The joint venture programme Phare (JOP/Russia) (which came to an end in 1999).
- The European Investment Fund-supported Growth guarantee programme targeted for businesses employing less than 100 staff. This is a part of the EU growth and employment initiative. (take up of the scheme has been good and the amount of guarantees rose to 60 Mmk (EUR 10 Mill.) within few months of the launch of the scheme
- Part of the EU structural funds, which will increase the supply of subsidised loans to the SMEs

The Domestic risk financing granted by Finnvera in 1999 totalled 520 MEUR (FIM 3.1 Billion). Of this sum working capital loans were about EUR 170 MEUR (FIM 1 Billion) domestic guarantees to secure loans from the banks 202 MEUR (FIM 1.2 Bill.), export credit and special guarantees 45 MEUR (FIM 270 Mill). 88 MEUR (FIM 520 MILL) for interest-subsidised special loans for establishing and developing SMEs. Of this sum 26 MEUR (FIM 152 Mill.) are micro loans for the enterprises employing less than five staff and 16 MEUR (FIM 95 Mill.) for female entrepreneurs. The value of environmental loans was 18MEUR (FIM 108 Mill.) and the demand is growing.

The state has stipulated a regional policy dimension on the terms of financing Finnvera provides. The interest rates are subsidised on a regional basis. The total amount of such subsidised loans in 2000 will be 106 MECU (630 Mmk). Also the state covered credit losses have regional dimension. As a result Finnvera can take more risk within the regions where the financing is scarcely available. The aim of this measure is to ensure an equal access to financing across the country. Finally, Finnvera can make use of the opportunities that the European Regional Development Fund (ERDF) financial measures offer.

2.3.2 Export Credit

Finnvera's subsidiary FIDE is the official Finnish Export Credit Agency (ECA) offering export credit guarantees and insurance. Export credit guarantees provide exporting companies and financiers with cover against commercial and/or political credit risks and enable the companies to finance export trade. FIDE Ltd offers companies and financial institutions an internationally competitive possibility to utilise OECD-term export credits by administrating the interest equalisation system and by developing the Finnish export finance system. FIDE provides companies and financial institutions with interest equalisation offers and concludes interest equalisation agreements with Finnish and foreign financial institutions. FIDE advises companies on the financing of exports and participates in the international co-operation of export financing, particularly in the OECD and the EU. Financial engineering and export credit guarantee decisions are made in the Major Customers and Export Guarantees - unit in Helsinki. Regional offices make most of the financing decisions relating to domestic business operations.

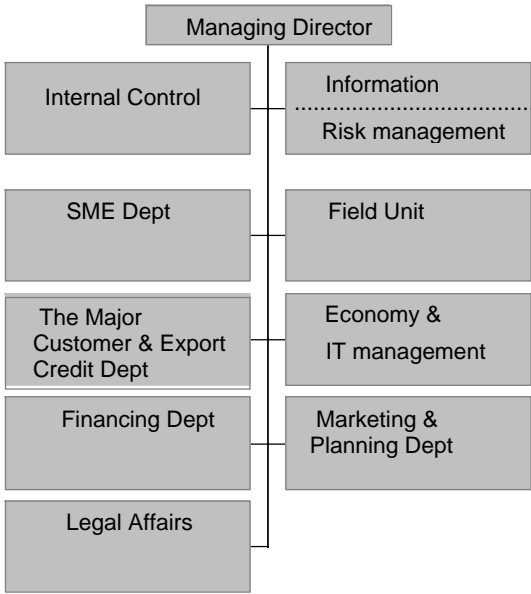
The Ministry of Trade and Industry can assign special goals for Finnvera such as the promotion of female entrepreneurship. In practice female entrepreneurs can get 0.5 per cent lower interest rate loans from Finnvera. Although the main task is risk financing the owner-managers receive a significant amount of business development sparring from the Finnvera representatives after the financing decision has been made.

2.3.3 Organisation and business process

Legislation provides the framework for Finnvera's activities. In practice the Ministry of Trade and Industry exercises ownership. Finnvera produces regular reports on the operations. The board of directors consists of the representatives from the ministries, industry and SME lobby groups. The highest administrative body is the parliamentary supervisory board consisting of MPs, business proprietors, regional organisation leaders, and representatives of educational institutes. The board of directors meet

fortnightly, in addition directors have a fortnightly meeting whenever necessary. The company has a corporate level strategic plan. Each regional unit has two planning meetings per year, one where the targets and resources are negotiated and another follow-up meeting. The entire staff of 400 meets once a year and each regional office has weekly internal meetings.

Exhibit 4 Finnvera's Organisation



The Finnvera organisation comprises nine key functions. The SME department is in operational charge of planning the regional offices activities, mainly because regional offices handle almost all SME customers (1-250 employees). The ‘field unit’ manages Finnvera’s 15 regional offices and offers management support for the SME department by providing integration and specialist resources - e.g. industry specific knowledge. It also takes care of customers which employ over 250 staff, and EU related matters. The major customer & export credit department is handling international matters and large project guarantees. Marketing department is in charge of business planning, development, marketing and human resources. Other departments provide management support functions.

Finnvera's national network of services is aimed to secure flexible handling of projects and fast decision-making, with all Finnvera's 16 offices providing specialised financing services for domestic operations, exports and internationalisation of clients. The regional network is based on the Kera offices, which have been established over a 25 year period. The company also has offices in Brussels and St. Petersburg, specialised in information gathering and lobbying. Head office operations are located in Helsinki, Kuopio and Oulu. Sixty per cent of the personnel work in various customer service tasks in the 15 regional offices, in the field operations unit and in the four business units. The largest occupational groups are business analyst and financial secretaries working in the regional offices. Other expert positions include country,

bank, export credit, project specialists and analyst working in the Large firm department and export credit guarantees.

The limits to delegation of financial authority in Finnvera are very clearly defined and under constant development. This is considered a very important issue in multi-site organisation. The financing process starts by a research of the applicant firm, followed by its classification into risk category. The lower the risk the more power the regional manager has. Regional units can finance one firm up to EUR 840.000 (FIM 5 Mill.) without referring to the central office. In the central organisation financing decisions are made by the managing director and by the board of directors.

Each regional office has a board which includes members from the central office and local decision-makers such as civic and business leaders. This board provides a forum for

- Information & knowledge exchange between region, branch office and central office
- Central office control in a positive sense, regular meetings and contact person
- Improving sensitivity to local needs
- Problem solving at an early stage at the local level

The board of the regional office has a key role in bringing together regional issues and the views of the central office. The board membership gives a formal position for the regional lobby. Thus, influence and responsibility are combined in a healthy manner.

2.3.4 Customer interface and marketing

Direct marketing and its customer magazine are Finnvera's main marketing activities. Sign posting by other organisations is also a very important source of new customers - in total 4.666 during 1999. Banks, insurance companies, MTI, TEKES and local enterprise centres recommend Finnvera for the small firms and start-ups.

The total customer base is 24.000 of which 20.000 employ less than 10 staff. Reaching a large number of very small firms is a marketing challenge. Small firms' share of the total financing is only about 420 MEUR (FIM 2.5 Billion) of the total of 3.87 BEUR (FIM 23 Billion) portfolio. The bulk of the money goes to large firms whereas small firm portfolio consists of a very large number of small loans.

During the worst recession in the early 1990s the share of non-performing loans was 4%. Currently their share of the portfolio is 1.4%. Close monitoring of payments is the main way to control customers' payments. Delays trigger swift action. In such situation the customer will be approached and the reasons for the delay will be tackled immediately.

Each of the 15 regional offices has 5-10 case officers, each specialising on two to three industries and having a portfolio of around 100 customers. The head office has eight industry specialists who also provide advice and recommendations to regional offices. Finnvera signposts customers to other customers when needed - often to a commercial bank. Typically, Finnvera and the customer together negotiate a financial package. This works well because case officers in the regional offices know are well networked

among other local actors who may play part in the financing. Finnvera's aim is to be a complementary part of the financial system, not a competitor to commercial banks. In this respect commercial banks were consulted before Finnvera and its targets were established.

2.4 TEKES

Tekes, the National Technology Agency is the main financing organisation for applied and industrial R&D in Finland. The primary objective of Tekes is to promote the competitiveness of Finnish industry and the service sector by technological means. Activities should diversify production structures, increase production and exports, and create a foundation for employment and social well-being.

Tekes offers channels for co-operation with Finnish companies, universities and research institutes. The agency co-ordinates and offers financial support for participation in international technology initiatives, including EU research programmes, EUREKA, research activities of OECD's energy organisation IEA (International Energy Agency), European Co-operation in Scientific and Technical research (COST), European Space Agency (ESA) and Nordic co-operation.

Tekes also offers a network of Technology Counsellors whose aim is to increase technological co-operation between Finland and the countries where they are based. The main functions are

- Framing and preparation of national technology policy
- Preparing, financing and co-ordination of national technology programmes
- Financing applied technical research and risk-intensive industrial R&D projects
- Financing and co-ordination of international technological co-operation
- SME advisory services in technology transfer and exploitation

2.5 SITRA

Sitra, the Finnish National Fund for Research and Development, is an independent public fund on the responsibility of the Finnish Parliament. Sitra's operations are mainly financed through income from 336 MEUR (FIM 2 Bill.) endowment capital and project finance. Sitra has in total 70 employees including project staff. Sitra's mission is to invest in technology firms and venture capital funds, both in Finland and abroad, and to finance and implement research, training and innovative projects of national importance.

Sitra's main goals are to facilitate Finland's social and economic adaptation to international changes, chart and present new strategic alternatives, to increase the competitiveness of the Finnish economy, as well as to identify, develop and test new instruments with an impact on the country's competitiveness.

2.6 Employment and Economic Development Centres (EEDC)

Employment and Economic Development Centres combine the regional units of three ministries: the Ministry of Trade and Industry, the Ministry of Agriculture and

Forestry, and the Ministry of Labour. These joint regional centres provide services to businesses, farmers and individuals in 15 regions. They have been assigned the following tasks:

- support and advise SMEs in the different phases of their life-cycle
- promote the technological development of their client companies, assisting them with export and internationalisation issues
- implement regional labour policy
- plan and organise training and education for adults in terms of the official labour policy
- promote farming and rural industries
- develop fisheries
- contribute to the overall development of the region

Each regional Employment and Economic Development Centre provides the same services that were previously provided by the regional units of the three ministries. The centres are also significant channels for EU finance and their aim is to make EU project work increasingly effective tool of economic development.

In the long run, the aim of the single organisation will be a simplified customer interface - a one-stop-shop - in employment-related and industrial matters. Each centre hosts a business service desk, which represents a step forward in developing the customer interface. These desks offer access to the best available specialists from each centre's Business, Labour Market, and Rural Departments and they work in close co-operation with Tekes, Finnvera, and Finpro (the Finnish Foreign Trade Association). They can offer assistance in the establishment, growth and development of a company and in the matters associated with internationalisation. Each service desk offer an access to advice, assist in selecting suitable specialists, finance enterprise projects, train and offer guidance in utilising the business service network. The aim is to serve clients throughout the various stages in the life cycle of the enterprise. The Business Departments of each EED Centre are in a position to partially finance enterprise investment and development projects. The financing activities are sustained by legislation that deals with enterprise aid and by various other statutes. In addition to aid granted by the Finnish State, the centres manage funds released by the European Regional Fund. The most important forms of financing are

- Investment aid
- Small-business aid
- Development aid for SMEs
- Operational conditions aid
- Internationalisation aid
- Energy subsidy

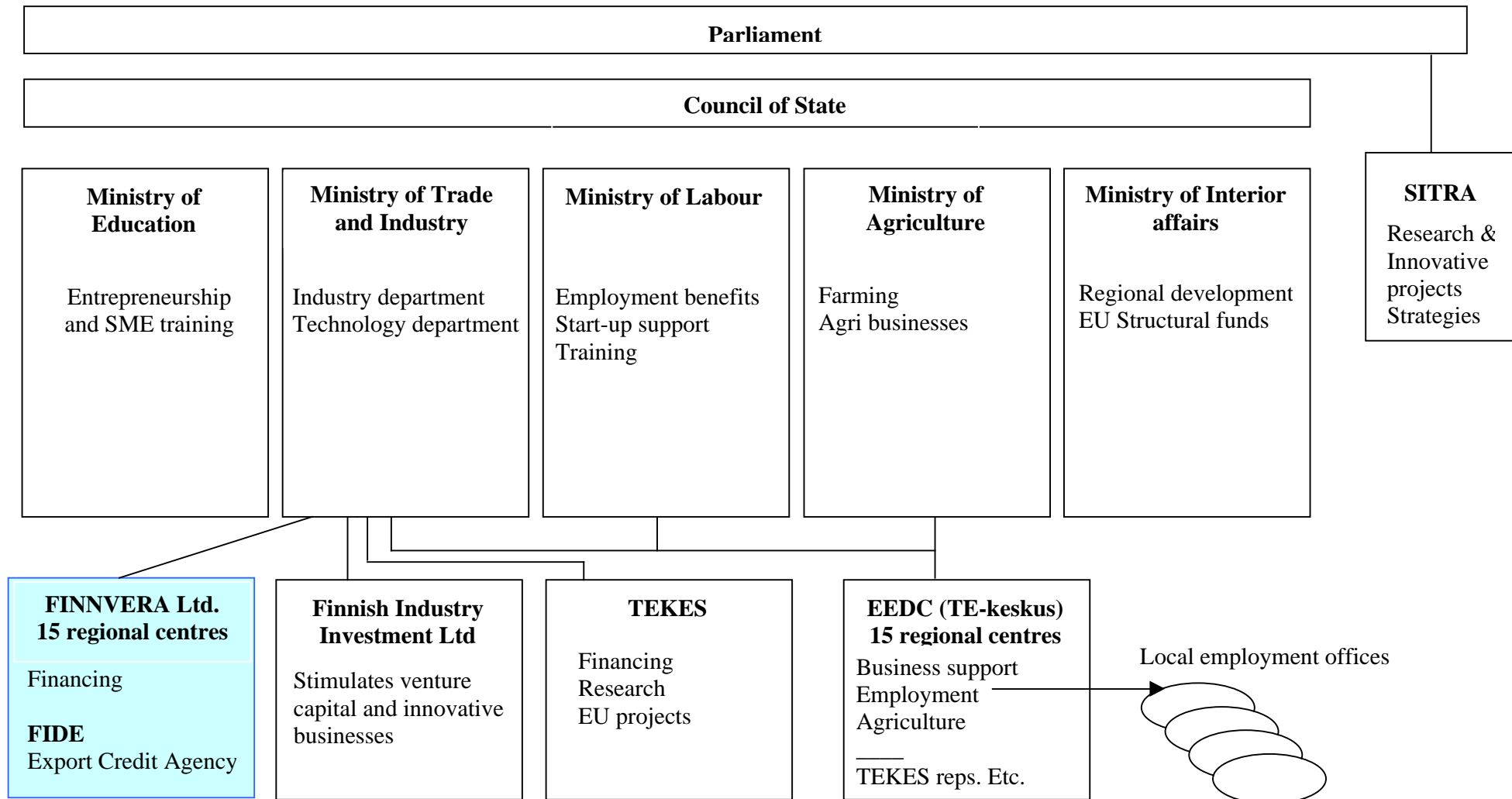
Regional investment aid may be granted to manufacturing, tourist, and support-service enterprises which initiate or expand operations within the development regions or in the areas undergoing structural change, and which can demonstrate that they have the prerequisites for profitable operation. The object of this form of aid is to increase the

SME base and thereby strengthen the economy. The technology unit provides enterprises with Tekes financing for projects associated with the development and planning of advanced products, services, and production methods. Product development financing may be provided in the form of aid or loans, or a development loan based on capital conditions. Depending on the project type and the size of the enterprise financing can be granted at most 25-50% or a loan at most 60% of the development project's costs. SMEs may be granted 10 percentage points greater aid. In evaluating the project, special attention is paid to the following factors

- The technology level and the desired competitive advantage
- The desired turnover and exports achievable by the project
- Company resources and its potential to realise the project

Training organised by the Business Department is targeted at company management, key personnel and persons who intend becoming entrepreneurs. The programme includes training in establishing a company, task and problem-related training, company analysis and development training, and management training. The bulk of the training is carried out in company groups as wide-ranging customised development projects which are often partly financed by the European Social Fund.

Exhibit 5 The Finnish system



2.7 Concluding remarks - Finland

The Finnish system for innovation and SME support has gone through a systematic change during the 1990s. The resulting structure is better equipped to make use of EU supports, places more emphasis on technology based growth and offers a one-stop-shop interface for the SMEs across the country.

Newly established Economic and Employment Development Centres provide a single contact point where the enterprises can get needed services at every stage of their life cycle. Each centre can offer a wide range of support in relation to training, financing and technology. There is a problem which may still plague the EED Centres functionality, namely the fact that they remain under control of three different ministries and thus they are a direct extension of state bureaucracy. The administrative problems have already been recognised, leading to some changes. Each Centre now has a single administrative budget to which all the ministries contribute. Moreover, the position of the Centres' director has been made more prominent with the view that it will strengthen the Centres ability to work as a single entity.

Finnvera is another key development agency in Finland. It is a merger of several independent agencies and it started to operate in 1998. Finnvera offers a single outlet for financing across the country through its 15 regional offices. Although Finnvera is a full service agency for financial matters it does not offer any grants or subsidies. In light of possible conflicts of interest, grant financing is delivered through EED Centre network. Finnvera has had a very systematic way to build its organisation since it was established and it seems to be well on the way towards being an effective state financing agency.

Overall the change process in Finland has been very systematic. It will take time before the structures take their final form and the agencies are able to perform to their full capacity. Overall, there is no way of escaping the costs and negative effects of the radical changes. However, there is reason to believe that the new system is better able to deliver services and meet customers needs. It is important that the agency structure can now focus on customer service after the structural changes have been completed.

3 France

The French support system for SMEs and regions has some very distinctive features. The entire system is strikingly complex and difficult to decipher. Despite this, it seems that the complex bureaucratic system work reasonably effectively. A key ingredient of this success is the relative stability of the agency structure. Although constant development does happen, the ANVAR case illustrates that a combination of stability and the distinctively French way to ‘interpret’ bureaucratic rules can result in a well functioning support system. However, the constantly evolving system is becoming increasingly complicated as layers of programmes, agencies and measures continue to accumulate.

The French are now focusing on promotion and diffusion of an innovation culture. It is mainly encouraged by

- Providing financial support for SME’s which hire students or researchers to work with an innovative project, often in co-operation with public research bodies
- Promoting co-operation between public research institutes and private firms, organised in thematic research networks
- Informing policy makers by conducting statistical studies and by compiling a table of innovation indicators on information technology, biotechnology and new materials sectors

Ministry of Education, Research and Technology (MENRT) and the Ministry of Economy, Finance and Industry (MEFI) are the most important government actors in charge of research and innovation promotion activities. In the French system programme framework and priorities are set on national level but the implementation of the research and innovation policy is left to regional actors. A result is that national priorities are not always in line with the regional implementation. As such the situation where two ministries are involved in innovation policy related activities is somewhat problematic. This is reflected on regional level where the complex agency structure can be confusing for SMEs.

Even if a regional “one stop agency” for SME’s will not be reality for some time, authorities have realised the existing problems and they are galvanising their efforts by setting up regional bodies to co-ordinate innovation promotion for SMEs. The four main executive agencies are

- National research and innovation agency (ANVAR)
- Regional government office for industry, research and environment (DRIRE)
Regional Delegate for Research and Technology (DRRT)
- Regional councils

Research networks set up by the MENRT involve public research institutes and private firms. The participants work together to set the research priorities which are mainly geared to the needs of larger firms able to make use of the leading edge research.

SMEs needs tend to be for simpler help, and they can benefit little from these networks. Moreover, the assistance offered at the regional level is often characterised by administrative confusion because both national and regional agencies offer various support measures for SMEs. In some regions more than 110 support measures are offered by around 70 public or semi-public agencies (national and regional agencies, technology transfer programmes and associations). In this respect, the need for a co-ordination at regional level is clear. This requires closer co-operation between the state agencies and a more transparent innovation support system, which is better able to cater for SME needs. The goal of setting up a 'one stop' agency in each region is difficult to achieve, given the complexity of the system and rivalry between national agencies. Political interference and mistrust between regional authorities and the state - often accused of imposing its priorities on regions - are not helping the creation of more transparent support system.

Since 1999 a number of measures have been outlined to address these problems, including the creation of incubators within universities and greater co-operation between local research establishments, local authorities and advisory bodies. In each region of France, a technology diffusion network (RDT) co-ordinates innovation promotion to SMEs.

The French case illustrates that there is a need for good co-ordination between local, regional and national support structures. This requires shared objectives and jointly agreed priorities for research and technology development. In addition, responsibility for individual measures needs to be clearly defined. Finally, there is a need for an independent evaluation of any new measure before it is widely introduced to the markets.

Exhibit 6 French Support Organisations

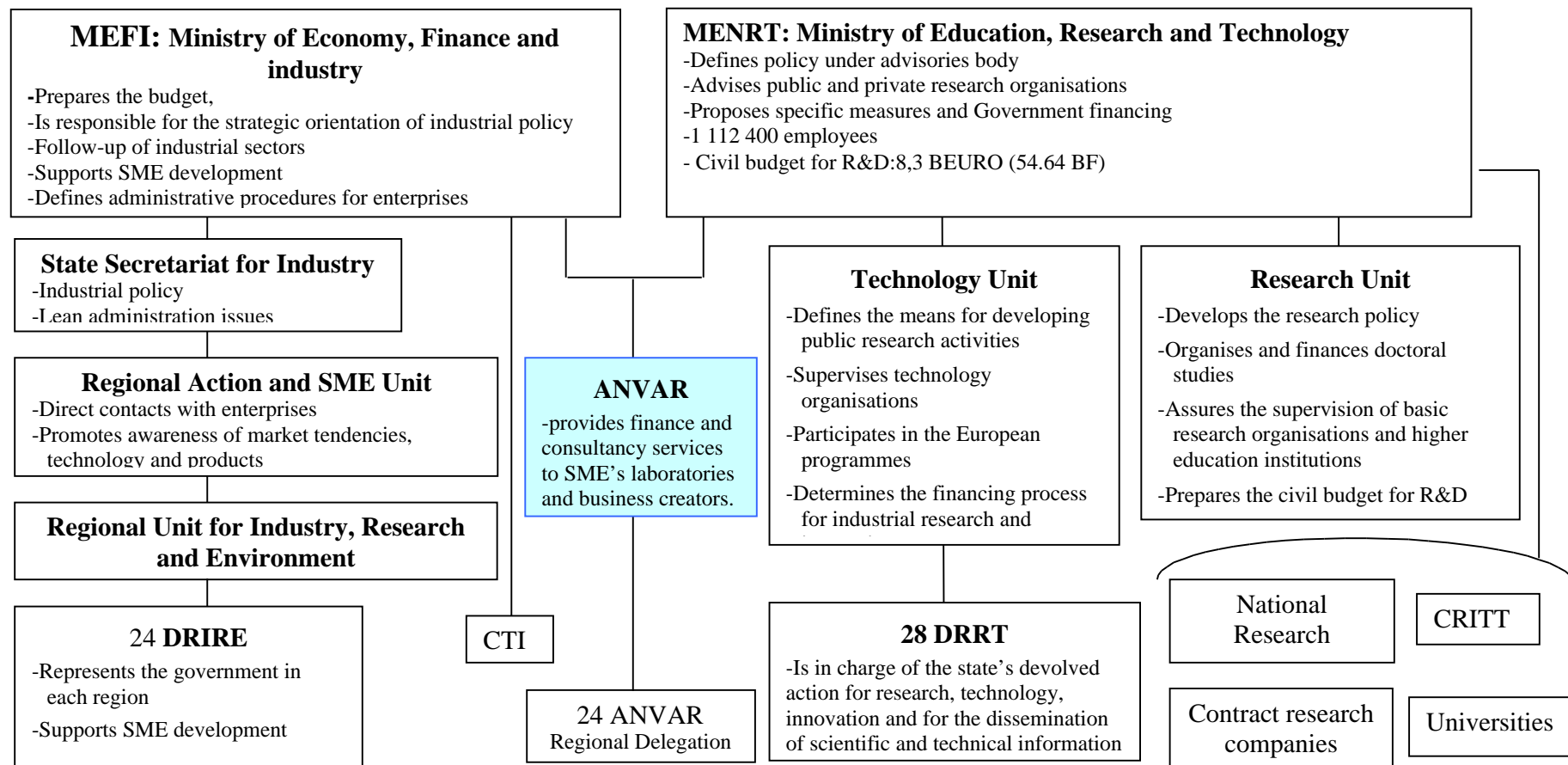
| ORGANISATIONS | Control | Tasks |
|---|---|--|
| Policy planning committee (Commissariat General Du Plan) | -Prime Minister | Mission: To inform public policy-making and to strengthen the cohesion of the State and the coherence of its action. Functions : - <u>Co-ordination</u> : The Plan provides a forum, which brings together different interest groups to work together in task groups and committees and formulate proposals. - <u>Forecasting</u> : The Plan undertakes foresight studies on all subjects of interest for the future of the Nation and for framing national policies. - <u>Assessment</u> : The Plan ensures the assessment of public policies and contracts between the State and the regional divisions. The purpose of such assessment is to gain a perspective on national choices and to show the cost-effectiveness of public expenditure. |
| MEFI: Ministry of Economy, Finance and Industry | - 179,705 persons - 13,83 BEuro (90,74 BillF) | It is responsible for the preparation and the realisation of the budget, the fiscal regulation, competitiveness, and a range of other monetary and financial affairs. In the field of industry, the Ministry is responsible for the strategic orientation of industrial policy, the follow-up of industrial sectors and support for SME's and the definition of administrative procedures for enterprises. |
| MENRT: Ministry of Education, Research and Technology | - Civil R&D budget 8,33 Beuro (54,64 BillF) -1 112 400 staff (320 800 scientists, technicians and administrative staff, 154 800 researchers) | The Ministry is responsible for education, research and innovation policy. In the field of research it defines policy together with advisory bodies, advises public and private research organisations and proposes specific measures and financing. Contracts with public research organisations and universities define the commitment by public organisations in terms of scientific objectives and technology transfer and the financial commitments of the Ministry itself. |
| State Secretariat for Industry (Secretariat d'Etat à l'Industrie) | MEFI | Responsible for industrial policy, energy and raw material sectors, as well as administrative simplification for enterprises. The regional action and SME Unit (Direction de l'action regionale et des PMI) is in direct contact with companies and promoting awareness of market tendencies, technology and products. This Unit creates and follows measures implemented by the regional arms of the Ministry (DRIRE). |
| Research Unit | MENRT | Mission: - To develop research policy, - To organise and to finance doctoral studies |

| | | |
|---|---|--|
| (Direction de la recherche) | | <ul style="list-style-type: none"> - To assure the supervision of basic research organisations under its authority, of higher education institutions. -To prepare the civil budget for research and technological development. - To promote the information society |
| Technology Unit (Direction de la technologie) | MENRT | Focused on technological development and innovation policies. <ul style="list-style-type: none"> - defines the means for developing public research - supervises technology organisations under the ministry's authority - participates to the development of research and technological programmes funded by the European Union. - determines the financing process for industrial research and innovation support. |
| ANVAR National research and innovation agency 449 staff Budget 215 MEUR | -MEFI / secretary of State for SMEs, Commerce and Craft -MENRT | <p>Mission: provides finance and consultancy services through its 24 regional offices to SMEs, laboratories and entrepreneurs to help them to overcome technical, commercial and financial challenges linked with innovation.</p> <p>Fields of activity :</p> <ul style="list-style-type: none"> - finance and support for innovative projects (new products, process or services), from feasibility studies to preparation of the industrial launch, - creation of innovative companies, - technology transfer, - searches equity for innovative companies, - European and International partnerships, - help in the recruitment for innovation schemes, - help for projects led by 15-25 years olds, - dissemination of information and promotion of innovation. <p>European and international network: Taftie (association for technology implementation in Europe) which links about 15 equivalent organisations to ANVAR. It has also signed bilateral agreements with similar organisations all over the world.</p> |
| National research organisations | -MENRT | 9 EPST(public institutions of scientific and technological nature) received in 1999 22.4 BillionF subsidies (3.44 BEuro). They employed 44024 persons of whom 17316 were researchers. The others organisations received 17.7 BillionF (2.72 BEuro) and occupied 18015 persons of whom 9164 searchers. |
| DRIRE: Regional offices for industry, research and environment | -MEFI / Industry State secretary | They represent the Government's policy at a regional level in industry, research and environment issues, and use central government powers in each region. The key objective is to support SME and industrial development. The industrial development department helps enterprises to manage their projects by offering financial support for businesses with the aim to: <ul style="list-style-type: none"> - provide individual help in their development's projects, - to initiate actions which improve environment for development, |

| | | |
|---|--------|---|
| 24 DRIRE | | - know ledge of the regional and industrial infrastructure in order to understand and anticipate its evolution. |
| DRRT : Regional office for Research and Technology 28 offices | -MENRT | In charge of the state's devolved action for research, technology, innovation, and dissemination of scientific and technical information. |
| Regional councils | | The councils task is to influence local economic development. They provide direct and indirect assistance and are in charge of vocational training and of hubs of research and economic development. The councils co-fund the technological dissemination network. |

| | | |
|--|-------------------------|--|
| Systems for Technology Transfer and Dissemination | | |
| CTI Industry and technology network (Centres Techniques Industriels) | -MEFI, | 36 laboratories, 60 departments and 3200 researchers and engineers form 18 technical centres, which constitute the network which promotes technical progress and industrial quality's assurance. It is funded by taxes, industry contributions and European and French public contracts. |
| SRC Contract Research Companies (Societes de recherche sous contrat) | -Needs ANVAR's approval | The main activities are research and industrial development. They represent more than 1 Bill. F and can be shared in 3 categories: 26 independent companies / SRC (1500 staff.), 10 associations (720 staff), and 10 collective research centres (350 staff) |
| CRITT Regional innovation and technology transfer centres | -MENRT | The centres have a multiplicity of statutes and their missions are extremely diversified: training new technologies, public laboratories researches development, technology advisory services for SMEs, specific technology promotion measures. |
| RDT Technology diffusion networks (Reseau de Diffusion Technologique) | | This network brings together the different public actors involved in the technology transfer and industrial development. There are 21 regional networks which get together to form an interregional network. It has more than 1300 advisers. |

Exhibit 7 The French system (reviewed bodies)



3.1 Policy support and advisory bodies

The French system for innovation and regional development consists of more than 100 organisations and actors. The following section presents the most important public and private actors involved in regional development, financing and promotion of new enterprises.

The policy planning unit (commissariat general du Plan) operates under the authority of the Prime Minister. It has a mandate to inform public policy-making and strengthen the cohesion of the state and the coherent actions. These targets are pursued through three key functions: co-ordination, forecasting and assessment. The unit can enhance co-ordination by providing a natural setting where different actors from the economic, social and labour spheres work together in groups and committees formulating proposals for actions. The planning unit undertakes forward-looking studies on all subjects of interest for the future of the Nation and framing of policy. The planning unit has a government mandate to commission assessments and evaluations of public policies and contracts between the State and the regionals. The purpose of such assessment is to gain a perspective on national choices and to investigate the cost-effectiveness of public expenditure. In order to carry out these functions the Commissariat is composed of 6 departments

- Department of Social Affairs
- Department of Technology and Industry
- Department of Energy, Environment, Agriculture and Services
- International Economy and Finances Department
- Evaluation and Public Sector Modernisation Department
- Department of Studies and Research

Each one of the departments work with a number of associated agencies and researches centres.

The Inter-Ministry Committee of scientific and technical research - CIRST is responsible to the Prime Minister. It meets once a year to determine the goals of national research and technology policy.

The Science Academy has responsibility to produce a bi-annual report on the state of research in France.

The National Council of Science is responsible for the Minister of Research. It has 20 members who are prominent researchers in public and private sector organisations based in France and other European countries. These researchers advise the Government on research policy matters. The Council may organise thematic expert forums to develop further expertise.

The Strategic Committee for high education and research is responsible for preparing schemes for public services in its field.

3.2 Government departments and ministries

3.2.1 The Ministry of Education, Research and Technology MENRT

The ministry is responsible for education, research and innovation policy. In the field of research it defines policy under advisory bodies, advises public and private research organisations (as the CNRS) and proposes specific measures and financing by the Government. The Ministry sets up a four year contract with public research organisations and universities which are under its control. The contracts define the commitment from public organisations in terms of scientific objectives and technology transfer and the commitments of the Ministry in terms of financing.

The Technology Unit (Direction de la Technologie) of the Ministry of Research seeks to enhance the value of the research and co-operation between enterprises and state research institutes. The technology Unit is also responsible for various technological organisations such as: National Environmental Agency (ADEME), Agency for technologies diffusion (ADIT), National research and innovation agency (ANVAR), The French Atomic Energy Commission (CEA), French research institute for exploitation of the sea (IFREMER), Agricultural and environmental engineering research (CEMAGREF).

Technology Unit co-ordinates and monitors R&D programmes financed by the European Commission. The Unit is also organising the financing of research and innovation programmes and it manages the “Technology Research Fund” (FRT). The Technology Unit is divided in two sub-units and four technology departments :

- Unit of innovation and technology development
- Unit of educational and communication technologies

There are also technology departments that are in charge of sectors which are strategic for the development of the country. They ensure that public research organisations follow government priorities and several thematic networks have been established around various sectors such as

- Space
- Biotechnology's and agro-industries
- Telecommunication and computer science
- Energy, transport, environment and natural resources

The Innovation and Technology Unit (Sous-direction de l'innovation et de la technologie) has responsibility to ensure the development of innovation through seven general actions

- Management of the new law for innovation
- Development of thematic technology networks
- Measures in supporting enterprise creation
- Defining policy on intellectual property
- Managing the Regional Delegate for the Ministry of Research

- Organisation of partnerships for European and international co-operation
- Management of training and employment programs for researchers

The Education and communication technologies Unit (Sous-direction des technologies éducatives et des technologies de la communication) is in charge of implementing Government policy on communication technology within the educational system. The Unit monitors the three year academic contracts, equipment for schools (public funds of 76 MEUR or FF 500 Mill.), training programmes and the interaction between computer science and training.

The Research Unit (Direction de la Recherche) is responsible for the development of the research activities and the evaluation of doctoral training and research teams. It monitors research programmes initiated by the Ministry and ensures co-ordination between public sector research organisations. Monitoring of international research co-operation is also one of the tasks the unit has. Organisationally it is divided into three sub-sections

- Research organisations and co-ordination of the budget
- University research
- Museums and technical & scientific culture

The Research Unit manages the budgets of several public research organisations, co-ordinates the production of the annual report on science and technology development and takes part in the preparation of legislation, agreements and procedures concerning research organisations.

Regional Research and Technology offices (DRRT) is a regional branch of the Ministry of Research. It has offices in every French region, each employing on average three staff. They are responsible for the implementation of national research policy and R&D-related financial support. For instance, the Ministry of Research can subsidise the salary of a researcher or an engineer employed by a private enterprise.

Regional offices also provide information for the regional partners on the national-level research activities by the Ministry of Research. These involve

- Co-ordination publicly funded regional research structures
- Reinforcement of existing regional technology clusters
- Develop and support technology transfer within the region
- Actions supporting the development of scientific and technological culture within each region

3.3 Ministry of Economy, Finance and Industry

The ministry is in charge of the state budget, the fiscal regulation, competitiveness, and a range of other financial matters. The Ministry is responsible for the strategic orientation of industrial policy, the follow-up of industrial sectors, support for SMEs and the legal framework for enterprises. The Ministry is divided in four State Secretariats

- Foreign trade
- Budget
- SME's, trade and craft industry
- Industry

Within the Ministry the *Industry Secretariat* (Le secretariat d'Etat à l'Industrie) is responsible for innovation and technology development. The Secretariat is responsible for industrial policy, energy and raw material sectors, as well as rationalising the administrative environment for enterprises. The secretariat is divided in three sub-units:

- Industry, Telecommunication and Information technologies Unit (DiGITIP)
- Regional action and small and medium enterprise Unit
- Energy and raw material Unit (DGEMP)

The Industry, Telecommunication and Information technologies Unit (DiGITIP) maintains innovation indicators table introduced by the Ministry in 1999. These tables are discussed in bi-annual meetings. The unit is also responsible for updating the French foresight exercise, 'Technology 2005'.

The regional action and SME's Unit (Direction de l'action régionale et des PME) is in direct contact with enterprises disseminating information on market tendencies, technologies and products. The Unit designs and monitors measures which are implemented by the regional representation of the Ministry DRIRE. It is also in charge of proposing and implementing measures promoting apprenticeship and training within enterprises. It governs various public bodies such as ANVAR, the Chambers of Commerce, state controlled technology transfer initiatives, National Institute for Intellectual Property and the National Agency promoting enterprise creation.

DRIRE - Regional Industry, Research and Environmental Protection Agencies are the regional offices of the French Ministry of Industry. DRIRE representatives are in direct contact with enterprises providing advisory services and support for enterprises in different stages of the development cycle. They provide assistance for enterprises through

- Promoting technology transfer to businesses from regional universities and research institutions
- Providing access to external expertise and the development of internal expertise by subsidising the employment costs of skilled staff and researchers
- Financing part of their investments and by promoting clustering & co-operative initiatives
- Monitoring and providing advice on environmental regulations
- Monitoring and inspecting nuclear installations

3.4 ANVAR - National research and innovation agency

ANVAR is a research and innovation agency in charge of technical and financial support to entrepreneurs, companies and laboratories willing to start innovation projects. The agency has developed expertise in innovation support by working with more than 20,000 companies and 30,000 technology based innovations. It is responsible for numerous innovation actions such as developing an international network with other European support agencies.

The ANVAR network consist of 24 regional offices and 4 units located in overseas regions (ex colonies). In total, ANVAR employs 490 staff of which 430 are full time employees. The agency has continued to increase the share of its workforce in its regional offices, which in 1998 employed 61% of the total workforce (against 58.5% in 1997). Managerial employees make up 54% of the ANVAR staff and 24% of the staff are technical specialists. Two thirds of ANVAR's workforce are women.

3.4.1 Marketing and customer interface

ANVAR has developed various marketing activities, which are adapted to regional needs. It circulates newsletters to businesses, laboratories and opinion leaders six times a year. It has publications presenting successful case histories and a radio programme broadcasting information to the potential customers. An Internet site is a relatively recent addition to ANVAR's media activities. Visits to potential customer businesses depend on the regional profile. For instance, the Paris office is not doing customer visits because all its capacity is absorbed in reacting to inquiries. In some other regions, where businesses are less active, ANVAR representatives visit customers more actively in order to make use of the available funding and other resources.

The agency is involved in many regional and international networks and collaborates with numerous partner organisations. On regional development issues, ANVAR works with Datar, the regional development agency, and with regional governments. In practice each of the organisations signposts customers to each other or some other appropriate agency. Datar co-ordinates and provides a contact point for various types of measures linked to enterprise development assistance. These include: grants, subsidies for business premises, tax and social security charge exemptions, and assistance from industrial groups affected by their re-structuring. The following provides an example of financial supports available in Burgundy region:

Business start-ups

- Venture Capital *up to 30%*
- Building Grant *up to 35%*
- Equipment & Machinery Cash Grant *up to 20%*
- Job Creation Cash Grant *up to 10,640 ECU (FF70,000) per job*
- Training Grant *up to 65%*
- Research Tax Credit
- Export, Consulting, Innovation Expenses Cash Grants
- Zero interest Loans *up to 76,000 ECU (FF 500,000)*

- Social Security expenses exemptions
- Business Tax and Income tax Exemption programs

New location for existing small and medium-sized businesses (less than 250 people)

- Building Grant *up to 35%*
- Equipment & Machinery Cash Grant *up to 20%*
- Job Creation Cash Grant *up to 10,640 ECU (FF70,000) per job*
- Training Grant *up to 65%*
- Research Tax Credit
- Export, Consulting, Innovation Expenses Cash Grants
- Low Interest Loans up to 152,000 ECU (FF 1,000,000)
- Venture Capital

Inward Foreign Direct Investment assistance for larger companies

- Building Grant
- Training Grant *up to 50%*
- Job Creation Grant *up to FF 70,000 per job*

In international context ANVAR is an active member of The Association for Technology Implementation in Europe (TAFTIE). This organisation provides a channel for co-operation, information and good practice exchange with other technology agencies. EUREKA and CRAFT programmes are examples of European programmes where ANVAR is actively involved.

3.4.2 ANVAR's business process

ANVAR activities are controlled by two ministries: MEFI (Ministry of economy, finance and industry); and MENRT (Ministry of education, research and technology). Its mission is to promote and finance innovation in French industry.

ANVAR was set up in its current form in 1980 and has since operated without going through any major organisational changes. The role of the agency is to respond to the needs and requirements of businesses through its 24 regional offices by offering a multi-faceted professional customer interface. The regional offices are semi-autonomous and have regional advisory boards with representatives from regional authorities, industry and educational institutes. ANVAR is a national contact point of the EU Innovation Relay Centre Network. Since 1992 ANVAR has totally given up its own research & development activities and focused solely on innovation support for SMEs employing up to 2000 staff.

Parliament makes a decision on ANVAR's budget, which is then allocated by the Paris head office to regions according to economic statistic indicators. In 1999 the agency had 3,135 projects worth 213 MECU (FF 1.4 Bill.). Most of the budget is spent on conditional interest-free loans, repayable if projects are successful. Most commonly, financing goes to feasibility & development projects (1332 projects) and recruiting a researcher or an engineer to work with an innovative project (1055).

ANVAR's basic funding 116 MECU (FF 765 Mill.) comes from the state, and is supplemented by 81 MECU (FF 536Mill.) roll over funds which are repayments from successful innovation projects. Typically, ANVAR support combines soft and hard financial measures. Customers are encouraged to sign up for packages which include both elements. The overall principle is to share the innovation risk with industrialists by:

- supporting people who are setting up new enterprises
- supporting innovative projects in new enterprises (less than 3 years old)
- supporting recruitment skilled staff into enterprises which have been operating for less than 3 years

Overall, advisory functions are an important activity, e.g. ANVAR can pay experts to work with the customer firms. These consultants conduct financial, technical, marketing & feasibility studies. ANVAR also provides information, guidance, access to the expert services for its customers by establishing contacts with research laboratories and technology transfer agencies.

3.4.3 Grants and loans

Financing is targeted to French SMEs, employing up to 2000 staff, and entrepreneurs starting up innovative enterprises. These can use the granted funds internally or buy in external services from research laboratories and consultants (see appendix 1, Public Research Organisations in France). Organisational capability building and further development of the project are often pre-condition for financial support. Until 1986 ANVAR could also finance large corporations but since then these customers have been a direct responsibility of the Ministry of economy, finance and industry.

ANVAR's role is complementary to commercial banks. It is a risk-sharing partner typically contributing to the high-risk part of the financing package. In any situation, ANVAR can finance only up to 50% of the project and typically the rest of the need is covered by the commercial banks. Offered innovation support is typically granted for projects related to innovation program or technology transfer.

Much of the support is given in the form of an interest-free loan, repayable only if the project is successful (See Exhibit 6). In 1999 this type of loans were granted for 3,135 applicants amounting to 212 MECU (FF 1.4 Bill.). About 65% of the conditional loans are being paid back, this amounts to 76 MECU (FF 500 mill.) which makes up one third of ANVAR's annual budget.

Exhibit 8 ANVAR Support

| ANVAR Budget for Innovation Support | | |
|--|-------|-------|
| | Cases | MEuro |
| Development and feasibility studies | 1279 | 164.6 |
| <i>for enterprises less than three years in business</i> | 354 | 48.8 |
| Recruitment support (engineers, researchers) | 963 | 22.8 |
| <i>for enterprises less than three years in business</i> | 342 | 8.1 |
| Technology transfer from Universities and research Institutes | 43 | 3.6 |
| Contract research | 49 | 11.6 |
| Technology diffusion network | 30 | 7.4 |
| Young people projects | 706 | 2.1 |
| Support for independent inventors | 65 | 0.5 |

ANVAR helps its customers to contact third party financiers, especially the venture capital funds. This type of financing is increasingly important because ‘new economy’ businesses are operating globally and they need very substantial financing already at the early start-up stage. Often the scale of state agency financing is not sufficient for this type of enterprises.

ANVAR aims to give priority to projects which involve research and development of commercially viable new products, services or processes. Support is also directed to development of new services associated with emerging technologies. Finance can cover any stage of the project, from idea formulation to commercialisation. In order to qualify for the support the applicant must prepare:

- Presentation of the project on the standardised application forms
- Description of the innovation and technology
- Financial plan and a cost estimate of the internal and external expenditures

Proposals are frequently evaluated together with the external experts. The decision is based on:

- Innovativeness and technical quality of the project,
- Economic growth potential, and;
- Industrial, financial and commercial capacity of the applicant.

The regional offices make their decisions on a monthly basis. Typically they are required to give an answer to the customers within 8 weeks of the submission of the application forms. The first payment to customer is made on signature of the

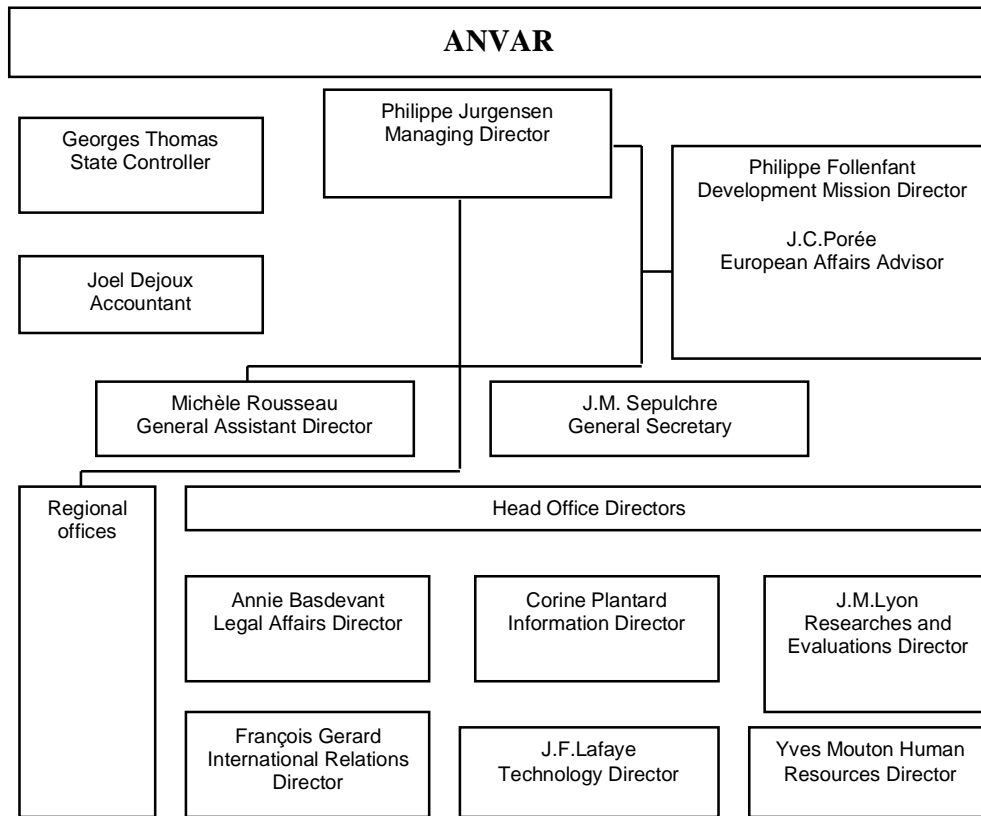
contract. Typically the applicant prepares the case with ANVAR over 1 to 6 months period before submitting the application. In the following stage, which typically takes 2 months, the agency gives advice to the applicant, analyses the business strategy and feasibility of the project. Loan decisions up to 230,000 EUROS (FF 1.5 mill.) can be done within the regional office and about 96 % of the loan decisions are made at the regional level. Only 14% of the submitted applications are rejected. This is largely due to the extensive preparation work which ANVAR and customers do together before the application is submitted.

3.4.4 Organisation

ANVAR has a relatively centralised decision making system which allows effective administrative co-ordination of regional activities. Human resource management, including recruiting, is centralised in the Paris head office. Further more, the Paris office is in charge of evaluation & research, international relations, legal issues, technology and information functions. Fifteen technical experts are also based in the Paris office providing support for all 24 regional offices. Every regional office has a steering group, which has an advisory role in relation to the director of the office. These advisory groups include civic leaders and representatives from the industry and educational institutions. In practice co-ordination between the centre and regions takes place in the regular meetings which are organised four to five times a year. Divisional meetings in the Paris office are organised on a weekly or fortnightly basis.

Besides centralised decision making, administrative effectiveness is related to the fact that the organisation has not gone through any major changes since 1980. Quality control in ANVAR is based on established set of administrative rules which the staff is expected to follow and there is a constant drive to improve the quality. For instance, these rules set two week standard for the application processing time. Currently ANVAR relies on two separate information systems, the mainframe system in Paris and PC-based systems in regional offices. These systems include customer data bases but there is no expert data base available. A project has been launched with the aim to integrate the existing information systems to a one organisation wide network.

Exhibit 9 ANVAR Organisation



The existing staff appraisal system is based on a yearly assessment, goal setting and development discussions. Business planning is an on-going process whereby staff can participate during the committee meetings. Ideas submitted are registered, studied and taken further, provided they have enough potential. ANVAR has a permanent training programme, in which each member of staff can participate within the limits of available time and budget. Overall, the budgeting system is relatively inflexible but the organisation has developed informal ways to increase flexibility. For instance, creative solutions are needed when the government decides to introduce a new initiative and ANVAR is obliged to respond it without delay and needs to redirect resources into the new focus area.

3.5 Advisory Bodies

The French Enterprises Association (MEDEF) represents over a million businesses of all sizes and sectors. Organised as an association under 1901 law, the French Enterprises Association is responsible for conducting research and actions which are in the mutual interest of the business community. Besides MEDEF, professional organisations represent the interests of specific occupational groups such as lawyers. In this context, MEDEF's duties are to

- Determine and publicise the business point of view
- Lobby the government for a favourable regulatory environment
- Make the views of business community known to the wider society

- Promote a favourable business climate and progressive management practices which are required in a globalised economy
- Inform wider society of businesses capability and willingness to make use of their national and international experience for benefit of the economy and social progress;
- Contribute to a constructive dialogue between businesses and their professional organisations
- Highlight the links between social protection, economy and demographic change

The business start-up agency (APCE) was created more than 20 years ago and has three specific missions

- Promotion of the entrepreneurship
- Information and assistance to entrepreneurs and enterprise creation
- Observation and analysis of the enterprise creation and introduction of measures which can facilitate the process

EVARISTE (Etude et Valorisation des Actions de Recherche et d'Innovation Scientifique et Technique pour les Entreprises) is an official web site of the French Ministry of Industry (MEFI), focused on innovation and technology transfer. It provides a starting point and access to numerous web sites, databases and links to research establishments.

Technology diffusion network (RDT) brings together public sector actors who are involved in technology transfer or industrial development (CCI, Technical Centre, DRIRE, DRRT, ANVAR, Laboratories, Universities, Regional Councils etc.). Members of the network have to undertake visits to regional SMEs in order to identify innovation needs. They are also responsible for delivering a large number of public sector measures for innovation promotion. Within this policy framework a particular emphasis is given to support for the SMEs that have not previously been in contact with public authorities or research establishments.

The Chamber of Commerce and industry provides information on enterprise creation and other recent developments. Regional Chambers of Commerce also maintain professional networks to support new entrepreneurs.

National association for technology transfer (ANRT) promotes the exchange of real life experiences on research and innovation.

3.6 French SME supports

| SME SUPPORTS | OBJECTIVES | RECIPIENTS | PROJECTS | TERMS AND CONDITIONS | CONTACTS |
|---|--|--|---|--|---|
| Support for innovation (aides au projet d'innovation) | To share the risks related to innovative projects | SMEs | R&D of new product or process/services associated to emerging technologies (1000 a year) | Interest-free loan repayable in case of success | -ANVAR regional offices |
| Technology diffusion measures (procedure de diffusion des techniques) ATOUT | To promote technology introduction | Industrial enterprises up to < 2000 employees | Projects aimed at improving the competitiveness of SME's products (PUCE/PUMA/LOGIC/DROP) (1000 a year) | 2 stages: -feasibility: study: subsidy up to 50 % of the expenditures, limit 300,000F. -carrying out the project: interest-free loan repayable if success up to 50% of the expenditures in the limit of 1 million F. | -DRIRE |
| Corporate tax credit for research (credit d'impôt recherche) | To promote R&D and standardisation | Industrial, trading and agricultural enterprises | -Depreciation of R&D properties allowances -R&D Staff expenses -R&D expenses paid to public research organisation -Patent costs -Standardisation costs (5000 a year) | Tax credit calculated according to R&D expenses and limited at 40MillF per company per year. | -Local tax office -State secretary for research (MENRT) -DRRT |
| Technology network contribution (prestation technologique de réseau) | To diagnose the needs of SMEs which are not familiar with technology analysis | Every SME with industrial activity | -Innovation project -Technology development project (1200 a year) | Subsidy up to 75% of the expenses up to 36,180 F | -ANVAR regional offices -DRIRE -Regional Council -DRRT -RDT |
| National call for proposal for the creation of incubator structure | To create an innovation support system in specified fields defined by the Ministry of Industry | Every SME or Laboratory subject to financial check | -Projects promoting co-operation between enterprises, laboratories and technical centres | Subsidy or repayable loan | -ANVAR regional offices -DRIRE -MEFI |

| | | | | | |
|--|---|--|--|---|--|
| Call for projects on key technologies ("Appel à projet Technologies Cles") | To improve French standing in specific technologies | Every sound SME, group of SMEs, technical centre, or research organisation | -Technology projects | 2 stages: -feasibility study; subsidy or loan up to 550,000F -development stage; repayable loan | -ANVAR regional offices -DRIRE -MEFI |
| Support for European technology partnership (aide au partenariat technologique européen) | To improve the SMEs opportunities for co-operation | SME's up to <2000 employees | -Innovation projects including European partnerships (100 a year) | -Subsidy up to 50% of the external expenses | -ANVAR regional offices |
| EUREKA | To encourage co-operation between enterprises and European research centres on R&D projects | Every sound enterprise | -Every innovative project (100 a year) | -Subsidy around 30% of the French contribution to the project | - ANVAR -Secretariat of EUREKA -DRIRE -MEFI -MENRT |

| SUPPORT FOR EMPLOYING SCIENTIFIC AND TECHNICAL STAFF | SALARIED RECEIPIENTS | TARGET COMPANIES | STATE FUNDS | CONTACTS |
|--|---|---|--|-------------------------|
| Recruitment support for innovation ARI | R&D Engineers / post-graduate students /researchers | SME's up to <2000 employees | Subsidy up to 200,000F, to cover 50% of the recruitment expenses during the first year | -ANVAR regional offices |
| Support for recruiting a manager in the industry ARC | Managers | SME 's up to <500 employees | Subsidy up to 50% of the recruitment expenses during the first year. Upper limit 200,000F | -DRIRE |
| Technology Research Diploma Agreement DRT | Engineers | SME's up to <500 employees | Lump sum subsidy 70,000F | -ANVAR regional offices |
| Support for recruiting PhD candidate on an applied research projects within companies CIFRE | Post-graduate students | Every French enterprise engaged in a research project | Annual inclusive subsidy of 94,200F during the 3 years of the agreement | -ANRT -DRRT |
| Support for recruiting technicians in innovative projects CORTECHS | Senior technicians <30 years old | SME's up to < 500 employees | Subsidy up to 70,000F | -ANVAR regional offices |

3.7 Concluding remarks - France

The French SME and innovation support systems is distinctively complex one. It consists of more than 100 organisations and a vast number of programmes. On positive side the French system is more stable than the support structures in many other countries where frequent overhauls tend to have a negative effect on agency efficiency. Stability may well explain the complexity of French system - while new actions are introduced, earlier programmes continue to run. As a result layers of policies and measures have accumulated to a currently existing complex system. However, French system offers plenty of support possibilities for SMEs and innovative enterprises. Despite the complexity the French system seems to work reasonably, possibly because the state administration has a very a long traditions in France.

The administration of the systems is not centralised and different ministries have their own specific agendas. Such shared responsibility causes problems, which tend to culminate at the regional and local level where a plethora of agencies and programmes operate in parallel without much of co-ordination. Resulting customer interface can be confusing for the SMEs. Recently these problems have been addressed by increasing co-ordination and network type organisations where several agencies, businesses and research institutes work together.

ANVAR is a national innovation agency which has an extensive regional network. For 20 years the organisation has remained essentially the same. Over this time the agency has developed a fairly effective administrations where many of the key support functions have been centralised. Sensitivity to regional particularities has been secured by including local civic leader in the advisory board of each branch office. Although ANVAR is an innovation agency it offers wide range services for SMEs with some innovative aspirations. Further more, ANVAR works in co-operation with regional councils and Datar which is an agency specialised in regional development. Overall, DRIRE, ANVAR, DRRT and regional councils provide the customer interface for the French SMEs.

4 Republic of Ireland

Since the early 1990s, the Republic of Ireland has had a strong track record of successful industrial policy and enterprise support. National policy has been formulated to make effective use of EU programmes and Ireland has been very successful in attracting inward investments. As a result Ireland is the second largest exporter of software and related products. Unemployment is at a record low level and overheating of the economy is currently the most evident threat to the stable development.

Over the last ten years the leading principle of the Irish policy has been that the enterprise support structures and processes need to follow the development of Irish industry. Since the industry has developed rapidly, the support system has gone through several overhauls. Although these radical changes may be necessary, it has been recognised that such changes require several years transition period. During this time the development agency will spend much of its energy on internal re-structuring rather than on enterprise support.

Enterprise Ireland (EI) was established in 1998 as a merger of several different agencies with the aim to have one customer interface which can offer tailored support for the enterprises across the Ireland. After two years time the agency is still developing its internal processes but it is becoming increasingly effective in performing its support functions. The key features of enterprise support in Ireland include

- Bottom up processes where the agency functions are developed on the basis of customer needs
- Support packages for enterprises include both financing and management capability development
- The aim of regional development is to create an infrastructure which provides a fertile ground for enterprise development

Regional development and enterprise promotion have distinct roles which support each other. *Enterprise Ireland* is the key development agency focusing on regional development and enterprises which employ more than 10 staff and are willing to grow. *Regional County and City Enterprise Boards* (CEB) are focusing on micro firms which employ less than 10 staff. The 35 CEBs provide support for small businesses with 10 employees or fewer. These boards are organised as locally controlled enterprise development companies operating in each county and urban local authority area in Ireland. Other key actors in enterprise development include *Department of Enterprise Trade and Employment* which is in charge of strategic development. *Forfás* is the policy advisory and co-ordination board for industrial development and science and technology in Ireland. It is the body in which the State's legal powers for industrial promotion and technology development have been vested. *FÁS - Training and Employment Authority* provides a wide range of services to the labour market including: training and re-training, employment schemes, placement and guidance. *Shannon Development* is a regional development agency which has a

mission to initiate, participate in and support economic development in both Urban & Rural areas of the Shannon Region. *Údarás na Gaeltachta* - the Gaeltacht Authority - was established by the Irish Government to promote the economic, social and cultural development of the native Irish-speaking regions. *Teagasc* is an agency which provides integrated research, advisory and training services for the agriculture and food industry in Ireland.

Exhibit 10 Irish support organisations

| Organisation | Funded by / co-ordinated by | Tasks |
|--|---|--|
| Forfás | Government 1997 Total Expenditure 608 MEUR. | The broad functions of Forfás are : * To advise the Minister on matters relating to the development of industry * To advise on the development and co-ordination of policy for Enterprise Ireland, IDA Ireland and other agencies established by or under statute * Encourage the development of industry, technology, marketing and human resources * Encourage the establishment and development of industrial undertakings from outside the State, and * Advise and co-ordinate Enterprise Ireland and IDA activities |
| Enterprise Ireland | Forfás Budget 132 MEUR One-stop-shop type of organisation, sign posting enterprises to services Network of 13 offices in Ireland and 30 offices world wide. | Government sponsored development agency helping ambitious companies to build capability. The agency has regional and overseas offices. It's key functions include: * Business Planning & Information * Research, Development & Design * Production & Operations * Marketing & Business Development * Human Resource Development * Finance for Growth |
| FAS - Irish Training and Employment Authority | FÁS activities are funded by the Irish Government, the European Social Fund and the European Regional Development Fund. FÁS is divided into 10 regions comprising 20 Training Centres and 53 Employment Offices. Budget 622 MEUR. | FAS provides a range of training and employment services to job seekers, community groups and employers. FÁS was established in January 1988 to provide a wide range of services to the labour market in Ireland. Its functions as laid down in the Act are to provide: * Employment and re-training schemes; * Job placement and guidance services; * Assistance to community groups and workers' co-operatives towards the creation of jobs; * Assistance to people seeking employment elsewhere in the European Union; * Consulting and human resource related services, on a commercial basis, outside the state. |
| Shannon Development | Regional development agency which as offices in seven counties, providing 'on the spot' advice and support on all aspects of the Company's developmental activities. | The mission is to initiate, participate in and support economic development in both Urban & Rural areas of the Counties-City of the Region in the businesses of manufacturing industry, tourism, services, food, agri-business and natural resources (Food Centre). |
| Udaras na Gaeltachta | Regional development agency | Promotes development of Gaeltacht (native Irish-speaking). Supports job creation in manufacturing, natural resources & modern services. |

| | | |
|---------------------------------|--|---|
| Teagasc | State sponsored body | Agriculture & food development authority. Includes R&D facilities of National Food Centre & Dairy Research Centre. |
| County Enterprise Boards | County Enterprise Boards - CEBs - are locally controlled enterprise development companies established in each county and urban local authority area | The function of the Boards is to develop indigenous enterprise potential and to stimulate economic activity at local level. This is done primarily by providing financial support, advice and training for the development of micro enterprise which have less than ten staff. CEBs support individuals, firms and community groups provided that the projects have the capacity to achieve commercial viability. |

4.1 Department of Enterprise Trade and Employment

The mandate of the Department of Enterprise Trade and Employment is to implement Government policy in five key areas: development of enterprise, employment promotion, trade development, protection of workers and the regulation of businesses. The above priorities are explained in detail in the Strategy Statement 1998/2000. The Department plays an active role in the development of EU and WTO policies to ensure that Ireland's interests are protected. In addition, the Department is the National Authority for the European Social Fund which currently provides some 381 MEUR (I£300Mill) funding annually to programmes and projects run by the public, private and community bodies.

The Offices which come under the aegis of the Department are:

- Companies Registration Office
- Patents Office
- Office of the Director of Consumer Affairs
- Office of the Registry of Friendly Societies
- Labour Court
- Labour Relations Commission
- Competition Authority
- Employment Appeals Tribunal

The Department also has policy responsibility for a number of state bodies

- Forfas
- IDA Ireland
- Shannon Development
- Enterprise Ireland
- FAS
- Health and Safety Authority (HSA)
- National Standards Authority of Ireland (NSAI)

The organisation of the Department has been divided into seven Divisions which broadly reflect distinct functional units which are in close co-operation with each other. In total there are over 900 staff employed in the Department in seven different locations in Dublin and one office in Kilkenny (Patents Office).

4.2 Forfás

Forfás is the policy advisory and co-ordination board for industrial development and science and technology in Ireland. It is the body in which the State's legal powers for industrial promotion and technology development have been vested. It is also the body through which powers are delegated to Enterprise Ireland for the promotion of indigenous industry and to IDA Ireland for the promotion of inward investment.

The role of the *Enterprise Policy and Planning Division* is

- To support the Board of Forfás in providing policy advice to the Minister for Enterprise and Employment on general enterprise development and promotional agency related issues
- Enterprise policy appraisal and development of longer term strategies for enterprise promotion in Ireland
- To co-ordinate and encourage operational consistency between the industrial development agencies
- To undertake and co-ordinate surveys at agency and regional level and disseminate the information derived

Enterprise Policy and Evaluation Department monitors, evaluates and proposes new directions for Irish enterprise policy. This involves focusing on

- Wider issues which affect enterprise development in Ireland, e.g., skills and human resources development, telecommunications, logistics, development of services and foreign investments
- The competitiveness of the Irish economy and business sector
- Monitoring the industrial development agencies performance and evaluating the effectiveness of industrial development programmes
- Encouraging co-operation between the operational agencies and facilitating overall co-ordination and

Finance and Tax Department of the Forfás set its priorities as

- Developing, evaluating and implementing finance and taxation policy from the perspective of enterprise development
- Providing specialist advice on Irish and international tax developments
- Making submissions for the annual budget and Finance Bills
- Reviewing the effectiveness of enterprise development programmes such as the Enterprise Areas Scheme, etc
- Ongoing monitoring of the availability of finance for enterprise development, and evaluating the role that initiatives such as seed and venture capital schemes, subsidised loans, loan guarantee schemes, etc. can play in this area
- Preparing and publishing a report on the reform of Irish Capital Markets

Exhibit 11 Enterprise Ireland Organisation

| ENTERPRISE IRELAND BOARD | | | | | | |
|---|---|--|--|---|---|--|
| CHIEF EXECUTIVE OFFICER Dan Flinter | | | | | | |
| Science & Innovation & Corporate support Service Feargal O Morain | Investment service Gerry Moloney | Food, Consumer, Britain & Region Mike Feeney | Industrial Products & Europe Gerry Murphy | Software & International Services; Americas, Asia | Technology service Brendan Finucane | Development Tom Maher |
| Corporate Services Paddy Hopkins -Grant payment -Legal Contracts -Client service Unit -International Administration -Information technology Science & Innovation Martin Lyes -International Programmes & EU Affairs -PATs Co-ordination & intellectual Property -RTI&Innovation Management -Regional/North-South -Innovation Initiatives and research Training HE-Strategic research/Logistic/Research policy Finance Jim Daly Human Resources Liam O Donohoe | Food & Timber Julie Sinnamon Consumer Products Giles O'Neill Britain & regions Tony Jones | | Group 1 Alan Dixon Group 2 Kevin Sherry Europe Michael Moriarty/Dusseldorf office & Jim Maguire/Paris Office | Software & Int. Trade services Patricia McIlister Americas John Corrigan Asia Paddy Delaney | Development Tom Kelly | -Technology Transfer & Business partnership -Operations unit -Excellence unit -International Identity development -International Media -Marketing -e commerce -Information -Quality -Design -Mentor Programme -Graduate placement -Promotion -HRD |
| | | | | | Equity Investment Proposal Evaluation | |

4.3 Enterprise Ireland

Enterprise Ireland, catering specifically for indigenous industry, was established in July 1998. The agency has 132 MEUR budget combining the resources of the former *Forbairt*, *Irish Trade Board* and the in-company training division of *FAS*. The aim of the new organisation employing 1040 staff is to end the multiplicity of agency schemes and move towards more tailored approach to assisting small businesses. The blue print for the merger was the Culliton report published 10 years ago. It establishes that enterprise support structures and processes need to follow the development of the Irish industry. Practical preparations started 6 months before any action was taken. According to management the merger related internal process absorbed 75% of their attention during a period of 12 months time and still now 18 months after it takes about 40% of the working time.

In operational matters, EI is an independent government agency and part of its director's job is to ensure that regional lobbying does not influence the operational work of the staff. Naturally lobbying brings up needs to which EI needs to respond in developing its activities. Regional boards are mainly monitoring bodies, which provide an institutionalised way to receive feed back from the elected members. Regional directors are required to liaise with local business community and Chambers of Commerce.

An internal staff survey is done once a year with the aim that it should indicate areas needing further development and progress achieved during the year. The process has been led by a high level co-ordinating committee chaired by the government secretary. Up to now merger related tensions have come up time to time but after two years the situation is getting much better. The different salary structures of the merging organisations were blended together so that if a person remained at a similar level in the new larger organisation they got an increase. The resulting organisation was not seen as a merger but as a totally new entity. Overall the process was carefully managed and especially the language used was seen as highly important. In order to promote the operational effectiveness of the new organisation managers have been charged disseminating information on new organisational developments, products and practices.

4.3.1 Marketing and customer interface

EI has two main tasks, enterprise development and regional development. In terms of company development the aim is to increase customer firms: **sales, exports and employment** by developing their competitiveness. Target group are firms which employ more than 10 staff and are willing to grow and increase exports and sales. County Enterprise Boards (CEB) have a task to develop micro firms which employ less than 10 staff. EI and CEB are actively working together and sign post customers to each other when ever it is necessary. EI is actively marketing its services to the firms in key target segment. According to EI the most difficult thing is to say no to a potential customer. In fact EI very seldom categorically says no to an applicant firm but they may give less support than the applicant asks or agree that after some development work the customer will come back and agree about the support. Key

industry sectors are: software and internationally traded services, industrial products and Food & consumer products.

4.3.2 The business process of Enterprise Ireland

Enterprise Ireland focuses its proactive efforts on the 20 % of potential customer firms that are seeking growth. Other firms get reactive support. Support measures are tailored according to customer firm needs. Recently the business mentor programme has been particularly popular and is seen as a great success.

EI has adopted a continuous planning process, driven by customer companies needs, to generate multi-annual budgets. It is characterised by a bottom-up approach where information is gathered from regional managers who have a portfolio of around 50 firms each. The objective of the planning process is to provide those services for which the targeted customers have demand. Since the market information comes from regional managers they are continuously involved in the planning process in co-operation with the staff in the central organisation. On the basis of the information regional managers provide, an estimate is made of how much the portfolio firms can *increase sales, exports and employment*. After this it is decided what measures EI can take and what resources it needs to be able to help these businesses to grow. These estimates will then become targets for the regional staff and they provide criteria for evaluating the results of their work. On a more detailed level each manager has a monthly plan of interaction with his portfolio firms. There is a yearly appraisal of individuals' strengths and weaknesses, after which parties agree together how skills will be developed. EI encourages staff to take relevant third level courses for which staff can get two weeks study leave, plus the costs of the training.

In addition to financing, capacity building support is offered in the following areas: business planning & information, research, development & design, production & operations, marketing & business development and human resource development. For instance, EI promotes good practice in manufacturing through World Class Manufacturing group. From the competitiveness point of view benchmarking is seen as the best way to learn.

Customer feedback is an important form of quality control in Enterprise Ireland. This is guaranteed by commissioning a yearly customer survey and by bringing key customers to meet the board of the EI. Regional representatives make frequent visits to their customer firms and collect relevant customer feed back.

Within the central organisation each directorate has regular management meetings. Some managers are also mixing a lot personally with the staff on daily basis. This is considered as the best way to exchange information. Formal meetings are being called together every six weeks time.

4.3.3 The regional network of Enterprise Ireland

The country has been divided into four areas largely based on the availability of EU supports. Regionalisation is reality also within the regions, e.g. EI tries to move businesses out of the central Dublin to the areas which have better supply of labour. This is one way to remove bottlenecks, which can prevent enterprise development.

The two main goals for the regional development are

- To build an infrastructure which allows business growth
- To ensure with third level colleges that businesses have appropriately trained staff available. EI can finance specific courses in educational institutes so that they can respond to industry needs, e.g. biotechnology and software industry

The regional network of Enterprise Ireland is largely based on existing offices of the merged agencies. This is an advantage because regional personnel already know their area and business portfolios very well. Regional units are managed with the help of a good corporate IT-network and customer knowledge databases. Through a matrix organisation and bottom-up processes, both regional and central office managers are involved in planning. Industry and other experts and regional managers work as a team and have regular meetings. This is also part of the policy development process. Experts work on those fields, which are considered strategic - such as software and food. Divisional manager and department managers can also provide expertise for the regional manager.

The existing policy framework dictates spending limits. All major projects are handled by the head office. County development boards co-ordinate different regional actors' activities. EI directors are personally involved in many strategy groups, which plan regional development, for instance, infrastructure development for the industry. These boards work in co-operation with the elected representatives of local bodies.

4.3.4 Financing

Enterprise Ireland's objective in providing finance to clients is to share risk in their growth and accelerate their competitive development. The focus is on helping to build **capability** within company as well as adding **capacity**. EI is also working to create the conditions where the private sector becomes the primary source of equity finance for expanding companies. A comprehensive information package and manual on financing has been developed in co-operation with PriceWaterhouseCoopers consulting. This package is a reader friendly presentation of available financing and it offers step-by-step financing advice for the aspiring entrepreneur.

Positive decisions on grants and loans are never made by a single individual. This is intended to protect employees, rather than to indicate a lack of trust. However, a case officer can take a negative decision on his own. The level of delegated power depends on the size of the financing under consideration. Board is the highest decision making body, followed by the investment committee, management committee and individual manager.

Time taken between application and final approval depends on the case at hand. The processing cycle can be up to six months. The process is iterative, so that EI representatives work actively together with the applicant. They do not simply hand out grants. The financing decision is typically made as a part of wider development process where soft capability development is coupled together with loans and grants.

In Ireland, the private sector takes care of commercial loans, and banks work in good co-operation with the EI. The parties discuss the market situation and one outcome of these efforts are the joint Venture Capital funds. EI has established a string of VC companies as joint ventures with private enterprises. These funds are driven by private sector partners. However, according to EI there is still need for further intervention in venture capital markets, in particular funds are needed which are able to handle large projects.

4.3.4.1 Funding for establishing a new business

The existing support for business start-ups includes the following measures

- Fast Track Start Up Companies
- Millennium Entrepreneur Fund
- Feasibility Studies: grant supports

The following sections describe each type of support briefly and in the end the principles of financial support used by the Enterprise Ireland.

Fast Track Start Up Companies

The support for start-up companies is targeted to meet the needs of high calibre, experienced managers, academics and entrepreneurs creating and building new companies likely to reach significant scale quickly with high growth and export potential. Enterprise Ireland can help by offering

- Multi-disciplinary development teams specialised in helping potential entrepreneurs to develop their concepts into commercially viable business plans
- By advising and assisting in all aspects of the crucial start-up phase.
- Continuous advice and support until the new enterprise grows to its full potential

Regional offices can help the company to liaise with specialists as required. If needed, Enterprise Ireland will assign a Development Adviser who acts as a key point of contact and gives an access to financial and other supports, including

- Help for evaluating and developing new business concept, including challenging and assisting in formulating the business plan
- Providing both practical and financial assistance for a feasibility study leading to the business plan
- Introduction to potential business partners, investors and financial & legal advisors
- Financial supports including management development, employment grants, capital grants and equity investment
- Access to the full range of Enterprise Ireland services such as: overseas offices, specialist technical expertise and market research resources

Other categories of start-up enterprise may find appropriate supports through their local County Enterprise Boards.

Millennium Entrepreneur Fund

This fund provides

- Seed Capital investment of up to I£100,000
- An experienced Company Mentor to work closely on key business aspects
- A Patron Company (a successful Irish based company) to advise and counsel the entrepreneur
- An Enterprise Ireland Development Advisor to assist in all aspects of business development

The target is to award 10 full investments of I£100,000 over a three year period. They will only be approved where high quality applications have been received which meet the Fund criteria. The Fund Board, consisting of representatives of the sponsors, will review applications and agree investments. When applying, the key Irish national should be resident overseas, and have lived and worked overseas for a minimum of 3 of the 5 previous years. Applications, at the sole discretion of the Fund Board, may also be considered from suitable applicants returning to Ireland within the six months prior to application, provided they meet the other overseas residency requirements.

The principles of financial support

According to Enterprise Ireland, the provision of financial assistance to firms is based on the following principles

1. The aim is to help firms develop to a point where ultimately they no longer need state supports
2. Focus on firms, in whatever current phase of development, which have a willingness and potential to grow
3. Supports to each individual client are customised to respond to the firm's real development needs
4. They will therefore be preceded by a careful analysis of those needs across the key business functions, within the framework of the Business Development Model
5. These supports will then be delivered over time in a systematic and streamlined, but flexible, way, to match the evolving needs of the firm along its growth path
6. The client's assigned Development Adviser maintains a pivotal role throughout, from early dialogue, to analysis and planning, through to ongoing delivery and review - all the time in partnership with the client
7. Reflecting the first principle, financing will tend to be more generous with SMEs until they grow into a more established phase
8. In line with Government policy and with European Commission agreement, supports for capacity building will be more generous in designated less developed regions of the country. However, the approach to supports for capability building will be uniform across all locations

9. Financial support packages meet the State Aid rules approved by the European Commission and set out in the National Development Plan. This places different limits on State Aid for new industrial investment according to regional designation
10. Financial supports should be repayable, based on the merits of partnership and risk sharing
11. Where possible partnerships are formed with the private sector to tackle market failures in terms of the nature and form of finance available to such firms
12. While it is our policy to encourage private sector providers of share capital, we acquire equity in our client companies on occasions such as
 - providing substantial levels of finance, in absolute or relative terms, to start-up or early stage projects;
 - where there is a later equity financing round, where the client requests it, or it is otherwise in Enterprise Ireland's financial interest;
 - where the client fails to raise the necessary equity from the private sector, but where Enterprise Ireland consider the client to merit State support

4.3.4.2 Funding for expanding an existing business

Funding for expanding an existing business can be obtained from EI or from third parties such as venture capital funds.

- Feasibility Studies: grant supports
- Funding for Expanding Capacity; third party funding

Feasibility Study Grant Programme helps businesses and individuals evaluate the viability of a new manufacturing or international services project. Grants may be available from Enterprise Ireland towards supporting feasibility studies such as investigating the viability of manufacturing a completely new product or process. Enterprise Ireland provides solutions, directly or with partners, to the problem of a shortage of finance for emerging companies seeking high growth. The aim is to support the private sector in developing financial instruments, which increase the number of options for Irish entrepreneurs.

Third party funding provides small and medium sized enterprises in Ireland with equity capital through the medium of Seed/Venture Capital funds. Enterprise Ireland administers this scheme which is co-financed by European Structural Funds. The scheme is targeted at Venture Capital Funds, which have the resources and management skills to make commercial investments in growth oriented SMEs. The overall objective of the measure is to stimulate growth and employment potential in these enterprises by the provision of additional equity funding. Funds of 44.5 MEUR (I£35Mill) have been allocated to the measure and, when matched with private sector finance, the total amount available for investment exceeds 89 MEUR (I£70Mill) over the period of the Operational Programme for Industry 1994-1999. Some 15 Venture Capital Funds have been set up by Enterprise Ireland in partnership with the private sector under the Seed and Venture Capital Measure of the Operational Programme 1994-99. A more recent plan is to establish also some larger venture capital funds, which can offer financing for major projects.

4.3.4.3 Business incubation facilities

Business incubation facilities and provide supports for graduates are offered under the following programmes

- Community Enterprise Centres
- Business Incubation Centres
- Campus Companies Programme
- Graduate Enterprise Programme
- Intellectual Property Assistance Scheme

Community Enterprise Centres

These centres assist community groups in establishing enterprise centres and the programme applies to large urban areas where the rate of long term unemployment exceeds the national average. It runs parallel to the existing Community Enterprise Centre Programme. Funding for this initiative comes from a special allocation in the 1999 Budget. These Centres have achieved good results in helping long-term unemployed to get back into the working life.

Business Incubation Centres

Enterprise Ireland's Business Incubation Centre programme is aimed at expanding the base of high tech companies operating on college campuses by providing funds to develop and expand incubation space facilities. Campus Companies Programme, Graduate Enterprise Programme, Intellectual Property Assistance Scheme provide supports for graduates planning to set up new businesses. A number of support measures are offered for R&D projects set up in connection with educational institutes. These include

Supports for R&D Projects & Networks

- Basic Research: Grants Scheme
- Strategic Research Grants
- Applied Research Grants - Universities
- Applied Research Grants - Institutes of Technology
- International Collaboration: accessing research facilities
- Research Visits Schemes: UK, France, Ireland
- COST - International Collaboration in R & D

Post-Graduate Training & Development

- PhD Scholarships
- Post-Doctoral Fellowships
- Irish American Partnership - Masters Scholars Programme

Supports to Industrial Innovation

- Research Technology & Innovation (RTI) Initiative
- EUREKA: product & process development
- Applied Research Grants - Institutes of Technology
- Applied Research Grants - Universities
- Intellectual Property Assistance Scheme
- Helping Companies Manage R&D

4.3.4.4 Programmes in Advanced Technology

The Programmes in Advanced Technology (PATs) are partnerships between Enterprise Ireland, industry and third level colleges. They were established to meet a need for a strategic expertise base in certain key technologies. They help industry to

- Access new technology
- Improve the competitiveness of existing production
- Move into new higher value areas

They also assist industry in attracting overseas and domestic investment in high technology areas that lead to the establishment of new technology based start-up companies. The seven PATs are located across more than thirty centres based within Ireland's universities and institutes of technology. The seven Programmes in Advanced Technology are

- AMT Ireland - PAT
- BioResearch Ireland (BRI) - PAT
- Materials Ireland - PAT
- PEI Technologies - PAT: power electronics
- Optronics Ireland - PAT
- Software Ireland - PAT
- Teltec Ireland - PAT: telecommunications

4.4 FÁS - Training and Employment Authority

FÁS was established in January 1988, under the Labour Services Act 1987 to provide a wide range of services to the labour market in Ireland. Its functions as laid down in the Act are to provide

- Training and re-training
- Employment schemes
- Placement and guidance services
- Assistance to community groups and workers' co-operatives towards the creation of jobs
- Assistance to people seeking employment elsewhere in the European Union
- Consultancy and human resource related services, on a commercial basis, outside the State

FÁS is divided into 10 regions comprising 20 Training Centres and 53 Employment Offices. In 1998 about 97,000 unemployed job-seekers or other individuals completed FÁS programmes, and, at the end of the year, 56,000 persons were on FÁS programmes. FÁS also provided financial support for the training of an estimated 27,900 employees in over 3,300 companies. During the year about 131,000 persons registered with FÁS and 67,000 vacancies were notified to FÁS Employment Offices. Apprentice recruitment reached record levels with 6,400 registrations compared to a level of 5,300 in 1997 and levels of around 3,000 in preceding years. In 1998 53% of persons starting FÁS programmes were female. FÁS expenditure in 1998 amounted to 622 MEUR (£490 mill). FÁS activities are funded by the Irish Government, the European Social Fund and the European Regional Development Fund.

4.4.1.1 Industrial Training Committees

The Industrial Training Committee (ITC) structure, which encompasses employers, trade unions, and organisations involved in education and training, provides an important mechanism for identifying and responding to changes in the skills required by the industry. There are six ITCs which cover Engineering; Food, Drink and Tobacco; Construction; Chemicals and Allied Products; Printing and Paper; and Textiles, Clothing and Footwear Sectors of industry. FÁS has also established training advisory committees for Contract Cleaning; Software; Retail; Film and Television, Small Firms and the Transport sectors. Each of the six statutory ITCs held an average of five meetings during the year and working parties have been established to look at the issues of apprenticeship, funding of training, sectoral studies and strategic action responses, the special skills requirements of sectors, safety issues, the environment and workplace equity.

4.4.1.2 Industrial Restructuring Training Programme

The Industrial Restructuring Training Programme continues to be the main FÁS industrial support mechanism. The main element of the Programme, the Training Support Scheme, provided assistance to 2,804 firms in the training of 21,889 people. The scheme gives special consideration to small enterprise owner/manager development, for which grants of 80% of course costs were available. In 1997

companies with less than 50 employees received grants totalling 5 MEUR (I£3.9 Mill) or 85% of the total available budget. This compares with a figure of 82% for 1996. A special scheme for firms in the Construction Industry provided for a range of relevant training grants funded from "Surplus Levy". This supported the training of 7,000 employees in 295 firms. Grants from this scheme totalled 1 MEUR (I£0.8Mill.).

4.4.1.3 New Industry and Management Development Grants

FÁS continues to work with the industrial development agencies in assessing and monitoring training grants for inward investment projects. FÁS staff has assisted these companies to formulate their training and manpower plans. FÁS has worked in association with Enterprise Ireland on the Management Development Grants Programme for Small Firms, which is tailored to the needs of individual owner/managers. This modular programme is delivered by consultants and independently monitored and evaluated by FÁS. In 1997, 147 companies were approved for Management Development Grants, at a cost of 780,000 EUR (I£614,000). The SME Cluster Programme, now in its third year, is operational in eight of the 10 FÁS regions. There are 108 companies participating in the scheme, with another 40 receiving training for a second year under the scheme. The cost of the programme in 1997 was 508,000 EUR (I£400,000). The programme, which helps small businesses to develop competitive advantage by strengthening management skills, has been awarded ISO 9002 accreditation.

4.4.1.4 Levy/Grant

During 1997, Levy/Grant Schemes were implemented to fund training in the Textiles, Clothing & Footwear, Food, Drink & Tobacco, Chemical & Allied Products sectors and in the Electronics sector of the Engineering industry. Under the 1997 Levy/Grant Schemes a total of 1,029 employers (employing 12,606 people) were assessed to pay levies amounting to 20.4 MEUR (I£16.08Mill). Grants to employers amounting to 15.2 MEUR (I£11.93 Mill) were set off, prior to payment, against levies due.

4.4.1.5 Construction Skills Certification Scheme

The Construction Skills Certification Scheme was launched in 1997, the main purpose of which is to provide for the formal training and certification of skilled operatives within the construction industry. The scheme has been developed following detailed consultation by FÁS with specialist working parties representing specific occupational groups and with the support of the Construction Industry Training Federation, the Industrial Committee of ICTU and the Health and Safety Authority, provides for the reinforcement of competencies at five yearly intervals. To date over 700 people have been trained and certified under the scheme.

4.4.1.6 Industry Studies

A major study of the furniture industry was undertaken and will be formally launched during 1998. A study of the footwear industry was published by FÁS. Work on a study of the future needs of the rapidly expanding computer software sector, which currently employs close to 20,000 people in Ireland, commenced in 1997 and will be completed in 1998. Updates of the Printing and Paper study and the Food, Drink and Tobacco studies were commissioned and are scheduled for completion in 1998.

4.4.1.7 Excellence Through People

Established in 1995, the Excellence Through People training quality award is designed to encourage organisations to strive for excellence through the training, development and involvement of their employees. In 1997 a total of 17 organisations achieved this award. These included manufacturing and service organisations in both the public and private sectors. The range of activities includes the manufacture of electronic, food and health care products, the development of software and the provision of financial and catering services.

4.4.1.8 Co-operative Development Unit

The Co-operative Development Unit, which promotes the development of worker co-operatives, developed a more focused approach in 1997. Three key areas of opportunity were identified:

- Start-up enterprises in rescue situations;
- Family firms in which there are no obvious successors;
- Medium to large firms seeking to develop their personnel, penetrate new markets and create new employment opportunities.

The worker co-operative model is also seen as an ideal exit mechanism for suitable FÁS Community Employment and Community Enterprise Programme groups contemplating starting a commercial business. In 1997, 17 co-operatives were established employing 88 people, while a total of 23 potential co-operatives received pre-start-up advice. A further 27 co-operatives, with the support of the CDU, conducted detailed strategic reviews intended to identify new business development opportunities. Ten co-operatives received continuing training support. Two co-operatives which started in 1997 were staffed entirely by women and these are being strongly promoted in 1998 to encourage the participation of women in enterprise.

4.4.1.9 Certification

During 1997 FÁS continued to develop certification assessment systems which will be recognised nationally and in the EU. It also continued to promote the value of certification to Irish employers and to establish linkages with other national and European vocational certification bodies.

4.4.1.10 Staff Recruitment

The planned restructuring of Employment Services will introduce an enhanced recruitment service for employers. Applicants with skills and experience will be matched with vacancies in all relevant occupations up to and including senior technical, administrative and professional positions. Closer links with employers including vacancy follow-through and marketing visits will be developed in addition to the current measures of placing job seekers on the FÁS Occupations Database and those exiting formal training programmes and schemes.

4.5 Shannon Development

Shannon Development's aim is to initiate and support integrated development that will achieve sustained economic growth in and throughout the Shannon Region. The Company is responsible for

- Air traffic promotion at Shannon Airport
- Shannon Free Zone - manufacturing and international service industry
- Irish-owned industry in the Shannon Region
- Management and development of the National Technical Park at Plassey, and promotion of the Eurotechnopole Centre for Japanese investment
- Tourism development in the Shannon Region
- Shannon World Aviation Park for aviation sector industries
- Rural development in the Shannon region
- Promoting the Shannon Estuary as an international tourism and industrial location in conjunction with other agencies

Shannon Development initiates, participates in and supports economic development in both Urban & Rural areas of the Counties. It has an office in each county providing 'on the spot' accessible advice and support on all aspects of the Company's developmental activities. Available measures include advice and support for

- Tourism
- Industry
- Agri-Tourism Scheme
- SME start-ups and or expansions
- Local development programmes

The agency seeks to increase the attractiveness of the region in many practical ways. National Technological Park and Shannon Free Zone have already been attested to by major international corporations attracted by competitive tax rates, quality labour force and convenient access to the European Union markets.

4.6 Údarás na Gaeltachta

Údarás na Gaeltachta combines an economic development role (that of creating sustainable jobs and attracting investment to the Gaeltacht regions) with community, cultural and language-development activities, working in partnership with local communities and organisations. It was established by the Irish Government to promote the economic, social and cultural development of the Gaeltacht (native Irish-speaking regions). As a regional development agency Udaras is responsible for promoting the creation of jobs in manufacturing, natural resources and modern services in the Gaeltacht areas. The objectives of Údarás na Gaeltachta are to encourage the preservation and extension of the Irish language as the everyday language of the Gaeltacht communities and to establish and develop job-creating industries and services in the Gaeltacht regions. The Údarás also pursues an active community development programme - 'An Pobal Beo'. The Board of Údarás na Gaeltachta comprises thirteen members, seven of whom are elected by the people of

the Gaeltacht. The remaining six are appointed by the Minister for Arts, Culture and the Gaeltacht.

Full-time employment in Gaeltacht companies has risen by 30% over five years: from 6,296 at the beginning of 1995 to 8,183 at the end of 1999. This compares very favourably with the experience nationally, particularly when the nature of Gaeltacht industry and, indeed, the peripheral nature of most of the Gaeltacht itself is taken into account. The job creation experience in certain Gaeltacht areas suggests that an employment plateau in manufacturing industry may have been reached. As a result the jobs issue has changed away from a focus on quantity to a focus on quality. The national trend is that traditional manufacturing jobs in rural areas are being lost and are being replaced by modern service jobs in urban areas. Obviously, this poses a particular challenge for Údarás na Gaeltachta as the Gaeltacht areas are all substantially rural and there is currently limited scope for significant growth in modern services jobs because of skills shortages and telecommunications infrastructural deficiencies. However, the agency is working with a number of Gaeltacht companies on the development of E-commerce.

The Operational Programme for Industry (ERDF) contains three measures

- Finance for Industry, which covers Údarás' grant schemes for capital investment, R&D, feasibility studies, interest subsidies and equity investment
- Advisory Support Services which cover the provision by Údarás, including a range of professional, advisory support services to both start-up enterprises and established companies
- Land and Buildings scheme provides co-finance for the development of the industrial floor space and associated infrastructure that is necessary to underpin the industrial development programme for the Gaeltacht

Human Resources (ESF) grants are paid out under the schemes which include vocational training and recruitment incentive grants. The EU contributes up to 75% of eligible training expenditure. FIFG (FEOGA) grants support the development of aquaculture and agriculture under the European Agricultural Guarantee and Guidance Fund. The co-financing, which in the Gaeltacht goes mainly to fish processing and aquaculture, is paid up to a level of 45% of eligible approved expenditure.

Local Development Initiatives often promote part-time and seasonal employment which by the end of 1999 increased by 119 jobs to a new record high of 3,604. Two significant movements within this figure are that the modern services sector regained most of the job losses incurred in 1998 with an increase of 167 jobs: fish farming and fish processing continued the trend from the previous year and a further 14 jobs were lost. However, Fish-farming is projecting a major expansion in full and part-time employment by 2001.

4.7 Teagasc

Teagasc provides integrated research, advisory and training services for the agriculture and food industry in Ireland. The agency employs over 1,500 people at 120 locations throughout Ireland. Research services are delivered by 200 scientists at eight dedicated centres covering food processing, dairying, beef, sheep, arable crops,

horticulture, environmental protection, economics and rural development. The agency has 550 local advisers and regional specialists located at 100 centres which provide independent advice to farmers and rural dwellers. Training for young entrants, adult farmers, rural entrepreneurs and the food industry is provided by 200 teachers at 11 colleges, 45 local training centres and research centres.

The agency is a semi-state organisation, governed by the board which is appointed by the Minister for Agriculture and Food and has representatives from the farming organisations, the food industry, the universities, the Department of Agriculture and Food and Teagasc staff. The agency is a client-based organisation and it operates in partnership with all sectors of the agriculture and food industry and with rural development agencies. It has developed close alliances with research, advisory and training agencies throughout the world and is continuously seeking to expand international contacts.

4.8 City and County Enterprise Boards (CEBs)

The thirty-five *City and County Enterprise Boards* were established nationally in October 1993, to provide a new source of support for small businesses with 10 employees or fewer. City and County Enterprise Boards (CEBs) are locally controlled enterprise development companies established in each county and urban local authority area in Ireland. The function of the Boards is to develop indigenous enterprise potential and to stimulate economic activity at local level. CEB's are centrally funded with some funds coming from a large scale EU Structural Funds Initiative. Their main task is promoting micro enterprises in each of the 35 local areas through grants, advice and training as well as a stronger enterprise culture more generally. They were given a target of creating 8,000 new jobs by 1999.

Each CEB has a board of 14 members representing local authorities, trade associations, Forbairt and community groups. On average, each CEB has three staff plus a manager. They report to the Department of Enterprise, Trade and Employment (DETE). The DETE is also responsible for approving CEB projects involving more than 12,700 EUR (I£ 10,000) which is a relatively modest level. Each CEB had to prepare an initial strategic plan - with performance indicators as benchmarks for future evaluation - for its area. These plans were drawn up in consultation with relevant local bodies.

The CEBs target micro enterprises who do not have access to support from other sources. Overall, the CEBs operate much in the same way as soft loan schemes elsewhere in the EU. The total financial help offered is relatively modest and cannot exceed half the estimated total needed. Grants may be for feasibility studies as well as for start-up or business development. Project evaluation is by a local subcommittee (except where it has to be referred directly to the DETE) who emphasise criteria such as innovation, filling gaps in the market and the potential for exporting. Support is usually in the form of a mixed package combining funding and training to ensure prospective entrepreneurs have the required skills to run their businesses. It is also usually a condition of support that entrepreneurs accept a mentor for the early years of the project. CEBs may also be involved in the provision of business incubator units in enterprise centres, craft award schemes and student enterprise schemes.

More generally, CEBs also offer assistance to community groups supporting small local enterprise and training for micro enterprises. The overall aim is to increase new enterprise formation, improve micro business survival, performance and job creation in the local area. They can also forge strategic alliances with other enterprise development bodies. They may also involve themselves in local community activities such as arts and cultural events.

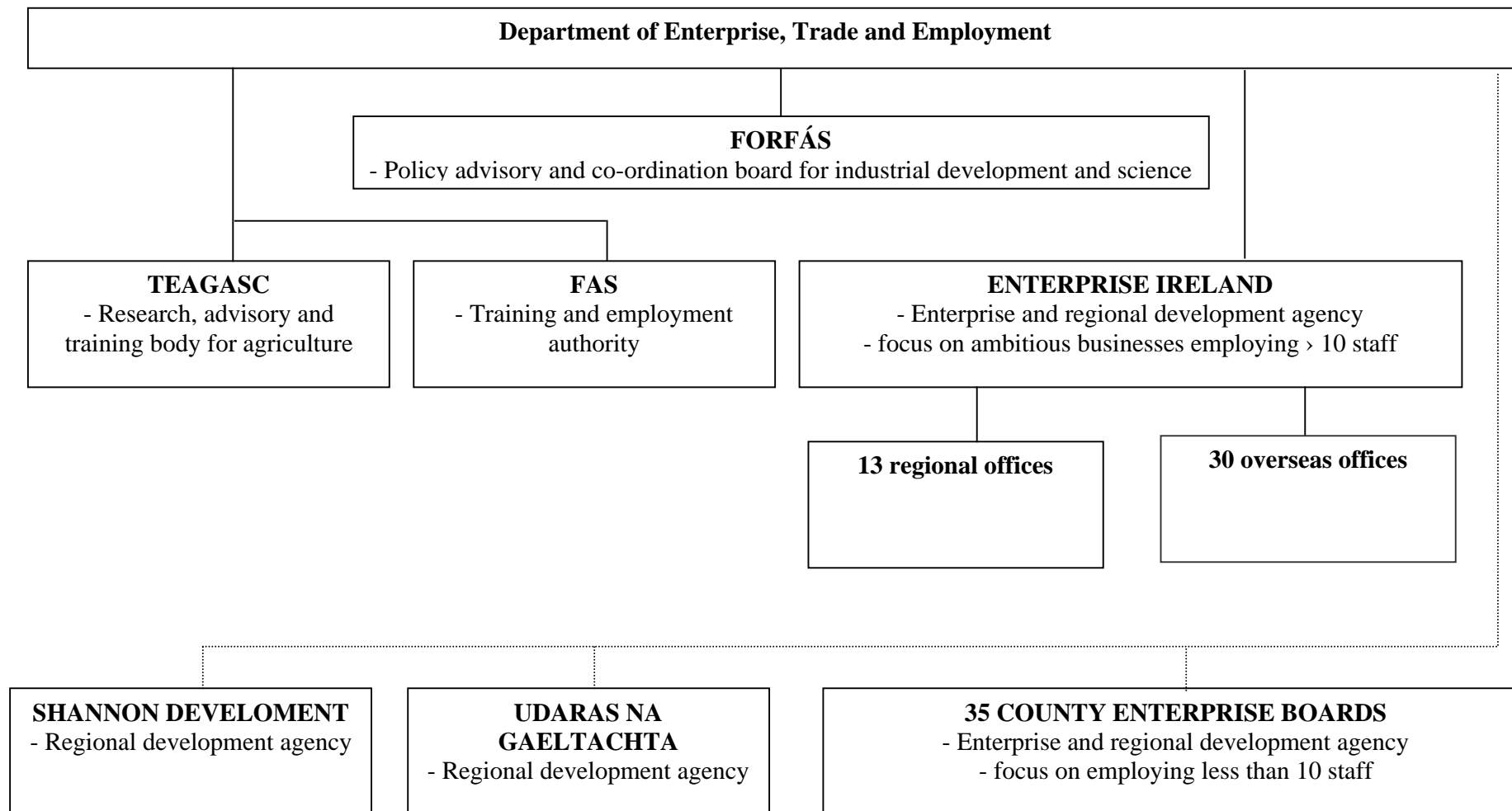
4.9 Concluding remarks - Ireland

The success of Irish industrial policy and enterprise support is largely based on an effective organisation at the ministry and agency level. Many of the key tasks have been assigned to one ministry and one development agency, both of which have sufficient power and resources to make things happen.

At the highest political level, the Department of Enterprise, Trade and Employment has a leading role and a wide mandate in the industrial development matters. The work of the Department is supported by Forfás, the high-level policy advisory and co-ordination board which provides strategic level recommendations. The Irish system is rather centralised, resulting in effective decision making at the policy and implementation levels. Such capability coupled with sufficient resources provides a basis for well functioning industrial policy framework. Overall, the policy process can be described as systematic and well structured.

The Irish support system has been evolving in line with the country's rapidly changing industrial base and the agency structure has been subject to frequent changes. In its current form Enterprise Ireland was created in 1998 as a merger of several agencies. During the following two years, the agency has experienced problems following from the radical institutional changes. Even if the process has been systematic and carefully planned, organisational effectiveness has suffered because the transition requires time & energy and it turns the management focus onto internal issues. It may take several years before the organisation will be working to its full capacity.

Exhibit 12 The Irish system (reviewed bodies)



In its new form Enterprise Ireland is a single outlet which can offer tailored support for a great variety of enterprises. It has a business process driven by customer needs and is able to offer support, which combines soft management development and hard financial measures. As an independent government agency Enterprise Ireland has a relatively strong position. The fact that its operational activities are isolated from lobbying, and that regional boards have only an advisory role, further strengthens its independent position.

Enterprise Ireland benefits from very clear and measurable enterprise development goals. It seeks to develop firms which employ more than 10 staff and are willing to grow in terms of sales, exports and employment. In the Irish system, locally based County Enterprise Boards take care of the remaining micro firm population. Detailed operational targets for each regional office of the Enterprise Ireland are worked out from the growth potential of their customer base. Hence the offered enterprise support is firmly based on local needs and targets are based on bottom-up estimates.

Another strength of the Irish system is that regional development is clearly separated from enterprise support. The key task of regional development is to create a fertile ground for enterprise development. This has been achieved by offering sufficient infrastructure and well educated labour force for the industry. Local colleges, FAS - the training and Employment Authority - take care of this by offering a large portfolio of industry related training programmes and training grants for the SMEs. Shannon Development and Údarás na Gaeltachta are agencies which offer additional help to deprived regions which have specific problems. The available support can be used among other things for community development, and for creating sustainable jobs.

5 Sweden

In terms of enterprise and innovation support there is a number of interesting developments taking place in Sweden. The government has recently (1998) introduced a new regional policy framework which promotes sustainable economic growth by developing infrastructure, promoting healthy enterprise formation and higher levels of employment. To succeed in this endeavour, industrial policy seeks to be sensitive to regional and local conditions. Regional industrial policy relies on close co-operation between different actors and sectors of society, for example, the business community, labour market actors and the educational institutions. This co-operation is formalised in Regional Partnerships, which are expected to play an active role in the drafting and implementation of development programmes. In the new system regions will have relatively large powers to decide on their own economic development programmes.

The support agency structure is also undergoing significant changes in Sweden. According to the plan, two of the key agencies – ALMI and NUTEK – will be re-organised so that parts of NUTEK will merge into ALMI. These changes are causing certain anxiety in both organisations.

The *Swedish Industrial Development Fund* is a state agency established in 1979. The objective of the Fund is to stimulate industrial growth in Sweden by investing capital and expertise into projects and enterprises in the situations where banks and other sources of financing hesitate.

ALMI is one of the key developments agencies and it has a comprehensive regional network which it owns together with county councils. Various business development programmes and EU structural funds projects are among activities which ALMI pursues to achieve the aforementioned targets. ALMI has a mission to stimulate growth and development by helping Swedish SMEs to achieve healthy economic growth, create employment and contribute to a thriving society. ALMI provides high-risk loans and soft supports to Swedish SMEs. The advisory component of ALMI offer includes business information, business-development programmes and consulting services which are offered at subsidised rates.

NUTEK is a state agency for industrial policy issues in Sweden. The main task of the agency is to stimulate industrial development throughout the country. This is done by making initiatives and promoting technology based enterprises which are being offered seed financing, advice, loans and project guarantees. The financing is focused on technology start-ups prior to commercialisation stage. Other focus areas include knowledge transfer, female entrepreneurship, environmental entrepreneurship, marketing and export promotion. NUTEK does not have its own regional network. Instead County Government Boards provide the regional outlet for NUTEK. In relation to county administrations NUTEK has only an advisory role.

Innovation Centre Foundation was founded in 1994 as a state funded organisation to promote the innovation in Sweden. Mainly the funds are directed to projects which have commercial potential but are still at an early development stage. Foundation

will also promote innovation by campaigning with the aim of increasing interest and understanding the links between innovation and economic growth.

The Norrland Fund provides high risk capital loans for development and expansion in manufacturing and service businesses in Sweden's five northernmost counties (Norrland). The fund is particularly interested in expansive industries and companies investing in new products or new markets.

County Government Boards represents state in each region of the country and has the highest executive power within the region. Each county government board is in charge of developing the county according to the wishes of the county population. The boards have a wide range of administrative tasks, ranging from drivers license administration to overall regional development and administration of the EU structural funds.

5.1 Ministry for Industry, Employment and Communications

During the spring of 1998, the Swedish Parliament (the Riksdag) approved the Government Bill "Regional Growth – for Employment and Welfare" (1997/98:62). The Bill contains a proposal for a regional industrial policy. The point of departure for this regional industrial policy is the potential that exists for accelerating economic growth in Sweden by making better use of the resources available in all regions. To succeed in this endeavour, industrial policy will have to be adapted to regional and local conditions. Regional industrial policy should also build on close co-operation between different actors and sectors of society, for example, the business community, the parties to the labour market, the educational sphere, etc. The overall objective of the new regional industrial policy is to stimulate sustainable economic growth based on the unique features of each region. The aim is to contribute to overall enterprise formation, increase the share of expansive enterprises and higher level of employment.

Regional growth agreements will be the principal instrument for co-ordinating and adjusting the policies of the various sectors, and also for exploring new approaches to the promotion of regional and local industrial development. The aim is to start launching the programmes by 1 January 2000. At the regional level, the Government has offered the county administrative boards, and the regional councils of Gotland, Kalmar and Skåne the opportunity to co-ordinate the drafting of an action programme which will serve as the platform for the agreements. All 21 counties in Sweden have decided to participate in *regional partnerships*. Regional partnerships are groups comprising representatives of municipalities, local business associations, universities and colleges, and regional authorities. They are expected to play an active role in the drafting and implementation of the action programmes. County administrative boards and regional councils will act as co-ordinators and catalysts.

Exhibit 13 Swedish support organisations

| Organisation | Subordinate to / Co-ordinated by | Tasks |
|---|--|---|
| Ministry for Industry, Employment and Communications | Government | Regional policy matters Research on regional policy Regional industrial policy Promotion of enterprise and SMEs Craftsmanship |
| Industrial Development Fund | Government agency 34 staff Capital 438 MEUR (3.68 BSEK) | The object is to stimulate industrial growth in Sweden by investing capital and expertise where banks and other sources of financing hesitate. The reasons for this may be lack of collateral, unacceptably high technical risks, or a project beyond the capacity of a company |
| ALMI | Government agency 11.9 MEUR (100 MSEK) working capital (driftsanlag)+ Loan fund 476 MEUR (4 BSEK) 22 subsidiaries, partly owned by each host county, about 500 staff | ALMI county offices offer loans and guarantees for SMEs and start-ups. Jointly with NUTEK competence development programmes for SMEs. ALMI gives advice for SMEs on strategic issues such as choice of products or markets and growth. Regional Export Centres in co-operation with Chambers of Commerce and Export Council. |
| NUTEK | Government agency 24 MEUR (200 MSEK) working capital (driftsanlag) | NUTEK is a central public authority for industrial policy issues. The main task is to stimulate industrial development throughout the country. It makes initiatives, co-ordinates and builds networks in order to help Swedish enterprises to foster industrial growth and renewal. Main areas of activity include: regional development and enterprise promotion. The range of activities include: The NUTEK Competence Centre Programme. Department of Industrial Policy Analyses Euro Info Centre NUTEK & Structural funds Material Research in Sweden Environmental management systems in small companies. |
| Innovation Centre Foundation SIC | Government agency/regional network, 3 staff, capital 59.5 MEUR (500 MSEK) | SIC has one or more offices in each county which aim to promote regional growth by supporting innovators. It is a part of innovation support system which has yearly budget of around 3.6 MEUR (30 MSEK). |
| The Norrland Fund | Regional development agency Capital 77 MEUR (649 MSEK) | The Norrland Fund provides risk capital loans for development and expansion in manufacturing and service-producing companies in Sweden's five northernmost counties (Norrland). Expansive industries and companies investing in new products or new markets are a key focus group. |

These regional partnerships are to conduct an analysis of the potential for and threats to economic growth and industrial development in their respective region. On the basis of the analysis, a range of measures is being introduced to take advantage of the identified opportunities for growth. The parties involved should then negotiate and agree on funding. Several central government authorities also run programmes which influence and support regional development in various ways. Within the framework of the agreements, regional and central government actors are encouraged to discuss opportunities for closer and more structured collaboration. The participation of the private business community is considered to be a prerequisite for the success of the programmes. Regional public actors are encouraged to enter into discussions with representatives of local and regional business communities to ensure that their views and needs are integrated into the action programmes.

The *EU Structural Funds Programme* has served in part as a model for the structure of the action programme – the basis of the agreements. Furthermore, it is expected that the EU structural funds programmes will be integrated with the regional action programmes in the next EU budget period which commences in the year 2000.

Government Offices are encouraging a cross-sectoral approach to regional growth and development. This principle means that multi-sectoral collaboration should also be intensified between the various Swedish ministries. A special committee consisting primarily of the state secretaries from various ministries has been set up. Most of the ministries are represented on this committee, which has the overall responsibility for co-ordinating issues relating to growth and employment policies within the Government Offices. The task of the committee will be to respond to issues arising in connection with the preparation of the regional growth agreements. The work of the committee is assisted by an inter-ministerial secretariat.

5.2 The Swedish Industrial Development Fund

The Swedish Industrial Development Fund was established by the government in 1979. The objective of the Fund is to stimulate industrial growth in Sweden by investing capital and expertise into projects and enterprises where banks and other sources of financing hesitate. The reasons for this may be lack of collateral, unacceptably high technical risks, or a project beyond the capacity of a company. Where, despite these factors, the potential for success exists, the Fund can offer financing and expertise. The two main areas of activity are

- Co-financing of industrial development projects and market introductions
- Participation in the form of owner capital in small and medium-sized developing companies

The risks must be balanced by sufficient remuneration - the greater the risk, the higher the required return of interest - often in combination with royalties. Profitability, market prospects, and risk levels are the most important factors when the Fund evaluates potential involvement. Projects which are potentially extremely profitable enjoy a greater chance of obtaining financing from the Fund. In addition, the project or investment should include an innovative element, for example the application of new technology or new solutions in response to market demands. A link to the current business of the company is advantageous, since this increases the

possibilities of reaching the intended market. The Fund has legal obligation to retain absolute confidentiality and it can only finance Swedish enterprises.

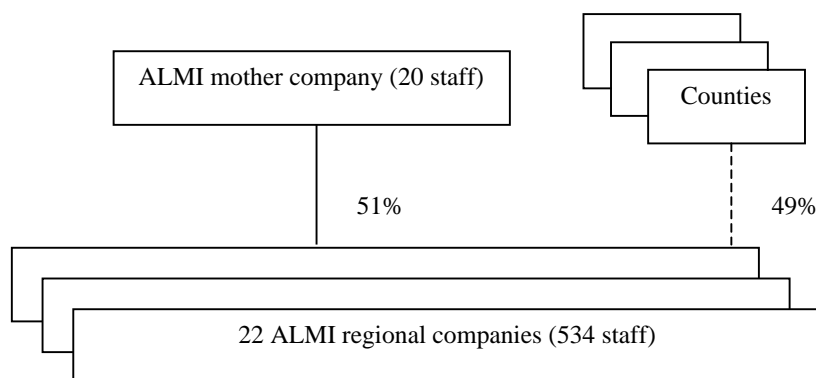
5.3 ALMI

ALMI was established in 1994 based on a parliamentary decision which stated that a new organisation was needed to promote small business. The existing county development foundations were converged to limited companies and they became part of a national corporation. The objective of this new limited company structure was to become a more effective national development organisation, better able to serve businesses needs. The corporation structure enabled the achievement of equally high standards through out the country, more effective administration of state funding, and better co-operation between various state organisations. At the central organisation level ALMI is co-operating with numerous industry and trade organisations (Industriförbundet, Svensk Industriförening, Handelskammarförbundet, Svensk Handel och Tjänsteförbundet).

ALMI's mission is to stimulate growth and development by helping Swedish SMEs to achieve healthy economic growth, create employment and contribute to a thriving society. Various business development programmes and EU structural funds projects are among activities which ALMI pursues to achieve the aforementioned targets.

The ALMI parent company is state-owned agency which manages funds of 447 MEUR (4,000 MSEK). These fund are used by granting loans to Swedish SMEs. In 1999, 87 MEUR (779 MSEK) was used to provide credit for new clients. ALMI's operations are financed by its owners - the government and the county councils - by EU funding for specific project activities, and by revenues from various services and projects. In 1999 the net turnover of ALMI group was 61.5 MEUR (551 MSEK), of which more than half was income from the loans and investment.

Exhibit 14 ALMI organisation



In total, ALMI employs 554 staff, of which 20 in the mother company in Stockholm. The rest of the staff is located in regional companies across the country. The structure of the company reflects the fact that the conditions for business development and managing SMEs vary from region to region. Each of the 22 ALMI companies is familiar with local conditions and plans its activities based on local variations. All regional ALMI companies are owned by the parent company (51%) and by the county

council (49%). This ties ALMI's organisation strongly to the regional level while providing full national coverage. Representatives from the ALMI parent company, the county councils and the business community form the board of directors of each regional company.

5.3.1 Marketing and customer interface

ALMI has adopted a proactive marketing approach to be able to target Swedish SMEs effectively. Of all 625,000 enterprises, only 740 employ more than 250 people. Overall, 95% of the Swedish businesses have fewer than 10 employees, while 443,000 individuals are self-employed. A typical ALMI client has less than 20 employees and all efforts are focused on the growth and development of start-ups and SMEs within each region. By increasing the number of employment opportunities the agency promotes the development of sound and prospering regional business communities.

ALMI representatives meet around 100,000 SME owner-managers and potential entrepreneurs each year. Of these, some 24,000 become involved in the agency's development programmes. ALMI is also involved in the evaluation of approximately 3,500 new technology concepts and products annually and it contributes financially to some 2,000 innovations. In 1998, ALMI extended credit to nearly 2,700 client companies of which 834 were loans for women entrepreneurs, 798 were start-up loans and 1,000 were loans for expanding SMEs. In total ALMI handles annually 14,700 loans.

ALMI makes extensive use of customer surveying. The yearly customer satisfaction survey provides information on the agency's service quality, development during the year and it enables comparisons between the regional companies. Such benchmarking is considered a very useful development tool. ALMI has also developed a sophisticated way to measure the impacts of its activities. Statistics Sweden has been commissioned to do a follow-up study on the turnover, employment and productivity among those firms which are ALMI customers. This information is analysed against data collected from the control group made-up of firms which have not received ALMI support. This type of research helps to follow the developments in customer base and above all keep the customer focus high on the management agenda. These surveys indicate that eight out of ten entrepreneurs believe that their businesses have benefited from co-operating with ALMI. 86% of the respondents are satisfied with the financing assistance received. Two out of three client companies are very pleased with the advisory services, and the same number state that the ALMI financing program was crucial to meeting their financing needs. The impact analysis shows that typically the outcome of a three-year co-operation with ALMI shows an 85% increase in turnover and a 42% increase in the number of employees. On average, each ALMI client improved turnover by 592,000 Euros (5.3 MSEK) while adding three new employees. The control-group companies showed a turnover increase of 40% and a 12% gain in the number of employees.

5.3.2 Business process

The customer survey and the impact analysis provide a starting point for business development processes. Planning in the ALMI group is based on a yearly budget cycle, which is not very flexible. One of the key problems is that the size of the

budget will be confirmed only a few weeks before the end of the year. The first half of each year is mainly spent on analysing the results achieved during the previous year. During the second quarter, the mother company and regional companies discuss priorities for their coming activities. After the priorities have been decided the third quarter is used in setting the targets for the coming year and allocating the required resources at each region. Recently the new funding structure has decreased the agency independence from the ministry because it is not any more possible to use the surplus financing to cover the operational costs of the agency.

Mother company and regional companies are managed with the help of the budgeting process and related meetings. In addition mother company representatives have seats in the boards of regional companies. This maintains good communications and constant information exchange. Within regional offices staff participation in the business planning process varies, typically business area manager or division head are responsible for the operational planning. Frequent surveys offer an important way to monitor the organisational climate.

On the operational level, the loans database helps to track the 16.000 existing loans. The payments are followed carefully and delays trigger further actions. However, there is a need for further integration of company data bases. The two existing customer data bases need to be merged together and the fact that each regional company has its own advisory data base needs to be addressed. There is a need for more transparent information system on corporate level. At the moment, information on expertise is disseminated by circulating staff CVs within the organisation. ALMI has competence centres which are located in regional companies. These are build around a variety of training programmes such as innovation and female entrepreneurship. These competence centres also organise meetings on various specialist topics so that the information can be disseminated across the organisation.

ALMI processes have developed over the years because it has not gone through any major organisational changes recently. However, the political decision makers have plans to merge NUTEK and ALMI mother company. This concerns ALMI to some extent because NUTEK has no regional organisation but a large number staff who are working in the head office. The situation of ALMI is the reverse, because most of its staff works in regional companies and the mother company has only 20 staff.

5.3.3 Financing

ALMI offers loans to SMEs that have willingness and capability to grow. The terms of the loans may vary from case to case but typically full collateral is not provided and hence interest rates are higher than in secured commercial financing. ALMI loans are complementary to existing commercial financing. However, financing is just one of the several tools ALMI offers for SME business-development, and it is always accompanied by soft development support. There are three main types of loans:

| | % of borrowings | % of granted loans |
|--------------------------------|-----------------|--------------------|
| Loans for start-ups | 33.0 | 39.0 |
| Loans for growing companies | 58.0 | 30.5 |
| Loans for female entrepreneurs | 9.0 | 30.5 |

Having analysed client company's current status, business concept and market potential, ALMI contributes approximately 20% of the total funding required. The company's business plan, together with the ALMI funding, is aimed to work as a door-opener for commercial financing. Ideally the bank gains a good client with growth potential and the SME is able to establish a reliable, commercial bank contact. The leverage effect of ALMI financing is significant because commercial banks benefit from the comprehensive evaluation work that ALMI conducts on the potential customers. Commercial banks can use ALMI's research information and avoid due diligence costs which each loan decisions involves. As a result each Swedish crown borrowed from ALMI generates, on average, four additional crowns from commercial banks. The rejection rate of loan applications is very low because of the extensive planning and preparation work that ALMI representatives and customer go through before the application is submitted. The rate of non-performing loans is 7 to 8 % of all borrowings (amount of money). The target is 5 % but it is difficult to achieve as long as ALMI continues to operate in its current role bearing the highest risk element of customers financing. Promotion of venture capital financing is a recent phenomenon. Regional companies are developing business angel networks within their areas and act as brokers between SMEs and business angels. Currently this third party financing market is not very important but it may grow in the future.

5.3.4 Advisory and business development services

The advisory component of ALMI services includes business information, business-development programmes and consulting services which the agency offers at subsidised prices. In offering these services the agency puts considerable effort into identifying SMEs that are capable of growing, and which have the desire to grow. Among many services ALMI offers

- Management programs,
- Business-development consultation,
- Advice on how to work efficiently with a board of directors
- An extensive program for international business development.
- Regional advisory boards for new technologies and product-development issues, quality- and environmental- assessment
- Management mentoring
- Network building

In the past, ALMI has offered more technical consulting services, especially technology audits. The leading principle is that offered services should not compete with existing commercial services. Instead ALMI develops and initiates programmes on the areas where no commercial alternatives are available. In the event local commercial services begin to emerge, ALMI reduces its effort in the field. In general

terms, ALMI's role is to be a partner for dialogue. It seeks to stimulate, motivate and drive SMEs for growth and development by making the appropriate development tools available.

5.4 NUTEK

NUTEK is a state agency for industrial policy issues in Sweden. The main task of the agency is to stimulate industrial development throughout the country. At the moment NUTEK has 350 staff and EUR 208 mill. budget (SEK 1.7 bill.). It makes initiatives, co-ordinates and builds networks in order to help Swedish enterprises to foster industrial growth and renewal. NUTEK promotes technology based enterprises which have growth potential by offering them seed financing, advice, loans and project guarantees. More specifically, the financing is focused on technology start-ups prior to commercialisation stage. Other focus areas include knowledge transfer, female entrepreneurship, environmental entrepreneurship, marketing and export promotion. The new EU regulations allow soft development support for R&D and marketing and these are recent additions to focus areas including

- The Competence Centre Programme
- Department of Industrial Policy Analyses
- Euro Info Centre NUTEK.
- Material Research in Sweden
- Environmental management systems in small companies

NUTEK has no overseas export promotion offices but it is working actively in EU and OECD. NUTEK is also involved in some overseas 'field activities', for instance, it is training administration in Latvia and Lithuania to prepare them for the EU membership. In Sweden NUTEK is involved in regional development and it takes actions to stimulate economic growth in every part of the country by:

- Advancing knowledge on regional issues and disseminating this information.
- Commissioning research on regional economy and policy activities that can promote development.
- Offering regional development support, employment support and transport support.
- Co-ordinating the national and EU support, administrating and reporting the EU regional support.
- Developing a national broad band network supported by 309 MEUR (SEK 2.6 Billion) government funding.

NUTEK is a national organisation with regional development dimension but it has no regional network of its own. Instead County Government Boards provide the regional outlet for NUTEK services. In relation to County administration NUTEK has an advisory role. The regional activities are co-ordinated by organising meetings and seminars with local bodies.

5.4.1 NUTEK and enterprise promotion

In order to promote growth and re-generation NUTEK offers seed financing for firms which are starting to exploit technological innovations, and by providing regional support for sustainable businesses. About 90% of loan and grant decisions are made at the local level by County Government Board personnel. In cases where an individual loan exceeds 2,38 MEUR (20 mill SEK) the decision will be made by the NUTEK head office. The target for application processing time is 2 months from submission. So far, the targets have been met reasonably well except in the case of very popular conditional seed financing loans. The administrative system has not been able to process such a large volume of applications within the target time. Since 2000 EU rules have made development grants possible and they too are expected to be very popular. Approximately 40% of the regional aid applications are turned down although almost all applicants can get a loan provided they further develop their project. This approach has secured relatively high 90% pay back rate for the conditional loans.

Other ways to harness firms potential include information and advice through start-up channel (Startlinjen), Euro Info Center and Environment lines. NUTEK can offer a full range of consultant and expert help to promote firms' growth. Business networking is promoted during EU:s contact days, e.g. through Europartenariat, Interprise and IBEX.

5.4.2 The internal process

NUTEK will be subject to re-organisation in the near future. According to current plan the industrial policy unit of NUTEK will merge with ALMI by the end of 2001.

Currently, the yearly budget allocates funds to specific task areas where NUTEK is active, mainly by providing loans and other forms of support. Since the early 1990s recession, government budget discipline has tightened, making the system more rigid. This can make the agency's work difficult, especially in the areas where technological change is rapid making risks difficult to estimate. NUTEK has a loan database, which covers the financial support granted by itself or County Administrations. However, ALMI financing is not included in this system. Key decisions within NUTEK are made in a monthly meeting where representatives from all units come together to discuss the relevant issues. The largest decisions are made by the general manager.

During the last 2 years NUTEK has developed check lists which set performance and quality targets for each unit – for instance, application processing times which are monitored by the time recording system. Personnel management is based on yearly development discussions with each member of staff. Currently, 40% of the staff is involved in continuous training activities. IT and language courses are especially popular. NUTEK has experts who have specialised, for instance, in a particular industry. This knowledge is disseminated in weekly meetings and to a large extent also in informal discussions.

On strategic level NUTEK activities are directed by a reference group which produces a memorandum informing the government on businesses and regions needs. The political influence on NUTEK activities is built into systems because the highest decision making belongs to parliamentary advisory committee. On regional level

county administration brings in the local perspective. ALMI, Industrifondet and SIC are other agencies which have somewhat similar activities like NUTEK has. However, these organisations have different profiles and they can direct customers to each other if necessary.

5.5 Innovation Centre Foundation SIC (Stiftelsen Innovationscentrum)

SIC was founded in 1994 as a state funded organisation aiming to promote the innovation in Sweden. The objective is that the provided capital will be used during the ten year period which is the planned operational life of the foundation. Mainly the funds will be directed to projects which have commercial potential but are still at an early development stage. SIC will also promote innovation by campaigning with the aim of increasing interest and understanding the links between innovation and economic growth. The foundation has nine staff including managing director. It has two main activities which are project support and innovation promotion by resourcing innovative activities. Since 1994 foundation has received more than 3000 applications and it has granted support for 1500 projects. The foundation works in co-operation with the following agencies:

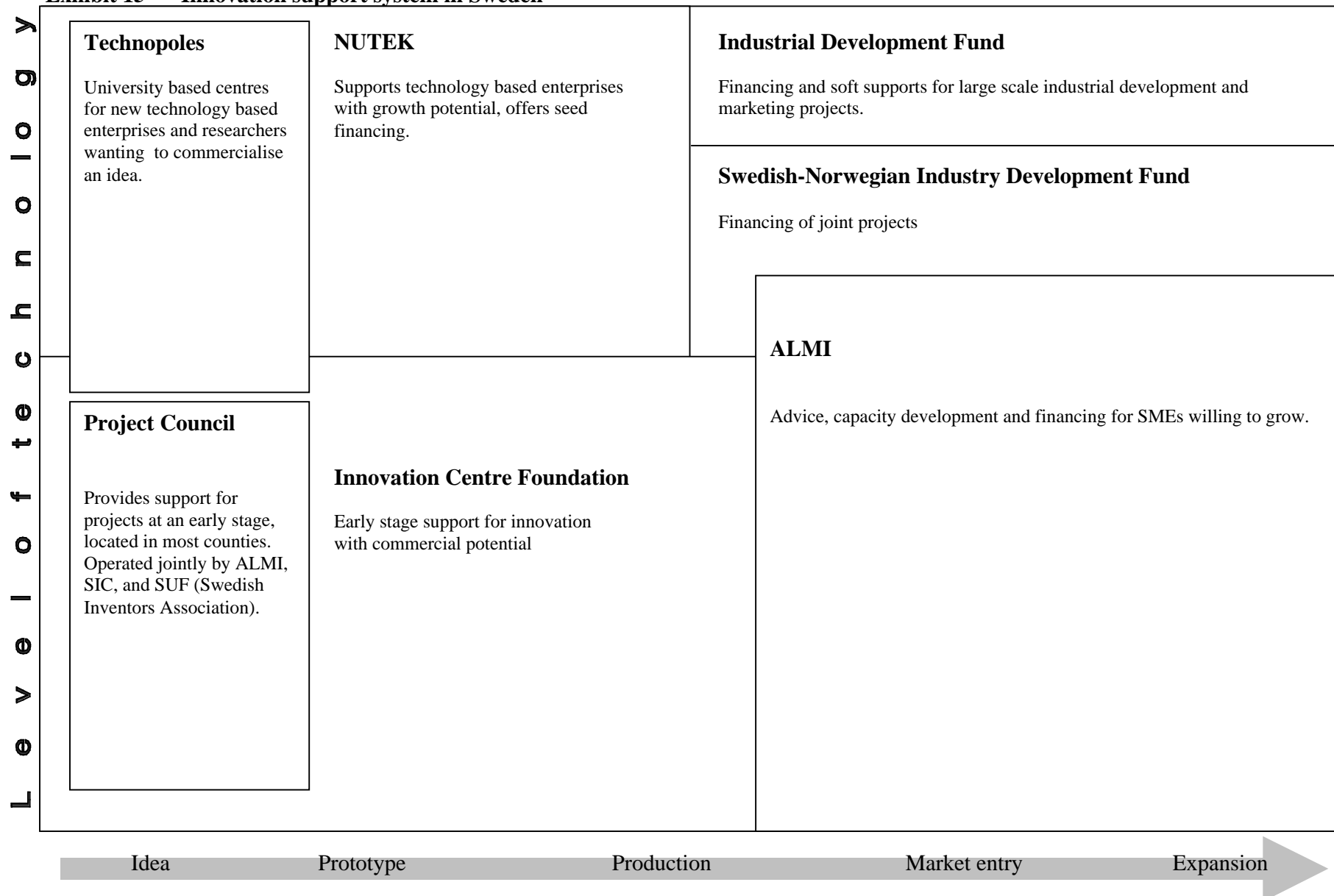
- NUTEK - which helps to evaluate complex technical projects.
- Swedepark - by providing funding for business park based research based firms.
- SUF - Inventor Foundation which has 25 offices across the country.

Innovation Sweden is a new regional level organisation. The list below indicates the number of innovation centres, their staffing and the existing local offices within each region.

| Innovation Centre | Staffing | Local offices |
|--------------------------------|-----------------|----------------------|
| Innovation Skåne | 6 | 2 (3) |
| Innovation Västerbotten | 4 | 3 |
| Innovation Norrbotten | 4 | 1 (2) |
| Innovation Västervik/Vimmerby | 3 | 2 |
| Innovation Växjö | 2 | 1 |
| Innovation Vetlanda | 2 | 2 |
| Innovation Västra Götaland | 7 | 5 |
| Innovation Östergötland | 3 | 1 (2) |
| Innovation Karlskoga/Degerfors | 3 | 1 |

The above shows that the regional innovation centre system offers improved access to national network of advice and support. The number of outlets has increased from 9 to 34 which is a significant improvement in the supply network. The total funding of the SIC is approximately 5.9 MEUR (50 mill. SEK). In addition to the existing network a number of new innovation centres will start to operate in the near future. These include: Innovation Dalarna, Innovation Uppsala, Innovation Blekinge, Innovation Jämtland, Innovation Medelpad, Innovation Halland, Innovation Stockholm, Innovation Gästrikland and Innovation Gotland.

Exhibit 15 Innovation support system in Sweden



The experts who are working for SIC will be qualified through training and practical experience. The training consists of six day s course and two exams. The first course will be for SICs consultants and ALMIs project managers. Besides passing the exam the qualified consultant has had to work at least one year within the innovation network system.

5.6 The Norrland Fund (Norrlandsfonden)

The Norrland Fund provides risk capital loans for development and expansion in manufacturing and service businesses in Sweden's five northernmost counties (Norrland). The fund is particularly interested in expansive industries and companies investing in new products or new markets. Norrlandsfonden accepts high risks, while at the same time it requires high return from the borrower. The product's market potential and the profitability of the investment are decisive factors. The personal capabilities of the managers are also important, since successful commercialisation of business ideas demands knowledgeable and committed leaders. Norrlandsfonden has recently received a significant capital injection, which means that the Fund has strengthened its position as the leading risk financier. In 1998 the capital of the fund reached the level of 77 MEUR (650 MSEK).

5.7 County Government Boards (Länsstyrelsen)

Each county has a government board which represents the state in each region of the country and has the highest executive power within the region. Each county government board can be described as a knowledge organisation which holds wide range competencies useful in developing the county. Their key task is to direct development so that it is in line with the wishes of the county population. Overall the boards have a wide range of administrative tasks, ranging from drivers license administration to overall regional development. Among other things the administration of EU structural funds is done by the county boards. There is a number of pilot counties (Skåne, Västra Götaland, Gotland och Kalmar) which have full administrative power over the decisions concerning

- Fulfilling the national objectives
- Look after the interests of the region
- The economic and social development
- Regional objectives, and
- Securing the functioning of the legal system.

County government councils are by and large in charge of economic development and job creation. These tasks are addressed through direct support for enterprises as well as long term labour market and overall development work.

In Kalmar, Gotland, Skåne and Västra Götaland, regional development work has been completely allocated from state to regional bodies. Planning, economic development, competition and communications have been charged to directly elected regional parliament or indirectly elected executives. Education system development in counties is a significant task for county councils. One of the key targets is developing an equal provision of work opportunities for men and women.

County government boards administer a range of regional and local financial measures. On county level these include

- Regional transport support (Grant)
- Industrial re-generation and development (Guarantee, Loan, Conditional loan)

There is also a number of supports available on municipality level. These include:

- Rural area support (Grant, Loan)
- Reduced social security rates for employers (Reduced tax rate)
- Regional development support Grant
- Employment support Grant

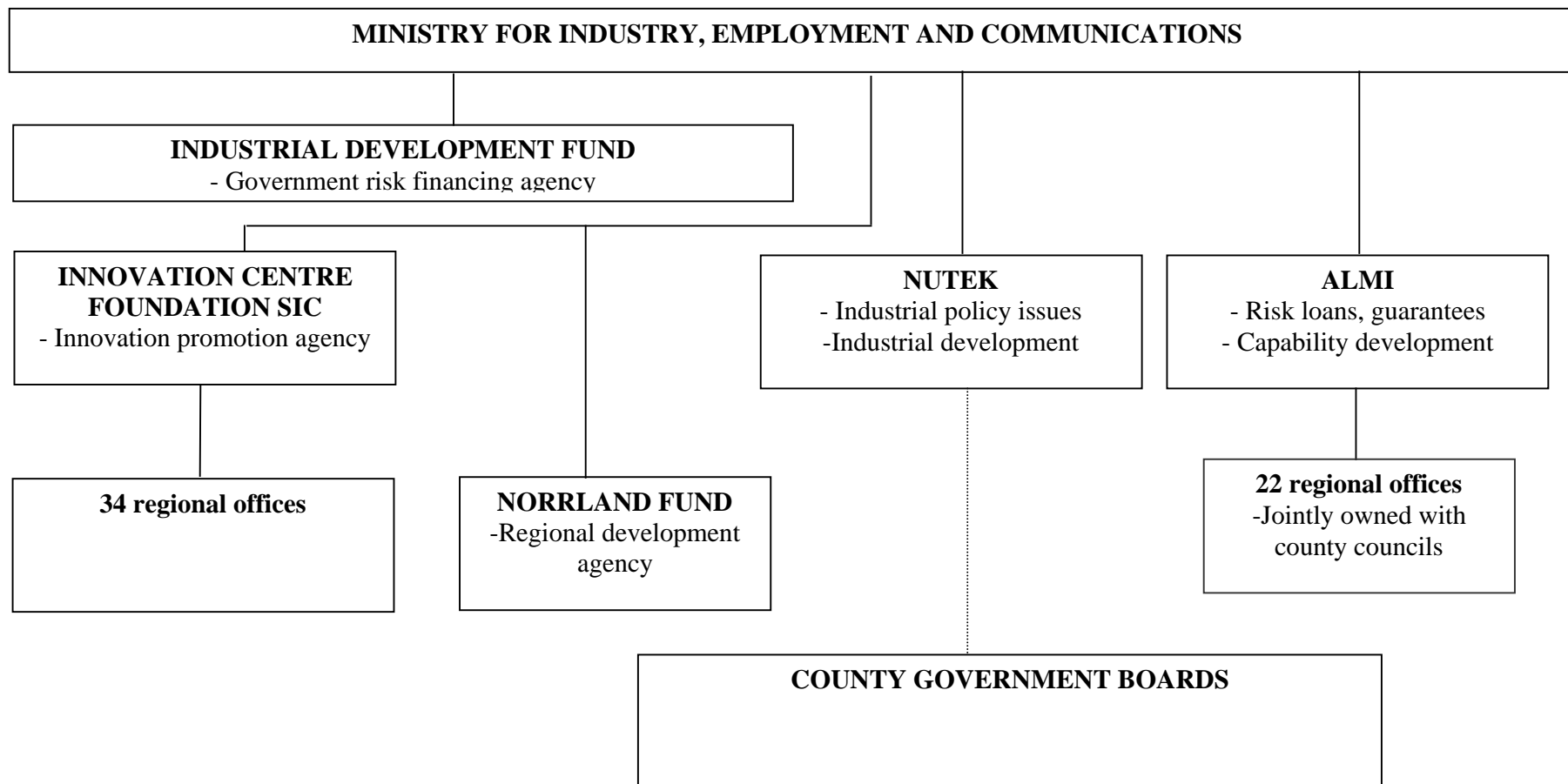
The aim of these supports is to secure an even economic development throughout the country.

5.8 Concluding remarks - Sweden

Sweden has a fairly comprehensive but lean support system for regional development, enterprises and innovation. As in most countries the Swedish system is undergoing changes which hamper the operational efficiency of the agency structure. Another recent development is increased autonomy at the county level which means that regions will have much more say in their strategic level planning. Regional Partnerships are a key regional instrument co-ordinating the development efforts of municipalities, local business associations, universities, colleges and regional authorities. This process has only started and it is not possible to say how successful counties will be in terms of their economic development.

ALMI seems to be a good example of a relatively effective enterprise development agency organised as a group of limited companies. ALMI has very lean central organisation and most of its staff works in the regional offices, including the industry and other experts. Co-ordination and control within the group has been organised by adopting a systematic customer surveying. Besides customer satisfaction it includes a fairly sophisticated impact analysis conducted by an independent third party. On a yearly basis ALMI gets follow-up information on the effects of its own support measures. This feedback provides invaluable information for the business planning process. Surveying is also used as a way to co-ordinate the decentralised regional organisation. By comparing the achievement levels of different offices it is possible to point out those who are performing particularly well. Those regional companies which perform below the average level are encouraged to work harder to achieve the corporate standards. Overall, ALMI is using customer analysis more effectively than most investigated development agencies.

Exhibit 16 The Swedish system (reviewed bodies)



Although ALMI is organised as a corporate structure it is dependent on the state budget funding. This is seen problematic because the available resources will be known only by the end of the year and the entire business planning process has to be done without this crucial information.

NUTEK is in charge of industrial policy issues and its organisation is very different to the above described ALMI. NUTEK does not have regional organisation so the entire staff works in the head office. Hence, from the outsiders perspective the planned merger of ALMI and NUTEK will create a very interesting situation.

The Norrland Fund has a special task to develop the economic activities in the northernmost part of Sweden. Risk capital is the key development instrument with the aim to stimulate the growth of manufacturing and service businesses in the northern Sweden. Somewhat surprisingly the Fund does not seem to offer community development services along with the offered financing. Such a 'soft' approach is a key ingredient of services offered by many agencies specialised in helping less developed peripheral rural areas.

6 The Norwegian business support infrastructure⁵

This Chapter outlines the business support infrastructure in Norway. This has four major components

- Finance for business, from the national business and regional development fund (SND) and various sources of start-up and venture capital
- Research and innovation services, comprising the Research Council of Norway (RCN), as well as the research and higher education sector which it funds
- Business capability development services, provided by RCN and SND
- Advisory services, comprising TI, ViNN, the former BRT (Bedriftenes Rådgivnings Tjeneste) network, the inventors' service (SVO), and aspects of more functionally specialised organisations such as the Export and Design Councils. Local government (*kommunal*) business development advisory services can also be considered under this heading

The distinctions between categories here are not clean, since many of the programmes and actors considered work with packages of supports. Notably, SIVA works across these boundaries, by bringing packages of innovation-related infrastructure and services to bear in science and research parks, and using a range of advisory and investment instruments to try to drive growth in the associated companies.

6.1 SND

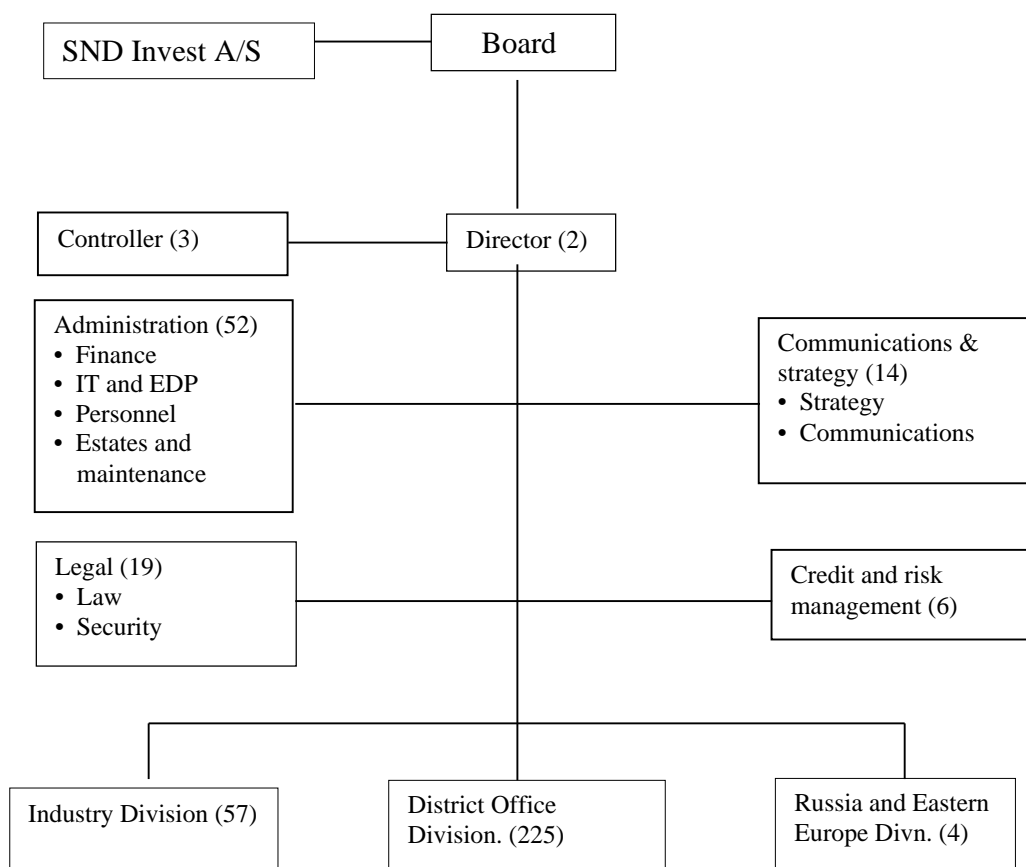
SND was established in 1993, through the merger of four state investment and business support funds.

SND aims to support profitable and sustainable business development in Norway. It offers a variety of high- and low-risk loan arrangements, grants and capability development programmes. In 1999, SND had a budget of some 325 Meuro, comprising a mixture of loans, grants, programme and administration costs. It also has a venture capital subsidiary (SND Invest), with a fund approaching 250 MEuro and a staff of 27.

Originally a highly centralised organisation, SND has recently been regionalised in order to put the 'front office' close to the customers and to empower the front office as far as possible to take decisions. Correspondingly, the headquarters had to take on the 'back office' roles of process support, quality control, R&D and strategic management. The organisation chosen is shown in **Exhibit 17**.

⁵ This Chapter is based on sub-report 4 of our evaluation of SND, Erik Arnold and Philip Sowden, *SND: Organisation and Structure*, Brighton: Technopolis, 2000. Readers familiar with that report can safely skip this Chapter

Exhibit 17 SND Organisation 1999



The District Office Division (*Distriktskontordivisjon*) was set up in April 1998, comprising 5 people in Oslo plus the 17 district offices. This looks after most of the front office functions.

Each district office has to

- Liaise with its County in the development and rolling forward of regional development plans, and assist with implementation within the rules nationally laid down for the use of SND instruments and resources
- Proactively maintain contact with its target customers in its region, informing them of opportunities offered by the business support system (defined as SND and its partners: RCN, the Design and Export Councils)
- Provide SND's unique⁶ customer interface to these firms
- Refer customers to partner business support organisations, where appropriate
- Process applications for support from companies, taking financing decisions, monitoring and maintaining 'live' projects through their life cycle

⁶ A minor exception is that the FRAM company training programme is implemented via a network of consultants, certified by SND as competent to deliver the programme. These consultants in practice also form a sales network for FRAM

- Comprehensively report its activities to headquarters

The Industry Division (*Næringsdivisjonen*) is now the main headquarters division. It comprises a director with four associated staff and four departments. Two of the departments comprise branch experts. Two work with SND's programmes: actions, which work outside SND's mainstream loan and grant mechanisms. The division is the focus for important debates within and outside SND about the extent of further decentralisation that is desirable within the SND system.

This Russia and Eastern Europe division manages two investment funds: the Northwest Russia fund; and the Eastern Europe fund. It works to

- Understand conditions in NW Russia and Eastern Europe so as to be able to support potential Norwegian investors in these areas
- Support these investors by injecting capital through the purchase of shares in companies investing in the target countries
- Maintain and increase the value of the two funds through the eventual sale of shares in customer companies and by managing unused portions of the fund

The division is self-financing, using profits from the funds to cover administration costs.

There is additionally a staff is made up of five groups.

- The controller, who in addition to normal financial controlling is responsible for managing and maintaining the process handbooks used in SND
- The administration department, which in turn consists of finance and accounting, IT, personnel and estates and assets administration
- A Legal department, consisting of legal services and the deposits and securities group
- Communications and strategy group,
- Credit and risk management group

Since 1995 if not earlier, SND has clearly been conceived as one pole in a binary process of national and regional development, where the Counties form the other pole. SND's decentralisation has provided the regions with an improved instrument for implementing regional economic development plans, provided these are consistent with national guidelines, while at the same time maintaining quality control at the level of implementing individual projects.

District Offices have been set up with local Boards, typically having 7 – 9 members appointed by the FK. SND can usually nominate up to two members of the Board, but not itself appoint them. The role of the Board is to provide a link to the regional planning process.

The District Office director makes case by case decisions on applications, within the spending limits delegated by SND headquarters and using the assessment criteria laid down by the centre because it is central to the SND philosophy that "equivalent cases

shall be treated equivalently.” The District Office Board **advises** them on these cases. Case officers have generally been transferred from the FK to the DK to handle the caseload. Since SND takes the final decision on funding, it also takes responsibility for any losses incurred. Cases, which give rise to matters of principle, are normally referred to the District Office Board. More generally, the Board aims to ensure consistency between regional plans and the way the SND District Office actually works.

6.2 The Research Council of Norway

RCN was set up to integrate previously disparate Norwegian R&D policy and to create a more holistic way both to manage curiosity-driven research and to integrate the definition and use of R&D more closely into society and industry. In 1999, 61% of its 2.6 BNOK budget was devoted to company-related work. A quarter of the budget was spent on user-directed R&D (where companies specify aspects of their R&D needs, in order to define projects which are then carried out by Research Institutes or universities), and a further 4% (113 MNOK) on innovation programmes such as SMB-Kompetanse, FORNY and TEFT – many of them in conjunction with SND.

From 2000, the Research Council’s Industry and Energy Area is now planning to devote a greater part of its resources to larger projects. Smaller projects and smaller companies will be less involved with RCN as a result of its increased emphasis on research content in projects. The expectation on both sides is that a gap will start to open up between the two agencies in the area of SMEs and innovation.

Most of the Areas within RCN are similar to traditional research councils, focusing on work in the research and higher education sector. These are rarely of direct relevance to SND’s customer base.

The great effort RCN devotes to user-directed R&D ought, in principle, to be highly relevant to large parts of SND’s customer base. It is clear from the quantitative success of its agreement with SND that this overlap is productive. But there is also anecdotal evidence from our cases studies that RCN is seen as remote, centralistic and unhelpful to smaller and medium-sized firms. To the extent that this is true, it will be exacerbated by RCN’s current plans to focus on larger projects. SND’s continuing relevance as a ‘distributor’ for user-directed R&D in turn depends on the customer groups at which this effort will be directed. If, in the longer term, RCN continues to pursue its target of raising the share of GDP Norway devotes to R&D so that it reaches the OECD average, it will have to find a way to deal with smaller and less research-capable firms.

Part of the needed approach is already being taken in RCN’s innovation-oriented programmes, over which it co-operates closely with SND and where there is the greatest overlap between the two organisations. Making this co-operation effective requires strengthening the innovation and technology function in the individual DKs.

6.3 Advisory Services

The advisory service providers offer a range of more or less specialised ways to help companies tackle their specific problems. They often tailor their services to tackle

particular situations, providing special kinds of consultancy. SVO handles the specialist function of advising inventors, so it has a somewhat different target population to the other services. Unlike the others, too, it does not charge for its services, but accepts clients based on its own evaluation of their projects' potential. It is organised nationally and based outside Oslo in Bærum. Its 9 employees travel extensively, often using SND offices as convenient places to meet inventors.

Other parts of the advisory service system have been privatised or de-emphasised in recent years. TI operates increasingly as if it were a private consultant. The fylke-owned BRT network of business advisory consultants has been privatised, though former members remain important deliverers of national programmes such as FRAM. BRT had been set up (1) to ensure that a consulting supply-side existed across the whole of Norway, which could be accessed by small firms and (2) to deliver tailored business advisory support to the smallest companies. Failure to separate these functions seems to have been important in the decision to cut central state funding to this network. Some fylkeskommuner use the private sector consultants who into which individual BRT organisations have transformed themselves to deliver business support services. The loss of the BRT's status as a state-funded advisor means there is no longer a legitimate and independent 'one stop shop' for business support at *fylke* level.



























Kommune-level business development officers can play an important 'signposting' role. Outside the cities, there is typically one or a half a person-year per *kommune* devoted to this development function, so the focus is strongly on the practicalities of setting up business in the *kommune*. Little wider advice can be given, and there are neither the resources nor the capabilities to provide diagnostic services. In the larger cities, on the other hand, the *kommune* business development services can be a significant force. Our interviews at the *kommune* level have made it clear that, in most cases, it is not possible for the business development officers to play an adequate role in first-line business support. Their staffs are too small, they are inadequately trained – both in business and in the specificities of the business support system – and they lack the needed tools. Strengthening this level to provide the kind of 'proactive mentorship' needed in the business support system would be extremely expensive, and would tend to leave the function both over-staffed and under-critical in most Counties.

The remaining category of service in the business support infrastructure is finance, where SND itself plays the dominant role. There is also a proliferation of state-sponsored seed corn and venture funds. Attempts to increase the amount of seed corn venture capital available in Norway have been fragmented and under-critical and will continue to be so unless one or more strong funds are created at greater scale.

6.4 The Division of Labour

Exhibit 18 shows in simple form the customer focus of each business support organisations discussed here, arranged against a hierarchy of company capabilities similar to that in **Exhibit 2**. (Compared with the earlier Exhibit, we have added start-up firms into the lowest rung of the ladder.) We have shaded SND's formal partner organisations in the title row.

Exhibit 18 Customer Foci of Business Support Organisations

| | Kommunale næringssejere | BRT, TI, VINN | Export Council | Design Council | SVO | NFR Research Councils | NFR Brukerstyrt | NFR Innovation | SIVA | SND |
|------------------------------------|---|---|---|---|--|---|---|---|---|---|
| Majors | | |  | | |  |  | | | |
| Competents | |  |  |  | |  |  |  |  |  |
| Minimum capability firms |  |  |  |  |  | |  |  | |  |
| Start-ups and low capability firms |  |  | |  |  | | |  |  |  |

The Exhibit shows that SND's focus on start-ups and the lower part of the capability spectrum is by no means unique. The *kommunal* business development managers tackle part of the same customer base as SND, and provide a first line of support. As we have explained, we see them as very useful allies for SND – especially in providing information and referral services to companies – but not as a potential replacement for the first stop shop function needed in the DKs. SND should provide services to the *kommunal* business development managers, which will enable them to serve their customers better with information about the opportunities provided in the business support infrastructure.

The privatised remains of the BRT network as well as TI and VINN are very useful implementation resources for programmes. Together with other parts of the private business services world (notably management consultants), their role is as contractors rather than as service agencies.

The Export Council's focus is on larger customers than those served by SND. Its international network has a quite different shape to SND's. The overlap between the two organisations is in subsidised services to the more capable part of SND's customer base, and this seems to be well secured through the existing partnership.

The Design Council's customer base is more similar to SND's, but its skill base and modus operandi are quite different. Again, the needed overlap is secured by a partnership agreement and by the allocation of a small amount of design-specific funding within SND.

The inventor support organisation, SVO, works with a sub-set of SND's customer base and with problems that are similar to those SND tackles, although SVO has more focus on questions of intellectual property exploitation than SND. A case could be made to merge SVO into SND. (In Sweden, ALMI has an internal inventor support scheme, operated at district office level.) The counter-argument would be that SVO appears to be functioning quite well as it stands, and – crucially – that internalising it within the DKs would break down SVO's existing team capabilities and shared knowledge base. It would also require doubling the number of invention specialists

from SVO's 9 to cover SND's 18 district offices, or finding a way to share specialists between DKs. The other factor to consider is that dealing with independent or small-scale inventors has a very high nuisance value in an organisation like SND, with a broad product range and customer base. Formalising the present informal co-operation between SVO and SND may be valuable, improving the interface between SVO and its customers by creating a physical presence in each *fylke*, through the SND DKs, and easing referrals from SND to SVO. A full merger might look tidier on paper, but we do not see many advantages compared with a partnership and there are some clear potential disadvantages.

SIVA is rather different from the other organisations considered here, in that it focuses its efforts on spatial clusters where research is present and can be considered a potential growth node. The range of services it offers are the normal ones offered in science and research parks, though it is internationally unusual to see these parks and services operating in effect as a national 'chain.' Inevitably, SIVA's non-property activities overlap with those of others, and a number of our interviewees have questioned whether this is a good way to organise the support system, but SIVA's focus on science and research parks appears to be unique in Norway. Good science park management requires the services SIVA provides. Experience in particularly successful science-based clusters (Cambridge, UK; Cambridge, Mass; the biomedical cluster in Munich, and so on) is that having multiple sources of finance and advice strengthens the hand of developing companies. It is therefore important within the Norwegian system to ensure that local service – and, especially, venture capital – monopolies do not arise. Both the SIVA parks and other parts of the Norwegian system working with venture capital could do well to develop closer links with foreign sources.

The present 'grey boundary' between RCN and SND has certain advantages. First, budget can be made available from two alternative sources, making programme introduction and continuity easier to achieve. Second, the current, slightly ambiguous arrangements mean both that RCN is forced to deal with the 'dirty realities' of technology capability, transfer and learning among less capable companies, and that SND is forced to tackle innovation issues. 'Cleaning up' the ambiguities by allocating responsibility for innovation programmes to either RCN or SND would give both organisations institutional excuses for not tackling the innovation process in its real industrial context. Almost all the theoretical progress we have made in understanding innovation and business processes in the last 20 years has pointed to the way these processes are closely intertwined.

6.5 Concluding Remarks - Norway

There is no really proactive and effective 'first stop shop' structure in the Norwegian business support system. Based on our experience of practice elsewhere, we think this is a major weakness. While the BRT system formerly had the potential to tackle this job, its break-up and privatisation eliminates this possibility. First stop shops need the freedom to act only in the clients' interest, which means they should not have interests of their own. This is difficult to achieve in the private sector. SND's district offices (DKs) present the only potentially viable network, which could tackle this function in the support system. SND has begun to take on this job. However, there is more internal work to be done in order to transform the DKs from a kind of

regionalised banking role into the more proactive units needed to provide a first stop shop service.

The point where it seems to use that the separation between SND and RCN actually matters is the customer interface. The DKs today have an inadequate ability to understand and communicate the possibilities that RCN offers companies. It is more important – and probably easier – to resolve this question than to fine-tune the boundary between functions in SND and Forskningrådet which – in the nature of things – inherently overlap. To this extent, the partnership between the two organisations provides a perfectly adequate start, upon which to build, with an initial focus on improving the ‘offer’ to firms made through SND’s DKs. The most likely solution would be to follow the Finnish model of placing (in their case, TEKES) personnel in the district offices.

7 Conclusions

This report is intended to provide background information to the overall SND evaluation. We therefore draw conclusions, but do not make recommendations. The knowledge generated here has been used in the process of making recommendations in the other reports of the evaluation.

Looking across the countries studied, there are clear patterns of regionalisation in service delivery, the definition of clearer points of entry to the support system through the use of 'one door' policies and a shift away from financing instruments and towards services, which develop company capabilities. Agencies are beginning to become more proactive in interactions with their customers and the environment.

7.1 Regional and national business development policy

The increased importance of the regions and of regional policy in business development is a feature that the countries we have studied here all have in common. This is, of course, part of a wider pattern of regionalisation – creating 'the Europe of the Regions' – that has been heavily promoted by the European Union. It is reinforced both by the structure of the European Commission and by the way it allocates funds to structural development and increasing the cohesion of the community by seeking to reduce inter-regional differences in income and quality of life.

The countries we have studied divide into two camps, when it comes to allocating responsibility for industrial and business development among ministries. In Sweden, France and Ireland, the industry ministries handle both national and regional business development policies. In Finland and Norway, this responsibility is split. Finland's Interior Ministry handles planning questions with the regions, and channels EU structural funds to them. Much of this money is then spent on industrial and business development projects, in parallel – and sometimes in conflict – with the centrally allocated but regionally distributed efforts of Finnvera and the TE Centres. In Norway, SND's regional offices channel funds from both the industry and the regional ministry into industry and business development. There is also a parallel spending track, where county governments spend regional ministry money on business development. Centre-periphery conflicts are, of course, present in all five countries, and are important parts of the democratic debate about how to pursue development. It is difficult to support all our impressions, in the area of state funding for business development, with hard data. However, it does seem that, centre-periphery conflicts appear less intense in the countries where national and regional policies and funds are 'pre-digested' by passing through the same ministry than those where the separation of funds is carried down to the operating level.

All five countries have business development policies which include subsidising capital through selective risk-taking loans by the state and through grants. Newer measures have evolved which shift the emphasis increasingly from capital subsidy towards developing companies' business and technology capabilities. Peripheral location, large distances and a low density of economic activity are structural features

of Finland, Norway and Sweden, which encourage the provision of operating subsidies, for example to reduce the transport cost disadvantages of the peripheral parts of these (in European terms) already peripheral countries.

All three countries continue to operate state loan funds in the remoter regions, in order to compensate for capital market imperfections, which are probably genuine. Yet all three also provide regionally differentiated levels of loans. This policy of subsidising one factor of production in order to compensate for regional differences in the cost and availability of others seems questionable. It may not survive, as policy emphasis more generally moves further from capital subsidy to knowledge and capability development.

7.2 Service Delivery

SMEs have become a much greater focus of policy throughout the OECD in the last 20 years or so, as industrial policies based on structural rationalisation, promoting ‘national champions’ and subsidising structurally loss-making industries have declined in importance. As the focus has shifted towards SMEs, so all five countries studied have adopted a policy of regionalised delivery for company-directed business development instruments. This principle of delivering services close to the customer has wide acceptance, not only in company development systems but more broadly in commercial practice. As part of the new customer consciousness, agencies⁷ now routinely survey their customers in order to gauge their own performance.

Even where services are delivered in a decentralised way, support systems have generally become complex and intransparent over the years. Countries and regions increasingly seek ways to simplify these systems.

Among the five countries studied here, Ireland and Norway have gone the furthest towards a ‘one door’ policy, where companies seeking assistance are offered a single, clear point of entry to the support system. The Enterprise Ireland system for SMEs is the most centralised, though micro-firms with fewer than 10 employees are directed to local provision through the County Enterprise Boards. It is structured so as to provide a layer of advice and brokerage to companies, which is separate from its battery of programmes to support company development.

The Norwegian SND system is more inclusive, welcoming micro-firms and providing measures relevant to them (such as FRAM). It is less centralistic than the Irish system, with SND working through partnerships in addition to providing its own services. However, its regional apparatus is much less able to act as a guide to companies because it has not yet separated the advice and brokerage function of the regional offices from the delivery of services.

The French system is complex by design, and is regarded in this respect as dysfunctional by many people who work within it. Despite current efforts at simplification, the Swedish system remains in practice very complex. One aspect our brief survey was not fully able to capture is the proliferation of additional fragmented actors at national and regional level. Examples include the seven ‘technology bridge’

⁷ ALMI, ANVAR, the TE Centres, Enterprise Ireland and SND all conduct regular customer surveys

foundations, the national KK Foundation for knowledge and capabilities, the SME services of the research institutes, the small-scale regional operators such as the Knowledge Centres network of 11 SME support providers in the County of Västernorrland, and so on. These systems are difficult for SMEs to navigate.

Finland is a case in transition. The reform which brought three ministries' services together in the regional TE Centres is still very recent. Finnvera's capital provision services remain separate, and the link from the two to regional development planning is limited. But the system is clearly moving towards a more effective 'one door' policy.

7.3 Proactivity

The service deliverers in the countries studied differ greatly in the extent to which they are proactive, with respect to national policy, regional development planning and at the level of the individual company (or network of companies).

The French administrative tradition involves comparatively strong ministries, with central analysis and planning capabilities. The Swedish system has a tradition of small ministries and much larger operating agencies. NUTEK has therefore had a very active analysis and planning function throughout the 1990s, which together with initiatives from the operating divisions have had an important influence on policy and the 'instructions' the agency receives from its parent ministry. Finnish administration is closer to the Swedish model, though the analysis functions of Finnvera, SITRA and TEKES are not individually as extensive as those of NUTEK. In Ireland, policy analysis is separated to a special policy advice and co-ordination board (Forfás). The division of labour in the Norwegian system is not so clear. Unlike the agencies in the other countries, which answer to a single ministry, SND acts on behalf of five ministries, which specify its tasks in varying amounts of detail. The balance of analytic effort between SND and the different ministries also varies. Overall, SND's role as a policy-defining organisation is surprisingly weak, given its role as – in effect – a cross-ministerial agency.

The involvement of national business support agencies in the development and implementation of regional plans is a new phenomenon, which is beginning to move onto the agenda as these agencies decentralise. In Finland, the Counties tend to involve TE Centre directors in the regional planning process. However, regional plans are not expected to try to commit TE Centre resources. The fact that the ALMI subsidiaries are part-owned by the Counties provides a link with regional planning. In SND's case, the County office directors are advised by Boards, made up of local representative – normally the key individuals involved in County planning. There is little or no direct connection between national business support agencies in France or Ireland and regional planning – though even here, the fact that regional directors are important in the regional system as a whole means they will often be informally involved or consulted. In no case do regional authorities make project by project allocations decisions about money from national business support agencies. The advisory role of SND's regional Boards already goes further in this direction than we have seen elsewhere.

It would be reasonable to expect the role of these national agencies in regional planning to increase further over time. In effect, they provide a standard tool kit which regions can use in support of their own development plans. The national nature of the business support agencies creates economies of scale in the design and implementation of programmes, permits quality control and assures the independence of funding decisions from local political influence.

Proactivity at the level of the individual customer is increasingly understood to be important in business support systems design. First, there are many potential customers who are insufficiently aware of their development needs, and whose economic performance can be improved if they are better informed. Second, the development of high-potential companies may be accelerated if they are offered systematic support for a time, using the mix of tools available within most developed business support systems.

This idea of proactivity is taken very seriously in Ireland, where Enterprise Ireland's client executives actively seek out companies with potential for development, and place the business development resources of the state at their disposal. While these resources are generally available to any company which applies and which satisfies the acceptance criteria of the various programmes, Enterprise Ireland is deliberately selective in its proactive work. It sees perhaps 20% of the SME population as having strong growth potential, and focuses its efforts on them. Other agencies are more reactive. The TE Centres and SND's regional offices are expected to work proactively, but have so far made little progress in this direction.

7.4 Organisational Performance

Support infrastructures in the countries studied are very different from each other, as are the agencies which provide innovation and enterprise financing/support. The following table summarises some information on the organisations, but their roles and scope are so different that it is pointless to make comparisons at the overall level. Only a detailed benchmarking of individual functions could show the extent to which one organisation performs a function 'better' than another.

Exhibit 19 Indicators for Business Support Organisations

| | Finnvera | EI | ANVAR | ALMI | SND |
|-----------------------------------|-----------------|-----------|--------------|-------------|------------|
| Turnover (MEuro) | 153 | na | na | 61.5 | na |
| Total income (MEuro) | na | 132 | 203 | na | na |
| Spending authority (MEuro) | 528.6 | 75 | 210 | 92 | 337 |
| Staff numbers | 400 | 1040 | 490 | 554 | 382 |
| at HQ | 200 | 700 | 160 | 20 | 162 |
| in Regions | 200 | 340 | 330 | 534 | 220 |

Finnvera and ALMI are organised as limited companies and hence turnover is one potential indicator for the scope of their activities. However, Finnvera is a pure risk financing/guarantee organisation whereas ALMI is a more typical example of a development agency providing a wide range of consulting services as well as financing. In Finnvera's case, loans make up 285 MEUR of the total financing granted, the rest of the financing are guarantees and security instruments.

Enterprise Ireland and ANVAR are support agencies which have even wider service offer ranging from consulting to administering various types of EU and National grants. For Enterprise Ireland and ANVAR the total income is more accurate indicator of the scope of the activities because financing is only one aspect of their activities, which range from grants to different type of training and consulting. Enterprise Ireland has very strong central organisation with more than half of the staff employed in three locations in Dublin. Also Finnvera has strong central organisation, although in two different locations, in Helsinki and Kuopio which is located in East/central part of the country. ALMI has very light central organisation due to its concern structure consisting of semi-independent regional companies which host even most of the expert staff. SND's degree of centralisation lies somewhere between these two extremes.

International experience demonstrates that radical organisational shake-ups and mergers absorb a great deal of time & energy. They are undoubtedly necessary from time to time, but should not be undertaken lightly. Every significant organisational turnaround requires 6 to 12 months advance preparation and the entire transition period can take up to three years. During this time a high proportion of management time will be spent on internal issues rather than business support - undermining the task the agency was set up to do in the first place.

Enterprise and innovation support agencies nonetheless need to adjust to their processes so that they continue to meet the requirements of a changing market place. Continuous focus on customer needs feeds impulses for minor adjustments in business process and services. In this bottom-up process each manager and region derives targets from the growth potential of the existing business stock and determines the required development resources for these firms. The role of the central organisation is to gather this information together and use it in strategic business planning, resource allocation and follow up. Constant fine tuning of programme features and organisation becomes an integral part of the planning process.

APPENDICES: Public Research Organisations in France

| Organisation | Ministry in charge | Task | Employee s/Budget for R&D |
|--|--|--|---------------------------------|
| ADEME | Research + Environment + Energy | Energy research | 674/ 190MF |
| ADIT | Research + Foreign Affairs | Technology watch | 30/ |
| ANDRA | Research + Industry + Environment | Nuclear waste | 357/ 200MF |
| ANVAR | Research + Industry | Support of innovation, research valorisation | 365/ 1057MF |
| BRGM | Research + Industry | Research of activity in mines | 850/ 335MF |
| CEA | Research + Industry | Nuclear research | 16 285/ 6500MF |
| CEE | Research + Employment | Research on employment and the labour-market | |
| CEMAGREF | Research + Agriculture | Research on rural knowledge | 610/ 236MF |
| CEREQ | Research + Employment | Research on qualification and employment | |
| CIRAD | Research + Co-operation | Agricultural research for development | 1 800/ 700MF |
| CNES | Research + Defence + Space | Space | 2 500/ 9000MF |
| CNEVA (=> AFFSA) | Agriculture + Health | Veterinarian research and food security | 666 |
| CNRS | Research | Basic multi-disciplinary research | 26 295/ 13720MF |
| CSI (cit  des sciences et des industrie) | Research + Cultural Affairs | Diffusion of scientific knowledge | |
| CSTB | Housing | Research of BTP and housing | 600/ 10MF |
| IFREMER | Research + Fishing + Equipment + Transport | Sea | 1 330/ 960MF |
| IFRTP | | polar research | (12)/ 90MF |
| IGN | Equipment | Cartography and geography | |
| INED | Research + Social Affairs | Demographics | 162/ 85MF |
| INERIS | Environment | Research on risk and security | 400/ 25MF |
| INRA | Research + Agriculture | Agronomic research | 8 528/ 3425MF |
| INRETS | Research + Transport | Transport | 411/ 215MF |
| INRIA | Research + Industry | Information technology and machinery | 737/ 480MF |
| INRP | Research | Education | |
| INSERM | Research + Health | Medical research | 4 963/ 2563MF |
| Institut Curie | Research + Industry + Health | Interdisciplinary research in biology and health | >100/ 37MF |
| Institut | | Medical research | / 378MF |

| | | | |
|--------------------------|-------------------------|--|------------------|
| Pasteur | | | |
| Insitut Pasteur Lille | | Medical research | / 39MF |
| IRD | Research + Co-operation | Development | 1 615/ 1031MF |
| LCPC | Research + Equipment | Transport and equipment | 572/ 270MF |
| Météo France | Transport | Meteorology | (248) |
| ONERA | Defence | Aerospace and military research | 1 840/ 1000MF |
| OPRI | Health + Employment | Rayonnement ionisant, Radioprotection | |