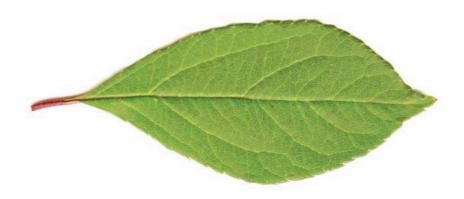


THE PUBLIC SECTOR - ONE OF THREE COLLABORATING PARTIES

A study of experiences from the VINNVÄXT programme



Title: The Public Sector - one of three collaborating parties. A study of experiences from the VINNVÄXT programme

Author: Ulf Westerberg

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About VINNOVA

VINNOVA, Swedish Governmental Agency for Innovation Systems.

VINNOVA's mission is to *promote sustainable growth* by funding *needs-driven research* and developing *effective innovation systems*.

Through its activities in this field, VINNOVA aims to make a significant contribution to Sweden's development into a leading centre of economic growth.

VINNVÄXT - Regional Growth through Dynamic Innovation Systems. VINNVÄXT is a programme that takes the form of a competition for regions. The aim is to promote sustainable growth by developing internationally competitive research and innovation environments in specific growth fields. The winning regions will receive funding of up to SEK 10 million per year for a period of 10 years. The objective is that the winners will become internationally competitive in their respective fields within this period. A prerequisite for the programme is the active participation of players from the private, public and research sectors and from the political sphere. VINNVÄXT also comprises a number of support activities such as seminars, training/education, the exchange of experience and the extension of knowledge/research. The programme began in 2001. VINNOVA has carried out three calls within the VINNVÄXT-programme and we have altogether selected twelve winners.

The VINNOVA Report series includes external publications and other reports from programmes and projects that have received funding from VINNOVA.

Research and Innovation for Sustainable Growth.

The Public Sector - one of three collaborating parties

A study of experiences from the VINNVÄXT programme

This study was conducted by Director-General Ulf Westerberg, who has chaired the Programme Committee of the VINNVÄXT programme since the beginning of 2002. He has been affiliated to VINNOVA since the beginning of 2007 to conduct this study. Westerberg has long experience in such areas as regional and working life development. He has also led a number of government agencies and held various posts in the Government Offices of Sweden.

E-mail: ulf.westerberg@glocalnet.net

Foreword

One of the cornerstones of the VINNVÄXT programme is that academia, industry and the public sector – the Triple Helix – collaborate and mobilise around a common strategic agenda. The objective is for the innovation system to become internationally competitive in its strongest areas within ten years.

This report deals with the role of politicians and the public sector in regional innovation systems and clusters. Individuals from eight VINNVÄXT processes and two other clusters have been interviewed. These processes include representatives of the political leadership of municipalities and county councils, the management of their administrative divisions and managers of governmental and regional agencies involved in the selected projects.

The aim has been to survey the experiences, commitment and involvement of regional politicians in the VINNVÄXT processes and gather opinions on what could be done better.

We would like to extend out thanks to everyone who took the time to be interviewed as well as the process managers and others who facilitated our work amongst other things in finding the "right" interviewees. This was invaluable in producing the report and in our ongoing work regarding the role of regional politicians in the VINNVÄXT processes.

Stockholm, June 2009

Ulf Westerberg Chairman VINNVÄXT Programme

Anne Lidgard
Director
Innovation Actors Division
VINNOVA

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1 Abstract

The purpose of VINNVÄXT is to promote sustainable growth within regions through internationally competitive research and innovation milieus in specific growth fields. The programme is a competition and the winners are those processes considered most promising. Funding is granted for 10 years.

The study is aimed at representatives within the public sector. This is one of three groups collaborating in the Triple Helix, a cornerstone of the VINNVÄXT partnership. The aim was to gather experiences from the collaboration within each process in two stages. The first stage was opinions on the VINNVÄXT programme and how these and similar initiatives by VINNOVA in the future can be developed and improved. The second stage puts particular emphasis on what particular measures are planned or carried out in the process of maintaining, broadening and developing the involvement and participation of politicians and civil servants.

Representatives of eight winners and two "non-winners" were interviewed, a total of 52 people.

The interviewer encountered a consistently positive attitude to the VINNVÄXT programme. Participation in the processes was not the source of any party political conflict. Quite the opposite, involvement appears to have been well established in party politics.

There was wide support for the Triple Helix's three-way partnership as a good, necessary method of working towards ambitious, long-term goals. The great value of the comprehensive, long-term financial support - 10 years - received particular emphasis.

Several of the projects came into being or received a real boost as a result of the programme's call for proposals. Everybody confirmed that the Triple Helix partnership is contributing to an increased understanding of each other's tasks and roles. One comment, which many would probably agree with, was that "the project is promising but the networks and bridges that are created are perhaps more important to the future development of the region".

A few representatives of the "public actors" participated heavily in the processes. Most had a peripheral and indirect role. The aims and wishes relating to measures for broader participation and mutual learning vary greatly.

All those surveyed considered the competition stages of the VINNVÄXT programme to be good and highly promising. However, it was pointed out that there could have been better handling of the "non-winners". Several concrete examples were given in which the programme had served as a pattern for new projects. In varying degrees, everyone thought that their attitudes to and way of working with development and growth had been influenced by participating in the processes.

The study ends with a number of reflections, conclusions and recommendations. One conclusion is that there is strong support for and expectation that, through VINNVÄXT or other programmes, VINNOVA will continue working in the same or similar forms as an instrument of support to regional innovation systems and growth. One recommendation is that the forms of party collaboration within the Triple Helix should be clarified and developed. Another criticism was that it might be possible to improve academic institutions' contribution to collaborations between parties if such collaborations were deemed to advance academic careers.

2 The historical background

Occasional mention is made of "the Swedish model". This is often defined in different ways and may also be described as a variant of the Scandinavian model, which comes from a similarly historically interwoven background in Scandinavia.

An important aspect of the Swedish background is that Sweden has not been to war for 200 years. Its population of just over 9 million people is relatively homogenous and historically there have been no major conflicts between different population groups. From having been a poor country with the greater proportion of its population employed in agriculture and forestry, Sweden's economic growth has, in the long term, been good since the latter part of the 19th Century when industrialisation took hold. Many early innovations and successful entrepreneurs laid the groundwork for this positive development. The success this has brought has made Sweden into one of the world's richest countries and the welfare distribution across the populace is considered fairly even.

Most countries in the world can be described as having more or less mixed economies. However, Sweden has long been distinguished by having greater elements of a planned economy than many other countries in the Western world. Starting around 1980, there was a significant deregulation under various governments. EU membership in 1994 required adaptation and is considered to have contributed to a more open attitude to what Sweden can learn from other countries, as well as a more easily accessible local market.

Another important element in the Swedish/Nordic model is that of general welfare policy. The idea behind this is that major welfare programmes should be designed to cover not only the neediest, but broadly the working and middle classes too. It is thought this system creates a level playing field, not only between richer and poorer citizens but also between different life needs and different parts of the country. Utilisation according to need and equal conditions for all, solidly funded by taxation and charges mean that the general welfare policy is broadly supported among citizens, who defend its continuation. Sweden has some of the highest taxes in the world, due mainly to the cost of government transfer payments rather than excessively high public consumption.

In Sweden, organisations with various aims have developed in parallel with industrialisation. Free Church, temperance and trade union organisations with broad public support have had a major influence on the development of society. Through informal contacts, involvement in government inquiries,

the consultation procedure and by involvement on the boards of official bodies, it has been possible for those specifically concerned with the labour market to influence policy. For many years, responsibility for wage determination resided centrally. Collective agreements regulating most of the relationship between employer and employee on the Swedish labour market are the reason why there has been no detailed legislation for such things as minimum wages in Sweden. This relationship has been criticised for being corporatist and lacking in openness at the same time as being defended for being a good way to preserve expert knowledge and vital public interests. At the start of the 1990s, the Swedish Employers Confederation unilaterally left all boards and committees on which it had been represented. Since then, the traditional party involvement has waned even as centralised wage negotiations have become increasingly common.

The aspect of the Swedish model that most typifies Sweden is presumably the labour market policy and what is known as the Rehn-Meidner model. This model was designed at the start of the 1950s within the trade union movement in a coherent programme consisting of the following four parts:

- Moderation in public expenditure to prevent increase demand leading to price rises and high inflation.
- An equitable wage policy, designed according to the principles of equal pay for equal work which hastened the closure of unprofitable companies.
- An active labour market policy to make it easier for redundant workers from unprofitable companies to get jobs in successful ones.
- Selective employment stimuli for those companies needing new employees.

It is thought that for various reasons, the model has not been fully implemented. However, it was still important in generating a relatively positive attitude to the change among Swedish wage earners and in hastening and facilitating the structural change. It was initially the large companies which reaped the industrial benefits and up until the 70s, whilst industrial employment was increasing, the expansion could be distributed across the country through such things as regional and industrial policy initiatives. Despite the ambition of supporting labour market flexibility it seems that there were obstacles, chiefly to newcomers establishing themselves on the labour market. Unemployment, which prior to the 90s was around 2-3%, has gradually risen to 5-6% and is anticipated to rise further in the wake of the economic crisis.

Sweden is one of the countries that make the highest overall investment in research and development. Publicly funded research takes place primarily in universities and (to a lesser degree compared with other countries) in

independent institutes. Sweden has long been regarded as having problems commercialising the innovations generated within research. In particular, since the end of the 1980s the initiative has been taken by various governments to bridge the divide between promotional measures aimed at strengthening the innovation climate and increasing growth. One such initiative was the creation in 2001 of the government agency VINNOVA. Its mission is to promote sustainable growth by funding needs-driven research and developing effective innovation systems.

In recent decades, the positive development which Sweden has historically enjoyed has encountered various adjustment problems. Sweden's transition and adjustment to the altered circumstances of post-industrial society and globalisation may have been made harder by its past successes. Despite this pattern of problems which it shares with many other countries, and thanks in no small measure to a stable economy, Sweden can still be considered well placed to cope with the adjustments that are necessary for the future.

3 The VINNVÄXT programme

The purpose of VINNVÄXT is to promote sustainable growth in regions by developing internationally competitive research and innovation milieus in specific growth areas. This is accomplished by funding needs-driven R&D to bolster the key expertise of the particular milieu as well as through strategic initiatives to develop innovation systems.

Since the programme began in 2001, three calls for proposals have been made resulting in the nomination of 12 winning processes so far.

Common to all the winners is that, within its functional region, each process has a well-established strategic concept, a strong research and innovation milieu, strong regional leadership and the active involvement of research, industry and public organisations. One of the most important criteria is that they are considered to have good growth potential. The target is for the winners to be internationally competitive in their respective fields within 10 years.

VINNVÄXT is unique because it is a competition where the most promising growth initiatives win and because the programme takes a long-term perspective. VINNOVA funds the winners by up to SEK 10 million per year for 10 years. Within their regions, actors must contribute corresponding initiatives in the form of cash funds and/or their own efforts. In addition, the winners are offered something called process support which takes the form of seminars, training, follow-up and experience-sharing.

4 Brief presentation of the processes in the study

Uppsala Bio (UB)

Uppsala BIO's long-term goal is to strengthen the growth of the biotech sector in the region. A long history of successful research and close collaboration with industry has led to a range of products and companies growing up within diagnostics, tools for biotech research, and drugs. Its market is the whole world. Uppsala BIO is an initiative from the local biotech industry, universities and the public sector in the county of Uppsala aimed at strengthening the future competitiveness of the biotech sector. www.uppsalabio.com

Robotdalen, Mälardalen (RB)

Robotdalen's vision is to take a leading position within the research, development and manufacture of industrial, field and health robotics. The key to its success has been a milieu in which factors such as strong research, advanced training and industry collaborate and in which innovations and new enterprise are encouraged. They have succeeded in mobilising interested parties from the entire region. Major companies such as ABB, Atlas Copco and Volvo are backing the endeavour. Sweden's first university course in robotics is held here.

Innovation i Gränsland, Skåne (IG)

www.robotdalen.se

Innovation i Gränsland is an innovation system for food in Skåne. The strategic concept is to increase the yield on investments in the food industry and "create the health food of the future" with high nutritional values. The creativity and innovative value come from a basis of interdisciplinary, cross-boundary research. Priority areas are health foods and good, nutritious food in schools and healthcare.

www.innovationigransland.se

Healthcare Technology Alliance (HTA)

The strategic vision of the Healthcare Technology Alliance is to carry out people-centred development of new methods, products and services which bring quality-of-life, wellbeing and health to everyone. The vision is to become the leading region within 10 years for the development of products and services within the healthcare technology field. The Alliance includes a large number of companies, organisations and research and development departments located in south-western Sweden. Its goal is to create growth

amongst its own and other companies within the region through innovative investment within the field. There is also an aim to establish new companies. Healthcare technology means equipment and aids focusing on medical care, preventative care, nursing and rehabilitation. www.halsoteknik.com

ProcessIT Innovation (ProcessIT)

ProcessIT is the driving force behind an innovation system whose strategic concept is to bring together the functional region's process and manufacturing industry (staple industry) with actors in information and communication technology (ICT) from universities and industry. The aim is to strengthen existing staple industry and advance the region's ICT industry to internationally competitive positions. The functional region comprises the tract stretching from Umeå in the south to Malmfälten in the North. The vision is to establish a leading European R&D centre within the field of ICT for staple industry.

www.processitinnovations.se

Fiber Optic Valley (FOV)

FOV will develop and run an innovation system for growth within fibreoptic applications for home and industry plus e-services. FOV comprises the
region along the coast of Norrland from Gävle to Sundsvall. According to
its vision, the innovation process which actually propels the enterprise will
lead to the region becoming the fibre-optic centre of Europe. Some 50
corporate, public-sector and university co-financiers are involved in the
process. The company is developing new products and services within the
field of communication which are being tested and evaluated in a welldefined and attractive milieu.

www.fiberopticvalley.se

Triple Steelix (TS)

TS is a regional development venture which will make the already successful steel industry in Bergslagen even stronger through an effective collaboration with industry, the public sector and research in the region. TS comprises 11 municipalities in three counties: Dalarna, Västmanland and Gävleborg. Small as well as large companies will have direct access to a broad knowledge of steel and steel processing, as well as assistance developing business strategy, production and marketing. There will be the opportunity for researchers to test new ideas. TS will involve a long-term investment in research and technical development. The goal is competitive companies and corporate growth leading to economic growth in the region and thus better job security.

www.triplesteelix.se

New Tools for Health (HNV)

New Tools for Health is an investment in growth within future health and world markets based in the Östergötland region. The venture is distinguished by uniting industry, research and society/policy to facilitate and/or enable collaborations and thus develop new products – goods and services – to meet future needs. Some 80 members are involved in the process. Focus areas are sports and athletics, personal health, distributed care and personal care. The primary goal is to create growth in the region through a gradual approach to the major and growing world market in the field.

www.halsansnyaverktyg.se

Biomedical Development in Western Sweden (BMV)

The strategic concept of BMV is to create, structure and develop tools, platforms and processes to convey cutting-edge academic research to innovations in industry and applications in healthcare. Some of the planned initiatives are more general in nature. They are intended to change the working methods of other areas as well and thereby benefit the development of innovation throughout the biomedical field. Other targeted initiatives are intended to strengthen and develop the innovation process within the region's two industrially and academically profiled areas of strength: Biomaterials and Cell Therapy, and Cardiovascular and Metabolic Diseases. The vision is that by 2015, Gothenburg will be seen as Europe's most innovative and expansive region where it concerns industrial development and evaluated application of new healthcare findings in the biomedical field. www.goteborg.bio.se

The Packaging Arena (TPA)

TPA is an interest body for companies, organisations and researchers with a common goal – to create future packaging based on consumer requirements and sustainability aspects. The aim is to assemble the world's best packing expertise and offer it to an international market. The vision is to use consumer instinct, profitability and sustainability as an innovative driving force in the creation of future packing. The mission is to bring out the potential of packaging as a competitive device and reduce its impact on the environment. TPA is an economic association with a number of integrated partners. Its activities are co-ordinated by a central staff based in Karlstad. www.thepackagingarena.com

5 Experiences

Significance of the call for proposals

The call for proposals and decision to compete to be a VINNVÄXT winner have been significant, in many cases highly significant, in the development of the studied processes into what they became. Some of those interviewed were of the impression that the initiative and process would have disappeared into the mist had the call for proposals and prize not come about. Common assessments include the application being a joint research initiative, and having led to a more definite foundation and stronger focus than before.

The call for proposals attracted major, long-term resources which created a fighting spirit and creativity as well as speeding the processes. It also gave legitimacy, in particular an ability to engage in public organisations financially and in active participation. It set standards for collaborating and cultivating of areas of strength which in many cases might not otherwise have happened. This approach drew in a number of major partners whose involvement indicated that it was serious. The prize spurred people on, added status and strengthened the brand. However, some of the "non-winners" pointed out that the application criteria risked being too standardised and not giving sufficient room for individuality or positive deviations.

There were several mentions of a previously common problem involving an excess of short-term, mediocre projects. Often, these had little other result than providing income for some project professionals.

Party political footing

All the processes studied indicate party political unity surrounding the involvement of the municipalities and county councils. This is underlined by the fact that since the start, there has been a change of majority in several municipalities and county councils but with no change to the participation or economic commitment.

Not many questions on priorities and little forcing-out effect

There were, by and large, very few criticisms within the regions regarding the ventures and priorities. However, in UB's local region for example, there were said to have been some questions from areas of more traditional industry beyond the base region. These considered UB to have dominated public support for industry too much.

According to some, the problem is not too much competition between different development projects but rather a lack of good, future-orientated initiatives.

No one thought there were any serious forcing-out effects.

Stronger focus

A common problem in many regions, which a majority singled out, is that within democratically elected assemblies there is strong pressure from all parts of a region that everyone will share in the development support whether or not there are good opportunities. For reasons of fairness, this often leads to attempts to gather as many development concepts together as possible under the same banner. Such a lack of focus creates poor confidence and often leads to splits and weaker involvement.

One example is ProcessIT whose predecessor in the first VINNVÄXT round was a project called Norrsken. There was great disappointment when the project did not win. It has now been clearly realised and understood that this project was too all-embracing, too sprawling and needed a focus. The entire process has contributed to an improvement in the focus. The new call for proposals led to a fresh approach. Sections of Norrsken were removed to form ProcessIT. Others remained and were progressed differently within the region's five priority focus areas of development and the regional growth programme. The work with ProcessIT has been a powerful unifying force. However, the feeling is that a further joint research initiative is required to generate the international breakthrough that is being sought.

Within TS, the Triple Helix (TH) collaboration is said to have contributed to municipalities getting better at focusing. The regional level leaves more to be desired. Traditionally, actors have mostly looked after their own interests.

A number said that involvement in the processes has contributed to a better focus. This also makes it easier to ignore non-priorities or projects which do not keep within bounds. A number of interviewees said the experience had contributed to a better focus within areas other than the regional development work. It was also thought important that priorities once set should not be so rigid as to hinder good new ideas and initiatives.

Strength areas

In varying degrees, all 10 processes studied were based on strong traditions and existing expertise within each region. It was felt that development and a fresh approach provided opportunities to take the lead in new business areas with major development potential relative to the tradition.

One example is TS, where there is a strong, broad conviction that the steel industry is well worth investing in and developing for the future. This is a mature industry with a wide variety of cutting-edge expertise. The TS process, which through the VINNVÄXT award received status and recognition, is perceived as a marker that the conviction was correct. There was the realisation that, in order to survive in future, the industry and region must join the competence chain.

IG stands out against the other processes primarily because for a number of years, the food industry – the heart of the process – has been deemed a problem industry. The challenge was, as the executive put it, "innovation or slow death". Amongst those interviewed, the industry was generally perceived as conservative and staid, with a few exceptions in companies like Skånemejerierna. The primary discussion forum on necessary survival measures was the Skåne Food Innovation Network, which was also principal applicant. The food industry is perceived as lethargic and conservative but more active now as it switches from bulk to processing. The ongoing generational shift is also considered a factor. Membership of IG means no more sitting and waiting for each other.

Increased contact and cross-boundary TH collaboration

One informant felt that, despite the actual process being promising and successful, it was even more important to the region and the future to build bridges and networks as implied by the collaboration. Network-building has become more efficient.

A large number of processes are collaborating across multiple county and municipal borders. For example, RD works with four municipalities, three counties, three county councils and two universities. This brings difficulties in broadly engaging politicians and civil servants so that genuine participation and learning comes into being between TH actors. At the same time, it is noted that those directly participating in RD are deeply involved and that knowledge of the process within the region is good. One process (UB) found it difficult to extend its functional region as envisaged at the start. The primary reason given was a certain rivalry between universities in the region. The conditions for expansion have apparently improved more.

Within RD, the involvement of the major companies, ABB, VOLVO, Atlas Copco and Esab, are highly significant to the process. RD is coordinating activities to develop a technology/system and new products within robot technology. It is also acting in particular support of small and medium-sized enterprises to create better competition through utilisation of robot technology. Not only has this initiative contributed to major companies in the region becoming active in RD, it has also brought extra involvement from small and medium-sized enterprises to the process. The sub-project,

known as Robots Galore, has contributed greatly to the legitimacy of RD with the industry. Subcontractors of the major companies are also involved.

It is important for collaboration within the regions to build common, trustworthy brands. Most people speak of a very good partnership which is going better and better within TH despite different cultures and a risk of territorialism. A genuine win-win process for all parties, as someone put it.

However, several interviewees also highlighted problems, such as the process of developing an innovation system across the entire proposed region taking longer and requiring greater initiatives than estimated. Reasons may include a lack of resources, half-hearted involvement from some elements in the partnership or a degree of competition with local projects.

One example is FOV in which the Hudiksvall municipality, where the initiative began, seemed to be the most forward-thinking public partner whilst other elements in the region were more reserved. One hinted reason was that the region traditionally pulls in different directions. Municipalities have usually run their own affairs. There was said to be a strong need for a broadening of the region and greater involvement amongst more actors within the whole proposed functional region.

Many localities in the FOV region are typical manufacturing areas where major companies have dominated and in some cases still do. At the time of writing, things are going very well for a number of companies which may lead to self-sufficiency and less interest in developing with others. The average educational level is low. However, it seems that new clusters and new companies, research and interesting training courses will generate more attraction. A number of interviewees stated that knowledge of FOV within the region was still hazy and that amongst all but the most involved, the opportunity to grasp the project was still severely limited. Outward communication appears to have improved. At the same time, a number of people said it felt like the project ought to make a breakthrough in the near future which is probably highly significant to its continuation. It is thought that a newly implemented change of process leader may have contributed to the process having lost some speed in the short term.

TS gives a clear impression of having strong regional establishment and backup despite the region being large. The region comprises three counties, three municipal associations and 11 municipalities. The impression is that there have been and still are many barriers which are not easy to tear down. In this regard, there is a strong consensus amongst interviewees that TS has been refreshingly cross-boundary and has contributed greatly to the creation of new contacts and contact routes. Within the steel industry, people

probably know of each other but many have never met. TS has created arenas which have actually generated new and exciting alliances between companies and on the personal level. The major companies are involved. In a number of localities there are small and large companies but few in between, so the aim is to bring in the small and medium-sized enterprises. There are planned initiatives for more success in this area.

In some parts of the TS region, TH has already been put into practice but elsewhere it is new. Many positive opinions were given in the interviews. TS has created new arenas and things have well and truly got under way. Representatives of the public sector have an important role, including preparing the ground for the process. According to one interviewee, the TH collaboration in TS stands out as exemplary compared to many other "coffee-drinkers and biscuit-munchers" in the collaboration sector. A clear, common goal is leading to less talk and more action. TS is contributing to an increased understanding and respect for the role of the TH parties. The mood and atmosphere in TS is good and respectful which is leading to the collaboration getting gradually better and better. It has been very valuable for major companies to been involved and some business leaders have really come on board. TS has helped open up new perspectives, reduced insular thinking and increased cross-boundary collaboration. However, like weeds, eradicated boundaries will quickly return unless kept in check.

TS is creating an exciting environment which can lead to the establishment of companies. An important lesson which TS has made obvious is how interdependent various actors are. This is particularly so where it concerns the future supply of expertise and workforce. The problem of young people's lack of interest in a scientific education throughout Sweden may be a greater problem here than in other regions.

The TH spirit already exists within BMV, including historically through several donations which dictate a certain amount of collaboration. One problem mentioned for the region is too few entrepreneurs and "successful capitalists". An interesting phenomenon was highlighted, in that the discussion on sustaining and draining activities which used to be commonplace has ceased. This is perhaps because in modern society it is now clearer that important activities are interdependent and that this contributes to the timeliness of TH work

The VINNVÄXT collaboration is described as having major significance in BMV's development. BMV has helped break the ice on collaboration in the industrial area. The process has helped create new routes and contacts and has broken through "firewalls", according to one informant. The long-term approach and competition stages marked it out and when industry became interested, many people realised it was serious. The application brought

together the players and speeded up the process. A densely industrial region needed to widen its base. Major personal involvement has characterised the actors' participation. The formation of Region Västra Götaland has helped greatly in creating good conditions. BMV is helping improve collaboration amongst the region's municipalities and there is now a common land usage plan. Bus companies no longer have their terminus out in the middle of nowhere on municipal boundaries and there is major awareness that development requires regional enlargement.

Within BMV, it was also stated that in its capacity as health authority, the initiative had been taken to make the region better at using its position as customer to promote development and innovations. This was seen as a good sign of politicians' thinking developing due to BMV's activities. BMV has probably contributed to a fresh approach and acted as a template. BMV reports once a year to the regional development committee.

There have been previous attempts at TH collaboration in several regions, but in different forms and not as firmly fixed as in the VINNVÄXT processes. Amongst other things, the collaboration is said to create mutual respect; but this requires participation. All parties have different perspectives, and this contributes to the dynamic of the collaboration. Looking after knowledge aimed at solving problems makes for interesting meetings. There is a lot of ignorance about the different roles, and great ignorance amongst politicians about the situation of business.

As a working method, TH received strong support from everyone interviewed. There was a strong conviction that TH is here to stay. However, there are major differences concerning forms of collaboration.

For example, within TPA the arenas for meetings between the three parties are informal in nature and people meet at special events under the TPA banner to which politicians/civil servants are invited. Several of those interviewed in TPA considered the arrangement to be good and adequate. It was felt important to have a boundary line between the various arenas so that issues end up at the right level and each actor to does what they do best.

In some cases, such as TS and ProcessIT, the public parties were given a very low profile in the presentations of the processes. The participation and interaction was deemed to increase understanding and respect for the parties' different roles. Encounters in new and old arenas created crossfertilisation and ideas for new growth areas.

In a number of processes, it was stated that involvement from the public parties was stronger at the beginning when the processes were being established. In a number of cases, participation subsequently diminished which some considered normal whilst others felt it was regrettable.

However, most of the interviewees shared the view that VINNOVA's definition of TH (given later in this report) is ambitious and important to live up to. However, it requires the participation of all parties and that the public parties are not merely present as financiers. The idea of mutual learning in the processes is based on the presence of a common responsibility and arenas for ongoing meetings. A number of people said there was a need to use processes better and more systematically for mutual learning. The progress of the latter would be best developed in collaboration with other processes and preferably in cooperation with VINNOVA.

Some interviewees mentioned the importance of having a collaboration/interaction between the regional and central players who can in turn cultivate the international contacts.

Increased interest in the situation of industry

A number of interviewees thought that politicians/civil servants had learned from the interaction, a fact that generally increased involvement in the area of industrial policy. For example, the RD collaboration was said to have contributed to a change in attitude amongst those participating the most. It was unclear at this point whether this was generally the case.

Opening up the academic institutions

From some quarters, collaboration with academic institutions was identified as the weak link. Opinions included a lack of attunement and tendency to self-sufficiency. In some cases, collaboration with universities was sluggish and difficult to get going whilst individual researchers showed great interest.

Within TS, it was noted that Högskolan Dalarna has got better and better at living up to the third assignment of contributing to regional development and is active in TS. Within FOV, it was mentioned that it sometimes seems easier to bypass the University of Gävle and collaborate with Uppsala University instead or KTH in Stockholm. There were some comments regarding academic courses sometimes being planned without a locally-connected needs analysis. A large number of assessors think their processes may help open up contacts between the academic institutions and other sections of society. There was one particular comment that through TH, it is important for politicians/civil servants to learn how academic institutions function.

Involving researchers has apparently gone well. They are often interested in a new audience and collaboration beyond the academic institution lends status. Research and researchers benefit from escaping the closed environment.

One informant found his experience of VINNVÄXT further clarified the difficulty of academic institutions in reaching out to companies, particularly small ones. The Swedish education system seems good at providing public enterprise with a highly trained workforce but less good at delivering academically trained people to small and medium-sized enterprises.

The food industry dominates in the IG region although there are some municipalities which have no such industry. Lund is one such municipality but instead contributes one of the important academic milieus. The TH collaboration was thought to have helped these open up more. Universities' increased need for external funding in recent years is also thought, for good or ill, to have contributed to such a development. There was a hint that for some researchers, this might be the only opportunity for collaboration.

Someone within TPA philosophised that if you are seeking a Nobel Prize, you probably don't apply to the small regional university. However, all the more important and perhaps interesting for many researchers is being allied with regional industrial development. This ought to help advance an academic career.

New approach to industrial and growth policy

Participation in the processes is helping politicians and civil servants learn more about how industry functions. There were several instances in which it was said to have increased the motivation and interest of politicians in developing their role and seeing new opportunities within industrial and growth policy.

Several regions have localities with a strong industrial tradition. In various ways and at various stages these have undergone major changes. Some interviewees described the former attitude of politicians as salvaging as much of the past as they could. Such initiatives have often been more or less wasted; at best, they brought deferment and were perhaps politically expedient. The same informant declared that they had been sceptical of VINNVÄXT to start with but realised this programme had an entirely different direction more in keeping with the way his municipality had wanted to work with industrial and growth issues since the mid-90s. Development processes such as RD help in moving up the refinement ladder; expertise is created/strengthened and leads to employment being maintained/increasing in the country instead of jobs moving to low-wage countries. Many of those interviewed expressed how the VINNVÄXT programme is a good example of necessary renewal of industrial growth policy.

For example, some within IG think involvement is helping weaken the boundaries between the various cultures. Some feel that compared with

before there is now an entirely different understanding of the circumstances of industry and a need for industrial/growth policy initiatives.

Within, ProcessIT, it was stated that there are good models of TH in northern Finland which have been informative. The initiative taken by NOKIA to build a testbed in collaboration with Uleåborg municipality on the other side of the Gulf of Bothnia, plus the development which took place, has been highly valuable.

A number of informants believe there has been a useful intensifying of Swedish regional and industrial policy, with VINNVÄXT as a good example. It is necessary to invest in what is best and in those forces with the capacity to develop and renew. Some put this consideration in context of entry to the EU.

Setting a trend

The huge majority of those interviewed thought that their experiences from the VINNVÄXT processes had been the pattern in various ways for other development work. A number of definite examples were given, but many found it hard to do so from memory.

Within the region, HTA is seen as a successful example and worthy of imitation. The project in Region Halland relating to the tourist industry and environmental technology may develop in similar fashion to HTA. Development work is continuously taking place and it is therefore difficult to cite concrete examples of how contributing to HTA itself has influenced working methods and forms.

Just as successful sportspeople generate imitators, FOV is considered a good template for its region. TS has been a good example and is thought to have contributed to the start of an IT collaboration in the region. This may end up being part of TS or forming its own process-IT project. The initiative will probably be able to grow further. Certain other industries in the region are not considered ready to corresponding investment. However, graphics is looking promising and a high-intensity cluster has formed in Ludvika.

Within BMV, it is difficult to immediately point out any projects for which BMV has been a template. However, it has probably made things easier for, say, the Petroproject at Hisingen/Stenungsund. BMV has generated additional involvement, mostly within the project.

Influence on community planning

In the same way as above, most people are convinced that community planning is also being influenced without everyone being able to give definite examples. The communications and training fields are what they primarily highlight.

They also believe there is an indirect influence on community planning but that the causes are not always easy to deduce. A number thought their processes would probably have a particular effect on education and research in the long term. Within ProcessIT for example, it was felt that the initiative is contributing to heightened interest in scientific education.

Concerning Hudiksvall, participation in FOV has clearly had an influence on community planning. The initiative has strongly contributed to the municipality being able to offer suitable premises for new companies, concentrating in the first instance on fibre technology and electronics. The FOV perspective is included in all planning drafted by the municipality. There are unique high school courses. However, as with other areas there are problems interesting young people in science. The school is of major importance in its contribution to a greater interest in technology, especially amongst girls. One observation was that more needed to be done in compulsory schooling to increase interest amongst girls as well as boys.

In some municipalities, an exodus is reportedly underway, but that this is also largely compensated for by an influx. The exodus is not the problem; more people ought to move away and then come back.

It is difficult to directly attribute changes in community planning to individual efforts in such things as TPA. A lot is going on simultaneously. Within the educational field, new courses have come about as a result of TPA. From 2008, Region Värmland will be funding a professor of consumer-driven packaging development.

Factory mentality dying out

A number of respondents say that much of what characterised the old industrial community and mentality has disappeared, or is in the process of doing so. Corporate selfishness and the reliance of generation after generation on the factory for their livelihoods no longer work. What stands out all the more clearly as the basis for a region's survival is all-round expertise and a generally attractive environment. This change is also seen as an effect of the generational shift going on, with younger generations no longer satisfied with or believing in the ability of the factory to provide lifelong job security or a generally good life in other regards.

Involvement of politicians/civil servants

The interest of the public actors comes chiefly from the awareness that a long-term need for growth, good employment and restructuring towards more knowledge-intensive industries is of major significance to their regions. This awareness is also based on the realisation that, in its

interaction with other actors, society has an important role to play in creating the necessary conditions.

Within ProcessIT, the politicians and representatives of the public sector have a more reserved role than in the other study processes. Industry and research are prominent whilst the government as the third TH party is little seen. This picture is enhanced by the fact that only one of nine board members represents the public sector. On the other hand, this representative is the recently departed county governor of Västerbotten. He is also chairman of the board, having been there from the outset. In designing and shaping ProcessIT, politicians were involved more than previously. Civil servants from various agencies and departments have been variously active in the process, particularly at its introduction.

However, contacts and information are said to be working well. One reason is apparently a strong and dynamic process leader solidly based in the universities. A certain amount of self-criticism is discernible over the fact that their involvement has diminished since the beginning and that the regularity of contact has thinned out. Some feel that the broader leadership ought to be regenerated. ProcessIT has strengthened its collaborations with both Umeå and Luleå universities. They have both improved at the third task, with more spin-offs benefiting the long-term growth and improved accessibility of the whole region. The three larger municipalities of Umeå, Skellefteå and Luleå are the prime movers, whilst smaller municipalities in the region have been harder to bring into the process.

Participation amongst representatives of the public enterprises varies greatly. Several people within UB are self-critical in highlighting the problem. There is great difficulty finding lasting forms of participation, due in particular to a general lack of time. There is a tendency in a number of processes to want to gradually withdraw, particularly when it appears the more short-term goals are being attained.

Some of the interviewees are aware that participation in TH is affecting the role of politicians. They are used to taking decisions and having things go as they decide. In TH, they are involved in a continuous process of give and take in regard to experiences and various interests.

Even though individual politicians have an influence on BMV, this is mostly indirect through civil servants and the board of Business Region Göteborg (BRG). BRG represents 13 municipalities in the Gothenburg region whose task it is to contribute to strong growth in the area. BRD has been the prime mover from the beginning and has a very active role in the process. A number of the interviewees are quite clear in their views on TH, which they consider a good, forward-thinking method of collaboration at the

same time as saying that politicians cannot or maybe even should not have an operational role. Especially not in a metropolitan region where there are a lot of projects and not enough time. Indeed, it is considered a delusion to think otherwise. The role of politicians is seen primarily as contributing to funding and backing up the project in various ways. There are no plans to change this outlook and/or measures for change, as described below. Similar points of view have been noted from the Innovation at Interfaces project in Region Skåne. At the same time, a striking lack of business and research knowledge is noted amongst politicians.

Within IG, no politicians are directly involved in the board or programme council (formerly the executive). Instead there are civil servants, mostly from Region Skåne, representing the public sector on the board and programme council. The civil servants inform and report to the political assemblies. Most of those questioned seem satisfied with this arrangement and it is apparent that the civil servants involved are both sensitive to the wishes of politicians and strongly engaged in the process. However, there was the complaint that the distance between politicians and process is too great. The various structures may raise thoughts regarding the different circumstances for politicians in metropolitan areas and smaller municipalities.

Naturally, in metropolitan municipalities, many more development projects are underway and in more areas than in smaller municipalities. Proportionally, there are scarcely any more politicians. Having enough time and stamina means that the bigger regions will need more levels of representational hierarchy. Having ambitious and effective politicians and civil servants need not entail any problem for the process in itself. However from a TH perspective, where the fundamental idea is for both politicians and civil servants to encounter the other actors for the greatest possible exchange of learning, the results will probably vary. In this regard, regions with smaller municipalities may be at an advantage.

Within TS, there are proportionally fewer politicians and civil servants directly involved in the management process. However, communication between civil servants/politicians/process management is said to function well. The process management is keen about information and reporting to the political assemblies and puts a lot of work into this. A number of politicians say that, despite the lack of time, they would prioritise greater involvement in TS if this was requested.

In the opinion of one interviewee, it was commonplace for politicians to come from industrial production. This is rarer now, even in areas with predominantly industrial employment. This makes it even more important to

create arenas in which people with different experiences can talk to and learn from each other.

By and large, everybody agreed that it was important for politicians to be involved and that this was particularly significant at the beginning. However, there were a number who thought perhaps politicians should not be too involved operationally but rather in forums where strategic issues were dealt with. A number of informants thought more involvement was desirable, but a lack of time often brought restrictions. There may be a conflict between broad participation and effective project management and a careful balance is required. A number of processes are reviewing their organisations in this light.

To a degree, several processes affect the municipalities' and county councils' own activities – healthcare and nursing, which means there is involvement on more levels compared with other projects. The link between politics and process may broadly increase the involvement. For example, some 2,000 assistant nurses in Norrköping have been involved in HNV in an inventory of ideas to develop products within the medical ventures. Some 50 ideas have been further processed and the suggestions operation has been made permanent. It was also confirmed that there is a strong innovative force within the public sector. This contribution is lending to an increased sense of professional pride. HNV has also contributed to a broader realisation that healthcare work can create growth; something on which money can be made that is also acceptable in Sweden.

Seminars and other events arranged in various contexts within the processes find to which politicians are invited are finding it hard to get them to attend unless they already know them or they are more directly involved. The most common reason given is a lack of time. This is thought to be a common problem which may have been exacerbated by politicians tending to be recruited in increasingly narrow circles.

County councils used to have a very limited role in Swedish regional growth policy. In recent years, a number of regions have replaced county councils with regional bodies. These have broader mandates than the county councils and have also taken over the duties of the county administrative boards. This initially took place on a trial basis but is now consistently spreading to other parts of the country. Region Skåne and Region Västra Götaland were first to carry out the trial which, as is well known, was a good fit when participating actively in the relevant process.

A number of interviewees stated that it was very important for politicians to be involved, particularly at the beginning to back up the process and give it credibility. No major problems in contact or communication between the actors have been mentioned. However, a certain irritation was noted that processes take a certain amount of time in the democratic assemblies. On the other hand, it has been possible to confirm that the major companies' organisations were probably equally as bureaucratic. In some cases, it was important to clarify the legal elements of the envisaged municipal participation.

Development with a gender perspective

The VINNVÄXT programme has stated that processes should have a gender perspective. Special support initiatives have been provided by VINNOVA to facilitate such an approach. All those approached have accepted the aim even if knowledge of how to do it has been vague.

Within FOV, which has obviously come furthest in its aims within the area, an equality integration network has been built up as support for the process. A large number of people have participated in such things as training courses to increase knowledge and awareness of the gender perspective as an important and integral part of the development of companies, new products and services.

The steel industry is strongly male-dominated for which reason an ambitious equality programme has been included as a particular priority in TS.

Programme and competition element highly praised

The competition stages and criteria in the call for proposals are felt to be good and have contributed to a fresh approach and keener initiative. Some have emphasised that the VINNVÄXT support takes place on market terms and bolsters the strength of what is most developable. Successful development projects also have a pivotal function; they make it harder for bad projects and opportunists to get their hands on funding. However, several think it is important to accommodate diversity. Nor should it be a beauty contest or perceived as permitting arbitrariness. It should not be like a nursery, with everyone playing at queen for a day; "equality" should be promoted by other means. Better to have winners than despair. There is too much projecteering. VINNVÄXT shines out as the exception.

Competing in a contest is considered good and an interesting trigger for bringing forth top-level applications. According to one informant, it can also disrupt individual long-term plans. Participation is a long process which creates irregularities in initiatives and planning. The wait for a decision and lack of a win can result in a major loss of energies and motivation. One person was doubtful about the competition element but it was felt that perhaps they were still unfamiliar and thus question things.

Within ProcessIT, it was mentioned that the competition stages create an incredible amount of work, which can be counter-productive. A brief concept presentation should be enough in order to then continue if the arrangement seems sufficiently interesting. On the other hand, the application preparations were not wasted.

By one accounts, the problem was that the VINNVÄXT programme has been developed as it went along. This has occasionally meant that VINNOVA has been perceived as being late, giving unclear signals and that the interpretation of the individual criteria has been displaced. One example given was a lack of clarity about what was meant by embryonic projects that they want to back.

Within HTA, which was not a winner, there was strong criticism of how the decision was notified. This was very brief and the justification was perceived as vague. This was not considered at all proportionate to the work put in or the need to try and understand and learn so as to move on constructively. The process was perceived as almost insulting.

Within ProcessIT, whose region is furthest north and where support programmes are common during the year, it was thought good that the strongest contestant wins and that resources are put into those projects with the best prospects. But in that case, clear criteria are necessary. It was felt that the competition should not be allowed to degenerate into "bullshit bingo", in other words where the winning applicants are those with no other qualification than being best at adapting to VINNOVA's "newspeak". The era of municipal boards going on "begging trips" to Stockholm is past; there has been a change of attitude. It is far more positive to highlight what you are good at than just give up. No more going cap-in-hand.

Insofar as there were contacts with VINNOVA, most people felt that these had gone well. Some said that the collaboration with VINNVÄXT/VINNOVA had been good, sensitive and professional. VINNVÄXT operates a smarter/more modern working method then many other actors. It was considered highly important that the central actors show respect and confidence in the implementers. Finding your own way has worked well and it has been permissible to be different. The intervention has been well judged. There was a certain criticism about the process time being too slow. It takes too long to produce a decision about a winner and impetus is thereby lost. The processes easily get snarled up which, if nothing else, can cause negative psychological effects.

Some pointed out that central agencies overlapped to a degree or seemed fragmented. Competition between government agencies is not intrinsically wrong but in regard to various EU programmes, the roles and any

coordination should be clearer and better. Too many financiers and actors risk swamping the market. It is better to focus on generating more robust initiatives by the government. Better to narrow it down at the beginning and then open up, with support for those who are good enough.

Being one of the winners meant a lot to FOV. It provided funding and a stamp of quality but also more stability and endurance. Support from VINNVÄXT gave an opportunity to scale things up.

In principle, the requirement for self-financing is good but may create problems for small municipalities with very limited resources. The form of government support involved in VINNVÄXT is strongly supported. There needs to be more investment in innovation and building up an innovation system. Endurance, stable rules and follow-up are required. Pretty much everybody agreed it was entirely reasonable and a good thing for the programme to set requirements through clear criteria.

For BMV, their win brought status and profile which gave advantages in the "internal battle". One person felt it had been easier to win the away match than the home one.

There were some views that VINNVÄXT is good but should be more a combination of call for proposals and dialogue even though it would be difficult to accomplish with clear rules.

Despite that particular TPA process not winning, they were overwhelmingly very positive about VINNVÄXT as a form of government support for regional innovation systems and growth. However, it was felt that TPA would have got going and been pushed even if there was no VINNVÄXT. Still, according to several people the call for proposals and competition stages helped the process gain a clearer structure, led to a polishing of the concept and thus better quality. This in turn required clearer requirements of the university and researcher involvement. Paper Province, of which TPA is a part, has recently been nominated in stiff competition as one of the 16 best cluster initiatives in Europe. This was in an evaluation conducted on the instructions of the European Commission.

A number of the major companies involved in IG have head offices in other countries. It has been very important that their own contribution could be in the form of their own work. If the co-financing had been required in cash then the decision regarding it would have been more difficult or perhaps not made at all.

The VINNVÄXT programme receives consistently good marks and there is strong support for its continuation. Some people feel it would be a shame to change a winning concept.

6 Proposed improvements from the interviewees

- Most of the interviewees expressed themselves in various ways as strongly favouring what can be briefly summarised as: wanting more initiatives similar to the tenets of the VINNVÄXT programme.
- There should be an investigation of how support and initiatives can be implemented effectively in the next stage. For example, in the natural step from regional to national strength and growth initiatives.
- The county administrative boards should have more independent opportunities to fund and contribute to such things as staffing regional development projects.
- Unconditional funding is required for project start-ups. Loans are not suitable.
- The Committee on Public Sector Responsibilities' proposal is in the melting pot. It is highly important for there to be government responsibility for the national growth policy and that new administrative government regions are formed and given a vital role in this.
- Taking into account EU support, there are too many support actors. It is very important to organise the variety of contributors.
- The government should coordinate and develop the support for regional and national innovation policy.
- The government should take responsibility for spreading good ideas to and between various regions. More arenas should be created in which actors are invited to cross-fertilise.
- There should be more space for experimentation in order to develop regional innovation policy. Region Halland has a high level of growth and should be made a test county to develop method and form.
- Special initiatives perhaps a new call for proposals to support the development within the fields of climate and energy will probably be very important. There are ideas and expertise. There are global markets. Successful efforts and initiatives like these would provide valuable contributions towards meeting one of humanity's greatest challenges.
- There should be better support for increasing young people's interest in entrepreneurship.
- There must be a better capacity to see the advantages and opportunities
 of preserving equality and diversity for development and growth. The
 VINNVÄXT processes provide an excellent opportunity to integrate the
 equality perspective in the development of companies, products and
 services.

- It would be of great value to develop political awareness with the aim of changing structures and systems in society that affect the circumstances of industrial development, competitiveness and growth.
- It should be investigated whether agencies, faculties and departments could set aside a certain proportion of their allowances for future inventories of particular knowledge/expertise from which companies would benefit.
- Universities need to get better at taking new knowledge to companies and participating actively in regional development.
- The incentive to researchers to contribute in the development of companies needs to be improved. It should count as an academic merit to help companies with what they need.
- VINNOVA should get better at organising itself so that it has relevant knowledge of the circumstances, development and growth of the country's various regions. Conditions and traditions are often very different, which requires flexibility and grassroots knowledge.
- VINNVÄXT and other VINNOVA programmes should be given a more dynamic and flexible outlook on growth. Less getting stuck on traditional thinking and more space for imagination.
- More competitions with clear criteria. It is good that VINNOVA sets tough requirements and it may need to get even tougher.
- The VINNVÄXT competition leaves non-winners and thus a certain amount of lost faith in its wake. How should these often very promising initiatives be dealt with so as not to counteract ongoing or new initiatives?
- The competition stages may be good but should perhaps be combined with more dialogue-orientated method. Better to be narrow it down at the beginning and then open up.
- VINNOVA should work for more collaboration between universities and research institutes.
- Proposals should be investigated for suitable ways to develop embryonic initiatives –projects in early stages.
- More development areas should be prioritised and given long-term support.
- There are many support opportunities both within Sweden and the EU.
 Government agencies such as VINNOVA, NUTEK and the Knowledge
 Foundation should be given opportunities to assist in seeking support,
 synchronising and creating natural transitions between this support
 during various stages of development.

7 Measures to preserve, extend and increase involvement and participation amongst politicians and civil servants

Reports from the four winners amongst the five last processes studied

ProcessIT

- The politicians were more involved initially when ProcessIT was being put together than later. This involvement is manifested in robust cofinancing.
- Since the introductory stage, there has been contact and dialogue chiefly
 with trade units, and growth and development offices alongside projectrelated activities and meeting venues. Public representatives
 occasionally contribute to corporate contacts, meetings with industrial
 organisations and for specific ventures.
- Politicians/civil servants are continuously updated on the status of the project and sub-project.
- The process management is given the opportunity to influence the strategy documents drafted within the region so as to clarify ProcessIT's role and development in context.
- Planning is underway to hold a workshop during April. The aim is to invite "non-projecteers" to discuss the actors' roles in the innovation system. Previously, this dialogue was mostly held with industrial organisations, various clusters etc.
- Many organisations prefer to build their surroundings based on themselves. The aim of the process management is for this work to be directed instead at making contributing actors recognise that they are a part of the innovation system and to conduct an ongoing dialogue on roles, who does what and methods of mutual reinforcement.

Fiber Optic Valley

- The membership and design of the non-profit organisations should be reviewed. The aim is to bring in more municipalities more actively and with greater responsibility. The board should take a clearer responsibility for these issues.
- A discussion is being held regarding a review of regulations and to give the election committee instructions on nominating more politicians to governing bodies.
- Initiation of strategy workshops for leading civil servants and politicians in the region.

- More initiatives from the process management to present to and inform municipal councils and other political assemblies.
- Inviting politicians to FOV's various events.
- Producing INDICATORS which measure of the dimensions of participation and continuously follow them up.
- Simplifying and enhancing communication relating to FOV in regard to these target groups.
- Developing collaboration with local media to strengthen knowledge of FOV
- Identifying "stakeholders" who can influence politicians and inform about FOV (e.g. CEOs from the traditional basic industries who have strong influence).

Tripple Steelix

- The process management sees the public party in TH as a facilitator and an important part of developing the regional leadership.
- A scorecard is used to clarify goals and methods in the collaboration work.
- The process manager has met with all 11 municipalities involved in the process for information and support. There will preferably be closer contacts with the chairman and director of trade development of the municipal council.
- Regular contact meetings, seminars and training initiatives are arranged.
- The board makes a number of study visits to companies each year.

New Tools for Health

- Involvement varies. Naturally, the power shift following the last election has contributed to a reduction in continuity but at the same time has extended the points of contact. The county council and some municipalities have been particularly active in developing their roles, setting up new services and contributing to certain projects and activities.
- There is still much to be desired in terms of developing the regional management in relation to the three actors within TH.
- The most important goal for 2008 is to establish a regional management with a commonly expressed aim and clear roles in the efforts within HNV.
- Planning for this has commenced with activities such as:
 - Evaluation, revision and establishment of the various driving forces
 - Intensified communication with key people
 - Evaluation of funding as cash versus person-hours

 Establishment of more definite projects with clear roles for public actors as requirement-setters and/or purchasers of goods and services, or as suppliers of infrastructure.

Biomedical Development in Western Sweden

- Five out of nine BRG board members are politicians from the region.
 BRG's CEO reports to the board about BMV. There are plans for BRG's CEO to present BMV in similar fashion to the VGR Regional Development Committee in the autumn of 2007.
- On the BMV board are BRG's CEO who is also chairman, plus the regional development director (Region Västra Götaland, VGR) and acting director of healthcare services (VGR).
- BRG and VGR have leading co-workers on the level directly below those mentioned above serving as active members of the BMV process management.
- The management groups for the two sub-processes include appointed representatives from healthcare within VGR and mandated by higher authority as above.
- Participating in the operational management's meetings are the programme manager at the VGR initiative Innovation Healthcare and Nursing and BRG's director for the medical area.
- Leading politicians from the region and the Swedish parliament's Standing Committee on Economic Affairs had a presentation on topics such as BMV in connection with its visit to Gothenburg on 15th October 2007.

8 Reflections, conclusions and recommendations

8.1 Observations and reflections

The interviewer encountered an overwhelmingly positive view from the informants on the VINNVÄXT programme, its form, implementation and results so far. Naturally, an obvious explanation for this is that they only represent the winners and the positive benefits for their region this has entailed. However, the representatives of the two so-called "non-winners" interviewed were largely very positive about the programme. Nearly half of those interviewed are elected politicians or have previously been politicians. Their opinions did not differ conclusively from those reported for the civil servants.

The venture has not been a source of any party political conflict in any of the initiatives. Great care has been taken to establish the involvement across party lines and for the long-term. This is confirmed by the fact that in several municipalities and county council/regions there has been a power shift with newly appointed representatives of new political majorities have been careful to ensure the involvement continues. According to one informant, there may have been conflicts but no-one was interested in "doing party politics" over them since the process was considered of major importance to the region and has great opportunities which they did not want to jeopardise.

There was broad support for Triple Helix as a good, necessary method of working towards ambitious, long-term goals. The broad collaboration creates the fundamentally essential mobilisation of regional forces. This is thought particularly important in a global competitive perspective and bearing in mind that a number of regions/countries in the world are doing similar work.

All 10 processes emphasised the unique aspects of VINNVÄXT, particularly the scale of support and its ten-year duration as highly significant in achieving their goals. Few informants mentioned any real problems with their financial support despite this meaning that new formal decisions have to be taken every year. Some county administrative boards indicated there might be formal obstacles to long-term financial involvement on their part, but practical solutions were found in these cases. Some representatives of smaller municipalities stated that they had problems

being able to finance at the required like-for-like levels, which larger municipalities find easier to manage.

Most of the initiatives came about or received a real boost as a result of the programme's call for proposals. In several quarters, the requirement for a Triple Helix collaboration brought about a collaboration which would previously have been difficult to achieve.

In some cases, Triple Helix has been practised before as a form of collaboration. Several examples were given of how VINNVÄXT processes became a template for other development initiatives or were certain to be the pattern for future efforts. Most interviewees emphasised that the attitude to the collaboration across municipal and county boundaries has been more positive in recent years and that the VINNVÄXT process has contributed to this. Amongst other things, it was pointed out that within the same family it is possible to live in one municipality whilst working or studying in another. Such experiences contribute strongly to more people being interested in the development taking place across an entire region and the entire country because they are interdependent. It is thus a positive thing that change and development are spreading.

No-one mentioned cultural differences, bureaucracy or mutual prejudice as posing any major obstacles or creating problems. Despite difficulties finding suitable arenas for broad participation – as described below – everyone said the Triple Helix collaboration contributed to an increased understanding and respect for each other's different tasks and roles. One informant expressed their opinion as more or less that the initiative itself is very promising and important but perhaps the networks and bridges created through participation are even more so for future development in the region. It is probable that most informants would agree with that assessment.

In general, it appears that most politicians and the majority of representatives of regional government agencies within the regions themselves have had a highly peripheral role in the processes. It has been more the exception than the rule for these to be directly involved. However, individual municipal councils or county governors are or have been board members or chaired executives. In most cases, it is the civil servants who look after day-to-day contact with the process leaders and report in turn to the politicians. For example, in conjunction with financing decisions once a year, it is usual to report on the status of projects to the municipal executive committee, local municipal association, region/county executive committee or regional development committee as applicable.

A number of politicians interviewed thought their own involvement was stronger and more intense in the beginning but has increasingly thinned out.

Although the huge majority are satisfied with their involvement and do not think they need to be more or less participative, they agree that a more systematic and broader involvement would probably increase the value of the Triple Helix collaboration. A lack of time, amongst everything else that must be done, and a lack of expertise other than on a general level have been cited as reasons for problems in increasing involvement. When people are satisfied with the status quo despite major differences, a reasonable conclusion might be that Triple Helix is a relatively new phenomenon in most parts of the country. Opportunities for comparison and prioritising based on personal and others' experience are therefore still limited. A number of interviewees were very clear concerning their perception that politicians can or should be involved in operational bodies within the processes. It is perceived, particularly in the metropolitan regions, as almost naive to believe that politicians would have the time and will to involve themselves in such a level. At the same time, there is agreement that politicians and civil servants in particular have too little knowledge about commerce and the conditions applicable to industry. There is also the view that there is a major lack of knowledge and understanding of the individual circumstances amongst other actors.

In a number of processes, there is a direct connection to healthcare and nursing. However, in several cases mention was also made of the difficulty involving the county council and county council politicians in development initiatives thus making for a weak partner. One reason may be that in many county councils, the politicians concentrate on the overall issues relating to structure and finance whilst the profession is strongly focused on managing production. The responsibility for development and a holistic view thus seems to fall between two stools. Where regions are taking over responsibilities such as managing and coordinating regional development, it seems more natural for these to also incorporate the specific traditional duties into the development perspective.

Experience from the interviews shows a major distinction in the initiative concerning the participation of politicians/civil servants. The report submitted by the process leaders in the second-stage study also showed major variation in the aim to use and develop the Triple Helix collaboration for mutual learning between the actors. Several processes have adopted the Triple Helix ideology for organising the collaboration and testing new ideas to create arenas as far as possible supporting comprehensive and continuous learning. Some seem to be focusing more on the commercial goals in the first instance and hoping for opportunities and forms of learning to arise more spontaneously. The circumstances and milieus differ greatly between the processes, for which reason the formal requirements of how the Triple Helix collaboration should look are hardly achievable. On the other hand, it

would be of very great value to assemble and disseminate information about good examples and arrange experience-sharing between different initiatives.

A number of the processes are now reviewing their leadership and decision-making structures. This may be because the circle of interested parties is expanding and/or that different levels and frequency of meeting are required relating to overall strategic issues on the one hand and operational issues on the other. An adjustment may be necessary, above all to increase involvement from politicians.

Despite the involvement of politicians in the processes standing out and often being limited, both politicians and civil servants assure that they often serve well as ambassadors and pioneers for the initiative. Naturally, one might still ponder how broader and more ambitious involvement and mutual learning in a number of the processes might help pave the way for even greater success. In addition to internal and local involvement, expanded roles can also be envisaged in regard to contact/lobbying on a national, EU and international level, storytelling etc. The politicians emphasise their vital role in safeguarding good experiences from the VINNVÄXT processes in order to progress new initiatives within their region. Their experience and contacts also give them an additional basis to enhance the attractiveness and develop the infrastructure to promote the development opportunities.

Regarding the issue of how far involvement in the process has changed the industrial, growth and regional development work or attitudes generally within this field, everyone confirms this to be the case but to different extents. Most are of the view that there is so much else taking place in the ongoing process that it is difficult to say what caused what. Concerning definite examples, these exist but a number of informants found it hard to recall them offhand.

A number also found it difficult to cite definite examples of involvement having an impact on community planning, even though everyone believes this to be the case. The development process in a region is thus intertwined with events and initiatives, is ongoing and a number of actors are changed during the process. Overall, this restricts opportunities for derivation. The most obvious ones seem to take place when municipalities and universities are involved in the educational field, with processes leading to new training courses linked to the initiative. Overall, everyone felt participation in the VINNVÄXT process had brought a better focus and bolstered the individual areas of strength in their region. Hardly any forcing-out effects were noted.

A number of interviewees linked to typical manufacturing areas or regions where larger companies are or had been strongly predominant reflected on the fact that the factory mentality has disappeared or is in the process of

doing so. The old patriarchal milieus where the factory set the rules, including taking a certain amount of social responsibility, have not functioned in the old way for a long time. The security this brought, with generation after generation able to count on their livelihood from the local factory or mine has also had a strongly negative effect on the ability to change and adapt. Unwillingness to compete for workforce, narrow training and a low educational level, habits and traditions which restrict personal development opportunities, have created vulnerability for families, individuals and the whole of society. In a modern society aiming for continual growth in the competence chain, other alliances must come about to replace the bonds which held together the old factory areas. Regional enlargement, internationalisation, good access to attractive training courses and social milieus, geographical, professional and role mobility are the kinds of things mentioned by many interviewees as more necessary for the future. The Triple Helix collaboration and VINNVÄXT logic seems to fit well in that perspective.

All those surveyed thought the competition stages in the VINNVÄXT programme were good and promising. They believe that supporting the strong ones to make them even stronger is necessary to achieve international competitiveness within each area. No criticism was levelled at the criteria established in the programme, although some felt that they were not particularly easy to understand especially at the start. The view was consistently that it was entirely reasonable that a body offering such strong support as VINNVÄXT should also be able to set reasonable counterrequirements. The criteria were also felt to have contributed to the project developing for longer and being better thought-out than the others.

Some informants emphasised the importance of having requirements for an equality perspective in the processes. However, within a number of initiatives it appeared that efforts with this aim had been added on for appearances' sake or were merely about increasing the number of women in various decision-making assemblies and amongst entrepreneurs. Naturally, the latter may well be important but it is very limited as a measure. There are also examples of a more reliable hold being taken. Training is broadly carried out to increase knowledge and awareness of the heavily entrenched gender patterns which often pose an obstacle to the best possible success. The increased knowledge and awareness is integrated into the work of developing companies, goods and services. Within this area, there is a great need for increased knowledge and experience-sharing.

The process for choosing winners was felt to be reasonable and reliable. No opinions were encountered regarding the procedure or suggestions for a better one.

Hardly any of the informants have participated in the support measures in the form of training/education, experience-sharing, knowledge advancement etc. but everyone said they felt that participation in such activities by more operational representatives from the process side would be seen as valuable. Only a few of the informants were directly involved in contact with the programme management of VINNVÄXT or generally with VINNOVA. However, the direct or indirect experience has been that these contacts went well and were informative and supportive including as a sounding board, especially to the project directors.

It is difficult to see any distinctions between the way the winners and non-winners have developed, apart from differences in resources. However, there is an observable tendency to divergences relating to how the partnership developed which appears to have become somewhat looser amongst the two non-winners. A number of interviewees thought it highly important to have a central standards authority doing things like helping hold together and develop the Triple Helix collaboration. The question of how far the responsibility for regional development should be on a regional or national level from the beginning drew the answer that it should not be either/all but both/and. It is at the interface between the levels and in respect to each others' roles that the work should take place.

A number of interviewees highlighted the strength of the processes being continuously evaluated both internally and as a requirement of the programme or other evaluations on the instructions of VINNOVA. One comment was that it can feel like a bit too much of a good thing when one evaluation comes right after another.

This study is the first to directly address itself to actors within policy and public enterprise. In addition to the major interest shown in such a study being conducted and curiosity as to the results, a number of people also pointed out that the actual interviews were a welcome opportunity for reflection on their own roles and how individual initiatives can contribute to improvements and development.

8.2 VINNVÄXT as a support model

The VINNVÄXT programme, its form and implementation have very strong support amongst the interviewees, particularly in the winning projects. However, even amongst the representatives of the two "non-winners", there was a fundamentally very positive attitude to the programme. Their criticism related more to the process of selecting winners than the general form.

The interviewer encountered major interest in taking part in the study. The number found the interview a good opportunity for their own reflection and thoughts relating to the role that politicians and public enterprise should have within innovation and growth politics.

There is strong support for and expectation that VINNOVA through VINNVÄXT or other programmes will go on working in the same or similar fashion as an instrument of support to regional innovation systems and growth.

There ought reasonably to be interest in a number of regions of Sweden and within different business sectors in imitating the ongoing processes. Like this study, the evaluations which have been made provide evidence that there are a number of processes which can act as good templates and that VINNVÄXT can be a model for future efforts.

Recommendations:

- VINNOVA should continue to gather and disseminate information regarding the VINNVÄXT processes with the aim of inspiring new process initiatives.
- VINNOVA should disseminate information and experience from VINNVÄXT to politicians and organisations on a local, regional and national level so as to highlight opportunities for the renewal of support for regional development.
- VINNOVA should conduct further VINNVÄXT calls for proposals or design similar support for regional innovation systems and growth processes.

8.3 Competition stages

The attitude to the competition stages in VINNVÄXT is also highly supportive. However, there is a certain amount of unease and experience of the downside to this which VINNOVA should give careful thought. Above all, this relates to how to deal with ambitious applications which according to the programme board and executive are not up to the competition standard.

The risk is great that the non-winners will not only lose heart but also have fewer opportunities within the foreseeable future to mobilise the good forces needed for new, joint efforts.

The resources within the VINNVÄXT programme did not seem sufficient to look after and support the non-winners in an entirely satisfactory fashion.

Recommendations:

- If new calls for proposals are made within VINNVÄXT or the like, then VINNOVA should consider adding greater sources so that it is possible to continue supporting promising processes in different ways and to different degrees.
- The winners can and should be nominated in similar fashion to previously. This part of the process appears to have worked well.
- It should be possible to offer financial support in ongoing dialogue processes to the non-winners who "went to the final round" or "played off for third and fourth place".

8.4 Triple Helix

The Triple Helix collaboration apparently existed in several regions before the VINNVÄXT calls for proposals, but has been strengthened and further developed thanks to the criteria in the call. The tripartite collaboration was universally felt to be a good thing and necessary for the future. The new or clarified role in the collaboration has generally provided important experiences, strengthened respect for the actors' various roles and aided thoughts on how politics and public enterprise can contribute more actively to building innovation systems and growth.

The views on how the Triple Helix collaboration can most effectively contribute to the development differed somewhat and were vague. The aims of creating mutual and continuous learning through collaboration also differed even though everyone accepts the concept and its opportunities. There are various ideas and aims where it concerns finding suitable and perhaps new methods of achieving the most possible benefit from the Triple Helix collaboration.

Practically everybody surveyed agreed that the Triple Helix collaboration is here to stay.

Recommendations:

- VINNOVA should develop and clarify the Triple Helix ideology in the light of existing experience.
- The basic concepts and expectations behind Triple Helix should be clarified and further disseminated.
- Prior to submitting a situation report to the VINNVÄXT programme management, there should be a requirement for information on what is being done and planned in order to maintain and increase involvement and participation amongst politicians and other representatives of the public sector.

• Experience and good examples of how involvement and participation can be improved should be continually gathered and disseminated. The politicians' role and how it might be developed can be given particular attention in this context.

8.5 Expectations of the research world

The collaboration between the actors within Triple Helix scenes in most cases have gone well. There were several specific remarks that through collaboration, the universities have become more open and accessible. In several cases, the contribution by researchers has contributed to the creation of a more interdisciplinary collaboration which was seen as very positive. Several people stated or agreed that the ways in which qualifications are given in the research world can be an obstacle to collaboration within Triple Helix.

It would be possible to develop the Triple Helix collaboration (in which universities play a vital role) even more effectively if contributing to such collaboration helped advance an academic career.

Recommendation:

 VINNOVA should increase its efforts so that researchers, even more than now, can count providing necessary help to companies or contributing to regional development as a credit to their academic careers.

9 Personal examples from the interviews

Hans Ekström, Municipal Commissioner, Eskilstuna Municipality, Board member of Robotdalen

"I was initially pretty sceptical about more government subsidy until I understood that VINNVÄXT was rather different to the normal forms of government support. This tied in better with my own ideas of investing in what was most robust instead of what drew the most pity. Previous projects were often rather like fireworks, going off spectacularly but seldom having any discernable results two or three years on. The fact that Robotdalen was a winner means we have gained lasting support to build and expand structures. The concepts were there, but the competitive element required more, generating strength and fresh thinking."

"Collaborating within Triple Helix – or whatever you want to call it now – opens things up, replaces old suspicions with a new spirit of collaboration and generates a broad back-up. I have experience in several fields; my own municipal management and the boards of the regional council and university. Very few development efforts I know have the same legitimacy that Robotdalen has gained. From the companies, I can only go on what was said and that was entirely positive. An example of this positive legitimacy is that Sörmland Regional Council greatly extended its support as things went on."

"There was some criticism in the beginning about the process investing in helping small and medium-sized enterprises to use robot technology. However, I reckon this has died down because it was a good way to get them involved as well. Training, fresh expertise, increased competitiveness and new contacts create a benefit which may be necessary for survival. Eskilstuna has strong traditions as an old industrial city with a relatively low educational level. The major companies often have their own research and are on good terms with the universities. The smaller companies seldom have people with an academic training. For this reason, it is important for us to break down the old patterns and create new contact routes."

"The collaboration within Robotdalen has greatly contributed to increasing the collaboration across municipal and county borders. Three counties, three county councils, four municipalities and two academies are getting on well within the process. Previously, there was a prevailing notion that the success of one was the death of the other. But this is even less so than before and the realisation has grown. People's problems and opportunities can seldom be linked to just one municipality. Within the same family, it is possible for people to live, work or study in several different municipalities simultaneously. We are dependent upon the surrounding world, and it on us. We probably do have to have administrative boundaries between different public duties, but these need not hinder the best solutions to citizens' problems."

"Collaborating in a partnership involving universities is very important, not least of all for the sake of research and education – both as faculties and as individual educators and researchers. The efforts made can have a significantly better exchange than when remaining self-sufficient. This provides legitimacy and interest in further collaboration and more initiatives. One of my pet subjects is that researchers' collaboration with companies and for regional development should have greater significance to their academic advancement. I know it is not all that simple because careers are linked up with the international systems, but there must surely be some way to give it more credence, if only the will can be found."

Lena Hartwig, Municipal Commissioner, Uppsala Municipality

"The Triple Helix collaboration is one of the cornerstones of Uppsala Bio and an excellent way of working. We get to learn from and about each other, which increases our knowledge and extend our network. The partnership in the collaboration also applies in many other contexts. For example, it has been used for the Carl von Linné Jubilee, in drafting the regional development programme, in deciding how the EU's structural funds would be used and in the latest urban development work. For me, and I believe for others who have contributed to the process, it has strengthened insight into the importance of a broad collaboration if you really want to get something lasting done. Personally, it has also meant more company visits and new contacts."

"Since the municipality strengthened the Trade Unit a few years ago and placed it directly under municipal control, we have created a good and necessary support for our regional development and industrial development work. The involvement of the municipality in Uppsala Bio takes place primarily through civil servants in the municipal secretariat. At least once a year, the management of Uppsala Bio visits the municipal executive committee or its working committee to provide a situation report and information. But the collaboration involving us politicians was more intense to begin with. It is perhaps difficult to find meaningful meeting venues which generate the envisaged participation. I read the newsletters and have been to some of the pub evenings, but I think we need to improve and that maybe Uppsala Bio should be used more as an example for other initiatives and contacts."

"I guess it's time to have a good hard think about what the roles of the municipalities, region and politicians are within Uppsala Bio and in the regional development work. What is the task and the assignment, other than allocating time and being involved in funding? Where and how will we create the most benefit? Perhaps VINNOVA can contribute to a constructive discussion?"

"I appreciate the fact that VINNVÄXT sets standards that the winning processes must achieve for equality integration in their development work. Unfortunately, I haven't seen so much of it and there is a lot to do in the area."

"Uppsala Municipality and I myself are getting involved in better support so as to increase the interest in entrepreneurship. This is a question of methods, attitude and generating curiosity around entrepreneurship. The emphasis in the first instance is on high school students. Development processes such as Uppsala Bio can make good templates for this."

"At times, the academic institutions can tend to live in their own world. There should be a stronger requirement for them to live up to the third obligation — collaborating with other actors and contributing to regional development. This has got better in recent years, but many people have lived their entire lives in education. In the academic milieus, the Triple Helix collaboration can aid greater openness and the will to be involved in give-and-take outside of the university world. I agree

that such collaboration should be given greater emphasis as academic advancement."

Lena Micko, Municipal Commissioner, Linköping Municipality

"We need more and more collaboration between the various parties in order to achieve the development we want in the municipality and the region. New Tools for Health is a good example and a template for when I and other politicians want to clarify the benefits of collaborating. We have drawn nearer to each other in the county in recent years and there is an increasing realisation of our mutual dependence. Participating in New Tools for Health strengthens that development."

"In Linköping we have a tradition of collaborating, especially with the major companies. A number of these are advanced technology organisations, but we also need some small and medium-size enterprises and the public sector in the cooperation. In the same way, we can create opportunities to utilise and disseminate the considerable expertise and experience in a wider context."

"It isn't just about taking tax revenues and investing in future projects, but being certain the results will benefit the taxpayer. Perhaps that's unfamiliar. The alternative of investing or not investing just doesn't compare. Concerning New Tools for Health, it's easier in that perspective because the contribution of the municipalities and county council provides excellent opportunities to develop and strengthen our own activities. The Faculty of Health Sciences has an obvious place in that process."

"Preventative healthcare and medical services are often split into different activities and sectors. Seeing and working with the entire chain in a broad collaboration is exciting and will very probably bring about greater employment, fewer costs to the community and a higher quality of life for citizens. The process makes a very significant contribution to focusing on the chain as a whole and thereby understanding of how everything fits together. It also widens out the thinking to new services, products and industries."

"The benefits of VINNVÄXT bring important and enduring additional resources to the process. It also gives status and legitimacy. Within the Triple Helix collaboration of government, industry, academia we have a lot to offer each other. We need to

get much better within the politically controlled operations at drawing up requirements and knowing where the research and companies are that can contribute to the development. But we also need to learn from each other about the circumstances and roles for which we are responsible. Respect for each other's duties can thus increase. It is very important to bring about meeting places where ideas from within and outside can be discussed, amongst other things to strengthen the health perspective in our various enterprises. Everything from exercise, sport, childcare, elderly care and advanced healthcare are parts of the whole."

"In the introductory stage of the process New Tools for Life, involvement was greater than it is now. Perhaps this is natural, but it's as though we've arrived at a new stage which maybe requires a different decision-making structure than before. It's important for different forums for discussion and decision to be kept apart, so that those who meet have equal decision-making powers and operational and strategic issues aren't perhaps muddled up. We have discussed this but not yet got started. Creating meaningful encounters for everybody is of major importance for future success."

10 Appendix

A. Aims and objectives

One of the cornerstones of the VINNVÄXT programme is the creation of good growth conditions in regions through dynamic innovation systems by collaboration in a so-called Triple Helix (TH). An important criterion for winning in the programme has been for the conditions for such a collaboration between industry, the public sector, and research and development to be assessed as good. This experiential study is based on interviews with the public sector actors only. Representatives of these have been chosen from amongst eight winning processes and two processes which have still survived without having won.

In summary, the purpose of this study is:

- from a Triple Helix perspective, to survey the experiences of the public sector representatives during the processes so far within the VINNVÄXT programme in a selection of projects
- to gather opinions about expectations, experiences and what worked well or less well and about lessons which resulted in, say, the relevant government actor working differently now to the way it did before.

B. Triple Helix and actors' roles

The fundamental concept of Triple Helix as drafted by VINNOVA is:

"A very decisive interaction is taking place in the innovation system between three groups of actors – industry, academia and the public sector.

This description of the innovation system includes the essential regulations with policy as the chief determiner. It also includes academia and its research and training which is often crucial to new knowledge and technology. Research is therefore central within VINNOVA's field of responsibility.

The description also explains that sustainable growth takes place through the creation of successful new products, services and processes. Industry and public enterprise are the key roles at this point. Last but not least, this account emphasises the mutual dependence between the actor groups within Triple Helix. Industry needs academia for training and research, and the public sector for efficient regulation and service. Academia

needs industry and the public sector for assignments, funding and to call for academically trained research personnel. The public sector needs a competitive industry and academia in order to gain economic and knowledge conditions to develop and administer an economically, ecologically and socially sustainable society. The goals for these three active groups differ, for which reason mutual understanding is required including personal mobility between them. Clarifying the various goals through recognition of mutual learning is often a successful way, including some "learning by fighting". It is important in this context not only to demand the others' efforts for our group but to ask what our group can do for the others."

It is above all in this perspective that this study wishes to clarify the role of the public sector in the various processes, its experience and what improvements can be made.

C. Procedure

Four processes were studied in an initial stage, in the spring of 2007 – three from the first round of nominated winners and one other which did not win. In a second round implemented during the autumn of 2007 and winter of 2008, six processes were studied; the five winners in the second round nominated in 2004 and one process in the same round which did not win.

The underlying data for the report was gathered at interviews principally at meetings but also through additional telephone conversations with representatives of the public sector within each process. 22 people were interviewed in the first round and 30 in the second. These were chosen in consultation with the process leaders of each process amongst other things to obtain a suitable spread geographically, by roles and by party politics. Close to half of those interviewed were elected politicians. The bases for the study were the calls for proposals for 2002-2003 and 2003-2004, applications, action plans, situation reports, other evaluations and continuation applications/presentations to the programme board.

Experiences from and opinions about the VINNVÄXT programme and VINNOVA's activity have been interpreted and listed by the report author. Observations, thoughts and recommendations are the responsibility of the author alone.

D. Question themes

At the interviews, the questions to the politicians/civil servants followed certain themes:

The first team dealt with how the process came about; which actors took the initiative, how the Triple Helix collaboration within the process worked/was perceived, if it had existed before, if there were other alternatives etc. How the process works, communication/contacts, structure/establishment, roles of politicians/civil servants, areas of strength and focus/divisions. Have attitudes, priorities, working methods changed as a result of involvement etc?

The second theme touched on the process between the project and actors outside; how they looked upon the competition stages in VINNVÄXT, opinions on the call for proposals and application procedure and selection procedure etc. Has the current project beaten other projects which were previously a priority, possibly contradictory? Have the experiences created new contact routes which may be important in future? Have attitudes to the collaboration across municipal/county borders changed? Has communication with central actors worked satisfactorily/developed etc?

The third theme related to general and miscellaneous opinions and particular definite suggestions as to how regional growth projects could be better facilitated/stimulated.

In the second stage, particular emphasis was placed on certain actions taken within the process particularly to preserve, broaden and develop involvement and participation amongst politicians and civil servants. The report data in this question was supplemented with information from the relevant process leaders.

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- 06 Summary The GSM Story Effects of Research on Swedish Mobile Telephone Developments. Brief version of VA 2008:04, for brief version in Swedeish see VA 2008:07.
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