

# **"PIONEERS OF PERSUASION"**

## **A Review of the Use of Scenarios in the Public Sector**

A Study commissioned by

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## EXECUTIVE SUMMARY

### Introduction

In late 1992, the Strategy Team of Scottish Enterprise was asked to look at the use of scenarios for strategy development. Scenarios, it was believed, could identify alternative futures which would challenge existing assumptions in strategic thinking and help develop a longer term perspective in Scottish Enterprise. The Team also sought to understand how the use of scenarios might differ between private and public sector organisations. This study was commissioned to review the scenario experience of other public sector organisations with a broad economic development remit and objectives and operating environments comparable to that of Scottish Enterprise. Given Scottish Enterprise's work with its many partners, experience with the broad process side of scenario building was seen to be particularly important.

### Evolution of Scenario Planning

Scenario planning first appeared in the United States in the 1960s, when Herman Kahn of the Hudson Institute wrote alternative stories about the future of thermonuclear war. Since then, many others have written studies attempting to understand the forces shaping the future. In the United Kingdom, scenario planning was picked up in the early 1970s by the Group Planning Department of Royal Dutch Shell in London. There it was used to help senior managers understand uncertainties in the surrounding business environment and shape their decisions accordingly. Shell still uses scenario planning, but their techniques have evolved to include more emphasis on using scenario building techniques to increase organisational learning.

This change in scenarios can be pictured as a continuum in which early scenario writers produced books that described alternative futures for the world economy, a national economy, a business sector or organisations. Later scenario planners realised that if scenario thinking was to change people's behaviour and decisions, those who were expected to change needed to participate in the intellectual work itself. This led to an increased emphasis on the process of building and interpreting scenarios using interviews, workshops, and a variety of analytical and facilitation techniques. By expanding participation in the process of scenario thinking, scenarios have become tools for changing perceptions, understanding and behaviour, which create change in strategy and outcome.

### Methods and the Final Sample

In looking for examples of how scenarios are used in the public sector for economic development, over 120 people were contacted for information or advice. Of the roughly 100 people who replied, just under 40% had never heard of any such use, while another 15% had heard they were used somewhere else. The remainder had some knowledge of experiences that were relevant to our purposes and about 40 people were interviewed for more details. Those 40 people described altogether about 28 experiences of interest.

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Most of the 28 examples came from Northern Europe, and North America, with a few from Africa. None came from Asia or Latin America. This suggests that scenario techniques are more suitable in some cultures than in others. About half can also be described as examples of scenario studies that were simply "products" - studies that were read with varying degrees of interest and then filed away. As such, they were products separated from any process involving those who were expected to use the scenarios. Another six examples were experiences that involved stakeholders in an economic development or public planning processes, but did not include any scenario work. These examples suffered from a disregard of future uncertainties. Finally, we found half a dozen examples of scenarios produced from a stakeholder process. However only two of these, both in Sweden, were interested in economic development and led by the public sector, and only one was still functioning in 1993.

In sum, out of 28 public uses of scenario techniques, only one is *closely* analogous to the position of Scottish Enterprise. Therefore, if people in Scottish Enterprise undertake a scenario exercise in economic development, they will be working at the frontiers of a new political and economic process.

#### **Eight Successful Experiments in the Public Domain**

Although there was only one organisation in a similar position and role to that of Scottish Enterprise, eight out of the 28 examples can be described as successful experiments in the public domain. Important lessons for Scottish Enterprise can be learned from these experiences, which we have organised in the main features of "Beginnings", "the Full Swing" and the "Spin Offs and Continuations."

#### **Lessons of Beginnings**

We found that 'beginnings' might happen in any way, but strong beginnings included individuals taking a personal risk while calling on their own networks for help. Six out of the eight also originated outside government structures, but quickly involved government people in some way. Finally, the endorsement of respected figures and institutions from the public or private sector served to legitimise an unusual venture and provided participants with confidence that the results of the process would not be ignored.

#### **Lessons of the "Full Swing"**

When we considered the nature of the process itself, we found a number of common elements. First, all have sought to gather financial or administrative support for their work. Second, each sought to draw in the 'right' people, representing both relevant stakeholders as well as good analysts or imaginative thinkers. All have placed a high premium on information and learning, through speakers, seminars and written work. If it can be said that "politics drives out learning", these are all processes which have put learning back into public discussion. Half also explicitly sought to understand their own assumptions and mental maps, using them to identify areas of work.

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All 8 have relied on the advice and participation of outsiders - as experts in a given field or facilitators of the process itself. Finally, the hurly-burly of process has required a structured schedule of meetings to set the pace and maintain momentum by meeting a clear set of goals and objectives. These regular meetings in turn have served to renew the original mandate created at the beginning, while directing the process towards new areas of concern.

### Lessons of Spin Offs and Continuations

All eight of our examples are still continuing. Therefore, their impact can be partly understood by considering how they have continued and what has been created out of each experiment. In every case, discussions that began among a small group of participants on sometimes quite specific issues have gone beyond the original intentions. In some cases, the discussion has deepened among those who began it. In other cases, it has moved to new issues or involved new participants. In one or two instances, the mass media has been used to draw in a wider audience, spreading the small group's knowledge and understanding through society more widely. In several instances, the process has been imitated by groups or individuals applying it to new concerns. Finally, several of our success stories moved from conversations to concrete actions, establishing various forms of 'frontier outposts' to create new institutions and laws.

### Consolidated Lessons of Success

What is perhaps most remarkable about our 8 successes is the number of features they have in common, despite their different political, geographical and cultural settings. The role of leadership and individuals, the importance of collaborative learning, and the ability to move forward in new directions have been part of each example. Some have even led to new institutions. It is therefore tempting to suggest that in these 8 experiences we are witnessing the birth of new political forms and social institutions. However, it should be stressed that these are, for the most part, *ad hoc* initiatives, created in response to difficult and uncertain times.

### Interesting Failures

In addition to our eight successes, we found a number of failures that also offered useful lessons. First, there is a need for a tolerant political culture in which the relevant players can largely be trusted to act in the collective interest. Second, an experiment is most likely to succeed when confident, and relatively uncomplicated, organisations are involved. Third, the scenario team working on a project needs to be assured that they will have continuity of support and time to learn from their mistakes. In return, the team itself must be responsible for using the best practices available. Fourth, the users of the work must help define the research and thinking. This requires the scenario team itself to approach its task with relatively muted egos and to search for ways of engaging the attention of their clients both early and throughout the process.

### Issues to Bear in Mind

The preceding discussion of the successes and failures from our 28 examples throws considerable light on what might be possible in Scotland. However, our research also threw up a variety of issues that don't fit neatly under the simple headings of 'success' and 'failure'.

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2. The second part of the document outlines the procedures for handling discrepancies. It is important to identify any errors as soon as possible and to investigate the cause of the discrepancy. Once the cause has been identified, the appropriate corrective action should be taken to prevent the error from recurring. The results of the investigation should be documented and reported to the appropriate authorities.

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First, scenarios were central to half our successes, but only important at a later stage for the remainder. This suggests that the scenarios themselves are only part of the story and can be used in different ways at different times depending on what the participants are ready to use and most require. Second, the principal clients in every case have been the policy makers, with wider audiences being reached more gradually. The definition of policy maker has, however, varied from one circumstance to another - or from the heads of public or private organisations to local neighbourhood activists or local government bureaucrats. Third, our successes have adopted a variety of roles for the press and the politicians, running from one that ignores both groups to one that treats them as full partners in the process. Given the generally inclusive style of all eight successful exercises it is likely that the model of partnership will be developed further. Fourth, it must be recognised that fundamental values are at stake and therefore any scenario team is always working a "narrow band" of tolerance between boredom and exoticism, making this an especially rewarding but high risk undertaking.

### Can Governments Do Scenarios?

The evidence of this study argues that most successful scenario or stakeholder exercises about the future of a region or country have been led by those who are working from a neutral non-governmental base. This can be partially explained by the fact that elected governments are currently mistrusted and seen as lacking the ability to think long term about important issues. There is one example of a government body, the Södermanland County Administration, leading a successful discussion, but it is considered a novelty even in its own country. Therefore, any government body seeking to emulate their work will be breaking new ground and designing new frontiers of government's work and role in society.

### Conclusions

It is our firm conviction that economic development builds on a society's capacity for political agreement. Without this, no durable social contract can be written so that relevant infrastructures will be created and the right skills developed to allow the majority of people to benefit from the emergence of a new economic system.

Our work on this report had introduced several examples of how that social contract is being renegotiated elsewhere in the world. The models have many features in common, but clearly represent a spontaneous desire to look forward collectively and learn to agree on the requirements for adapting to changing circumstances. As such, they can also be seen as exploring new forms of political agreement and, coincidentally, new roles for government bodies. In addition, all of our successful examples either have, or plan to use, scenarios to develop ideas about the long term future and possible responses to the many uncertainties of the late 20th century world.

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# **1 INTRODUCTION**

This is a report about scenarios, economic development and the evolution of government in the late 20th Century. It is the product of a 6-month partnership between myself and the Scottish Enterprise Strategy Team. While none of us understood this at the beginning, we now know that we have been exploring new ground in several directions simultaneously. First, there is the fact that 'scenarios' mean many different things to many people and even meant many different things to us as we began and pursued this work. In a later chapter, I will explore how our understanding of 'scenarios' themselves has evolved.

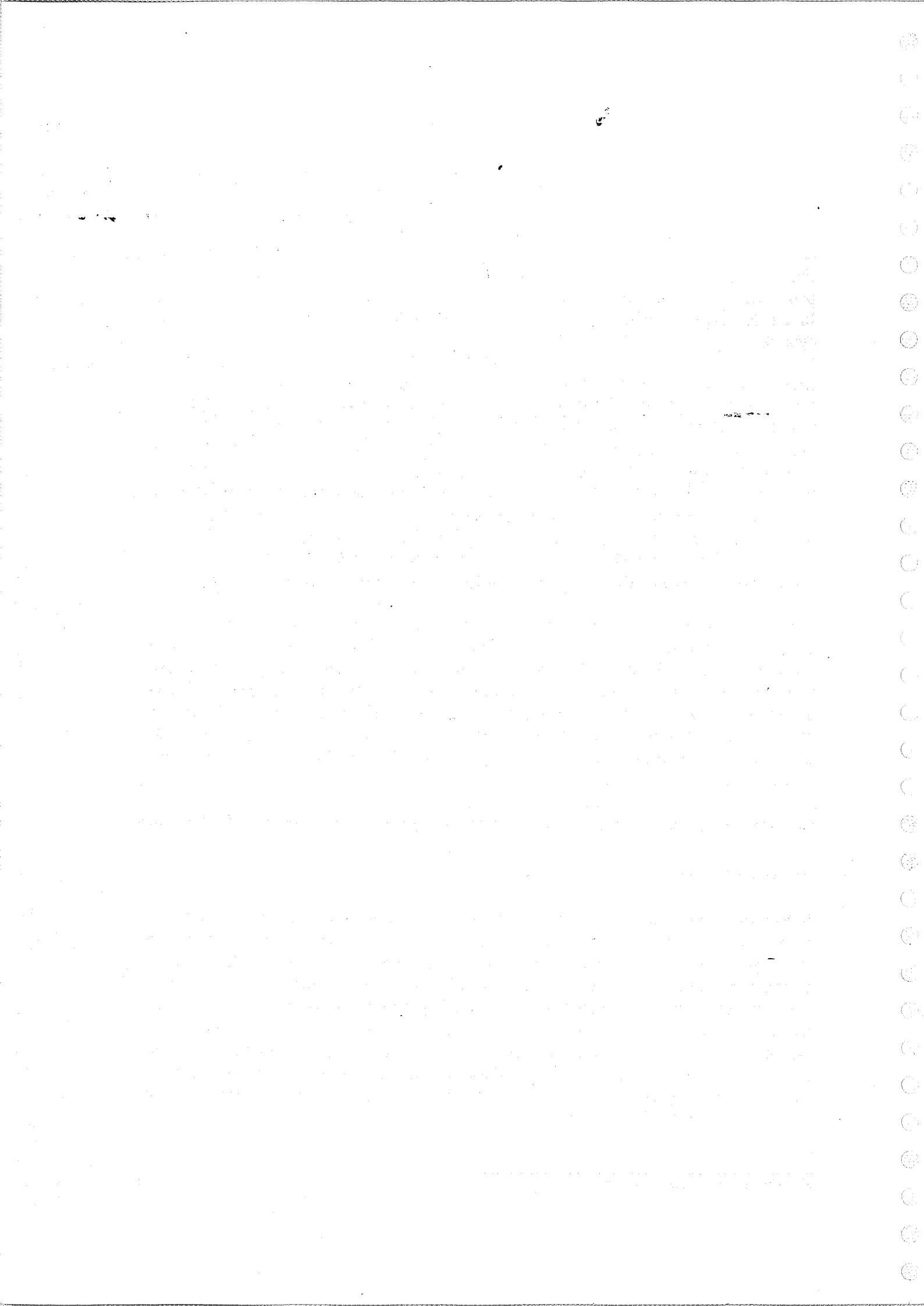
Second, there is the question of economic development. This is an idea that did not exist before the end of the Second World War. When it did gain currency, it was applied to 'Third World Countries' in Asia, Africa and Latin America who were seeking to industrialise and 'catch-up' with the more 'developed' countries of North America, Western Europe and the industrialised Communist bloc. In the case of Scotland, however, we are working with a nation that has already industrialised, deindustrialised and is moving (like many other societies) towards a new social and industrial structure -- a 'neo-industrial revolution', in the words of Bo Ekman, the President of SIFO in Sweden. Economic development in this environment is pioneering work that can draw on some of the lessons of catching-up, but which is also a uniquely different experience.

Third, there is the role of government. When we began asking who used scenarios in public sector economic development, we found several private sector initiatives leading public discussion. These people were engaged in public activities using many of the techniques scenario planners would use, but they were using them outside formal government structures. Government people were included, but often found themselves in new roles. Therefore, without having directly asked the question, we were quite by accident brushing against a redefinition of government's role and responsibilities at the dawn of a neo-industrial age.

So this is a report about scenarios, economic development and the evolution of government.

## **1A Origins of the Brief**

In late 1992, the Strategy Team was asked to look at the use of scenarios for strategy development. Scenarios, it was believed, could identify alternative futures that would challenge existing assumptions in strategic thinking and help develop a longer term perspective in Scottish Enterprise. The Team also sought to understand how the use of scenarios might differ between private and public sector organisation. This study was therefore commissioned to review the scenario experience of other public sector organisations with a broad economic development remit and objectives and operating environments comparable to that of Scottish Enterprise. Given Scottish Enterprise's work with its many partners, experience with the broad process side of scenario building was seen to be particularly important.





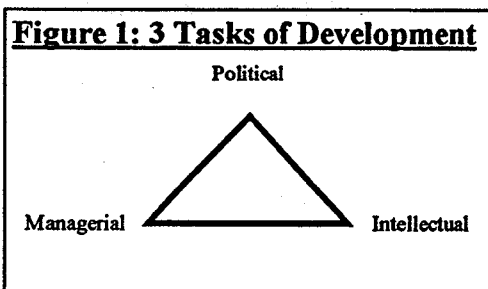
## 2 THE WIDER CONTEXT OF THE ASSIGNMENT

### 2A Scenarios & Economic Development

Many scenarios used in the private sector take a 20-year view. They look at the interaction of social, political, technological, environmental and economic forces to imagine two or three different ways the business environment might evolve in coming years. Since the future is uncertain and unknowable, the company will be best able to survive if it can imagine in advance some of the possible twists and turns it might meet and "rehearse" the different decisions that might be made.

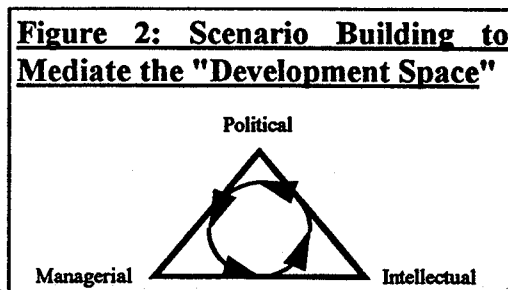
Economic development planners face many of the same uncertainties that are faced by a large multinational company, but in a broader context. In addition, an economic development agency needs to secure a measure of political agreement among competing interests on the goals and means by which development is to be achieved. In this sense, economic development can be defined as have three important components (Figure 1):

- 1) a political task (achieving agreement);
- 2) an intellectual task (identifying policies for agreement); and
- 3) a managerial task (implementing the policies which have been agreed).



Scenarios help to understand the environment within which these development tasks are accomplished. To the extent that they are developed in consultation with competing interest groups, they also help achieve political agreement. By distinguishing between the certain and uncertain developments of the future they can help define appropriate policies and options as

circumstances change. Finally, if those who manage policies are involved in the scenario process, their ability to react to changing circumstances is improved, and successful implementation of agreed policies is more likely. Theoretically, therefore, a good scenario process could be a useful way of mediating the 'development space' between the intellectual, managerial and political tasks (Figure 2).



## 2B Increasing Economic Uncertainty

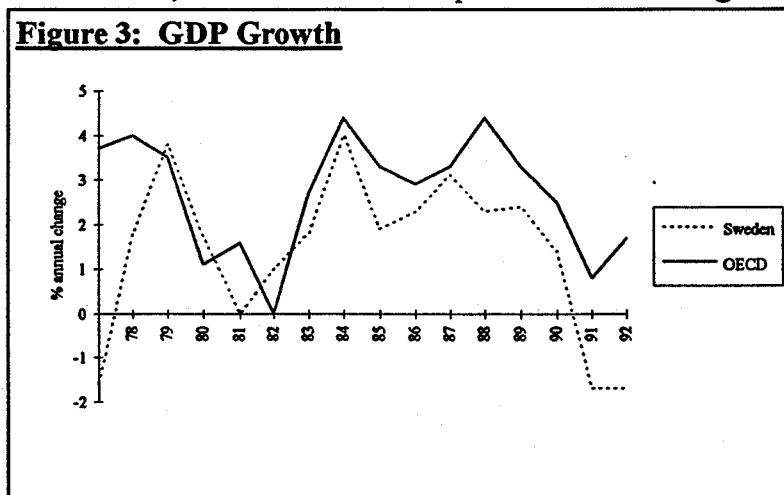
Despite the logical applicability of scenarios in an economic development context, so far as I knew when this study began, scenarios had never been used by any public agency in this way. However, this is less surprising than it might seem, since scenarios have never really achieved wide application in the business world either, apart from Shell and one or two other companies.

This is not the place to speculate on why scenarios have gained so few business adherents; undoubtedly many factors have been at work. One, however, does merit mention: the calm belief that businesses were operating in a predictable world and that scenarios of different futures were unnecessary. In addition, large economic organisations have been better insulated than individuals and slow to accept uncertainty as a defining characteristic of our times. As Adriana Lender of the Trygg Hansa insurance group in Sweden said in November 1993,

*This is the first year we have had scenario reasoning in the budget process. Previously, it had not been a question for a big corporation, insulated from many changes. We didn't need that; the world has been so secure.*

This statement, in 1993, is all the more remarkable given the economic swings and shifts of the 1970s and 1980s (Figure 3). By contrast, Royal Dutch Shell has been using scenarios since the early 1970s after the first oil crisis of the 1970s was anticipated by Pierre Wack, the man who developed scenario thinking in Shell.<sup>1</sup> But many companies

**Figure 3: GDP Growth**



and governments, less dependent on oil, were less permanently shocked by the 1970s oil crises (with the possible exception of Japan). Most organisations have been able to continue to believe in a manageable, predictable world. Even in Shell, despite the early successes of

Pierre Wack and his team, it took ten years to accept that the future was uncertain.<sup>2</sup>

Thus, over much of the past 20 years it has been easy to assume that some form of 'business as usual' would continue to define the future as it has defined the past. Even the

<sup>1</sup> See Pierre Wack's articles in the Harvard Business Review: "Scenarios: Uncharted waters ahead" HBS, 63 (5), pp 73-89 "Scenarios: Shooting the rapids" HBS, 63 (6), pp. 139-150.

<sup>2</sup> Interview with Arie de Geus, former head of Shell's Group Planning division, January 1994 (unpublished, B Heinzen 1993)

recession of the early 1980s, when the Thatcher and the Reagan revolutions began, was more an exercise in liberalising existing rules rather than changing rules and structures fundamentally. The policy response to that recession sought to return society and the economy to the high growth and predictable patterns of the early, post-war decades. As a result, marginal adjustments, rather than more radical change, were the dominant style.

The recession of the early 1990s, however, has been very different. Every major economy has suffered and many of the policy responses of the 1980s are now criticised for bringing on the collapse of the 1990s -- particularly the debts and insecurities of leading financial sectors around the world. This has led more people to see their own nations and organisations as vulnerable creatures in a sea of complex global shifts and transformations. There is also increasing speculation that what we are witnessing is not a cyclical business recession, but a deeper, structural depression leading towards uncharted ground; whether this is *truly* so is perhaps less important than the perception that it *might* be - and the consequent uncertainty the perception creates. This sense of fundamental uncertainty has coincided (and partially been created by) the collapse of the Soviet bloc and the discrediting of communist dogma. As a result, both private sector and state solutions seem woefully inadequate to cope with the scale and challenge of recent change. Instead, there is a sense of intellectual vacuum, an anxiety and uncertainty about the nature of current woes and the best responses to them.

## 2c Growing Mistrust of Governments

Much of this sense of vacuum has focussed on governments, and a residual faith that they should *do something* has not been matched by any action that helps to justify that faith. Increasingly, national leaders are perceived as simply "not up to the task".<sup>3</sup> Opposition politicians are often tarred with the same brush, offering little in the way of personalities or policies that inspire confidence.

There has also been a recent and noticeable growth in two important political responses. The first is the growth of spontaneous local organisations, often using democratic consultative processes to tackle *local* issues that the *national* machinery is too large to handle. The second is the increased interest in and development of supranational solutions - the United Nations, the European Union, GATT, are examples. In Europe these two types of organisation have frequently relied upon each other for their financial support and political legitimacy.

How these political trends might develop is a separate question. However, it is important to recognise that they are an important element of the wider context within which Scottish Enterprise is functioning.

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<sup>3</sup>"Only 20 percent of Americans trust the federal government to do the right thing most of the time -- down from 76 percent 30 years ago." quoted in Vice President Al Gore, Creating a Government That Works Better & Costs Less: Report of the National Performance Review, US. Government Printing Office, September 7, 1993.

## **2D Summary: The Wider Context**

Despite the logical potential for using scenarios to integrate the political, managerial and intellectual tasks of economic development, there is no known history of such use. Nor has there been over the past 20 years widespread use of scenario planning in the private sector, outside a small number of companies. The lack of popularity of scenarios is partially explained by a (now waning) faith that the world is fairly predictable and that existing theories are strong enough to support strategic planning. However, with the prolonged recession of the early 1990s, and the collapse of Eastern Europe, there has been an intellectual vacuum, creating increased anxiety and uncertainty about both the present and the future. This has coincided with a growing popular mistrust of national governments and politicians. In response, people have turned to both local and supra-national organisations for leadership and new ideas. In short, if a scenario exercise were to be undertaken in Scotland, it would be using an established technique in a new context at a time of considerable economic and political uneasiness.

### 3 A SHORT HISTORY OF SCENARIOS AND THE LEARNING ORGANISATION

There is a third aspect to the context of this study that is worth mentioning - the evolution of scenario methodologies over the past thirty years. In this evolution, we can see that scenario techniques have shifted their centre of gravity from being the product of speculative intellectuals, to being a process used by decision-makers to inform their own understanding of the world and their reactions to it. This is a shift of fundamental importance that is not yet widely recognised. This section takes a quick look at major thinkers in that evolution.

#### 3A Early Scenario Work

Since the 1960s, there have been two important geographical centres of scenario thinking, one in France and one in the United States. In France, scenarios are considered one of several different methods of understanding "*la prospective*", which means (as it does in English) 'characterised by looking forward into the future' (*Shorter Oxford English Dictionary, 1973 edition*). In the United States, similar work has been known as futures studies. In either case, Herman Kahn is credited with having first introduced in the early 1960s the idea of looking forward in order to inform policy decisions, initially in military and diplomatic thinking in the US government.<sup>4</sup>

From the beginning, studies of the future have been characterised by a curious mixture of strong academic analysis and emotional speculation. One of the best known early examples of the analytic style is *The Limits to Growth*, published by the Club of Rome in 1968<sup>5</sup>. This book was based on computerised projections of likely supplies of raw materials compared to similar projections of the growth in demand. It forecast a time when the economic demand for energy, metals, minerals, etc. would outstrip supply. Although this rough calculation has since proved too simplistic, a more enduring conclusion from this work prophesied that we would soon reach the limit of the ability of the earth's biosphere to absorb environmental waste.

This Club of Rome study reflected parallel work in economics where statistical models were being used to project long term trends. These long range economic forecasts were described in 1970 by Jacques Baudot<sup>5</sup> as the product of a technocratic era which believed that all political problems could be resolved by good management and administration. This reflected a conviction that economic science was objective in its analytical instruments, its conclusions, and its advice to those in power. It also reflected an absolute confidence in the progress of growth. "In confusing economic growth, development and progress, an overly ambitious (*trop répandu*) prospective slid into fiction."

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<sup>4</sup> See Kahn, Herman. *On Thermonuclear War: Thinking about the Unthinkable*. New York: Horizon Press, 1962.

<sup>5</sup> Baudot, Jacques, *La Prospective Sociale*, "Note introductive". Rapport No. 70.19, Institute de Recherche des Nations Unies pour le Développement Social, Geneva, 1970. This essay provides an entertaining and enlightening review of futures thinking as of 1970. In quoting from it, I have used my own rough translations.

Baudot's linking of early future studies to what people wanted to believe led him to identify two 'congenital' risks of *la prospective*, which still exist today: millennial utopianism and catastrophism. The utopians of the 1960s he argued had been encouraged by recent conquests in space and "the magic of a round number" [the year 2000] to believe that the world was infinitely perfectible, even though present reality was far from the ideal: "A technical utopia has replaced the Radiant City" as the new promised land, he wrote. In contrast, the catastrophists drew on a 'constant pessimism about contemporary civilisation, [to deduce] a cunning or terrifying apocalypse instead of a future Eden". Such catastrophes were seen to follow from atomic explosions, over-population or the destruction of the natural world. Both tendencies, towards utopia and catastrophe, can still be seen today in writing about the future.

Baudot also saw three functions for prospective studies: to reassure those who doubted the wisdom of present conditions by pointing towards a better future, to mobilise people towards a given task, and to help in decision-making. This last was described ("for lack of a more elegant term") as *la prospective pré-décisionnelle* and was the forerunner of the scenarios we use today.

In acting as an aid to decision-making, Baudot argued that decision-aiding studies could "identify problems that a short-term optic might allow to escape." They could also highlight "certain trends [that] taken in isolation do not seem to pose major problems, [but whose] coincidence in the future could be the source of profound change. ... The identification of the interaction between two or more evolution's is one of the essential tasks of *la prospective*." Such studies also isolated "*les tendances lourdes*", literally 'heavy tendencies' or predetermined elements which all decisions must take into account, thereby placing "boundary markers around the inescapable characteristics of the future." Finally, Baudot argued that *la prospective* enlarges the field of the possible, making the future explode into alternatives, largely subject to current choices. "The future does not exist," wrote Baudot, "it is only a series of possibilities."

I have quoted extensively from this essay because it identified in 1970 several characteristics of prospective studies that have survived to the present day. First, there is a strong faith in good analysis and the use of statistical information. Second, there is a more emotional tendency to write of utopias and catastrophes -- the good future and the bad future. Third, at their best, future studies serve as an aid to decision-making, placing boundaries around the inescapable characteristics of the future, identifying the important interactions of evolving trends, and creating an awareness of current choices. Finally, there is still a strong inclination to use future studies to create a vision of a more desirable world.

### 3B The Shell Experience with Pierre Wack

Soon after Baudot wrote his essay for a small United Nations organisation in Geneva, Pierre Wack was packing his bags and moving to the Group Planning department of Shell International Petroleum Company in London where he worked until 1981. Pierre Wack had already experimented with using scenario techniques at Shell Francaise, and was now

applying them at the head office level. By this time, a number of organisations had experimented with future studies of one kind or another, but most such studies were numerical forecasts. Since such forecasts were becoming less and less reliable as the world became more turbulent, Pierre Wack and Ted Newland began to develop scenarios, "to accept uncertainty, try to understand it, and make it part of our reasoning."<sup>6</sup>

Their first scenario process in London constructed four 'first generation scenarios' about the oil price in the 1970s. These scenarios were constructed by first sorting out what were the "predetermined elements" of the future and what were the "uncertainties." These initial scenarios were helpful, but did not actually lead to any change in strategic thinking among top management, because the scenarios

*needed structuring. ... In oil exploration, there were theories to call on, concepts to use, an organised body of geological and geophysical analyses, comparisons with similar geological structures, and ways to spread the risk that were familiar to the decision-maker. The first generation scenarios presented the raw uncertainties, but they offered no basis on which managers could exercise their judgement. Our next task was to provide that basis ...*

In creating a structure to understand the uncertainties, Pierre Wack and Ted Newland began identifying the "key driving forces" shaping the oil price. This led to the next generation of scenarios which helped managers understand the different factors influencing the price and included an analysis of each of the major oil-producing countries. This revealed important differences in the interests of Iran, for example, as opposed to Saudi Arabia or Nigeria. Out of these building blocks, a new set of scenarios was produced. This set included one scenario that would allow 'business as usual' to continue only if there were "three miracles": a miracle discovery of new large oil reserves, a socio-political miracle under which the oil producers would be happy to deplete their resources at the whim of consuming countries, and a third miracle whereby no crisis would create a sudden need for spare production capacity. The unlikeliness of these three miracles occurring together "forced Shell management to realise how disruptive the changes in the world would be."

On the strength of these scenarios, the senior management at Shell decided to "use scenario planning in the central offices and the larger operating companies and to informally advise governments of the major oil-consuming countries about what we saw coming."

Shell's scenario planning continued to develop from that early base laid down by Pierre Wack and Ted Newland. By the time I worked there in the mid-1980s, the Group Planning department had three sections. The first, under Peter Schwartz, was responsible for researching and developing scenario thinking. Every two years, this

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<sup>6</sup> All quotations in this section are taken from Wack, Pierre, "Scenarios: Uncharted Waters Ahead", *Harvard Business Review* 63 (5), September-October 1985, p 73-83 passim)

thinking was presented to various parts of the Shell organisation using overhead slides, lectures and discussions. The presentations began with the Committee of Managing Directors and, once approved, were repeated by the Scenario Team throughout the rest of the global company. The scenarios were also published in a very concise scenario book, supported by a series of more in-depth studies on particular subjects.

The second section of Group Planning was the "strategy section". People there routinely reviewed the resources of the Group and worked with the scenarios to think about strategies for the Group as a whole. This was a much smaller, more confidential unit in Planning than the scenario team. The third section was the last to evolve and was an in-house consultancy team, led by Kees van der Heijden, that advised senior management teams in various Shell companies on their own decisions and use of scenarios.

### 3c Scenarios as an Aid to Learning

I mention this division of the Shell work between the scenario team, the strategy team and the consultancy team, because in its strictly logical way, Shell tended at that time to see the scenario work as a somewhat separate intellectual task. Once completed, the scenario thinking could then be handed on to those working on company strategy and developed further in that section. Gradually, however, from the early 1980s onwards, the Planning department became concerned that most of the learning of a scenario exercise was remaining with the scenario team, rather than spreading effectively through the organisation.

*When we first began using scenarios we tended to produce these wonderful books in which we took great pride. We thought of these books as being our product, as being the real output of what we were trying to do. It was only after a period of time that we began to realise that these books really didn't matter, that what we were really trying to do is to get people thinking about the future and developing common visions. The real product was that process, getting everyone to develop a common understanding or map of the situations we might be facing, and increasing participation in the process both of creating those visions and of working at what we might do about them if they should come to pass.<sup>7</sup>*

This issue became a particularly important preoccupation for the head of Planning in the 1980s, Arie de Geus, who started searching for techniques and methods that would raise the understanding of all managers in the Shell organisation, rather than simply those people in the planning department. In 1988, Arie published an article in the *Harvard Business Review* titled "Planning as Learning"<sup>8</sup> in which he explored some of the implications of this idea. In particular, Arie was concerned with finding ways to

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<sup>7</sup> Arden Brummeli, Shell Canada, quoted on p. 74 in Steven A. Rosell, *Governing in an Information Society*, Institute for Research on Public Policy 1992.

<sup>8</sup> The quotations in this section are taken from de Geus, Arie P. "Planning as Learning", *Harvard Business Review*, March-April 1988, p. 70-74.



accelerate the process of organisational learning that is chronically much slower than the rate of individual learning.

*In fact, the normal decision process in corporations is a learning process ... The problem is that the speed of that process is slow — too slow for a world in which the ability to learn faster than competitors may be the only sustainable competitive advantage.*

Arie concluded that the only relevant learning was done by those who have the power to act. He also observed that learning involved changing the mental maps of those people - as new ideas are incorporated into existing mental models which shape decisions and actions. Thus, "the real purpose of effective planning is not to make plans but to change the microcosm, the mental models that these decision makers carry in their heads."

Despite this being the real purpose of effective planning, planners too often fall into traps, according to Arie.

*One is that we sometimes start with a mental model that is unrecognisable to our audience. Another is that we take too many steps at once. The third, and most serious, is that too often we communicate our information by teaching. ... But teaching ... is actually one of the least efficient ways to convey knowledge. At best, 40% of what is taught is received; in most situations, it is only about 25%.*

He then reflected on the Shell experience of using a large scenario team to develop the scenario thinking, which was then presented in a small book or presentation.

*... we had spent nearly 15 man-years preparing a set of scenarios which we then transmitted in a condensed version in two and a half hours. Could we really have believed that our audience would understand all we were talking about?*

The balance of Arie's article in the *Harvard Business Review* discusses various ways Shell sought to accelerate learning in its organisations. Changing the rules of the planning process was one innovation. Using case studies of imaginary events (e.g. the oil price falls to \$15 a barrel, how do you react?), was another. Developing computer models of how a complex system like the oil market works was a third approach. Interviewing managers to uncover their own implicit models of the world, presenting those models back to managers, and then discussing them was yet another approach. What was important, however, was the fundamental shift from seeing planners as assemblers of information to seeing planners as the facilitators of a process of organisational learning.

### 3D Scenarios and Stakeholder Consultation

Planning as learning led to an interesting shift in Group Planning's practices. Scenarios were no longer strictly the intellectual property of the scenario building team in Planning.

Instead, they were increasingly developed in partnership with the decision-makers who needed to incorporate long term issues and uncertainties in their own thinking. This has opened a new and very important aspect of the overall scenario process: the involvement of stakeholders in scenario building. This had a particularly interesting application in the early 1990s when Adam Kahane was seconded from Group Planning to work with a group in Cape Town on the development of scenarios for South Africa. This exercise brought together representatives of all the leading political groups in the country (with the notable exception of Inkatha). They then used the process of building an agreed view of alternative futures for the country to develop a common language and shared understanding of the risks and uncertainties they were all facing.

### 3E Other Developments in Scenario Thinking

Despite the great attention given here to the Shell experience, scenario work has continued to develop outside Shell. There is still a large group of people in France working in this area as well as groups in the United States. Many have evolved in slightly different directions from Shell where scenarios are used to anticipate possible future events and rehearse responses to those events. Against that anticipatory approach, the French tradition seems to have moved towards what are often called 'normative' scenarios. These are not so much descriptions of alternative futures evolving from their own logics, but rather ideal worlds toward which an organisation or society aspires: "The Dream Impregnates (*Féconde*) the Reality", according to Michel Godet who writes:

*La prospective is above all an attitude of spirit (anticipation and will) and a behaviour (imagination and hope) mobilised to insure the quality and mastery of our present and future existence.<sup>9</sup>*

Against the normative approach, Christine McNulty of Applied Futures in the USA has been developing what she calls "vision-based" scenarios. In this technique she seeks to submerge her clients in an imaginary world, taking the gaming and playful side of scenario thinking a step further. She draws decision-makers deeply and imaginatively into the consequences of alternative conditions more fully, making alternative futures as 'real' as possible. They then explore changing social values and circumstances and lead to different business choices. While this is a visionary approach to take, it uses visions to explore uncertainty rather than establish goals, as the more normative French approach.

'Normative' is a curious piece of jargon. The word, by definition (*Shorter Oxford English Dictionary, 1973*) means 'establishing a norm or standard'. However, in this context it has acquired more visionary meaning, a setting of goals and desirable objectives. In this study, we have chosen to concentrate on the use of scenarios to anticipate change rather than direct change towards some laudable standard. We have made this choice out of a desire to learn how scenario thinking can aid decision-making in a time of uncertainty. We also believe that there is a risk that when scenarios are written to set goals they may inadvertently exclude those who have a different vision of

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<sup>9</sup> Godet, Michel, *L'Avenir Autrement*, Paris, 1991, Armand Colin Editeur, p6.

the future, even though they share the uncertainties of the present. We also believe there is a risk that normative scenarios narrow thinking towards a particular object, rather than broaden thinking around a range of possibilities.

In recent years, particularly in the very uncertain climate of the 1990s recession, there has been growing interest in the wider use of scenarios, especially those described as anticipatory rather than normative. This is partly a question of timing -- a methodology that has been around since the 1960s is found to have a new relevance in more difficult times. It is also true that many of the people who worked in Shell during the 1970s and 1980s have left the company or retired and are now offering scenario methodology to a wider public. The Global Business Network, which specialises in scenario development, was established in the late 1980s by Peter Schwartz who had been head of Scenario Planning at Shell after Pierre Wack left. Pierre himself now works as a consultant and has offered scenario thinking to a variety of clients. Others are following suit, introducing the use of scenarios more and more widely.

### 3f Summary: The Scenario Legacy as of 1993

These many different strands in the development of scenarios have left us with an intriguing legacy:

- 1) A strong intellectual legacy that scenarios should be based on good research and imaginative thinking.
- 2) A strong political legacy that relevant stakeholders should be involved in the thinking and understanding of new information.
- 3) A strong psychological legacy that scenarios can be used to understand and alter the mental maps stakeholders use to make decisions.
- 4) A strong organisational legacy that if 1, 2, and 3 are met, scenarios can help to develop a common language and understanding of the future which helps groups to respond effectively to a very uncertain environment.

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## **4 METHODS AND THE FINAL SAMPLE**

The balance of this study will look at what we learned from the experience of others. First, however, we will review the opening assumptions made by the Strategy Team and consider how those assumptions changed.

### **4A Early Assumptions & the Scenario Continuum**

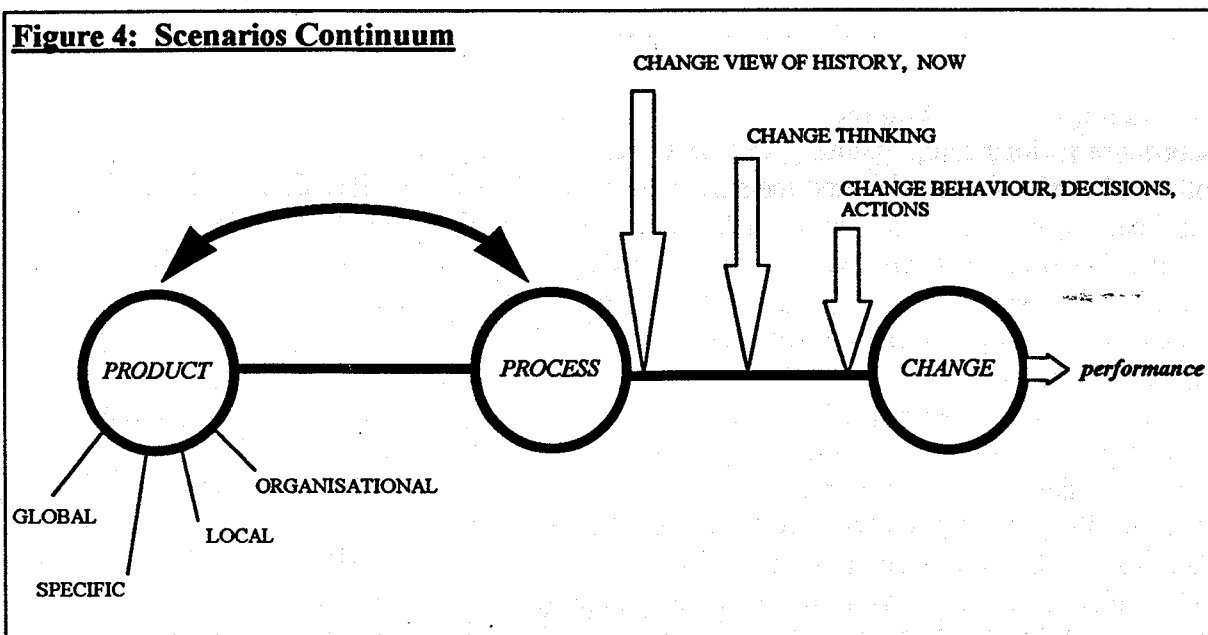
The Strategy Team in Scottish Enterprise began looking in detail at how scenarios might contribute to long range planning in late 1992. However, the search for contemporary information about scenarios and their use was constrained by the fact that much of what has been written is hidden in specialist journals or confidential reports produced for clients. What information about scenarios does reach a wider public tends to be limited, travelling by word of mouth, the occasional myth-making article, and stories told by consultants selling scenario techniques. Moreover, in the UK, the scenario story repeatedly comes back to Shell and people who worked in the Group Planning Department, since the body of literature that has built up in France and the United States is largely inaccessible, rarely picked up by local libraries and even more rarely discussed in the popular media. As a result, those who do take an interest in scenarios are more than usually dependent on the word of people hoping to convince clients of the merits of their approach. In this situation, the client is particularly vulnerable, since there is little independent information by which he or she can judge the product that is on offer. Even when asked for clarification, consultants tended to maintain the mystery of the process, partly, to be fair, because it is inherently a technique that is easier to demonstrate than to explain. As a result, however, there appeared to be something inherently mysterious about this work; scenarios were paradoxically offered with great enthusiasm by those who had developed them, but simultaneously lacked sufficient public evidence of their real strategic utility to be credible.

To develop a clearer sense of what was involved, the Strategy Team began looking more systematically for those people working with scenarios who could offer advice on what scenarios to acquire and on their application to economic development in Scotland. The team also began picking up books of scenario stories (*The Art of the Long View, Britain in 2010* for example), and reading through them to understand what this technique had to offer. This early work led the Team to invite bids from consultants who might be able to review the use of scenarios in the public sector.

Specifically, the work was to have three distinct products:

- 1) A list of public sector organisations with a broad economic development remit which had used scenarios;
- 2) Insights into their experience with scenarios;
- 3) Detailed case studies of that experience where it was most applicable.

As the work progressed it became clear that scenarios could not simply be bought off the shelf like any supermarket product. Nor could they be commissioned from outsiders and expected to have much impact. Instead, the thinking in the Strategy Team evolved along the continuum shown in the Figure 4.

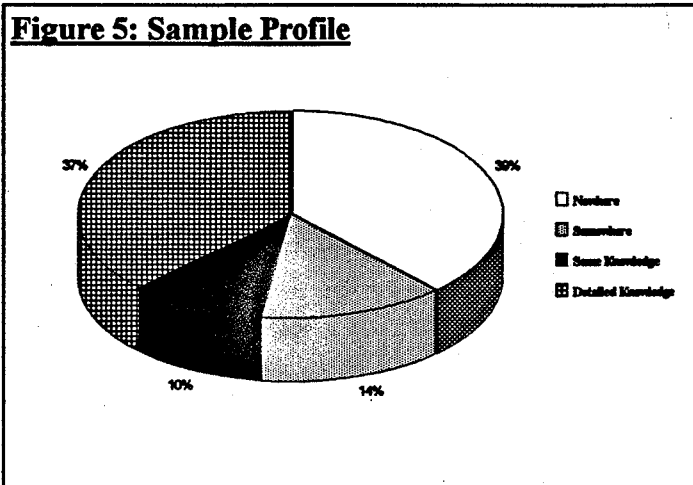


Scenarios were first seen as a product which analysed the local or global environment, from the perspective of a specific industry sector or area of work like health care, for use by a particular organisation. Later it became clear that the product had the greatest impact when some participatory process was used to understand the analysis or even to do the original thinking. This process was seen to contribute to a changed view of history and the present, to changes in everyday thinking and finally to changes in behaviour, decisions and actions. Only the accumulated impact of these changes would lead to a change in overall performance of a firm or economy. This scenario continuum shaped our approach to the interviews we conducted with people in the second half of 1993 and has also influenced our analysis of what we heard.

#### 4B Methods and the Final Sample

When I first heard of the Strategy Team's interest in a review of public sector scenario work, I was sceptical that we would find any useful experiences at all. However, in order to test that hypothesis, I suggested that we could tap two networks: the academic network of development studies centres in Britain, and the scenario-builders' network which is much more international. While a formal request for information to half a dozen centres of development studies in Britain turned up little information, the process of writing to anyone we knew with scenario experience or development experience proved more fruitful.

The networking side the study began when I wrote to about 60 people who worked either with scenarios or in development to ask if they had any experience of scenarios in economic development. Where people in this group did not have information about scenarios in their own experience, they referred me to other people who might help. Eventually, from a mailing list of about 200 names, 123 people were contacted; 107 replies were received (Figure 5).



Just under 40% of respondents had never heard of any use of scenarios in the public sector for economic development ("*nowhere* are scenarios used that I know of"). 14% had heard they were used *somewhere* else. The remainder had *some knowledge* of experiences that were relevant to our purposes and about 40 people were interviewed for *detailed*

*knowledge*. Those 40 people described altogether about 28 experiences of interest.

In the next section of this report, we look at those 28 experiences.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions.

2. It is essential to ensure that all data is entered correctly and consistently.

3. Regular audits should be conducted to verify the accuracy of the information.

4. The second part of the document outlines the procedures for handling discrepancies.

5. Any errors identified during the audit process should be reported immediately.

6. The third part of the document provides a detailed description of the system's architecture.

7. This section includes a diagram illustrating the flow of data between various components.

8. The diagram shows how data is processed and stored within the system.

9. The fourth part of the document discusses the security measures implemented to protect the data.

10. These measures include encryption, access controls, and regular security updates.

11. The fifth part of the document describes the user interface and its features.

12. The interface is designed to be user-friendly and intuitive.

13. The sixth part of the document provides a summary of the project's objectives and goals.

14. The project aims to improve efficiency and reduce errors in data processing.

15. The seventh part of the document discusses the future plans for the system.

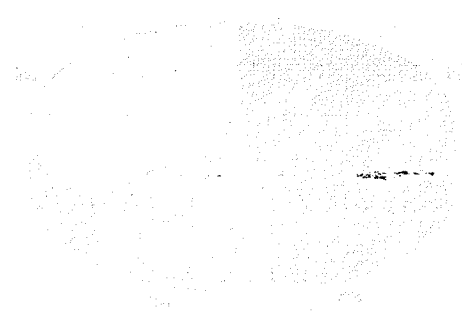
16. These plans include expanding the system's capabilities and integrating it with other systems.

17. The eighth part of the document provides a conclusion and final remarks.

18. The project has been successful in meeting its objectives and goals.

19. The system is now operational and ready for use.

20. The project team is grateful for the support and feedback provided throughout the process.





## 5 THE BROAD LESSONS OF OUR SEARCH

People contacted were initially asked two questions:

- 1) Do you know whether scenarios have been used in economic development?
- 2) If scenarios have not been used, how have others managed the development space between the political, the managerial and the intellectual tasks?

In most cases the first question was answered, but not the second, which was probably too broadly framed to be useful. However, having placed the second question on the table, we were able to pick up related experiences we might otherwise have ignored.

### 5A The Geography of "Nowhere": Places where Scenarios Were Not Used

The results of our enquires contained a few surprises. First, there is no evidence (apart from some hints in Singapore) that scenario thinking has been applied to economic development in Asia, including China and Japan, where there is a strong development record. I was told that the MITI Vision exercises in Japan would probably come close to the 'planning as learning' side of scenario thinking, but the word, 'scenario', was unknown to two of the leading British scholars of Japanese society and politics: Ron Dore and Richard Boyd.<sup>10</sup> A more explicit technique of scenario thinking is being done in Japanese corporations<sup>11</sup>, but there was no evidence that scenarios as we understand them here were used in the public sector. One of the Asian NICs was developing scenarios, but the people working on it clearly regarded the exercise as confidential, and gave us little information about it.

Nor was there any evidence of scenarios being used in the developing countries of Africa (with the notable exception of South Africa), or Latin America. In the case of Latin America there may be more scenario work than we found, since we had fewer contacts with people working in that part of the world than elsewhere, but *prima facie* little is being done.

We were also disappointed with the use of scenarios in the two longest established centres of scenario thinking: France and the USA. In France, we came away with the impression that scenario thinking had become isolated from direct involvement with political decision-making. Instead, it was the province of Parisian intellectuals writing from university seats, but largely disengaged from the ambiguities of public negotiation and compromise. There were several people who had developed consultancy practices which employed scenarios for risk analysis in businesses, but we found little application in the public domain (with one interesting exception in Brittany). This was even true of

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<sup>10</sup> MITI is the Ministry of International Trade and Industry in Japan. Some scholars (e.g. Chalmers Johnson) give MITI much of the credit for Japan's economic miracle, based on its negotiation of government/business relations.

<sup>11</sup> Kono, Toyohiro. *Long Range Planning in Japanese Corporations*. Walter de Gruyter, Berlin & New York, 1992.

the Commissariat au Plan, which had engineered France's recovery after the Second World War and still enjoys a certain reputation. The Commissariat was of interest because they are known to write scenarios and known to bring different interest groups together to discuss difficult issues -- *la concertation des acteurs*. However, we did not see any evidence that the scenario work and the consultative work were linked in an effective way.

We were also disappointed in the other centre of scenario thinking: the United States. Here, too, there is a long tradition and many journals published for those in the futures field. However, the application of scenarios to the public sector seemed distinctly limited. Repeatedly I asked, "how do you cope with uncertainty and how do you think about the long term?" only to be disappointed. When in August 1993 I visited the offices of the National Performance Review which was 'redefining' the organisation of the Federal government<sup>12</sup> under the leadership of Vice President Al Gore, I was told by Terry Feinberg, the Managing Editor, that

*The lack of evidence of scenario use in the economies of Asia merits consideration. In successful Asian countries there is considerable evidence that long term plans are developed through some form of consultation involving all relevant parties. This is similar to a scenario stakeholder process and has frequently meant that plans take a long time to formulate - but are then implemented very quickly. Where this system has been known to fail is where an external shock has forced a crisis review of the existing consensus. The resulting turmoil has often been extremely difficult to handle, although the difficulties do not get much publicity in the West.*

*It could be argued, therefore, that Asian societies could benefit from scenario thinking as much as Western societies. However, to create and agree good scenarios requires the expression of unconventional views. This open exploration of the unthinkable is not a feature of many Asian societies. The Asian proverb that says "the nail that sticks up must be hammered down" expresses the premium placed on conformity. This may explain the uneasy reception scenario presentations have received in Asia, since admitting more than one view of the future could create opportunities for conflicts that are better left "hammered down".*

*There is not a whole lot of thinking about the future here ... we are aware we are living in the industrial age at a time when we are surrounded by the information age. ... In general, however, most discussion is about 1) how to catch up with the business world and 2) how do we correct past mistakes [in the organisation of government].*

To be fair, there were reports of scenarios being used in regional development plans, usually developed during SRI<sup>13</sup> (Stanford Research Institute) consultancy work. But we never saw these scenarios or heard a good description of how they had been developed

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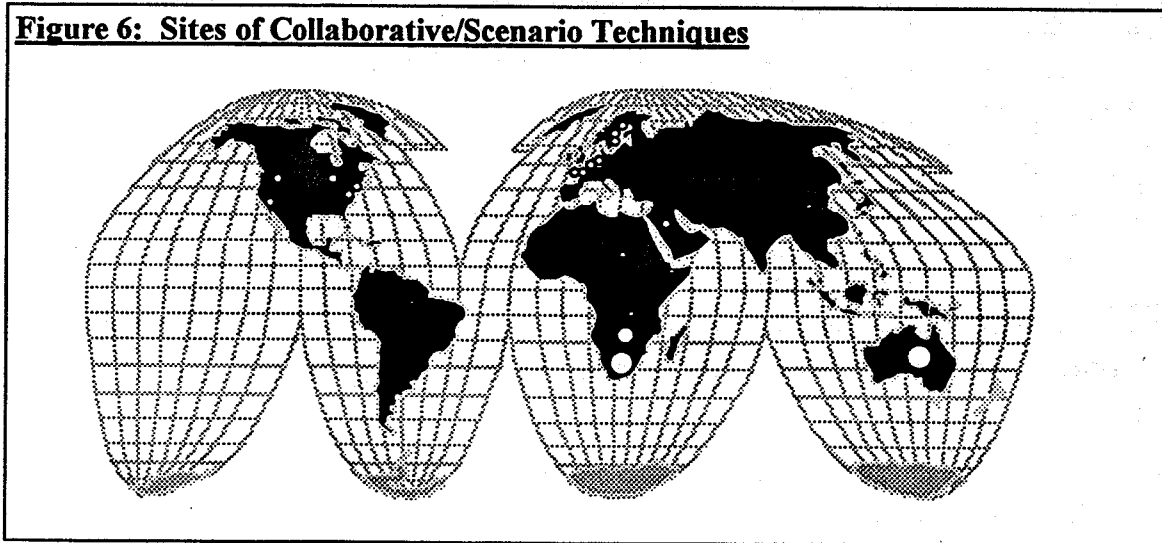
<sup>12</sup> op cit

<sup>13</sup> This branch of SRI's consultancy work has been sold and is now offered under the name "DRI/McGraw Hill". Most examples we heard mentioned, however, were done through the Stanford Research Institute (SRI).

and used, a source of information that could be pursued in the future.<sup>14</sup> We also found another group, the Millennium Institute in Washington D.C. which was said to use scenarios for working with "Second and Third World countries," but we did not have an opportunity to learn more. Finally, the Council of Governors' Policy Advisors, based in Washington, has recently begun some modest scenario work, but has so far been more successful at introducing various "scanning" programmes. These programmes draw on the work of individuals who scan current publications for signs of new long term trends and ideas that might be significant. Their collected reports are then circulated within state government departments to alert their colleagues about emerging issues of importance. Scanning can lead to and contribute to scenario work, but its main achievement so far in the USA has been to introduce thinking about the longer term.

While we were not completely defeated in our search for good examples, the geography of 'nowhere' led us to speculate that scenarios techniques are more suitable in some cultures than in others, as suggested in Figure 6.

**Figure 6: Sites of Collaborative/Scenario Techniques**



In particular, the geography of 'nowhere' suggested to us that those societies which avoided or suppressed the public discussion of difficult issues were not likely to find scenario techniques culturally comfortable or easy to adopt. While I will not expand on this theme here, it is an observation that recurs later in this discussion.

#### **5B Scotland Is at the Frontiers: The Limitations of Useful Examples**

To find out which of our remaining 28 examples was at all similar to Scottish Enterprise, I designed a matrix (Figure 7) based on the scenario continuum which distinguished between scenario products (books, papers and presentations) and stakeholder process. The matrix also makes a distinction between those experiences which were led by the

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<sup>14</sup> There could, however, be some very useful experience here that should be tapped. Stephen Waldron is the best contact; see mailing list.

private sector versus those led by the public sector. On the basis of these two dimensions: a) what is done and b) by whom is it led, each of our 28 experiences was classified into one of the nine cells of the matrix, as follows.

**Figure 7: Scenario Matrix**

	<i>SCENARIO-STYLED PRODUCTS PUBLISHED</i>	<i>SCENARIOS FROM A STAKEHOLDER PROCESS</i>	<i>STAKEHOLDER PROCESS USED</i>
<i>PRIVATE SECTOR &amp; ECONOMIC DEVELOPMENT</i>	Australia AngloAm, S.A. Old Mutual, S.A.	SIFO, Sweden Mont Fleur, S.A.	Inst. de Locarne Silicon Valley
<i>PUBLIC SECTOR &amp; ECONOMIC DEVELOPMENT</i>	Le Plan, France CPB, Netherlands Alberta, Canada LTPS, Africa	Sudermantand, Sweden Vasteras, Sweden (81-83)	Baghdad region Alberta
<i>PUBLIC SECTOR</i>	FOA, Sweden US Governors US Coast Guard  EC Regional DG * EC DG XII * EC Energy DG? * OECD, Futures * World Bank *	Governing, Canada Waterstaat, Netherlands	NPR, Washington       Connecticut
<i>PUBLIC ISSUES</i>			

\* Multilateral Institutions rather than local or national governments

First, to classify what was done, the matrix divides our examples into three columns. Column One contains those examples where experts have produced scenario thinking for presentation to others. Column Two consists of those examples where scenarios have been created through a stakeholder process that involves those who will use the scenarios in the research and development of the thinking. Column Three consists of examples of stakeholder consultative processes where scenarios had only a limited role, if any.

Second, in order to under who led each experience, the columns were further divided into rows. The first row holds examples where the private sector took the lead and worked on issues that included a large measure of economic development. While the public sector were often participants here, they were not the prime movers. The second row includes public sector organisations with an economic development interest or responsibility that led the exercise in some fashion. The third row holds those public sector organisations which have used scenarios and/or stakeholder processes, but which were not explicitly involved in economic development. I have included here one interesting example from Connecticut, USA, which was a private sector initiative on public issues.

This simple exercise showed us that there is only one current example which comes close

to matching Scottish Enterprise's circumstances and brief in economic development: the county administration of Södermanland in Sweden. Our second example, the municipal government of Vasteras dates from 1981-85 and is no longer engaged in scenario work. This suggests that if Scottish Enterprise decides to undertake a scenario building exercise they will be working at the frontiers of a new economic development process.

This is not to say that we cannot learn from all the examples represented on this matrix. However, these lessons come in bits and pieces, rather than as a useful model that can be imported wholesale and simply imitated in Scotland.

(i) **Broad Lessons of Column One: *Futures Divorced from Political Processes***

As shown in the continuum in Figure 4, those scenarios in the first column, which existed as some kind of "product" -- usually a published report or presentation prepared by experts -- were likely to have less long term impact than scenarios developed in some kind of stakeholder process. In fact, most of our 'interesting failures' in scenario work come from this column. Part of the reason for such failures is that those who were meant to benefit from scenarios did not participate in the thinking and therefore did not 'own' the conclusions. Instead, the work in this column was largely prepared by one group for use by another, with only minimal communication and engagement between the two. This was even characteristic of the very good scenario work prepared by the Central Planning Bureau in the Netherlands. These scenarios have been highly praised by people who have read them. However, we found little evidence when we met with Ben Geurts in the Hague that the design of the thinking and research had been critically shaped by those who were potential users of the scenarios. Rather, it was a report prepared by a bureaucratically independent group of economists charged with thinking about the future of the Netherlands.

This is not to say that the Central Plan Bureau's scenarios -- or others of a similar origin -- were ignored. On the contrary, several of the scenario reports in this column were very useful. They set people thinking, sparked off important debates, and stimulated people to confront long term issues and present uncertainties. However, the users of such work were not engaged in shaping the key questions or conclusions of the work itself. We will consider both the successes and failures of this column in later sections of this report. (See 'Interesting Failures' and 'Consolidated Lessons of Success'.)

(ii) **Broad Lessons of Column Three: *Political Processes without Views of the Future***

Equally limited, although also offering useful specific lessons, were those examples from the third column, "Stakeholder Process Used". These all represented exercises where people looked at important issues in their region and used facilitated meetings, consultations, dialogues and research to develop new ideas for resolving difficulties or dealing with economic development. These processes were by and large very successful at achieving political agreement and mobilising people to think and act creatively about their own circumstances. The Institut de Locarne in Brittany, "Joint Venture Silicon Valley" in California, and the collaborative processes in Connecticut

all provided inspiring examples of how one could mobilise people to take charge of their own affairs in new and refreshing ways. These examples had all found a political clear space within which to work, with the endorsement of senior leadership in the public and/or private sectors. However, where these examples failed most frequently was in understanding long term trends outside their control and in recognising those uncertainties in the environment that would require greater flexibility.

The most extreme example of this fault comes from work done in the mid-1980s in Iraq on a regional development plan for the central plain around Baghdad. Although all participants deemed this a huge success in agreeing development plans, the unforeseen invasion of Kuwait several years later reduced all agreement to a state of brave fiction.

(iii) **Broad Lessons of the Middle Column: *An Ideal of Stakeholders Looking at the Future Together***

This leaves the middle column, "Scenarios from a Stakeholder Process". Having learned of the evolution of scenarios from 'a beautiful book' to a messy process of changing minds, we had idealised the virtues of developing scenarios from a stakeholder process. Our triangle of economic development as a political, managerial and intellectual task had postulated that this task could be mediated through the use of scenarios in a stakeholder process. Moreover, we had assumed that a public sector organisation could be instrumental in leading such a scenario process.

Yet, of the six examples in this column, two were led by the private sector (row one) and two were not directly concerned with economic development per se (row three). Of the public sector examples remaining, both from local (not national) administrations in Sweden, only one was still functioning: the county administration of Södermanland, which lies south of Stockholm in Sweden. The municipality of Västerås (lying just to the north of Södermanland) was another good example, but the use of scenarios there had ended in 1985 and all the people who had been involved have either retired or taken new jobs.

This suggests that there are difficulties surrounding a public sector organisation's use of scenarios for economic development -- a subject taken up in the section titled "Can Governments Do Scenarios?". However, our most relevant example will first be described and examined for some of the elements of its success before going on to other topics.

**5c Summary: The Broad Lessons of Our Survey**

In the course of this survey, over 100 people were contacted and asked if they knew of or had any experience with scenario techniques being used by the public sector in economic development. This survey identified 28 examples. Most examples came from Northern Europe, the USA and South Africa, which suggests that scenario techniques are more suitable in some cultures than in others. Of the 28 examples, most can be

classified as examples of scenario studies that were produced and published by relatively isolated intellectuals, disengaged from the political process. We also found examples that involved stakeholders in a political planning process, but did not include any scenario work and hence suffered from a disregard for future uncertainties. We also found half a dozen examples of scenarios produced from a stakeholder process. However only two of these, both in Sweden, were interested in economic development and led by the public sector. Of those two, only one, the County Administration of Södermanland, was functioning in 1993. In conclusion, it is clear that if Scottish Enterprise undertakes to run a scenario exercise in economic development, they will be working at the frontiers of new political and economic processes.

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## **6 OUR MOST RELEVANT EXAMPLE: "PIONEERS OF PERSUASION" IN SÖDERMANLAND, SWEDEN**

We have chosen the county administration of Södermanland as the most relevant example for several reasons. First, it is an unelected central government body working in a local region in partnership with locally-elected authorities. Second, the county administration has responsibility for regional development involving local businesses and administrations. Third, because of its central government authorisation, the county administration has executive authority in structural and strategic planning, as well as responsibilities for environmental quality, agriculture, and investment in physical and social infrastructure projects like railroads and local universities. Fourth, the county administration also has responsibilities for local training. Scottish Enterprise is in an analogous position on all these points and therefore has much to learn from the Södermanland example. However, there are also some critical differences between the two administrations, as should be clear in the following description of the surrounding context.

### **6A The Geographical, Economic, Social and Political Context**

If Scotland can be seen as a geographically peripheral region in Britain, Södermanland can best be described as a 'home counties' region in Sweden. The population density is low, the largest town has only 90,000 inhabitants, and there is still considerable rural space, with the larger industrialised areas in neighbouring counties. Even when the surrounding counties, including Stockholm, are counted, there are no more than 3 million people living in the greater region compared to 5 million in Scotland, with the county administration of Södermanland having responsibility for only a fraction of the total. Moreover, the county lies to the south of Stockholm, the national capital, and also lies between the capital and the rest of the European continent, as well as being on the coast facing the other Baltic nations. It is therefore in a comfortably strategic geographic position if European economic integration proceeds.

Another important aspect of the context is that Sweden has also been for over forty years one of the most successful nations in the world, when judged by both its social and economic health. It has frequently been held up as a model 'third way', uniting the benefits of socialist ideals with free market economics. The success of that model has led to a degree of complacency in society which is only now being attacked as the country faces a serious economic crisis, but the long success itself has been undeniable. We were told, for example, that the "political ceiling on unemployment" has for years been 3%, a laughably low number by British standards; if the jobless total ran higher, a political storm would follow. The fact that unemployment has recently risen to 8% partially explains a new sense of crisis in Sweden.

That long success, however, may partially be a consequence of the fact that until recently, there has been only one party in power, the Social Democrats. Their 40-year reign gave the country a consistent and successful social and economic policy that those subject to the British political seesaw would envy.

This political continuity (plus a respect for socialist planning) may explain why there also seemed to be greater consideration of the long term point of view in the public sector. Most of the examples we have of the use of scenarios in the public sector come from Sweden. The civil defence people have used such thinking since the 1950s (see the FOA example in Appendix 1) and have gone even further using various kinds of 'games' to train municipal leaders in how to react to different crises in defence. Furthermore, in about 1990 a new administrative rule required that environmental impact analysis be done before each public sector budget. This may have been linked to a law passed six years ago which requires local administrations to write Comprehensive Plans every 3-6 years that take an integrated view of all the development services in an area.

In addition, the information culture appears to be more open than in the UK. We were told by George Fischer at the Department of Defence Analysis that the ground rule is that all government information is free; only exceptions are classified. While the same desire to protect one's interests and hide embarrassments must afflict Swedish governments and administrations as it does others, the assumption that information must be shared appeared to be more widely prevalent than it is in Britain, where a tradition of "need to know" had made secrecy the default position in government. This openness about information also affected the participation of labour unions on company boards, where labour and management have had access to the same facts and analysis.

Finally, considerable government authority rests with the localities. As Abdul Khakee of the University of Umeå told us

*In Sweden we don't talk about the Welfare State, but the Welfare Kommune, since the municipalities have most of the responsibility and authority for the services of the welfare state.*

While Britain has long given considerable authority to local governments, that authority has been increasingly circumscribed by Conservative leadership over the last 15 years. In contrast, the trend in Sweden has been to shift more power to the municipalities (including the power to raise local taxes) -- a fact that has shaped the role of the Södermanland County Administrative Board in its region.

#### **6B Peter Eklund and the Office of Future and Structure in Södermanland**

The County Administration where Peter Eklund works was described to us as "a remnant of state administration" that has been in existence since the 17th century. The people on the county administration boards are not elected officials, but government civil servants representing the central government in the regions and the region in the central government. While they work with a County Council elected locally, they have no formal relation to the County Council. Nor do they have a formal relation to the municipalities, where so much state administration and authority now lie. There is currently a debate in Sweden on the role of regional and county administration, but in the meantime the Södermanland County Administration clearly sees itself having responsibility for co-ordinating work on broad regional development issues. That said, its unelected position and origins in central state administration at a time when power is

shifting to local authorities all make it difficult to exercise that co-ordinating role, as well as placing the people on its own staff in a somewhat anomalous and archaic position.

It is not surprising, therefore, that Peter Eklund and his team of two people, Birgitta Lundh and Patrik Nissen, have been described as "Pioneers of Persuasion", since they have little elected authority on which to draw and a relatively small annual budget of about £800,00. All three are also relative newcomers to the County offices, having joined between 1986 and 1989, at a time when the majority of the officers had been there at least 18 years. Peter Eklund was described in our November 1993 interview with Gösta Oscarsson of NUTEK (the Swedish National Board for Industrial and Technical Development) as 'the intellectual motor' but he was fully backed by the County Administrative Board. The head of this board is a man called Stephan Lindeberg, whom we did not meet, but was said by Oscarsson to be the 'driving force' in the county, a man with a strategic vision of Södermanland, who understood the breadth of regional competence and how to organise it in an integrated and co-operative way. His support for Peter Eklund and his team has clearly been important.

## 6c Steps in a Long Process

One of the interesting features of the Södermanland example is its longevity. As is shown in the following discussion, the work began in 1987 and had continued and evolved up to the present day.

1987

### Seminars

Eklund and his team did not begin with a scenario exercise. Instead, they first held a series of seminars on trends that would affect the region: in education, research, business, environment, quality of life and the outside world. These seminars also looked at three levels of thinking:

- 1) Short term questions of business, industry and the rural environment;
- 2) Long term issues of regional structure, culture, values & community;
- 3) The environmental base & the economics of sustainable natural resources.

It is not entirely clear to us who was participating in these seminars, but there seem to have been people from Parliament in Stockholm, the country level and the municipalities -- in short a government crowd, but one which crossed several different layers of authority and occupations, e.g. politicians, economists and planners.

1988

### Structure Sketch for the Year 2020

The following year, Eklund and his team began an explicit scenario exercise, no doubt building on the learning acquired in the seminars. However, the scenarios were not about the global, national or local economy as a whole. Rather, they were organised around a very specific, but broad reaching question: a high speed rail system for the 21st century. Two scenarios came out of this work. The first was the "Big Regional Alternative" in which the region was organised around Stockholm. The second was described as a "Network Alternative", in which the railway linked a number of smaller centres.

1989

In preparing both scenarios, they looked at the distribution of population, housing, employment and new jobs. They also spent some time talking to businesses and residents in the area and continued to hold the seminar series. Eventually there were six counties involved in this work and it was a very big job. Throughout, Eklund's office was the driver and co-ordinator of the exercise. This part of the process was completed in late 1989.

1990

The following year, 1990, there was a series of local seminars and a quantification of the ideas. In publicising the work, Peter Eklund says he gave about 150 speeches in two years.

1991

In February 1991, they held a big seminar, attended by 275 people including business people as well as politicians and planners from the area. This effectively concluded the "Structure Sketch for 2020" work, but the municipalities thereafter began their own efforts to develop the vision that had come out of the exercise.

1991-3

### Mälardalsträdets Initiative

Following the success of the first 2020 structure sketch, an informal group was formed to co-ordinate the thinking of the municipalities, the county council and the regional planning groups. Inevitably there was a certain competition between this group (which held the local elected power) and the county administrative boards (which represented central government). However, Eklund's team chose to work with the local bodies. As Peter Eklund commented somewhat obliquely, "We work with them more easily than we do with other administrative boards -- [which] have other mental maps on how to work together."

1993

This informal group considered the infrastructure scenarios in more detail. In the spring of 1993 they produced three new scenarios which sought to incorporate trends in how people were already behaving with various ideas of the most desirable spatial organisation of growth. These were, in fact, an unusual blend of what we have earlier described as 'anticipatory' versus 'normative' scenarios. As such, they tried to anticipate changes in social preference (e.g. more people using their cars to live in rural villages while working in local or central cities) while looking at the impact of different infrastructure choices (such as where the high speed railroad would stop) on those preferences, while also considering what different stakeholders thought was most desirable. This led to three new infrastructure scenarios for the region, which in the absence of a good translation of their Swedish titles we called "One" "Few" and "Many".

A Scenario of "One": This scenario was predicated on Stockholm acting as the nucleus of the region, with all transport and jobs organised around Stockholm.

A Scenario of "Few": This scenario showed a more diffused settlement pattern in the region, but it was one organised around various nuclear cities; it was a network of nuclei.

A Scenario of "Many": This third scenario was one of many small centres, a multiplication of villages throughout the region as people used their cars to spread out across the landscape - the ex-urban explosion taken to its logical limits.

Eklund and his colleagues felt that this informal group had been able to change the perceptions of local people from ones that saw the county only within its own close boundaries, to a larger map of the county in a global framework. "This global picture is very important to us," said Peter Eklund. This work also allowed residents to see that whereas they had no high education institutions within their own county borders, they had 70% of Sweden's high education within their wider boundaries.

1993-4

#### Industry Strategy Group and Other Work

Having begun using seminars to introduce wider trends and then focusing thinking on long term infrastructure scenarios, the team has since been expanding their use of scenarios into other areas. There is presently an industry strategy group which involves over 200 people in a series of seminars, and drew on the scenarios developed earlier. This group has included big companies, younger people, government agencies, existing groups and interests as well as consultants and forecasters of various kinds.

From the seminars alone 500 new ideas of what might be done have been generated and winnowed down for inclusion in a strategic document agreed by the board of the industry strategy group.<sup>15</sup> While the document is not yet being published, it has included discussion of small and medium sized firms, technology transfers, direct foreign as well as inward investment, financing, etc. They have also considered the nature of private and public co-operation in order to achieve their goals. This includes areas like investment in infrastructure for railroads and information technology.

The team is now organising similar regional discussions to consider strategies for the environment, and education and research.

### Competition: Vision 2025

Finally, recognising that development and growth require new visions and new ideas, the team has launched a competition for groups of local people to come up with ideas for activities, services or facilities (e.g. training centres, parts, waste management) that will benefit their local communities in the year 2025. It is a Nordic competition open to all the Scandinavian countries, plus Iceland and Greenland. It is being published through press conferences and brochures sent to local authorities. They have already held one seminar with possible contestants to explain what they are looking for and how the projects will be judged. All the entries will then be displayed and discussed and there will be a radio series of programmes to discuss the ideas entered in the competition. These programmes and the final judging are timed to coincide with the 1994 elections in Sweden, in hopes they will inform the electoral debate. They have a budget of about 3.2 million Swedish Kronor (£266,000), for the competition, and there are also the investments made by the contestants themselves in preparing their entries, which are expected to include some architectural designs. Birgitta Lundh has the principal responsibility here and, like her colleagues, is simultaneously excited about the contest and curious to see what it will produce.

1994

## 6D People and Publicity

Throughout our discussion, it was emphasised to us that in engaging in this process of creative thinking and mobilisation, it is important to choose people with ideas and views. "Look for good people, create a network who can continue to work together." We sensed that as new projects have been taken on, the network of good people has expanded, drawing in more and more citizens of the community. This idea was clearly central to their thinking and it is illustrated in a brochure containing a series of pictures. The first picture is of a tangle of small segments of rope; these are then knotted into

<sup>15</sup>In many ways, this exercise resembles similar work reported in the "Joint Venture Silicon Valley" example.

longer strands, which are then used to create lengths of rope, which can then be tied together to create a ladder, etc.

The team also stressed the need for publicity and constant communication with a wider audience. The previous Friday, they had held a big press conference on the industrial work, which had been received with great enthusiasm. While we were there, the local press came in to interview both Campbell Gemmell and myself, asking what we thought of the work Peter Eklund and his team were doing. When we praised the work, they were amazed that their small and rural corner of the globe could offer a world class example of anything, but that was very much the impression we had. It was also shared in Stockholm by Gösta Oscarsson who had first sent us to Södermanland on the grounds that they were "something of a showcase of the integrated view of development."

#### 6E Summary: "Pioneers of Persuasion"

Peter Eklund's department in the County Administration of Södermanland, Sweden, is the best example we have of a successful scenario process led by the public sector that draws on the participation of relevant stakeholders to address the uncertainties and long term issues of economic development. Their work seems to have succeeded in suing the strong intellectual, political, psychological and organisation legacies of scenario thinking to meet the demands of development for the 21st Century. In so doing, they have also defined some of the parameters of such an exercise when it is undertaken by a central government body in a regional context. As "Pioneers of Persuasion" they have set an example that is simultaneously challenging and catalytic.

In the next section of the report, I would like to draw on the whole collection of our examples to look at how others have approached similar experiments. Like Eklund's department, these people are also Pioneers of Persuasion, whose efforts are summarised in the next section on the "Consolidated Lessons of Success".

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## 7 CONSOLIDATED LESSONS OF SUCCESS

### 7A Measuring Success

While Södermanland is our most relevant example, there are altogether eight other experiences which have been instructive. In our minds, these eight are the "success" stories of our search. Not all have used scenarios in a central role, or at the same point in the process. All have, however, in one way or another, created a widening debate that changed perceptions and thinking in a significant way. They also all seem to have facilitated long term thinking, shifted the geographical boundaries of the imagination, and enabled people to recognise the uncertainties around them without losing hope. In each of these examples, those involved have also come to share a common language and understanding of the world they live in and the tasks they are confronting. This has made it much easier to function creatively and collaboratively in a time of rapid change and considerable insecurity. Finally, in each one of these examples the process is continuing, having created a dynamic that is either self-sustaining or has had the effect of inspiring others to pursue similar work.

We frankly recognise that these intangibles are a curious measure of success. This partly reflects a survey based on interviews with those who have led each of these experiments, rather than searching more widely to gain the experience of all those who participated or were affected by the processes described here. Nonetheless, that each process has continued - in ways that are described in the section titled "Spin Offs and Continuations" - argues that something valuable has been tried even though its precise impact remains unmeasured.

### 7B Organisation of Information

This chapter looks at these eight examples to see what they have in common and how they went about initiating and maintaining a successful learning process in the public domain. In order to avoid overburdening the main text of the report with detailed narratives, **Briefing Notes** have been assembled so that readers could see the overall story of what happened in each of our examples. The Briefing Notes summarise all the information we have about our 28 'experiences of interest', using a standard format, and are presented in Appendix 1. The **Briefing Notes** for our eight success stories appear first, in alphabetical order, with the remainder following afterwards. For each of these Briefing Notes we have culled our interview notes and published material for any information on the following points: Time Span Covered; Financing; Beginnings; Pace, Participation, Process & Products; Results; Lessons; Source of Information; How Far the Process Went; the Use Made of Scenarios.

This organisation of material in the Briefing Notes reflects the format we used in the interviews, which asked questions relating to three areas:

- 1) How did the process begin?

- 2) Who participated, what was involved, and what was produced in the way of books, presentations, etc.?
- 3) What were the results of the exercise? How was strategy or behaviour changed?

In the case of our eight successes, I have also drawn on the interview notes, published material and occasional phone calls for further information. All the interview notes and some useful articles have been assembled separately in Appendix 4.

## 7c Eight Experiments in the Public Domain

Three of our eight examples come from North America; four are from Europe and the final one is from South Africa. They are:

<u>Name</u>	<u>Country</u>	<u>Start</u>
<i>Connecticut Experiment in Collaborative Processes</i>	USA	1991
<i>Governing in an Information Society - Round Table</i>	Canada	1990
<i>Institut de Locarne, Brittany</i>	France	1989?
<i>Joint Venture Silicon Valley, California</i>	USA	1991
<i>Rijkswaterstaat</i>	Netherlands	1989?
<i>SIFO Multiclient Project</i>	Sweden	1991
<i>Södermanland County Administration</i>	Sweden	1987
<i>South Africa x 3</i> <sup>16</sup>	S. Africa	'83/90

We did find two other experiences that might have been included here, but are not for particular reasons. The first is a scenario exercise that was conducted in the Swedish municipality of Västerås in the first half of the 1980s and is reported in an article by Abdul Khakee of the University of Umeå titled "Scenario Construction for Urban Planning".<sup>17</sup> By all accounts, this was a very successful use of scenarios in local government and included many of the elements summarised from our other eight examples. It also had a number of concrete outcomes, as reported by Abdul Khakee when we interviewed him in November 1993:

*We can look at the changes [in Västerås] in three parts: 1) the extent of change in the planning system; 2) development projects; and 3) change in the way people think. We were successful in the second and third of these, but less so in the first. As far as development projects go, Västerås is now a thriving community with lots of enthusiasm and participation. And several good projects came*

<sup>16</sup> The South African example is the story of three different scenario exercises from 1983 to 1993. However, each experience built on the one before, so these have been collected into a single history.

<sup>17</sup> Khakee, A. "Scenario Construction for Urban Planning" in *Omega International Journal of Management Science*, Vol 19, No. 5, pp 459-469, 1991.

*out of our work: a) a college for air cabin crews; b) the establishment of a Cultural Communications Centre; b) Asea, Metalwerk, and other companies started an Innovation Centre for training young people in things like artificial intelligence. The question is not whether these would have happened anyway, but whether these ideas would have come forward at that time without future studies ...*

We have not included this example in our discussion, largely because those who were involved have now either retired or moved on from the municipal government and the work is no longer continuing. However, the exercise is very fully and helpfully reported in Abdul Khakee's article, which also describes a variety of innovative techniques. His article was read at an early stage by all of us and influenced our thinking on many points. It has also been included with the interview notes in Appendix 4.

Our second possible example comes from the Directorate-General for Energy in the European Commission. Kevin Leydon, who is head of the Division of Analyses and Forecasts, has been seeking to shift his work away from expert reports to more participatory uses and development of analyses. His greatest success to date has been in bringing together the heads of half a dozen EC directorates to discuss energy issues. To one of us who has worked with the EC, this was a very impressive achievement, given that there is habitually little communication between the directorates. However, the rest of us thought that this achievement was still a far cry from the kind of successful stakeholder work we were seeing elsewhere, although it might be an early stage in a similar process. Therefore this example, albeit a potential success, did not meet our requirements right now.

It might also be argued that the Commissariat au Plan is a stakeholder exercise that continues and should therefore be counted as a success. Our exclusion of le Plan may be faulted. However, quite apart from the fact that the scenario work and the stakeholder work functioned independently of one another, there was a more serious lack of credibility about the work being done in the Commissariat. After our interview in November 1993 and after talking to others working in France, we were left with the impression that the form had survived, but not the substance. Instead, the process of consultation served as often to confirm existing thinking as it did to introduce vital new thinking in a time of change. In effect, le Plan is currently seen as another one of the mistrusted political institutions of the present, rather than a vital political process shaping the future. As such, it stands as a warning to those experiments we have recorded as the successes of the 1990s, since le Plan was the success story of its time just after World War II.

We are therefore left with our eight examples.

## **7d Beginnings and First Steps**

It may be significant that seven of the eight examples began in the two years between 1989 and 1991. Only the work in Södermanland began earlier, in 1986/87. In the case of South Africa, the Anglo American Corporation developed scenarios for the country in

1983/84 that were widely presented and discussed. However, the process largely stalled from 1985 until 1990 when President de Klerk's speech unbanning political activists led two financial houses in South Africa (Old Mutual and the Nedcor) to undertake a new scenario exercise. All of our other examples started up in the last five years and all are still dynamic in some form or another.

But how did each exercise begin? Who took the initiative? Where did the money come from to pay for the work? Why was it thought necessary? What were the first steps to get things going?

**(i) "Taking a Personal Risk"**

Throughout our interviews, we were repeatedly struck by the role played by individuals with an idea. In every case a single individual decided it was time for a new approach, or took on the risk of implementing such an approach in his organisation. "You must be willing to take personal risk to get things moving," we were told by Bo Ekman in November 1993. Neither Bo nor any of the others knew where the process would lead, but each thought it was time to think about policy and strategy in a new way.

- In the case of Connecticut, an insurance executive, Wick Sloane, proposed to a politician, Tom Ritter, that they should experiment with using negotiating techniques developed in the private sector to resolve a difficult public issues.
- In the case of Brittany, a retired Naval commando who had taught strategy in a French business school, Josef le Bihan, returned to his native region and organised the leading local companies into a club.
- In Silicon Valley, California, one of the local chief executives, Jim Morgan of Applied Materials, invited a small group of other Chief Executive Officers (CEOs) from local companies to lunch. There they decided to create a public/private partnership to revitalise the local economy.
- In Canada, a former civil servant in the Cabinet Office, Steven Rosell, organised a dinner for government officials and gave a short talk on governing in the information age. The subsequent discussion lasted for hours and led to the creation of a 'Round Table'.
- In Sweden, Bo Ekman, a business consultant and former senior executive in Volvo, who had been developing scenarios for years began giving presentations about the challenges facing his country. "We delivered a message in the power houses." This led to a multiclient exercise involving both the public and private sector in discussing "Futures for Sweden".
- In South Africa in 1983, Harry Oppenheimer, the principal owner and ruling intelligence of the Anglo American/de Beers corporate grouping, asked Edouard Parker to present his 1976 scenarios for South Africa. Edouard Parker expected

to be heard, very confidentially, by three or four senior executives. Instead, all the senior managers and members of the Oppenheimer family were there. The subsequent discussion lasted for a week and led to a longer scenario exercise, the results of which were publicised widely throughout the country.

- The role of particular individuals is less clear in the two government agencies among our eight: the Rijkswaterstaat in the Netherlands and the Södermanland County Administration. However, in both there is a suggestion that a strong chief executive appointed a quiet, but imaginative planner to rethink the role of planning from its most basic foundations. This man then took on the challenge of introducing a novel approach in his organisation, sharing the risk with his chief executive that the exercise might fail.

## (ii) Drawing on Personal Networks

For the most part, these individuals did not set out to work alone. Instead, they first contacted people they knew who would be open to a new approach. Wick Sloane in Connecticut phoned the man he had campaigned for in State politics, who had become head of the Banking Committee in the Connecticut Legislature. Josef le Bihan contacted the men he had taught in business school or knew from other areas of his work. Jim Morgan in Silicon Valley spoke to other CEO's. Bo Ekman gave his presentations to those clients with whom he had already built up a good working relationship and Harry Oppenheimer started first in his own company and family. This first step towards personal networks undoubtedly helped to create an atmosphere of trust in the early days of each experiment. Steve Rosell in Canada invited people he had known and respected in other work he did in Ottawa, as reported in a recent letter.

*The people invited to the first dinner were a mix of folks I knew and others I thought would be interested. Ditto for the list of those who subscribed in the end. The fact that I had a good reputation in Ottawa no doubt helped folks to decide to do something this unusual.*

## (iii) A Non-Governmental Lead

It is also interesting to note, that in five cases -- Connecticut, Brittany, Silicon Valley, SIFO and South Africa -- it was people from the private corporate sector who took the lead. And in four instances (Silicon Valley, SIFO, Brittany, and South Africa) it was the corporate sector that provided the first financial support. In a sixth case, *Governing in an Information Society*, it was a private institute -- the Institute for Research in Public Policy, comparable to the Brookings Institute in Washington -- which took the initiative. Only in the Rijkswaterstaat and the County Administration of Södermanland did a public sector organisation take the lead. In the Rijkswaterstaat that was only sensible since they began the exercise largely to improve their own internal processes and thinking, so it was not a public exercise. Södermanland, as we have said before, is our only example of a government agency leading a public discussion of this kind.

In none of our six 'private sector' initiatives, however, was government avoided. Quite the contrary, in each instance government was quickly drawn into the process as a key participant and sometimes financial supporter. However, in six of our eight examples, the initiative and first steps began outside any government structure.

The importance of these private sector initiatives raises a variety of issues. First, much of the mistrust of government comes from a dismay among many that governments are constrained by electoral cycles from thinking long term about complex problems. That circumstance has forced businesses to protect their own interests by taking a lead on issues normally seen as outside their competence; Anglo American's response to apartheid is the best example here. In taking this lead there has been no suggestion in our interviews that businesses are seeking to replace government. Quite the contrary, since government has consistently been drawn in as a vital partner. Rather we have found a desire among participants to reopen and refashion political space so that new solutions can be found. Governments that have been formed within a given political structure and set of rules have found this very difficult to do on their own.

Second, a variety of forces in the 1980s have weakened people's financial and ideological reliance on the state to solve social and economic problems. In response, businesses are increasingly asked to help -- the now fashionable interest in attracting multinational investment is a good example of this refocusing. More importantly, this altered perception of the private sector has created greater demands for private sector leadership than existed in the era of state solutions to public problems.

#### (iv) Endorsement of Respected Figures

That said, an important feature of all these cases, is that a respected figure or institution has endorsed the process and given it legitimacy. This endorsement has come from both private sector and public sector leaders. In the case of Connecticut, the politician's backing was critical in a process where neighbourhood activists and bank managers were meeting to discuss why people in poor neighbourhoods were refused home mortgages. As Tom Ritter, now Speaker of the House in the Connecticut Legislature described it:

*I was then chairman of the Banks Committee and represented the City of Hartford, so I saw the issue from both sides. I could foresee pickets, advocate groups on the steps of the Capitol, etc. But I had the credibility to bring people together. That was very important, since the corporate people were very dubious, but felt they had to do it because of my position. Some of the neighbourhood people dropped out, but one stayed on, partly because of past contacts I had with him and partly out of self-interest.*

Because of his unique position, Tom Ritter was able to say, "If you agree a solution, I can implement it." This promise was largely accepted and believed by participants.

However, the endorsement in other cases came from the private sector. The best example here is in South Africa where a subject that had previously been taboo -- the future of apartheid -- was brought into the open when Harry Oppenheimer, whose stature is legendary, invited people to hear Edouard Parker's presentation in 1983. Not even a repressive government in South Africa would silence a business leader whose company controlled such a large part of the South African economy. In 1990, Harry Oppenheimer's role was picked up by the chairmen of Nedcor and the Old Mutual, Dr John Maree and Mr Mike Levett. As acknowledged in the report<sup>18</sup> of those scenarios

*It was due to their vision and concern for the future of South Africa that this scenario exercise was undertaken in the first place, and it was they who committed the substantial financial and managerial resources necessary to carry the project through to completion.*

#### (v) Summary of Beginnings

In short, 'beginnings' might happen in any way, but strong beginnings include individuals taking a personal risk while calling on their own networks for help. They also frequently originate outside government structures, but quickly involve government people as partners. Finally, the endorsement of respected figures and institutions from the public or private sector serves to legitimise an unusual venture and provide participants with confidence that the results of the process will not be ignored.

#### 7E The Stories of "Full Swing"

Having taken the initiative, having set the ball rolling, what happens next? Many good ideas are thrown on the wind, but never take root or grow, let alone bear fruit. How did our best examples then move forward? In this section, several common features can be identified: the need to gather support, to involve good people, to engage in shared learning, and to set a good pace of work with clear goals and deadlines.

#### (i) Gathering Support

Gathering support includes the processes of raising finance and gaining administrative approval. In Silicon Valley Jim Morgan seconded one of his senior managers to head the initiative for one year. This man then met with all the participating companies individually and raised corporate donations of \$1 million to support the subsequent work. Similar financial efforts took place with the Institut de Locarne and the SIFO Multiclient study. It should be noted, however, that the fund raising in these cases seems to have been the logical consequence of having decided to respond to the first call, the initiative of the individual, rather than a slogging exercise in seeking support.

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<sup>18</sup>Tucker, Bob & Bruce R Scott, editors. *South Africa: Prospects for Successful Transition*. Kenwyn, South Africa, Juta & Co Ltd, 1992.

In that sense, it was the backing of a commitment that had already been made.

When administrative approval is involved, the process of gathering support can be fairly time-consuming, as reported by Steve Rosell. After the dinner at which he introduced the subject of Governing in an Information Society, he spent 6-8 months agreeing the terms for the Round Table exercise that followed, as described in a December 1993 letter.

*After the dinner I developed a proposal based both on the original paper circulated before the dinner and the conversations we had there. Then I went through an elaborate process of discussing it with various people we thought would join, beginning with a few charter members whose participation would send an important signal to others. In parallel, because nothing like this had ever been done before (doing something unprecedented in government is even more difficult than in corporations), we had an elaborate negotiation with Treasury Board on how it might be done administratively. This whole process (the individual sign ons and the administrative negotiations) took 6-8 months. Then we took it to a committee of Cabinet for ministerial approval, and held our first meeting.*

## (ii) Drawing in the Right People

In addition to gathering financial or administrative support, another critical aspects in all eight examples has been involving the 'right' people. The word 'right' actually has several meanings here. In one meaning it is a question of the quality of individuals -- to choose people with ideas, imagination and the ability to work collaboratively. "Look for good people," we were told. "Create a network who can continue to work together." The analogy from Södermanland of strands of rope creating a strong ladder is the appropriate one here.

However, choosing the right people can also mean ensuring that all those who are stakeholders in an issue have an opportunity to participate in the discussion. This was an important aspect of the third scenario exercise in South Africa -- the Mont Fleur scenarios. The twenty-two people on this team were not only multi-disciplinary in their training, but also represented nearly the entire political spectrum in the country. Similarly, in the Connecticut banking story, neighbourhood activists protesting the banks' behaviour sat down with loan officers from the banks to come to a common understanding of the problems. In 'Joint Venture Silicon Valley', which had been conceived of as a public/private partnership, there were two boards: one of CEOs from local businesses (called the 'Advisory Board'), the other including all the town mayors, 9 county supervisors, 10 legislators from the California government, as well as 1 State Senator and 1 former Congressman, who would represent California in Washington. This was called the Public Sector Round Table. The two boards were then combined into one large "Directors' Board" of about 100 people. Similarly, the SIFO study in Sweden was sponsored by 12 clients including big business, the unions, state agencies and the organisation of municipalities.



Choosing the right people can also have a less formal meaning. In the Waterstaat it meant interviewing not just top level management, but managers two or three levels below the top. And it meant talking to both 'club thinkers' and eccentrics in the organisation, as well as seeing that the voices of both older and younger generations were heard.

However it is done, each exercise sought to find people who could contribute thinking or representation so that the work would have a broad political and intellectual base. It should also be stressed that this process of finding the right people was something dynamic and renewable. As the work expanded, as new questions and issues arose, people were drawn into the discussions and into the exercise others had begun.

### (iii) 'Inform Yourself'

Having chosen good people, one of the first steps taken by six of our examples was to increase learning, either through research or seminars or both. The Institut de Locarne set up a seminar series for CEOs, one of which was conducted by Edouard Parker talking about how countries grow. Silicon Valley commissioned a scenario study from the Stanford Research Institute (SRI). The Canadians organised a seminar series with outside speakers. SIFO did the same. Peter Eklund in Södermanland held a seminar series on trends affecting the region and Anglo American asked Clem Sunter to manage the research and development of scenarios for South Africa with the help of Pierre Wack.

Even those examples which did not begin in such an academic way first sought to improve their knowledge in other fashions. In Connecticut, having chosen people to address the mortgage issue, everyone was sent two books -- one about negotiating a deal, titled *Getting to Yes*, and another about running meetings effectively, titled appropriately *How to Run a Meeting*.

What is important in these cases is that the first steps in the process were ones which emphasised learning and expanding local knowledge in appropriate directions. Moreover, with the exception of the SRI study in Silicon Valley (described in an August 1993 with Seth Fearey from Hewlett Packard as "a weak document with little data and very weak scenarios"), these were not exercises in 'imported' information produced by experts and hung out to dry before being shelved. These were exercises in acquiring useful tools or information that would help to move the process towards the next step.

I am reminded here of election posters that appeared in Spain about a year after Franco died. Each poster simply said: "*Informese*": "Inform Yourself" ... so that you can cast a wise vote.

### (iv) Understand Yourself

Another important early step, was the examination of existing knowledge and assumptions. In the Rijkswaterstaat, the department in charge of the exercise and

known as "Q", sought the views of the Waterstaat staff in a series of interviews that exposed existing dilemmas in the organisation's thinking. These internal interviews were augmented by external interviews among people who were interested in the Waterstaat's business or business environment. A similar approach was taken in the 1990 South African scenario exercise when 40 directors and senior executives from the Old Mutual and Nedcor groups were interviewed to determine their concerns about the future. This exercise showed that no one had a favourable scenario for South Africa. Rather, management "had one which was unfavourable and another which was even more unfavourable".<sup>19</sup> In both South Africa 1990 and the Waterstaat, the first step was not to acquire new knowledge, but to understand the nature of existing knowledge and assumptions -- to sketch out the mental maps of managers who are, in the words of the Rijkswaterstaat, the "true strategists". In the Waterstaat these interviews were also used to seek endorsement for the idea of proceeding to an experimental scenario exercise.

Where interviews were not used, existing assumptions were still explored through other means in two examples: Connecticut and the Mount Fleur scenarios in South Africa. In its early meetings the Mont Fleur exercise asked people to produce 'stories of the future'. About 30 stories were proposed by individuals in the discussion. These exposed existing hopes and fears about the country, but were then scrutinised by the group who chose those stories that were plausible and internally consistent until nine stories remained. These were further whittled down to four stories, which became the published scenarios. However, what is important here is that the public discussion of the opening 30 stories inevitably meant that groups with differing assumptions and ideas could test each other's views in a neutral space. A similar working process seems to have occurred in Connecticut where participants were asked to state their priorities, define their language, and spell out their goals.

These four examples all suggest that, as important as acquiring new information, successful processes may also seek to expose existing assumptions and goals - the 'mental maps' of participants - by holding up a mirror to participants which allows a more objective look at their own beliefs, fears and ambitions.

#### (v) The Role of Outsiders

Equally important in all eight of our examples, were the outside advisers. In Connecticut, their five meetings were run by an experienced professional facilitator named Michael Ryan. In Brittany (as in South Africa), Edouard Parker's seminars were based on work he had done establishing the "Ten Commandments" leading to high growth in the dragon economies of Asia. His presentations not only allowed local people to think about their competitive position in the world more broadly, it also provided a structure for understanding the basic elements of successful social and economic development more generally.<sup>20</sup> In Canada, Södermanland and the SIFO

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<sup>19</sup>Tucker and Scott, p. xviii

<sup>20</sup>See: Parker, Edouard. *Ten Commandments for the High Road. and +10%. The High Road of the 21st Century.* both written for the High Road Forum March 1991, Volumes 1 & 2, published by XA-EP, Paris. Also see: Parker,

study, outside speakers on topics of interest were important in stimulating thinking and broadening horizons.

I have already mentioned SRI's role in Silicon Valley, but quoted an unflattering assessment about their scenario work. What should also be mentioned, however, is that SRI earned their fee, not by producing new information, but by outlining the structures for, and facilitating the steps of, a consultative process that was at the heart of the Silicon Valley success. It was SRI who first suggested creating the three boards mentioned earlier. Similarly, when the Rijkswaterstaat decided to look at their strategic thinking they also decided that the "true strategists are the line managers" and that this required a different approach to strategic thinking. In understanding what that approach might be, they relied heavily on the advice of Arie de Geus who had by that time retired from Shell, but continued working on what might be meant by 'planning as learning'. Many of the organisational innovations they tried came out of discussions with Arie. He now uses the Rijkswaterstaat exercise as an example of this kind of work. Finally, in South Africa, Pierre Wack not only advised the first scenario exercise undertaken by Anglo American, but also shaped the 1990 scenario exercise undertaken by the financial houses and seems to have played a similar role to that of Arie de Geus in the Netherlands.

#### (vi) **Maintaining the Momentum of Shared Intensive Learning**

While inevitably each of these examples will have been adapted to local circumstance it is, on reflection, curious that they have so many features in common. This comes out strikingly in taking an overview of what people included in the 'process' of each example. Very simply, all eight involved some combination of regular meetings, high information content, clear goals and deadlines to create and sustain the momentum of shared intensive learning.

The pacing created by regular meetings is important, since if regularly scheduled work is not being set and accomplished interest in the process may be lost. This was brought home to me in the case of Silicon Valley. There, the CEO's met in late 1991, and one year later 15 task forces were meeting once a month to generate new ideas. These ideas were presented five to six months later in March 1993, with a final report delivered in June 1993. When I commented on the rapid pace, given the amount of work that had clearly been done, I was told that it helped keep up the momentum. By comparison, another California town, San Diego, had moved too slowly and its exercise had run into the sand.

As for information, it was shared through briefing papers, the use of outside expertise and, importantly, through the exchange of participants' own knowledge. In some cases -- the Rijkswaterstaat, Silicon Valley and the SIFO exercise -- study groups were formed to look in detail at particular issues. These task forces or study groups worked over a period of several months, doing research and thinking that would feed into the larger product. Where good information did not exist, the need for it was

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Edouard. *Objectif 10%*. Criterion, Paris, 1993.

quickly recognised: in Connecticut, participants discovered that although everyone had anecdotal evidence for which neighbourhoods received the bulk of mortgage loans, no one actually knew the facts. As a result, before the 5-meeting process had finished, new legislation had been signed to require anyone involved in mortgage lending to produce better data on where their loans were going.

The goals and deadlines were sometimes a written product, sometimes a presentation, and sometimes both. In Södermanland as well as Silicon Valley, there was also "A Big Event", a mass meeting, to present findings and conclusions. In Silicon Valley over 1000 people came to a "Public Progress Report" in March 1992 to hear the ideas that had been generated by different task forces. It was apparently well-rehearsed and run like clockwork: five minutes for each of 43 ideas! In Sweden, 275 people assembled in February 1991 for what Peter Eklund described as a "Big Seminar", in which politicians, planners and business people all participated.

A final important aspect of maintaining the momentum is that as people continue to participate in the process they are implicitly -- and sometimes explicitly -- renewing the original mandate established when the founders were first building support. This periodic renewal validates the work that has already been done and directs efforts towards new areas of attention.

#### **(vii) Summary of the "Full Swing"**

However it is finally organised, a number of key process elements appear in our eight examples of successful experiments. All have sought first to gather support and draw in the 'right' people representing relevant stakeholders and ideas. All have placed a high premium on information and learning, through speakers, seminars and written work. Half have also explicitly sought to understand their own assumptions and mental maps, using those to identify areas of future research and work. All eight have also relied on the advice and participation of outsiders -- whether as experts in a given field or facilitators of the process itself. Finally, the hurly-burly of process has required a structured schedule of meetings to set the pace and maintain momentum by meeting a clear set of goals and objectives. These regular meetings in turn have served to renew the original mandate created at the beginning, while directing the process towards new areas of concern.

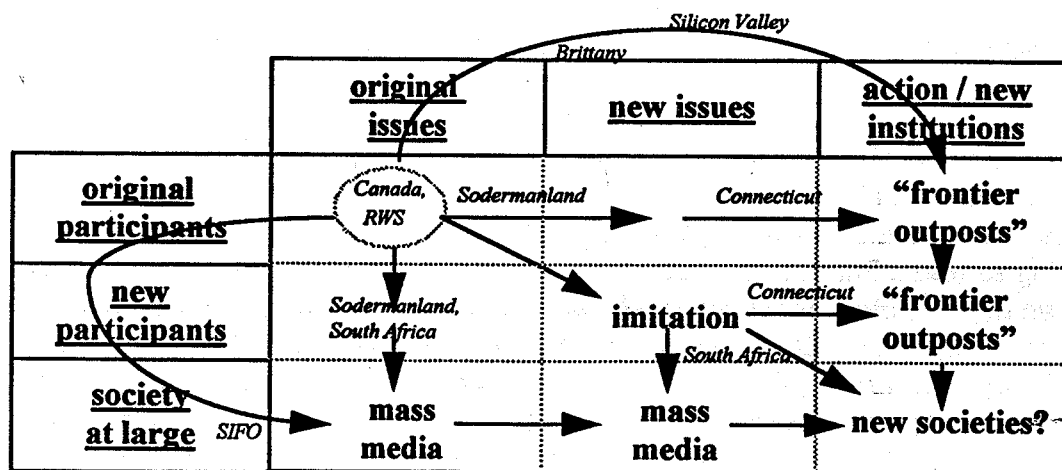
#### **7F Spin-offs and Continuations**

In the absence of any mathematical measures of the impact of these new processes, we have agreed on one simple criterion of success: does the process continue? All eight of our successes are still functioning in one form or another, and the results for each one are described in this section.

#### **(i) A Notional Framework**

The spin-offs and continuations have taken a variety of forms, which have been roughly captured in the matrix diagram below:

**Figure 8: Spin-offs and Continuations**



There are a number of pathways through this matrix. One is simply to continue debating *original issues* among the *original participants* by deepening the discussion amongst them. However, it has also happened that the original participants have moved on to explore *new issues*. Some of these discussions have then progressed further towards concrete *action* and the early stages of *new institutions* -- labelled here as "frontier outposts." Alternatively there is a continuation of the debate on the original issues, but with *new participants*. In some cases, this broadening of the debate to new participants has been taken into the mass media, especially television. This necessarily alters the form and process of the discussion, but serves to take ideas which had not circulated beyond a small number of people into a wider audience. Another spin off of these experiments has been their imitation, where the process itself has been taken and applied by new participants to new problems. Some of these exercises in imitation have also been institutionalised in new forms -- like the Connecticut desegregation law, mentioned below. In the discussion that follows, I will explore how our eight successful experiments have travelled through this framework.

**(ii) Connecticut**

The Connecticut story has had a number of spin-offs. Having managed a successful discussion about mortgages, another vexed issue -- roads -- was handled in a similar way. More importantly, having been involved as Chairman of the Banks Committee and seen the process work, Tom Ritter adapted what he had learned to his own political party. When he became Speaker of the House, he organised a facilitation process in the Democratic Party Caucus to discuss the State's budget, which had failed to pass the year before. Tom Ritter briefly described the process when he was interviewed in August 1993.

*When it came to the budget negotiations, we used five facilitators and everyone felt good about the process. We adopted the budget one*

*month early and the experience helped us in the way we viewed our job.*

When asked how this process dealt with long term issues and uncertainty, Tom Ritter argued that having finished one month early, legislators were able to go home to their families, read books they had left unread, spend time with their children and generally reflect on things. He also added that any successful approach to the long term needed to be a bipartisan effort that he hoped to adopt from his position as Speaker of the House. In effect, by changing the informal rules of the game, Tom Ritter was working to institutionalise new customary practices that might, if successful, outlast his own term in office. More concretely, when a new bill was passed to deal with the issue of desegregating Connecticut's schools, a clause in the bill stipulated that local school boards had the option of using a collaborative stakeholder exercise to design their own desegregation plans. If they did not use this provision, the State would impose a desegregation order. This is a much more formal institutionalisation of the political process that was first tested in the mortgage issue.

Another group in Connecticut, some of whose members had also been involved in the first exercise, tried to use similar techniques to develop a "Vision for Hartford", the capital of Connecticut. This involved 47 people and a very diverse task force. While they have not yet generated the kind of excitement the first mortgage process created, they are now looking to use a more structured scenario approach to bring the group together and focus thinking.

In short, the Connecticut exercise has been successfully imitated by others. It has been modestly, but formally, institutionalised in the school desegregation law, and informally adopted in the unwritten legislative procedures of the Connecticut House of Representatives, and imitated directly in the Hartford vision exercise.

### (iii) Institut de Locarne

While the process surrounding the Institut de Locarne shares many of the same elements as the others -- regular meetings, clear goals, high information and learning - - there has been a crucial difference between the Institut and the other examples. The organisers here knew from the start they were seeking to establish a permanent learning organisation. They also hoped to use this new social, cultural, and economic forum to move towards greater political autonomy in Brittany. In that sense, they were not a temporary experiment looking to stimulate new thinking at a time of change. Rather, they were creating a relevant local learning institution and have therefore already gone much farther, in some ways, than the other examples we have cited here.

In 1992/93 they held, as described, seminar series for heads of local companies and of the Institute. They also organised a summer school in 1993 for the children of those leaders who had attended the seminars; they want to introduce new thinking to the next generation as soon as possible. They have also begun offering a training programme that is not aimed at the heads of companies or at those with advanced

degrees, but at people who have a Baccalaureate (A-levels) plus two years training. Finally, the permanence of their ambitions will become manifest when the doors to a new educational institution -- the Institut de LoCarne -- open in early 1994. This will be a frontier outpost in the most visible sense imaginable.

**(iv) Joint Venture Silicon Valley**

In June 1993, the large combined board of 100 people endorsed 14 of the ideas presented by the task forces in the public meeting in March. A report of their choices was published and they were also publicised on the local television station. This is one of our examples of a discussion moving into television, where the show included interviews with people who had been involved in the task forces or who were likely to be affected by the proposals. At the same time, "Joint Venture Silicon Valley" set up its own frontier outposts and new institutions. The original discussion task forces were converted to fourteen permanent working groups and the large joint board was reduced to a more functional, and permanent one with 25 members. These new working groups are now looking for ways to implement the ideas that were suggested. The "Smart Valley", for example, is looking for ways to create a high technology integrated information infrastructure in the region. In one Smart Valley project a television company is working on broadcasting programmes on demand by teachers, with the money for the broadcasts coming from a local cable company. Smart Valley had another 30-40 ideas of a similar nature, and it is likely that the other working groups were also testing new ideas in their initiatives. How many of these efforts will survive the first wave of enthusiasm remains to be seen. But the whole story of the Joint Venture in Silicon Valley shows how a small lunch time conversation has spread to include new participants, new ideas, and new institutions.

**(v) Governing in an Information Society, Canada**

Steve Rosell's Round Table was originally mandated to run for two years. That mandate has now been renewed and people are on a waiting list, hoping to be able to participate. Nor is the impact of the conversation limited to those attending the meetings. Every indication suggests that participants take what they learn back to their own government departments so that the knowledge gained becomes more widely diffused. This project is also a good example of a discussion that has deepened among the original participants. In July 1993, for example, the group hired Adam Kahane who had worked on the Mont Fleur scenarios in South Africa, to act as the facilitator in organising the learning of the previous two years into a structure of scenario stories. These stories are currently being finalised and will be used to address specific issues faced by the participants in their own departments and work.

In addition, Steve Rosell has written a book<sup>21</sup> describing the first two years of the Round Table. Titled *Governing in an Information Society*, and published in 1992 by the Institute for Research in Public Policy, it has now sold 700 copies, mostly by word

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<sup>21</sup> Rosell, Steven A. et al. *Governing in an Information Society*. Institute for Research on Public Policy, Ottawa, Canada, 1992.

of mouth. In this fashion, the discussion among the original participants is not only reaching a slightly wider audience, but the book itself is likely to be seen in future years as a key early descriptions of the issues and challenges facing government today.

(vi) **Rijkswaterstaat**

More than any of our other examples, the Rijkswaterstaat work has been organised around the needs of a single organisation. The public at large has been only involved as experts or suppliers/contractors to the Waterstaat itself. This process was more hesitantly handled: the senior management team reviewed the progress of each step and decided whether to go one step further -- for example, from interviewing to an experiment in scenarios. Moreover, when the scenario work was undertaken, it was described as a 'training' exercise, to see whether it was worthwhile going through more in-depth development. Now, having tried it once, their reaction is: 'Fine. Let us do it for real this time.' "Q" is accepting this mandate, but also looking to improve on aspects of the process that did not work as expected the first time around. Having begun first with the senior management teams of the principal divisions, they are now looking at ways of training the next level of management in using this kind of thinking. In particular, they are searching for better ways of integrating scenario understanding with strategic choices in management and searching for better ways of bringing about organisational (as opposed to individual) learning. In short, the process goes on, deepening within the senior management teams while also spreading to a wider audience within the organisation as a whole.

(vii) **SIFO Multi-client Study, Sweden**

One of the more surprising developments took place in Sweden. The work began in mid-1991 and the scenario study was completed in 1992. At that point, the participants found the process and the thinking so interesting that they wanted a wider audience and approached Swedish public television. On Sunday, April 4, 1993, they held a one day programme on Swedish society, titled "Futures for Sweden". "We were looking under the skin," said Bo Ekman, "and showing people what we found."

*"It was a very structured programme, but it was not popularised. We had academics presenting their research and gave them all enough time to get their ideas across. We had a hearing, a panel of people who knew about the Swedish crisis and could talk about it. We had interviews with international experts so that people could get a sense of the perspective from outside. About 1 million Swedes looked in on the programme that day -- 500,000 for more than an hour. It was very successful."*

Given that the population of Sweden is 8.5 million, it is indeed remarkable that so much attention was given to this program. (Can we imagine a British audience being so attentive?) This first success was followed by another programme on the 14th of



November 1993. Unlike the first which documented the crisis in Sweden, this was more positive. As Bo put it, "we are moving from the need for change to the 'change of change'". That programme lasted four hours and was also a great success. Now they are putting together a Group of Eminent Persons, "a group that Swedes will notice", according to Bo Ekman. This is perhaps our best example of a discussion that has expanded its audience through the mass media.

**(viii) Södermanland County Administration**

In our full description of this example, we have already described how the initial work was carried forward. In the past year there has been new collaborative work on industry strategy, education and research, work on the environment, and the Vision 2025 Competition. All are signs of a dynamic learning process that is set to continue for some time. Like the SIFO example, it has moved the discussion into new issues and into new audiences. With the Vision 2025 competition, they are also searching for new institutions that might be developed in coming years.

**(ix) South Africa**

Finally, there is the case of South Africa. Here it is important to note that each scenario exercise was widely presented throughout South Africa. Both the first Anglo American scenarios in 1985 and the 1991 Nedcor/Old Mutual scenarios were presented to government leaders and all political parties in South Africa. In the case of Anglo American, Clem Sunter gave two speeches a day for a year, responding to requests for presentations from all over the country, including radical activists in Soweto and the ladies' clubs of the Kahroo. Wide publicity was also given to the 1992 Mont Fleur scenarios which caught the popular imagination and were picked up by the press, turning the scenario names (*Flight of the Flamingos*, *Icarus*, *the Ostrich* and *the Lame Duck*) into an every-day shorthand for the threats and opportunities facing South African society. The Mont Fleur team also produced a 30-minute video and offered to make 2 hour presentations to anyone requesting one. More subtly, these scenarios had been developed partly to provide a non-business, even left-wing, view of the future of South Africa to augment the business-driven scenarios produced in 1985 and 1991. In that sense this third exercise involved new participants, although the basic issues had not changed greatly from the previous two discussions.

Unlike our other examples, we were able in the case of South Africa to gain two outside opinions of the impact this work has had in the country. Certainly those who have been involved in any of the three scenario exercises believe that their activities have helped create the political changes we are seeing today, partly by bringing groups in conflict together around a common table. Yet, Stephen Ellis, former editor of *Africa Confidential* and the Director of the African Studies Centre at Leiden, believes that "They have really only had an impact on the margins." He cynically observed that there was a comfortable cocktail party circuit moving from one discussion of South Africa to another 365 days of the year. The major failing of these scenario discussions is that they never reached the kids on the streets, who have formed the emotional political vanguard of the anti-apartheid movement. Many of these young men and boys have been boycotting schools for years and are now a lost generation, having

only violent revolutionary fervour in their grasp. Scenarios, Steve felt, had little impact on people like these.

On the other hand, Graham Bell of Ivor Jones, Roy & Co, stockbrokers in Johannesburg, who had watched, but not participated in, the three exercises felt that they had been beneficial.

*What strikes me about scenarios is that the process itself brings about some of the scenarios envisioned. The process actually changes the scenarios that are possible. If you look at the headlines in South Africa, you can see a real dramatic change in three years.*

He also described three stages:

*First: Everyone is involved and very enthusiastic.  
Second: Everyone gets tired of it; what do you say after you've said "hello!"?  
Third: The process begins to fragment into many different scenario processes.*

This last stage is one that we have been referring to as "spontaneous combustion", when the approach is taken up widely by many different kinds of groups. Adam Kahane, who was the facilitator at the Mont Fleur scenarios, said that

*There are now regional economic forums with all stakeholder groups participating. They are very informal, but could be a very progressive and advanced means of policy formation and collaborative local development work.*

This is the process of imitation we described earlier, and has followed the earlier expansion of the conversation to include more participants from different groups. Both can be seen as important political achievements, although Steve Ellis reminds us that scenario work in South Africa still has to reach those who have by their radicalism hastened the formal break-up of apartheid.

#### (x) Summary: Spin-Offs and Continuations

In this section we have seen how discussions which began among a small group of participants on sometimes quite specific issues have in all eight cases exploded beyond the original intentions. In some cases, the discussion has deepened among those who began it. In other cases, it has taken up new issues or involved new participants. In one or two instances, the mass media has been used to draw in a wider audience, spreading the small group's knowledge and understanding through society more widely. In several instances, the process has been imitated by groups or individuals applying it to new issues. Finally, several of our success stories moved from conversations to concrete actions, establishing various forms of 'frontier outposts' to create new institutions and laws.

## 7G Summary: Consolidated Lessons of Success

What is perhaps most remarkable about our eight success stories is the number of features they have in common, despite their different political, geographical, and cultural settings. The role of leadership and individuals, the importance of shared collaborative learning, and the ability to move forward in new directions have been part of each example. Some have even led to new institutions. It is therefore tempting to suggest from these eight experiences that we are witnessing the birth of new political forms and social institutions. However, it should also be stressed that these are, for the most part, *ad hoc* initiatives, created in response to difficult and uncertain times. To what extent they will evolve into something other than transitional vehicles remains to be seen. Even as they stand, however, our eight stories of success offer a variety of exciting and creative models worthy of emulation.

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## 8 INTERESTING FAILURES

Obviously, not all scenario or stakeholder exercises have been a success, so this section of the report looks at those experiments among our 28 examples which have failed. To do so, I will first tell as briefly as possible the story of those failures and then consider the lessons they teach us.

### 8A Stories

#### (i) Iraq

In the 1984/85 executive summary of a report on the development plans for the central plain around Baghdad<sup>22</sup>, the following assumption about the political and economic environment was noted:

*"The ensuing 15 years seem likely to be turbulent, but not so much so as the last two 15-year periods during which much progress was made in a planned way."*

This report was the result of a long and successful stakeholder process, which did not include any scenario work, but instead relied upon assumptions like the one just quoted. As we all know, within five years, Iraq had invaded Kuwait and suffered the destruction of much of its infrastructure under enemy bombing. This not only destroyed the gains of the previous periods, but completely altered the requirements for development in the future. It must be recognised, however, that it would have been political (and actual) suicide for anyone in Iraq in the mid-1980s to postulate a future as destructive as that brought about by the folly of Iraq's own leader.

#### (ii) Long Term Perspective Studies for Africa

Following the World Bank's 1989 publication of the first Long Term Perspective Study of Africa, *From Crisis to Sustainable Development*, a scenario initiative was agreed at a 1990 meeting of African ministers in Maastricht. The UNDP (United Nations Development Programme) and the World Bank were given responsibility for co-ordination and a unit was established in Abidjan, Ivory Coast, run by a man named Brito with a budget of \$9 million. Brito was charged with encouraging the development, by Africans, of national level scenarios of the future. As of August 1993 no scenario work has been done. When I asked why, Pierre Landell-Mills, who had authored the 1989 study, said:

*But there is no constituency! The politicians only do things by necessity and what is making them do this? So it then becomes an*

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<sup>22</sup> Republic of Iraq, Amanat al Assima/Baghdad. *The Integrated Capital Development Plan of Baghdad: Strategic Alternatives Study - Comprehensive Alternative Strategies - Volume 1: Executive Summary*. Baghdad 2001, JCCF; Japanese Consortium of Consulting Firms, Tokyo, Japan, undated, roughly 1985/86.

*intellectual exercise, but there is no forum for intellectuals in Africa, so no one does it. As soon as they gather, they are seen as an opposition and they are mistrusted. I have had late night conversations with the younger academics. They know the money is there. They have great enthusiasm and we have long talks into the night. But then there is nothing. ... I think culture is very important.*

### **(iii) European Commission**

In October, Campbell Gemmell and I had four interviews with people in the European Commission doing scenario work. None was doing anything like the kind of process work we have described in this report, with the possible exception of the work by Kevin Leydon in the Directorate General for Energy. A number of interesting papers had been written, but there was little to suggest that stakeholders had shaped the questions addressed in those papers or even been given much opportunity to work through the consequences of the findings. As Ricardo Petrella, head of the FAST (Forecasting & Assessment, Science & Technology) Programme put it: "I am a frustrated person. I have tried to apply these ideas but have rarely been successful." When asked why, he said:

*Because of power. The institutions have tried to do the exercise as a legitimisation of their existence and policies, not as an exploration. Only very rarely does an institution want to do long term forecasting and assessment that creates a mise en cause, a debate, about their existence. Instead they want something that confirms them, or is 'neutral' advice. But what is neutral advice?*

Kevin Leydon in the Energy Directorate, clearly hoped to introduce consultative scenario processes in his field, but was rarely able to bring people together to work in a collaborative way. "In my case," he said "the relevant decision-makers are the 17 Commissions, the Member States and the industry. They are my 'Rent-a-Mob.'" By implication, simply scheduling a meeting with representatives of this diverse group was going to be difficult, let alone creating a shared, collaborative conversation.

### **(iv) The World Bank**

In 1987 the World Bank reorganised its operations and created a Research Department that had responsibility for strategic planning. The strategic planning team were mostly recruited from outside the Bank and were asked to include scenarios of the external environment. They had top level support and were told that they had a 3-5 year 'grace period' before any assessment of their work would be done. Drawing on departmental contributions, one person was in charge of designing a single, challenging scenario of the world. This scenario was an extreme vision of things that could happen. This single extreme scenario was then presented, in focus groups, to Bank managers. It led to a very strong rejection of such an extreme view. As a result a new single scenario of more plausible events was constructed by managers and the old extreme scenario was discarded. Based on this new scenario, managers concluded

that everything they were doing was fine and appropriate. However, the strategic planning team thought the exercise was a failure because no new thinking took place. Top management also thought it was a failure because it did not create any discrete guidance for action. Others simply argued that the rigidity of the World Bank's culture had won.

**(v) Silicon Valley and the Coast Guard**

Despite the success of the consultative process, the use of scenarios in "Joint Venture Silicon Valley" appears, *prima facie*, to have been a failure. There was no indication, either in the interview or final report, that scenario thinking had appeared anywhere but the June 1992 SRI report. A similar rejection of an outsider's work came in the Coast Guard. There, after successfully testing existing assumptions with a single alternative scenario of the Coast Guard's future, the planning department commissioned a report that scanned the external environment for clues to possible future changes. The author of that report, John Petersen, assembled a wide variety of information. This was often culled from the fringes of society, on the grounds that marginal activities have a way of moving to the centre over a period of time. Included in this scanning document were reports of some of the more exotic developments being predicted on the fringes of society. For example, there was a comment that some people believe the US Government will be establishing official contact with UFO's (unidentified flying objects) by the year 1995. Another theme in the report was that extrasensory perception would have growing importance in everyday life. Although John Petersen's presentations were stimulating and led to considerable discussion, the extreme nature of some of his findings, led the entire report to be discredited and the process was stalled. As a result, the scanning document was never used to develop scenarios for the Coast Guard, although it has been picked up by the US Department of Transport and republished.

**8B Lessons**

**(i) Political Culture**

Both the Iraqi example and the Long Term Perspective Studies in Africa raise questions about cultural requirements for good scenario work, in particular the need for a political culture that is tolerant of a diversity of ideas and not threatened by broad ranging public debates. Neither of these conditions can honestly be said to exist in Iraq or most African states. Iraq is known to be one of the most totalitarian and brutal states currently in existence and no one could be expected to 'live to tell the tale' twice of a future failure resulting from errors of judgement by the leader. While most African governments are not so systematically repressive, there has been little encouragement since Independence of genuine free speech. There has also been a systematic lack of government support for universities, most of which are weaker now than they were under colonial rule. This is beginning to change, but it is still very early days in the 'Democracy Movements' of Africa. An alternative hypothesis in the African case is more subtle. As noted, the UNDP and the World Bank has co-

ordinating responsibility and are the conduits for the \$9 million budget. As I was frequently told in East Africa two years ago, "He who pays the piper calls the tune." Therefore, there could be worries that any scenario exercise funded by these donor agencies would inevitably create, not a local scenario exercise, but one which simply repeated the imported views of the expatriate donor community.

**(ii) Organisational Self-Confidence and Organisational Complexity**

Following his outburst about the frustrations of introducing scenario processes in the EC, Ricardo Petrella observed, "I am always very proud when an institution does this, because it means it is strong and institutionally secure." Arguably, given its youth and history of fractious agreements, the European Commission, does not have the fundamental organisational confidence to undertake a successful scenario exercise. That, however, could be only part of the answer. As hinted by the quotation from Kevin Leydon, the EC is also a very complicated beast, constantly coping with conflicting priorities and interests. From that point of view, there may well be a limit to how complex an organisation can undertake a scenario exercise, and the EC may well be too far the other side of that complexity to use scenarios effectively in a broadly based way.

**(iii) Internal Acceptance of a Planning Experiment**

The World Bank's failed attempt at scenarios is instructive on several points. First, the techniques used were not very good: a single extreme scenario was produced by one individual, rather than a collaboratively developed set of scenarios which reflected both existing assumptions and alternative possibilities. Second, because it was an extreme scenario, there was no perceived connection to reality; it had failed the 'plausibility' test. Third, before the planning team had an opportunity to learn from its mistakes, its top level support was withdrawn and the division was reorganised again. Finally, the Bank's own culture is known for its complacency in the face of criticism. Without top level support of efforts to confront that complacency the initial failures of the planning team were used to confirm existing self-satisfactions rather than find a better way to address them.

**(iv) External Ownership and Egos**

It is arguable that the scenarios presented in Silicon Valley were unacceptable, not simply because they were poorly researched, but because they were products of an external organisation which did not engage participants in the scenario thinking. This was also a fault of the World Bank exercise, which had employed 'outsiders', and was a factor in the Coast Guard environmental scanning report. The research of that report was done by one man, to a very high standard, and he was honestly and legitimately proud of his work. However, the fact that his contact while writing the report was limited to a single individual meant that when he came to present his findings, few people were prepared for the novelty of his thinking. He, however, by this time was passionate about what he had learned. As a result, not only was the thinking not a shared product, but it was seen as a product owned by one man. As



such, even though John Petersen is a fairly modest individual in many ways, a justifiable pride in his work may have been perceived as an overbearing ego with too many eccentric ideas.

**- 8c Summary: Interesting Failures**

The lessons we learn from these interesting failures are important. First, there is a need for a tolerant political culture in which the relevant players can largely be trusted to act in the collective interest. Second, it is most likely to succeed when strong and confident organisations are involved, with straightforward structures. Third, the scenario team working on a project needs to be assured that they will have continuity of support and time to learn from their mistakes. In return, the team itself must be responsible for using the best practices available. Fourth, the audience of the work must be involved in the research and thinking. This requires the scenario team itself to approach its task with a relatively muted ego and to search for ways of engaging the attention of their clients both early and throughout the process.

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## **9 ISSUES TO BEAR IN MIND**

The preceding discussion of the successes and failures from our 28 examples of relevant work, throw considerable light on what might be possible in Scotland. However, our research also threw up a variety of issues that don't emerge neatly under the simple headings of 'success' and 'failure'. In this concluding section, therefore, we look at half a dozen issues to bear in mind when embarking on a scenario or stakeholder exercise of the broad public kind discussed here. While it is largely based on the successes, some issues also come from consideration of the failures.

### **9A The Role and Timing of Scenarios**

The attentive reader will have noticed that not all of our success stories were stories about scenario exercises. In fact, only half of the eight put scenarios at the heart of the process, while the other half either used them in a more limited fashion or at a later stage.

In Södermanland, the SIFO multiclient study, South Africa and the Rijkswaterstaat the building of scenarios was central to the process, helping to organise research and direct thinking about the future. At their best, scenarios are a unique intellectual exercise, combining clear analysis with a degree of novelistic imagination in a way no other process completely grasps. When this is done in a shared collaborative exercise, the impact can be particularly powerful. In these four cases, that seems to have been accomplished. Not surprisingly, in all four cases, the participants we spoke to were enthusiastic, confident that their use of the technique was valuable and enduring.

In two cases, Silicon Valley and the Institut de Locarne, scenarios generated by outsiders were used to stimulate thinking early in the process. In Silicon Valley the scenarios appeared briefly in the SRI report, but do not appear to have been taken very seriously or in fact been done to a very high standard. Whether they informed people's understanding of what was possible in the Valley is not clear. What is clear is that the task forces were looking forward, not backward, and were considering not just the business of information technology, but also aspects of social welfare and the quality of life that a good scenario approach would encourage. In the case of Locarne, the scenarios developed by Edouard Parker and his seminars on how countries grow, had a clear and dramatic impact. Not only have they become part of the 'core curriculum' of the Institut, but their shared understanding of development and growth expanded under Edouard Parker's influence and illuminated what was possible in Brittany.

In our last two cases, Connecticut and Canada, scenarios have been taken on as an additional useful technique as the experiment evolved. In Canada, the two and a half years spent in discussions and presentations enabled the group to construct challenging alternative views of the future of Canada during the July 1993 scenario workshop. The early seminars and case studies also seem to have created the necessity for analysing and integrating the many facts and uncertainties they were uncovering, something that scenarios are particularly good at doing. In Connecticut, on the other hand, the use of scenarios is only being discussed, and has not yet been agreed. However, Wick Sloane is encouraging a scenario process to help with the Vision for Hartford exercise, saying that

"scenarios are a better medium for allowing different points of view." He sees the imaginary future as a neutral space where existing resentments can, briefly, be left outside the door.

### Summary: The Role of Scenarios

This split history, where scenarios are central to half our successes, but only important at a later stage for the remainder, suggests that the scenarios themselves are only part of the story and can be used in different ways depending on the circumstances. In some cases, scenarios have been used to structure learning that had taken place earlier, e.g. the Canadian Round Table. In other cases, the Rijkswaterstaat, SIFO, Sodermanland, South Africa, the scenarios were the structure around which learning was developed. Still others seek to use scenarios as a neutral intellectual space where vexed issues can be discussed among parties in conflict -- the Hartford vision exercise in Connecticut or the Mont Fleur scenarios in South Africa. Elsewhere, the scenarios have been used as intellectual triggers to stimulate thinking in new directions -- the first South African presentation by Edouard Parker, the Institut de Locarne and the Silicon Valley Joint Venture. In short, scenarios are a technique that can be used effectively in a variety of ways depending on what the participants are ready to use and most require.

### 9B Principal Clients or Who Is This For?

In September 1993, I asked Clem Sunter, who had led the Anglo American scenario study of South Africa, about using scenarios in Scotland. His immediate response was, "Who is this for?"

*Would this be directed at the policy makers, the heads of government or would it be a popular exercise? They are all very different. ... In fact there are probably three kinds of scenarios:*

- 1) There is one to the policy makers.*
- 2) Another version is what I call the "rock concert" or the "road show". That is the one I took to the Kahroo and the townships.*
- 3) Then there is the thing that Adam [Kahane] did, bringing different conflicting groups together to talk to each other.*

This question can be usefully applied to our group of eight successful examples to see whose behaviour was meant to be changed by the scenario and stakeholder work. This is a useful drill, since it helps to focus thinking both on what should be undertaken in any comparable exercise and how the impact of such work might be assessed.

Probably the most restricted participation was in the two public sector examples: the Rijkswaterstaat and the Canadian work. In the first, it was by definition an organisational exercise, aimed at the senior management team of the Rijkswaterstaat itself and at the senior managers of its principal divisions. As such, it never sought to engage in a large public debate, although outsiders were involved in other ways. It did, however, move

the strategic thinking process outside an isolated planning group and into the senior management teams across the organisation. It was an exercise explicitly aimed at the policy makers -- the senior management teams.

The Canadian Round Table was also a restricted group. This was initially a discreet process for senior civil servants where a wide ranging discussion could take place outside the gaze of media publicity. The lack of publicity was no doubt an element of the design, probably a crucial element since participants needed to be assured that confidences would be respected if open discussion were to take place. Like the Rijkswaterstaat, therefore, this has been an exercise for policy makers, with only limited exposure to wider audiences. While this may seem too modest an ambition, it is arguable that the discretion and limitations of the project are a strong aspect of its success.

The Connecticut mortgage exercise was broader in its intention, aiming at a creative interaction between policy makers from both the public and private sector and that segment of the public affected by their policies. As such, it has redefined who are the policy makers, putting the population at large into a policy-forming position. In some sense, this makes the Connecticut experiments the most radical we have seen, since it used work in conflict resolution to push greater policy-making powers directly into poor urban neighbourhoods. Unlike the Canadian Round Table, therefore, the Connecticut work has begun with popular involvement. As a price, perhaps, the intellectual content -- one of the key legacies of scenarios -- has not been academically sophisticated. That highlights a very clear challenge for any scenario work that follows: to stimulate learning that is relevant and appropriate to all those participating.

The Institut de Locarne has followed a different path again. The group here began with the education of those in leadership positions and then looked for ways of drawing in other members of the community. For the most part, they have first involved those in business in Brittany, but the Institut is also drawing in leaders from other sectors of society -- the schools, the church and local government. As such, it is aimed initially at policy makers, but concentrates on those in the local, Brittany setting. There is also a suggestion that as the Institute develops, its reach into the population more widely will expand.

In three of our examples, Joint Venture Silicon Valley, the SIFO Multiclient Study, and Södermanland County Administration, there have been clear attempts to involve people widely and to use the media to publicise the results of thinking. In all three, the ambition to reach the largest number and variety of people possible is clearly marked. These are people in local government, business leaders, union leaders and academics. By and large these people are in a policy making positions in both public and private sector, but the interest in using the mass media to broadcast new thinking shows that all three examples also have ambitions to reach the public at large -- to mount a "road show", in Clem Sunter's terms.

Finally, there is the example of South Africa. In all three scenario exercises the work began in a small group of fairly intellectual people, but was then presented in widening circles to government, business and political leaders, as well as to the media and the

population at large through various popular road shows. This example therefore includes all three forms of audience: policy makers, groups in conflict and the road show.

### Summary: Who Is This For?

This discussion shows that the principal client in every case has been policy makers, with wider audiences being reached more gradually. The definition of policy maker has, however, varied from one circumstance to another. In the Canadian example and the Rijkswaterstaat, it was senior civil servants and senior managers. In South Africa, looking at the three scenarios exercises as a single process, the work began with the senior managers of major businesses, expanded to draw in members of government, and later included members of the principal opposition parties. In each exercise, the initial work was directed to the leaders of organisations, but was later broadcast to a wider public. A similar pattern can be seen in the two Swedish examples, the Institut de Locarne and Silicon Valley, where leaders from key groups in society -- government, industry, academia and trade unions -- have participated in collaborative discussions, with the media being used at a later stage to involve a wider public. In the case of Silicon Valley, the working groups were also, importantly, open to anyone. Thus, even before the televisions were used, more popular voices could be heard and incorporated into the thinking. This wider democracy also influenced the approach taken in Connecticut, where policy makers were defined to include both those who had historically formed policy and those who had been subject to such policies.

## 9c The Role of the Press and Politicians

### (i) Role of the Press

Our eight success stories include three different models for the role of the press:

- absent, non-interfering
- use the medium, but not the messengers
- involved as publicists and partners.

By design, there seems to have been little role for the press in either the Rijkswaterstaat or the Canadian projects, with the latter in particular a quiet and discreet affair. In Connecticut, on the other hand, the press was absent almost by accident. When Tom Ritter organised his Caucus to participate in a facilitated Budget Day, one politician would not go along with the ground rules and was excluded. As Tom Ritter described it:

*I threw one person out for not accepting the Caucus decisions [on ground rules]. I said that if you are simply setting selfish priorities, you can leave. I was prepared to lose my job. You see, before, the budgeting process was absolutely brutal; 'he who holds out longest wins'. But if you make people start with intellectual honesty, you can get much further.*

When I repeated this story to Carolyn Lukensmeyer at the National Performance Review in Washington, her first question was "Where was the press?" If that had happened in

Washington, she said, the man who had been excluded would have become a *cause célèbre* and the whole event would have become a great scandal. I repeated her question to people in Connecticut and was told that "Process is not very interesting to journalists." This meant that the processes were given a greater opportunity to work, in the absence of intense publicity, and the budget agreements were made. That said, there has been considerable publicity about the success of the experiments so far, and greater press attention may follow in the future.

Against the Connecticut example, there is the SIFO example where the organisers used the television medium to present their ideas, but did not include either journalists or politicians in the programme. Instead, the television programmes relied on academics and other presenters to get new ideas across directly rather than through the filter of existing political or journalistic assumptions. When the journalists and politicians appeared afterwards, there was an implicit and unfavourable comparison between them and the work of the SIFO group. This is an approach that could, however, backfire in the future if it leads to permanent exclusion. That, however, does not seem to be the intention, since the second television programme in November was followed by a reception to which the press and politicians were invited. There, it was hoped, a franker discussion of the issues could take place off camera than had been possible in the full glare of television.

That leads to our final model: the press as publicists and partners. In Sodermanland, Silicon Valley, South Africa, and the Institut de Locarne the press is seen as a key partner, helping to broadcast new ideas and increase the knowledge and understanding of the population at large. This model is likely to be the one that comes to dominant if these new experiments in political process continue to multiply and develop. If nothing else, the processes themselves are designed to create co-operative rather than conflictual experiences, implying the need to draw in the press as collaborators. That said, it must be frankly recognised that everyone of our eight successes is a self-appointed body, lacking any formal public review. To deny the importance of journalistic monitoring of ethics and honesty among such groups could be self-defeating in the long term.

## **(ii) The Role of Politicians**

There is a similar trio of roles played by the politicians in our eight successes. Politicians have been:

- ignored and surrounded,
- asked for endorsement or ratification,
- involved as partners in full.

In the Rijkswaterstaat, the politicians were an element of the external environment, to be taken into account in developing scenario thinking. However, in the SIFO exercise, as already hinted, politicians were side-stepped and the process was constructed to simultaneously surround and ignore them simultaneously. This then created implicit pressure on politicians to accept a new approach to public issues. The Institut de Locarne took a similar surround-and-ignore approach, but more specifically directed at

central government, which, it was believed, took little interest in Brittany.

Elsewhere, politicians were asked to endorse the process early on or ratify it later, granting it a legitimacy that could not be ignored. The Cabinet approval given to the Canadian Round Table and the role of Tom Ritter in Connecticut both served that purpose, although Tom Ritter's role was as much personal as institutional. The ratifier's role was also important in South Africa where the early scenario work was presented to government politicians and the later Mont Fleur exercise drew in representatives of the opposing parties as full participants. In all three, the presentations and involvement of politicians were partially designed to secure political ratification of the work. However, the scenarios teams in South Africa for example also probably hoped to change the thinking in government and in the more radical parties by presenting their scenario arguments.

Finally, in Södermanland and Silicon Valley politicians have been involved in the development of the thinking from the start of each process. This partnership approach not only brings a degree of political endorsement, but also means that the politicians' own hopes and ambitions will be reflected in the final work. The need to include such hopes was also present in the Västerås scenario exercise in the early 1980s, as reported in Abdul Khakee's paper. In that project, Khakee arranged for local politicians to write "future biographies" of themselves. These were essays the politicians wrote as if they were 80 years old and looking back on their lives. Khakee then took these essays and analysed their content, reporting on the hopes and fears of the politicians in an anonymous way.

### **Summary: the Role of the Press and Politicians**

We have seen here a variety of roles for the press and the politicians, running from one that ignores both groups to one that treats them as full partners in the process. Given the overall, inclusive, style of all eight successful exercises it is likely that the model of partnership will be developed further. Both the press and politicians are powerful groups in society, despite present disillusionment. Both are also capable of destroying any collaborative work that gets down. It therefore makes more sense to include these groups constructively wherever possible. This point was reinforced when we interviewed Steve Ellis, Director of the African Studies Centre, Leiden about the role of scenarios in South Africa and the role of planning generally in African development. He commented astutely about the need to include politicians, a comment that could probably also apply to the press.

*The thing you planners have to do is work with the politicians. They naturally play a short term and dirty game. They look out for their own interests. And if you don't include them, you lose.*

### **9D Rate Factors**

The speed and efficiency of any chemical reaction will be affected by what are called "rate factors", such as the temperature, the humidity, the size of the container, etc.



Similarly, all these scenario and stakeholder processes are influenced by rate factors that can shape their efficacy. These are grouped into four areas:

- surrounding political climate
- leadership and personal qualities
- methods and time
- working the narrow band.

**(i) Surrounding Political Climate**

- political tolerance • perception of need & urgency • a neutral space •

The first requirement here is perhaps obvious: the need for political tolerance. As shown in some of our failures, and suggested by the geography of "nowhere", this kind of collaborative long range discussion succeeds best in a political culture that accepts open discussion and shared open information. Second, there has also been in most cases a recognition of need and urgency. This perception has encouraged people to believe that fundamental issues are at stake and need to be addressed in a new and sometimes risky way. However, because the issues are fundamental, there has also been a requirement for a neutral space within which the discussions can proceed. In the Canadian Round Table, for example, this was provided by the Institute for Research on Public Policy. SIFO played that role in Sweden, while the Mont Fleur exercise was named after the location where meetings were held.

**(ii) Leadership and Personal Qualities in the Scenario Team**

democratic inclusion  $\Leftarrow$  paradox  $\Rightarrow$  strong leadership

One of the paradoxes of these processes is that they are collaborative, inclusive and democratic, but also require strong leadership. There is a clear need in nearly all cases for the support of top leadership in the business community, the government and private organisations.

However, once planning becomes learning, the personal qualities of the scenario team become important. At their best, they are people who facilitate learning by others, rather than intellectuals whose pride is found in publication of their own insights and ideas. As a result, this team must have some very special qualities -- not only must they be good intellectually and possessed of an imaginative curiosity, but they must also be sufficiently self-confident to leave their own egos in the background and enter the understanding of others in order to move that understanding onto new ground. The team is central to the process, but always leading from behind, willing to step into the background as others do the thinking. These paradoxical qualities of strength and quietness also strengthen another important aspect of the team: the need for an interdisciplinary balance, so that insights can be included no matter where they are found.

### (iii) Methods and Time

#### Make haste slowly // Use what fits

Another important factor in these processes is that they make haste slowly, building on a long term commitment and continuity of effort. If the scenario team is to succeed, it needs time and support. For that reason, it is important that both the people involved and those who are supporting them, recognise that several years of commitment may be needed. This does not have to be a large commitment of funds, but all our successful examples involved leaders and facilitators who had worked with the process and the participants over a number of years. This continuity of voices and memory, even as some left and were renewed by others, appears to be an important aspect of the success of these ventures. This reflects the fact that all these processes involve organisational learning and need to respond to the progress made (or not made) at each stage.

These are also 'anti-methodocratic' exercises. No single analytical tool -- including scenarios themselves -- can be allowed to determine the nature of the process. Instead, the participants determine what will work and fit their own needs and circumstances, rather than what is fashionable or intellectually tidy. Ricardo Petrella in the EC FAST Programme referred to this as the *Quincaillerie*, or the tool shop, where bits of hardware, string, adhesives, woods, electric gadgets and gizmos are all for sale -- the DIY store where everything is to hand to make whatever is required. It is an anti-methodocratic approach because methods do not rule the people, but people rule the methods.

### (iv) Working the Narrow Band

Finally, it is also important to recognise that there is only a 'narrow band' within which these processes can function effectively. This was described to us quite graphically by Gerhaardt Schwartz in the Rijkswaterstaat:

*There is an area, a band of tolerance, among any management team. Fall below it and nothing happens; go above it and they will kill you. ... I don't know if cautious is the right word to describe this, but there is a need to be cautious since we are trying to make the unthinkable thinkable. We also need to be cautious because basic values are at stake, which makes this kind of work a very risky enterprise. So when the scenarios were built we had to be careful. If they are too wild they are ignored; if they are too tame, nothing happens.*

This band of tolerance affects all the processes we have been discussing here. The ability of any team to stay within that band, avoiding boredom while pushing at the top of it to stretch participants' thinking, will be an important rate factor in any success.

## Summary: Rate Factors

In summary, rate factors include a tolerant political culture that sees an urgent need to engage in a different discussion and finds a neutral space within which fundamental values can be addressed with a minimum of harm. For this to succeed, strong leadership is required, but leaders must be able to mute their own egos and rely on their abilities as facilitators and thinkers to move the process forward with creative curiosity. Such people will be using whatever analytical and process methods work, while maintaining and securing long term commitments to the exercise so that all can learn from the own successes and failures. Finally, it must be recognised that fundamental values are at stake and therefore one is always working a "narrow band" of tolerance between boredom and exoticism, making this an especially rewarding but high risk undertaking.

### 9E Can Governments Do Scenarios?

The last issue to consider before concluding this study is whether governments can do scenarios at all. As has already been observed, scenarios are best done by democratic governments with a high cultural tolerance for free speech and debate. Repressive regimes need not apply. However, some of our interesting failures suggest that even in tolerant societies it is a brave government that undertakes to do scenarios at all. That being so, is the example of Södermanland only a freak, unlikely to be repeated elsewhere?

In the course of talking to various people about scenarios in the public sector, there was considerable scepticism that government bodies were appropriate for the job. Arden Brummell in Shell Canada noted that most scenarios in the public sector tend to be international in scope rather than local. In his view, local scenarios become very political and it is then difficult to know how to talk about issues. As a result, Arden believed there is a whole rich area of scenarios that governments cannot do.

This was a very tempting conclusion that felt instinctively right. However, Arden had partially based his observation on the work of the Dutch Central Planning Bureau which had published a highly regarded set of global scenarios in 1992. This is an example we have not discussed in detail because it was a very successful scenario study, but not one which involved very much process work. Arden's conclusion, however, was later undercut, when we learned that the Dutch had in fact produced scenarios for the Netherlands, but they were not available in English! To be fair, however, there are clearly more political stresses and strains in writing scenarios about one's own society than writing global ones about the world at large. Even in the private sector work of Anglo American, they first did a global study and only two years later took up the question of scenarios for South Africa.

Steve Rosell recognised some of the difficulties of managing a broad discussion within government structures. For that reason he launched his Round Table exercise from outside government, using the Institute for Research in Public Policy as a base. As he saw it, the process "needs deniability", allowing those in power to say that the conclusions are not necessarily endorsed by them. Moreover, by working through an

outside institution, participants have been able to "leave their turf battles at the door". Even though the expenses of the exercise are paid by their departments, each person participates in his own name, not the name of his organisation.

Ricardo Petrella's point that institutions want their policies and legitimacy confirmed not questioned, is also relevant here since it raises the issue whether anyone from outside government can trust a process that is in government hands. Given the deep distrust of government referred to earlier, this is an important issue. On the other hand, governments can legitimately fear that the process might be captured by people with their own limited agenda. This point was raised in Graham Galer's story of the use of scenarios in Australia in the late 1970s. In that case, Graham had been posted to Shell Australia after working in Group Planning and had decided to introduce the use of scenarios there. Shell Australia then commissioned a scenario exercise from a small group of academics led by Wolfgang Casper with the following results:

*As it evolved, it was not quite what I had in mind. I was used to the Group Planning approach to writing pretty objective scenarios. But it turned out that Casper had extremely normative views and therefore the scenarios were quite normative: "The Mercantilist Trend" and "The Libertarian Alternative". Casper and the others made it clear that the Libertarian Alternative was preferred.*

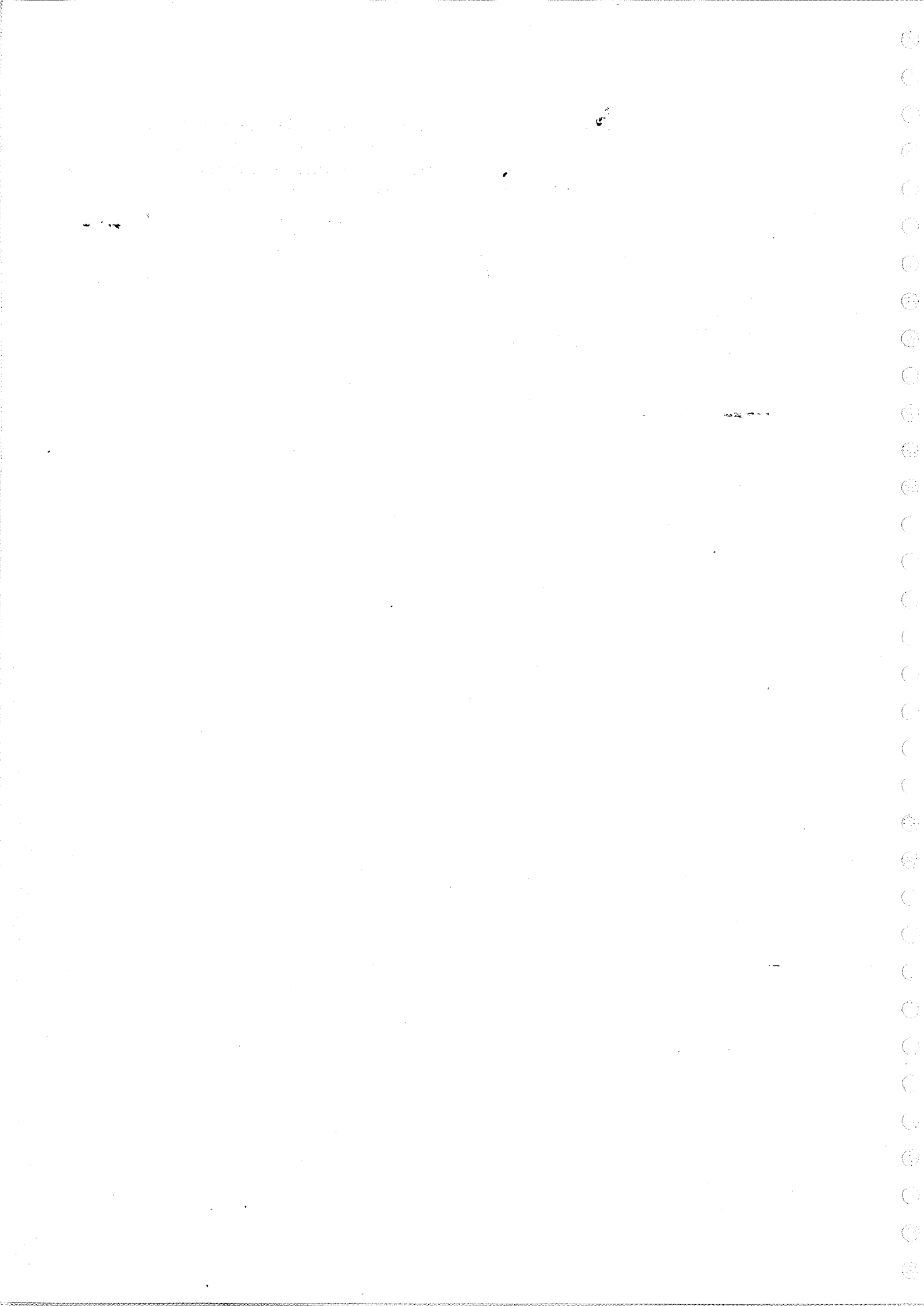
The assignment had been predicated on an agreement that the work would be published and it in fact created quite a splash, affecting the political and economic debate in Australia. But as Graham observed, "You have to ask yourself if those writing the scenarios have an axe to grind. That is really the lesson of the Australian scenarios. And it is probably why governments are so chary [of scenario work]."

Finally there is an important constitutional point. In every case of a successful process, the participants were partially self-selected and partly asked to join by those already in the process. While each process sought to include a variety of important stakeholders, this is a far cry from the elected democratic base of representative government. That may explain why so many of these processes sought endorsement from an elected government figure or institution, even though most of these processes began because of a perceived failure in the instruments of elected government. It therefore remains to be seen how the relationship between these new political forms and existing political institutions evolves. For the time being, however, the evidence of this study suggests that any government body undertaking a scenario or stakeholder exercise to look at issues of economic development will need to establish its own neutrality and legitimacy in a novel and respected way.

### **Summary: Can Governments Do Scenarios?**

The evidence of this study argues that most successful scenario or stakeholder exercises about the future of a region or country have been led by those who are working from a non-governmental base. This approach has been taken partly because elected governments are currently mistrusted and seen as lacking the ability to think long term

about important issues. There is one example of a government body, the Södermanland County Administration, leading a successful discussion, but it is considered a novelty even in its own country. Therefore, any government body seeking to emulate their work will also be breaking new ground and designing new frontiers of government's work and role in society.

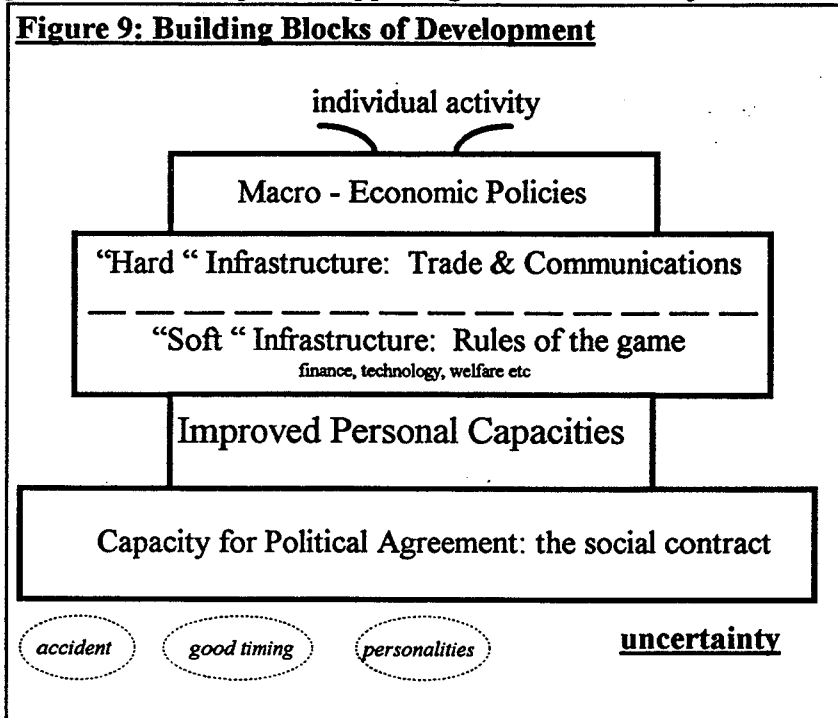


## 10 CONCLUSIONS

It is our firm conviction that the next development challenge facing all the industrialised (and de-industrialising) nations is still largely mysterious. We can see evidence of a shift, we pick up hints of its directions, but by and large we are facing the unknown.

There are some lessons we can pick up from those countries who have been seeking to catch up to the advanced world over the past thirty years. We now know that the process of development supporting individual activity is based on much more than good

**Figure 9: Building Blocks of Development**



macro-economic policies (Figure 9). There must also be investment in "hard" infrastructure like railroads, motorways, and communications systems, as well as more subtle investment in "soft" infrastructure: e.g. financial systems, intellectual property rights, company law, etc.

None of these can function effectively, however, if the majority of the population does not have the skills to exploit evolving technologies and laws or the health to stay active. Hence another important component of economic development it to improve the capacity of individuals throughout the population to adapt to new economic and technological systems - most basically, improved health and education for all.

However, all these investments in hard and soft infrastructure, in skills and well-being of the population require most fundamentally a capacity in society at large for political agreement. Without this, no durable social contract can be written so that relevant infrastructures will be created and the right skills developed to allow the majority of people to benefit from the development of a new economic system as it evolves.

Our work on this report had introduced several examples of how that social contract is being renegotiated elsewhere in the world. The models have many features in common, but clearly represent a spontaneous desire to look forward collectively and learn to agree on the requirements for adapting to a neo-industrial age. As such, they can also be seen as exploring new forms of political agreement and, coincidentally, new roles for

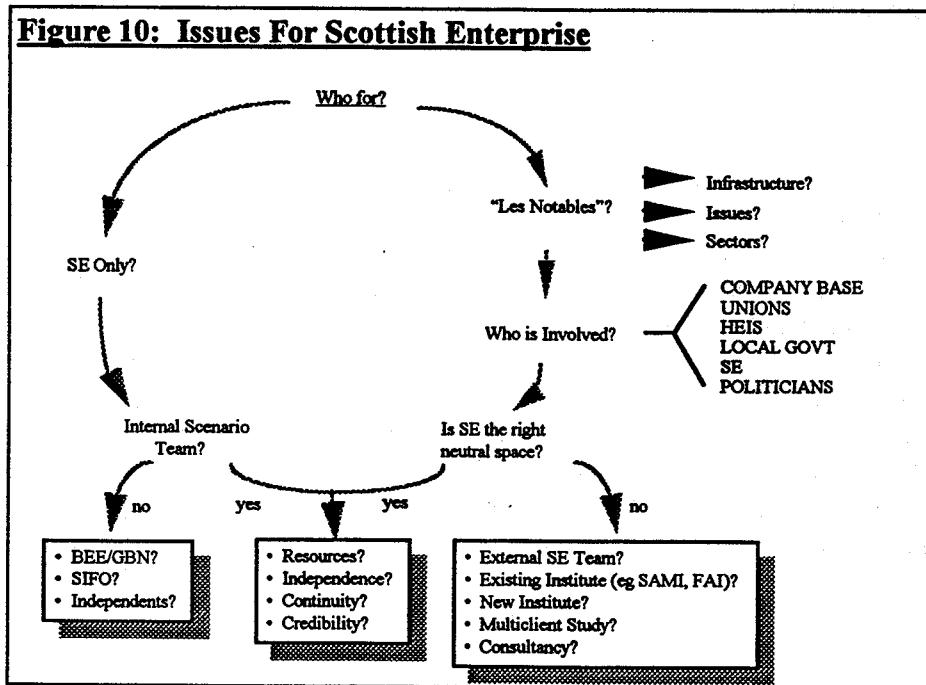
government bodies. In addition, all of our successful examples either have, or plan, to use scenarios to develop ideas about the long term future and, more specifically, to explore ways of understanding and responding to uncertainty.

So this has been a report about scenarios, economic development and the evolution of government in the late 20th century. It has drawn on eight strong experiments that together may represent the best and most imaginative response that can be made to the uncertainty -- and potential -- of our times.



## 11 ISSUES FOR SCOTTISH ENTERPRISE

The preceding discussion raises a number of issues for Scottish Enterprise to address before deciding how to proceed with a scenario exercise. These are summarised in Figure 10. The chapter does not seek to provide answers - but to restate the questions explicitly for Scottish Enterprise to consider. There *is* no answer - deciding how to proceed is a matter of judgement. However, that judgement can be informed by considering the issues raised here.



### 11A Who Is This For?

There are perhaps four ways that Scottish Enterprise might wish to use scenarios:

- as an organisational development tool (for itself)
- as a business development tool (for companies)
- as a tool for exploring the infrastructural needs of the Scottish Economy
- to explore sectors and issues

There is some overlap between each of the four approaches, particularly in terms of the processes employed. Thus, for instance, one way of using scenarios as a business development tool might be to bring companies together to develop scenarios of the particular sector in which they operate. Similarly, exploring issues - such as skills or rural policy - might involve many of those who would participate in an exercise to develop scenarios around the infrastructural needs of the Scottish Economy, but at a smaller scale and with a smaller scope initially.

The concept of a 'Scenarios for Scotland' exercise is probably closest to the idea of using scenarios to explore the infrastructural needs of the Scottish Economy. While it is not difficult to imagine Scottish Enterprise embarking on a large scale exercise of this sort, drawing in many of the major actors in Scotland, there is certainly merit in initially approaching scenarios through a smaller scale and narrower scope exercise. Our findings in this study suggest that starting small and pulling in a broader range of participants is a perfectly efficient and effective way of approaching a regional scenarios exercise. Furthermore, it has the advantage of allowing the scenario team to refine the approach in what is almost a 'test bed' situation.

#### 11b How to Proceed?

The findings of this study suggest that Scottish Enterprise will be working at the frontiers of scenario use in the public sector if it goes ahead with a scenarios exercise. Nevertheless, there *are* some experiences that Scottish Enterprise might wish to draw on. For example, an infrastructural needs exercise might follow the SIFO multi-client approach, coupled with high media coverage; or the Sodermanland approach (if carried out on a larger scale) might be more appropriate. Would an organisational development exercise for Scottish Enterprise itself best follow the work at the Rijkswaterstaat; and, if so, would it require an internal scenario team with high level support and commitment - comparable to "Q"? Will any scenario team be given the resources, the independence, the continuity and the credibility it needs to do the job well? Will it have the political clear space that appears to be required for such an exercise to be successful?

#### 11c Risks and Rewards

Finally, Scottish Enterprise must consider the risks and the rewards. There is a risk that, if designed badly, the *process* will fail for one reason or another. Further, if the process is carried out badly there is likely to be failure to move from discussion to collaborative and co-operative *implementation*. In either event, a scenario exercise is likely to suffer a loss of credibility.

More dangerously, we have been reminded in several occasions that the scenario process (and other new forms of political process) is about basic values. Therefore, Scottish Enterprise must be alive to the danger that discussions might lose their neutrality and, rather than uniting different views in a neutral working space, serve to reinforce existing fractures and lines of contention. In that event, more than credibility will be lost: the ability of partners (in economic development) to work together harmoniously could be damaged.

Clearly, therefore, a scenario exercise is a gamble. However, where good gamblers have judged their risks well, they have been enormously successful, helping people previously mired in various frustrations to resolve difficulties and to work creatively towards futures they have not previously been able to imagine.