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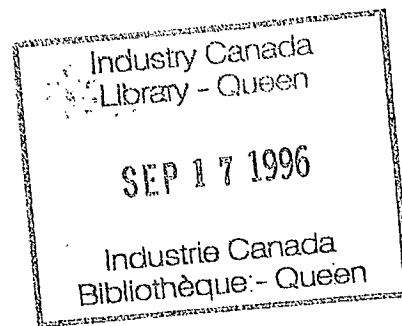
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SECTOR SPECIALIST STUDY

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SECTOR SPECIALIST STUDY



January 1988

Executive Summary

The primary conclusion of this study is that there has been a serious deterioration in the level of sector specialist expertise in the department. The higher the level of technology, the worse the impact of the situation if it is allowed to continue.

Although current job descriptions clearly define the role of sector specialists, far too many positions are staffed with officers who lack sufficient knowledge and expertise to adequately perform their duties. This applies to the more recently hired officers.

Knowledgeable and experienced sector specialists are overburdened with tasks that serve management, not their clients. As well, some spend a considerable amount of time "bailing out" inexperienced officers.

Industry Sector Branches (ISBs) are not adequately staffed, either in terms of numbers or in qualified officers. ISBs cannot now devote sufficient time to their principal roles, let alone the expanded advocacy role envisaged for DIST.

Although there are pockets of sector expertise in the regions, those officers do not claim sector expertise. They prefer the title Industry Development Officer which more accurately reflects their overall dealings with clients and an emphasis on program delivery.

Regional officers have come to depend on sources outside the ISBs for some sector knowledge, citing the absence of headquarters expertise in certain sectors as the reason.

There is need for new systems, structures and processes if ISBs are to pursue an increased advocacy role under DIST and demonstrate a level of competence consistent with industry and government expectations of DIST.

Department of Regional Industrial Expansion

SECTOR SPECIALIST STUDY

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Foreword

During the course of this study, a number of officers raised issues and concerns and offered recommendations that went beyond our terms of reference. We draw the attention of senior management to the individual studies which contain references to the issues and concerns which may have implications for the organizational structure of DIST.

Advisory Committee
Sector Specialist Study

OVERVIEW

Introduction

This study was launched in late 1987 in response to a request from senior management for a working definition and description of sector expertise. Management directed that such an examination should focus on the views of officers at the CO2 and CO3 levels.

The request for the review was the outcome of deliberations during the October 28, 1987 meeting of Regional Executive Directors (REXDs) on the organization of regional DIST offices. The Deputy Minister, Assistant Deputy Ministers and REXDs sought advice on the basic question: What is a sector specialist?

One Industry Sector Branch (ISB) description summarizes the general response:

A person with good all round knowledge and expertise on a particular sector (structure, competitiveness, issues) combined with a broad knowledge of government programs and policies relevant to the sector. The source of expert advice for the federal government. Should be backed by education/multi disciplinary knowledge (marketing, finance, etc.) and an appreciation for the Canadian and international business environment.

The study was undertaken in the context of the proposed DIST mandate and mission to discharge effectively DIST's core responsibility to assist in strengthening the country's industrial, technological and scientific base. It was conducted by three sub groups which gathered and analysed information from 30 ISB sector specialists at headquarters, 71 officers in the regions and 25 senior managers in nine organizations outside the federal government. The principal findings of these studies are summarized in the Overview and are provided in detail in the individual rollups.

The conclusions and recommendations are offered to the Departmental Management Committee for consideration in structuring a new organization (DIST) that serves its clients in an effective, credible and responsive manner.

Sector Specialist Role

Although there have been changes in the Departmental mission in recent years, the basic skills and characteristics required by sector specialists to fulfill their missions have not changed significantly in two decades. The role described in CO2 and CO3 job descriptions remains valid and it is the conclusion of this study that the qualifications required to perform the sector specialist function will be relatively unchanged in DIST.

The sector specialist is viewed as the principal source of the department's and government's knowledge of industry. The desired inventory of skills and education varies according to the complexity of the sector but typically a specialist possesses a university degree in engineering or science, an MBA or equivalent experience, and has at least five to ten years of relevant experience in private industry and a wide knowledge of the sector. The principal duties are to:

- . accurately interpret and evaluate commercial and technological developments to strategically optimize the future development of that sector;
- . enhance industrial development by providing sector expertise on technological, marketing and industry structure matters;
- . provide advice and support in the development of government policy; and
- . inform, interpret and guide industry on government policy as it pertains to that sector.

One of the key functions of sector specialists is to act as the advocates of industry in government, a responsibility that has become increasingly difficult to fulfill. There is general agreement that if the advocacy role is to be strengthened in the new DIST, the department and its management and officers will have to demonstrate to industry and to other government departments their competence to perform the role.

Regional officers do not consider themselves to be sector specialists. They prefer the title Industry Development Officer (IDO) which more accurately describes their broad-based dealings with their clients and the emphasis on program delivery. They define their role as promoters of the interests of a sector in such fields as marketing, technology, investment and innovation through advocacy and inputs to policy decision. Their clients perceive them as an entry to government and a source of funds and information.

The state of the department's sector expertise and the impediments that sector officers face in carrying out their responsibilities are recurring themes in this report. The department's level of specialist expertise at headquarters has been eroded in recent years by an overall reduction in the number of officers and the hiring of non-qualified people for sector specialist positions. This has become a major hurdle in maintaining credibility with industry. Unless specialists are provided with the tools and resources to assume effective leadership, DIST's vision of a "flagship economic department" will not be realized.

Training and Experience

There are variations in the desired qualification profiles of sector specialists, but they consistently include a university degree plus relevant industry experience. The more technical the sector the greater the insistence that an appropriate degree is essential with a minimum of five to ten years of private sector experience as an engineer or manager.

Some domestic and international sales and marketing experience is identified as being a highly desirable background. Core skills include analytical capabilities, experience in finance, marketing, accounting, economics, writing, and oral communications.

There is general consensus that officers entering government from industry tend to have excellent credentials. These recruits are able to build their credibility with industry because they understand the motivational forces that drive industry and, most important, they speak a common language. In today's business milieu specialists need to know the product, the manufacturing processes and the people involved to be able to solicit information and maintain a level of credibility.

As noted earlier, the general competence level of the CO group is a major concern of this study. One solution rests with more stringent practices for hiring officers and managers with the requisite academic qualifications and relevant industry background. Also needed are policies that encourage the promotion of competent officers to the management level or provide recognition of their competence and contributions if they wish to remain sector specialists.

The regions were particularly critical of available training programs. One officer summed up the situation by saying that officers who took the courses were wasting their time: they could very well be teaching them. This study concludes that existing training courses should be re-evaluated in terms of their calibre, usefulness and objectiveness. The review should be done in the

context of the needs of individual officers and the skills they will require in DIST. Government training programs are only a minor consideration to the maintenance or expansion of sector expertise.

New recruits to the ISBs should be subject to strict minimum requirements as to training and experience. They should possess the relevant post secondary training in engineering and science. They should also have MBA-type knowledge or equivalent experience in marketing, technical sales, export sales, research and production.

In the regions, there is a need for functional and business oriented skills to help officers prepare for a new emphasis on technology, business and competitiveness. Formal training to enhance the skills of the CO group must be supported by departmental structures so the mission can be accomplished quickly and effectively.

The U.S. Department of Commerce, for example, is developing a management information system in Washington that will link all regional offices and overseas posts. The system will improve communications between all parties and the quality of information the regional representatives deliver to their clients. The system is operated by full time analysts dedicated to packaging the information in a way that satisfies the requirements of clients.

Sector Knowledge

Sector specialists at headquarters spend considerably more time maintaining sector knowledge than do their counterparts in the regions. According to our surveys, regional officers spend about ten percent of their time maintaining sectoral knowledge. By contrast, some headquarters specialists believe that most activities involve an element of knowledge maintenance or upgrading. The estimated time devoted to this process at headquarters ranges from 20 to 30 per cent to a high of 80 per cent.

All groups report that conferences, seminars, contacts with industry and selective reading are the main vehicles for maintaining their sector knowledge. Sector specialists at headquarters maintain a wide range of contacts with large companies, associations (in larger sectors) and other government department specialists. Sector expertise in the regions varies -- limited in the smaller regions, extensive in the larger ones -- and these officers tend to deal principally with small to medium size companies or with specialized associations. In the smaller regions, there is significantly more interface with provincial governments, other federal departments and trade offices.

The regions note that if more data and sector information are not available to them from headquarters in the new DIST, they will have to find more time and ways of keeping their knowledge current. At best, present information exchanges are haphazard and the regions, loaded down with case work, are without adequate sector data.

There are no mechanisms in the department for capturing and disseminating sector data and knowledge between headquarters and the regions. Nor are there mechanisms for facilitating regional and sectoral consultations and joint activities on sector profiles, etc. Headquarters specialists seldom initiate joint activities, and with some exceptions, the regions cannot access headquarters data bases.

The regional offices require an improved communications network with ISBs, access to data bases and the availability of additional sectoral expertise at headquarters. At present, the regions depend heavily on provincial governments, other federal departments and agencies to fill the void created by the absence of shared information networks and the lack of ISB sector expertise.

The value in establishing strong working relationships between headquarters and regional offices is recognized by other organizations, among them the U.S. Department of Commerce and Price-Waterhouse. To maximize all the available resources on behalf of the client means that regional offices and headquarters work together to complement each other's strengths. Hence, systems and individual capabilities are continuously improved because both are in close proximity to industry and serve their needs.

Environment

The primary conclusion of this study is that there has been a serious deterioration in the level of sector specialist expertise in the department. The higher the level of technology, the worse the impact if the situation is allowed to continue.

Far too many individuals employed in the sector specialist category at headquarters do not meet the minimum recommended standards. This situation was brought about over a number of years through reorganizations, downsizing, affirmative action and redeployment. The officers with expertise are spread so thinly and overloaded with administrative functions that they are not able to cover substantive issues in depth or serve their clients adequately. In addition, the complement of acknowledged sector specialists is aging and there is no succession planning program to replace the expertise that will be lost during the next few years.

As noted above, stringent hiring practices are part of the solution. However, the competence of the CO group is only symptomatic of a much larger problem, namely the structures and environment in which officers must perform. And it is here where we learn some valuable lessons from the private sector.

In all cases, successful companies ensure their people are well aware of the purpose of the business they are in and the individual's role. These companies make greater use of the matrix system which enables their employees to collectively work toward the common goals. In such organizations (the Bank of Nova Scotia, for example), employees are market-oriented and customer focussed. This kind of organization offers positive benefits to both the individual and management including fast feedback on the individual's contribution. It supports the principles of reward and recognition which now are important components of the corporate environment.

In DRIE, anyone who wants to remain a sector specialist is capped at the CO3 level. Few officers at headquarters are satisfied with advancement prospects. In recent years, promotions to the management level have been prompted by affirmative action considerations, efforts to redeploy people or a desire to staff jobs with economist/writers. There is a general perception that the better the specialist the less chance there is for advancement. In the regions, there are fewer opportunities for promotion due to smaller establishments and the nature of the expertise.

While the major priority of the regions is program delivery, the ISB officer's priority has become a continuing list of demands for briefings, questions and answers and papers for all levels of management inside and outside the department. Bureaucratic and administrative demands at headquarters impose a heavy workload that absorbs most of the time and resources.

In general, sectors are not sufficiently well represented in the present organization of branches. For example, a \$10 billion industry which once had a branch of its own is now one of five separate directorates in a branch. This has an impact on the available time that can be devoted to this industry.

Conclusions and Recommendations

The following are examples of some of the issues, conclusions and recommendations identified during the course of this study. Refer to the individual reports for details.

- . Minimum requirements for a sector specialist should be a relevant technical degree, an MBA or equivalent experience, and five to ten years of relevant industry experience.

- . Need more sector specialists and more branches if DIST advocacy role is to be achieved.

- . Policy of promotion from within for ISBs would motivate specialists, bring in new blood, and increase the credibility of departmental management with industry.

- . Need recognition for superior sector specialists who do not wish to enter the ranks of management. The present limit for such officers is the CO3 level.

- . Remove the administrative and bureaucratic workload preventing sector specialists from carrying out their mandate.

- . Develop a clear and concise understanding of departmental direction and purpose within all employees.

- . Develop a matrix system to enable sector specialists and functional groups to work toward common goals.

- . Provide specific training that will develop functional and business oriented skills in all employees in support of line activities.

- . Develop specialists for key sectoral areas and have these officers located in headquarters and the regional offices where those sector activities are greatest.

- . Ensure the specialist remains visible and active in industry to provide credible input to the decision-making process.

- . Develop sectoral intelligence in those sectors critical to individual regions.

- . Develop structures for joint regional-headquarters activities such as work programs, intelligence-gathering activities and shared data bases.

. Review practices, structures and procedures with the view to ensuring more uniformity, continuity and consistency in departmental operations.

. ISB sector specialists should supply regional officers with information on new technologies, technology trends and opportunities along with market intelligence, competitive reviews and investment opportunities. Mechanisms for facilitating communications on a continuing basis should be put into place.

**INDUSTRY SECTOR BRANCH
STUDY***

* The questionnaire on page 127 was addressed to the five sector branches in Industry Marketing. The designations A, B, C, D and E in the responses represent the five branches.

SECTOR SPECIALIST STUDY ISB's

1. How would you define a sector specialist (SS)?

- A. The eight SS's interviewed in the ADIB Branch defined a DRIE Industry Sector Branch Sector Specialist (SS) as one who is:
- ° a Science or Engineering Graduate;
 - ° who has had increasing levels of responsibility and at least five years of experience working as an engineer or a manager in an industry related to the ISB Sector that he is responsible for;
 - ° who has either obtained an MBA degree or equivalent business experience in order to obtain adequate knowledge in international marketing, finance, accounting, production management, personnel & resources management, etc.;
 - ° who has acquired sufficient knowledge and experience in the sector for which he is responsible to adequately perform the tasks listed in the Position Description of CO-2 and CO-3's, especially to accurately interpret and evaluate the commercial and technological developments to strategically optimize the future development of that industry;
 - ° who is a self-starter, motivated, people-oriented, good communicator and capable of handling broad complex issues.
- B. Person with good all round knowledge and expertise on a particular sector (structure, competitiveness, issues) combined with a broad knowledge of government programs and policies relevant to the sector. Source of expert advice for the federal government. Should be backed up by education/multi disciplinary knowledge (marketing, finance, etc.) and appreciation of Canadian and International business environment.
- C. The most comprehensive definition was "an individual with a full understanding of the business situation, obstacles, opportunities and developing trends on his assigned subsector, as well as an understanding of the business and market environment in which it operates and the fundamental technology applicable to the sector". Other responses were terms of their roles. One respondent suggested a possible need to distinguish between sector specialists as defined above and sector officers in supporting roles or in non-strategic sectors.
- D. Most knowledgeable person within Department/government on a sector who can interface with industry at all levels. Single person within government to represent industry sector to government and vice-versa. Comparable position in industry would be a "Product Manager".
- E. Everyone agreed that an SS is someone who is knowledgeable about the sector. Specific individual comments mentioned the need to know the product, the manufacturing processes, the people involved and the ability to elicit data.

2. What is the role of an SS?

- A. There is a consensus that the role of an SS is adequately described in the Position Descriptions of non-policy ISB CO-2's and CO-3's and that it had not changed significantly during the past two decades nor is it expected to do so in the future.
- B. The role varies according to sector circumstances and the nature of responsibilities but generally includes:
 - ° maintenance of on-going knowledge and assessment of the current status of the industry and sector issues via consultations and intelligence gathering within the sector, government and outside institutions;
 - ° carries out the departmental mandate by promoting and facilitating industrial development through: the gathering and disseminating of intelligence and assessments; promotion of development opportunities; the initiation of or input to government policies, programs or activities; prospecting for investment, product or technological opportunities; and providing a service function;
 - ° acts as the focal point and source of expertise, as well as advocate for the sector on all major policy issues, program activities or development initiatives and as the designated "contact" person within the department and within the federal government for industrial development issues.
- C. All respondents identified advocacy of the sector within government and services to the firms in the industry sector as the two principal activities of sector specialists. Generally, officers gave these equal weight. To the extent that there was unequal weighting, those emphasizing the knowledge aspect of the job tended to place more weight on service to industry; those emphasizing analysis put more weight on service to management/government.
- D. CO-2 Position Description
 - ° To enhance industrial development by providing sector expertise on technological, marketing and industry structure matters. The SS is usually the single source of a national and international overview for the sector.
- E. To provide advice and support in the development of government policy and to inform, interpret and guide industry on government policy as it pertains to the sector.

3. What should be the role of an SS?

- A. In addition to its current role, the SS should be given more decision responsibilities and authorization commensurate to those he had in the private sector. The SS's interviewed generally had spending authorizations in the thousands of dollars in the private sector and took important managerial decisions, whereas in DRIE, they cannot even authorize minor SOW and equipment changes nor any progress claims. All applaud the current trend of downward shifting responsibilities but a lot of improvements at the Branch level could be implemented with significant increases in productivity.
- B. Varying responses
- same as 2;
 - step up advocacy role which has been lacking;
 - take broader view of advocacy role, emphasizing positive aspects and placing it within broader industrial context;
 - promote national policy/sector views and act as expert advisor to Regional Offices;
 - honest broker between industry and government;
 - better two-way flow of knowledge (R.O./H.Q. and industry/government);
 - eventual move to specialization within organizational units with both sector and discipline specialists (e.g. technology).
- C. All respondents indicated that the role being undertaken is the correct role. Individual comments were made about effectiveness and efficiency in undertaking the role - too much effort wasted on overhead/non-productive activities, senior management's failure to use sector specialists; contribution, need for greater emphasis on the service to industry aspect of the role.
- D. Varying answers to this question.
- same as 2;
 - same as 2, but excluding "to formulate policies and strategies ... to initiate effective industrial trade development programs";
 - to provide any required sector expertise, particularly from a national/international viewpoint;
 - assists industry to improve its competitiveness. Is the focal point for all government issues relating to the sector and acts objectively as an advocate for industry.
- E. Basic comments were similar to those in (2) but with emphasis on a higher profile. Specific comment noted that serious issues get transferred to higher management levels where there is not the familiarity with the background. This weakness reflects back negatively on the SS relationship with the industry.

4. How important is formal training?

- A. There was a consensus that it is not only extremely important for an SS to have an engineering or science degree in a field related to the industry sector for which he is responsible but that it should be made mandatory for all ISB CO's, SM's and EX's. Without that prerequisite, the CO's, SM's and EX's could not have been promoted to private sector jobs and acquire the mandatory experience required to do an adequate ISB job.

Similarly, everybody agreed that if the SS does not have an MBA, he should have equivalent business experience.

Whereas, an MSc degree was generally judged as useful for an SS to have but not necessary. Also, everybody doubted any advantage would be gained by hiring PhD's anywhere in ISB's.

- B. Varied from non-essential (industry expertise more significant) to most important. bulk of responses placed it as increasingly desirable but emphasized need for core set of skills including analytical capability, business related (finance, marketing, accounting, economics), written and verbal, and broad, forward looking outlook, all of which formal training tend to develop.
- C. Answers here ranged from "very important" on the one hand to "useful as an indicator of an ability to learn, think, analyse, write" on the other. Two respondents pointed out the need for a mixture of formal training and industry experience.
- D. Unanimous opinion that formal training is very important and will become even more important with the greater emphasis on science and technology. It is important to be able to speak to people in the industry in their own language.
- E. This was rated from "some degree" to "very important" scoring from five to eight out of ten. One person noted that there is no formal training on how to organize a mission, how to prepare briefings and how to be an entrepreneur.

5. How important is private sector experience?

- A. On a scale of one to 10 (very low to very high) seven gave this question a 10 and one gave it a nine. Everyone felt that without the correct type of experience, the ISB Officer, Manager, Director and D.G. would not have the knowledge necessary to make decisions on broad and complex enterprise and industry development issues, especially those involving the prediction of future technological and market developments within fast changing and very competitive international market conditions.
- B. One response of "very important", due to specific requirement for technical industry knowledge in his position.

Two responses of "very important" so as to be able to understand and relate to business attitudes, problems and parameters (one response noted that private sector experience could be replaced by prior government or international experience working with industry).

Three responses of "desirable but not necessarily essential". This would vary by sector. Ability to understand and be sensitive to views of industry is necessary but sector knowledge can be developed. Increasing need for flexibility and broader view of issues may argue for more rotation and/or industry interchange. (These three responses came from officers who are now covering a relatively broad range of industry sub-sectors or who are carrying out some divisional level horizontal activities in the sector. Of the three "very important" responses, two came from respondents with more narrowly defined or specialized sector responsibilities.

- C. Answers ranged from "doesn't have that much bearing", through "helpful", "valuable" to "essential".
- D. Opinions ranged from a definite plus (from someone without industry experience) to very important and vital from the rest.
 - ° Sensitivity to the needs of business not necessarily direct industry experience was given in the "definite plus" reply.
 - ° Only with extensive industrial experience would an SS "possess the necessary expertise to RAPIDLY and ACCURATELY interpret and evaluate the possible implications of commercial and technological developments", as required in CO-2 Position Description.
- E. With one exception, this was rated very important "indispensable" scoring eight out of ten. The exception noted that an "understanding of the commercial environment" is essential but it can be obtained from previous experience in other government agencies or departments.

6. What would be the ideal background for an SS?

- A. The definition of the Ideal SS varied in answers between one and two engineering degrees in the field of the SS's endeavour, plus an MBA, with 10 to 15 years of experience in diverse functions (R&D, Engineering, Production, Marketing) in companies exploiting related products for which the SS is currently responsible.
- B. General agreement on university degree with some business/commerce skills. Private sector work experience or experience in dealing with business. Strong analytical capability, somewhat entrepreneurial, some strategic planning/policy and marketing experience and strong interpersonal skills. Some support for a broad, multi-disciplinary background to be better able to filter issues and avoid narrow focus.
- C. One respondent indicated no ideal background - personal attributes - (motivation, curiosity, intelligence, judgement, etc.) are more important. One indicated MBA plus private sector experience. The others saw a need for a technical degree (in one case aptitude) and private sector experience. Two respondents also included government central/agency policy experience.
- D. There was unanimous agreement that a university degree in the appropriate technical subject is a requirement.

On experience, opinions ranged from "a business background" to a requirement for industry experience of three to five years, five years, 10-15 years and 10-20 years. A couple of the respondents thought that an international sales/marketing background would be highly desirable.

- E. A degree preferably in engineering (unanimous) or some other scientific or technical qualification coupled with training in public administration and/or economics. Practical business experience which includes marketing, accounting, financial analysis of at least ten years. An appreciation of the legal and political implications of the various activities within the sector.

7. What should be the minimum acceptable qualifications?

- A. A Science or Engineering degree was a mandatory requirement stipulated by all as well as at least five years experience (half of interviewees thought that at least 10 years experience should be the minimum) in a company manufacturing products related to those the SS has responsibility for. The majority answered that some business courses should be mandatory or equivalent business experience in marketing, finance, accounting and production management. All agreed that experience in production without any experience in R&D and/or Engineering was not sufficient.
- B. Three supported minimum of relevant Bachelor degree and three viewed degree as non-essential or replaceable with industry work experience. Work experience necessary but this could be private sector (three-five years minimum) or equivalent work experience in government dealing with industry. Emphasis on business related skills, analytical capability and initiative.
- C. Two respondent indicated that there should be no minimum acceptable qualification; one indicated a knowledge of industry, however obtained; two indicated undergraduate university degree; one indicated an MBA.
- D. One officer declined to set minimum qualifications saying that it would depend on the individual and the sector. Others set a relevant degree as a requirement plus industry experience of 3/5 to 10 years as a minimum.
- E. A formal degree (bachelor) with five years of industry experience or completion of post secondary school coupled with extensive private sector experience. Individual notes were that:
 - an M.B.A. does not necessarily mean a good officer;
 - an SS division should be composed on one third engineers, one third bachelors of commerce and one third in other disciplines to take a policy writing direction.

8. What is your background?

- A. ° All have at least one engineering degree in a discipline related to their present field of endeavour;
° Half have related MSc's;
° Half have MBA's and the other half have equivalent business experience including several business courses;
° Between seven and 25 years of private sector experience each with the average being 17 years of technical and/or business experience all in related industry sectors.
- B. Sector specialists had:
- ° BSc Agriculture - government work experience (various departments) covering primary, manufacturing and distribution industries.
 - ° MBA and B Comm (Econ) eight years centrally planned economy experience, plus years North American private sector experience.
 - ° BA, Mechanical Engineering, some Masters Work - 10 years industry experience.
 - ° B. Comm (Econ), RIA courses - 10 years departmental experience.
 - ° College Degree in Business Administration - 10 years industry experience.
 - ° Bachelor (Mechanical Engineering) - 15 years industry experience.
- C. Fairly close correlation between respondents background and the ideals indicated above. Respondents ranged from the classic ITC sector branch officer (10 plus years of relevant industry experience, including management) to officers with limited private sector experience, but with good educational qualifications and government experience.
- D. Respondants had:
- ° Degree plus five years industrial experience (Manager who hadn't been an SS);
 - ° PhD Biochemistry plus hands on business experience;
 - ° 2 University degrees plus eight years industrial experience
 - ° BSc Chemistry plus 11 years industry experience;
 - ° 2 Chemistry degrees, Chemical Engineering diploma plus 20 years industrial experience.
- E. Two with degrees in commerce (one also chartered accountant), two professional engineers, and one other. All have private sector experience ranging from eight to eighteen years.

9. How do you maintain your sector knowledge?

- | <u>A. Activity</u> | <u>Per cent of Total Time</u> |
|--------------------------------------|-------------------------------|
| Reading trade and technical journals | 3% |
| Courses, Seminars and Conferences | 3% |
| Dealings with companies | 24% |
- B. Trade magazine and directories, industry contacts, associations (more so than firms in larger sectors), specialized publications and journals, line department specialists (DRIE, OGD and Provinces), conferences, trips, missions, statistics, U.S. Department of Commerce.

Due to particular sector circumstances, one sector specialist indicated prime source was via questionnaire which served as input to an annual report and another sector specialist cited prime source as specific projects undertaken with industry.

Problems cited: size/scope of sector and inability to offer industry something in return for intelligence (due lack of programs or reduced involvement in policy process). Need for more systematized approach was raised e.g. use of microcomputers.

- C. Consulting with industry, colleagues, trade journals, technical literature. Trade shows, conferences were only elicited upon prompting - officers agreed that they are very important.
- D. Conferences, seminars, industry contacts, trade publications, trade associations.

Conferences and seminars were thought by a couple of officers to be the best and most cost effective means for getting an up-to-date national and international perspective and at the same time renewing contacts with Canadian company representatives.

- E. Continuous contact with firms, associations and institutions; trade and technical publications; attendance at trade shows, conventions and technical seminars and company visits.

10. What percentage of your time to you spend on maintaining sector knowledge?

<u>A. Activity</u>	<u>Per cent of Total Time</u>
Reading trade and technical journals	3%
Courses, Seminars and Conferences	3%
Dealings with companies	24%

B. Sector specialists indicated most activities involved an element of intelligence gathering, e.g. evaluating program proposals, undertaking projects, etc. Estimates range from 20 per cent, with the bulk around 30-40 per cent and one respondent indicating it underlay all work activities.

C. Three officers declined to quantify - all work being done contributes to maintaining sector knowledge. Other responses ranged from less than 10 per cent to 50 per cent.

D. The replies were: 10-15 per cent, 15-20 per cent, not nearly enough but 25 per cent, 20-30 per cent and 30 per cent. Almost everything that an SS does increases his knowledge of the sector or contributes to the maintenance of that knowledge.

E. Answers ranged from 20 to 80 per cent.

11. How frequently do you consult with industry?

- A. Except for two interviewees who are currently working in staff/policy positions, all respondents stated that they normally deal with industry on a daily basis. The two exceptions also did before their latest assignments and both have stated their disappointment at not being able to keep-up with technological and other business developments. They recommend that Staff Positions which are filled by an SS be limited to no longer than one year so that he does not lose too much sector knowledge.
- B. ° Several times a day but need more systematic consultations. Concentrate on associations due to size of sector and uses projects such as Capital Investment Survey to piggyback;
° several times per week (2 sector specialists) but with considerable incoming calls;
° daily and usually by phone;
° usually indirectly through other SS, due more horizontal nature responsibilities of division;
° erratic, can't quantify.
- C. Responses ranged from daily to more than once a week. Depended upon sub-sector and portfolio (number) of companies that officer is responsible for.
- D. Replies were:
° Continually, daily, one or twice daily, almost daily but not enough face to face contact;
° One officer commented on calls from industry about export market prospects which used to be frequent. With the trade development agreement with Quebec COMDP two officers in Montreal have been actively developing sector expertise (including overseas travel with the SS) and enquiries have diminished.
° External Affairs is also building its own sectoral expertise;
° Trade enquiries to the SS are now about 10 per cent of what they were.
- E. Answers ranged from once a week to daily. Comment was made that with decentralized program delivery there is no excuse to call frequently and that the department is seemingly more inwardly looking.

12. What other sources do you use?

- A. ° Network of friends and colleagues;
 - ° International meetings;
 - ° Trade shows;
 - ° Trade development missions abroad;
 - ° Interdepartmental meetings;
 - ° On-line computer searches;
 - ° Library.

- B. Annual reports, association newsletters (domestic and international) other government departments, seminars, international trade fairs/conferences, daily press, library, visits to stores (consumer goods).

- C. All respondents referred back to question 9.

- D. Studies, news letters, international reports, newspapers, other government departments.

- E. This question is very similar to question (nine) and received similar answers. In addition, mention was made of other government departments including EDC and CIDA.

13. Is the Division adequately staffed?

- A. There was a consensus and strong feelings expressed concerning the quality of new ISB Officers being hired that do not qualify as Sector Specialists. All felt that the quality of the overall Commerce Officer Group has severely deteriorated during the past few years.

Except for one, all interviewees thought that at least a 50 per cent to 100 per cent increase in staffing is required to carry out the mission of the Department within their sector. This takes into account the fact that all divisions of the Branch are staffed with some non-SS's who cannot carry out their jobs efficiently nor effectively but cannot be replaced.

As a result of both factors above, the majority of DIPP projects cannot be monitored appropriately, many cannot be adequately analysed and worked up, most MCP's suffer from under-staffing and sub-quality attention, thereby missing a great number of opportunities for creating jobs, exports and other benefits to Canada.

- B. No (four sector specialists): not for size of sector/economic activity covered; can't cover issues in depth and too little time spent on substantive issues and/or servicing clients; can only provide cursory coverage and have lost policy role (one sector specialist noted area had gone from 14 to one employee). Another sector specialist with technical advice responsibilities indicated staffing of generalists in technical area has left him as only SS with industry experience. Thus "technical" workload comes to him.

Yes (one sector specialist) if division was fully staffed and if priorities/responsibilities clearly organized/assigned. Lack of support staff results in officers doing own clerical work.

Uncertain (one sector specialist) - should be assessed against relative importance of sector. Qualitative problems throughout department.

One suggestion that more use of micro-computers by officers could help.

- C. No; two respondents indicated a need for more quality in terms of technical expertise; the rest indicated a quantity, understaffing problem. Two included support staff - secretaries that are more than W.P. operators, clerks to handle administrative aspects of the job, research assistants, etc.
- D. Pulp and Paper and Metals and Minerals are adequately staffed in terms of the number of officers, the former because it is a high profile Division. Other Divisions have no back-up or are short of officers. Support staff is considered inadequate by all.
- E. All but one considered that their Division was understaffed with further comments such as "we need an engineer" and "some of the people in house have not developed the skills to operate in the environment we have got".

14. What is the availability of specialized support groups such as financial analysis, etc., within the Branch/Department?

- A. All felt that the Department is in good shape in this area. However, seven out of eight spontaneously suggested that they would appreciate the services of a Financial Analysis Branch on a need basis just like the Legal Services Branch can be used. Engineers cannot always do without the professional services of accountants who are often quite valued as support for certain types of analyses but not always required.

Also most spoke about the Department's loss to DEA of our Trade Development Group, including the Defence Programs Bureau, which are providing deteriorating services. Most suggested that this group should be repatriated within DIST or duplicated since their services are degrading rapidly.

- B. One response of adequate. Other responses indicated biggest problem was one of visibility. Difficulty finding out what services are available what role groups play or in finding needed specialized advice. Financial services okay but little used by respondents. RAMS/PRISM generally very poor. Policy and Analysis group seen as: adding another level of departmental process rather than providing incremental input; briefings on major issues needed; activities should be targetted to important issues (i.e. availability of departmental experts on tax reform). Interfirm comparisons group useful but slow to respond. More statistical analysis/forecasting on sector basis. Tendency for some groups to not want to work with ISB's so as to ensure output is credited/recognized as theirs. Overall, talent that is not being utilized by ISB's due to hidden nature of specialized groups.
- C. All but one saw this as being totally inadequate. Either they no longer exist (technology branch), have become inaccessible (financial services, corporate analysis), are largely irrelevant (special projects) or have no interest in serving sector branches (policy, economic analysis, import analysis, interfirm comparisons). One respondent mentioned that Microelectronics Technology Office as a much welcome new addition.
- D. The question specifically mentioned financial analysis. Some officers answered that it wasn't required because the regions do the financial analysis. Others replied that support was inadequate or non-existent.

Library service was rated good.

The need for increased resources in areas such as import analysis, interfirm productivity analysis, was noted by one officer. Having to get Finance and EMR to do detailed financial and cost/benefit analysis on chemical companies because DRIE lacked the capability was cited as an example of the sorry state of the department.

- E. Adequate.

15. How can you/could you make more of your sector knowledge available to others for such things as policy development?

- A. ° SS's need to be asked ... (the Branch's policy division does but the Policy Branch rarely does);
° more SS's are required;
° SS's cannot write everything down and must therefore be invited to form special study groups to develop specific policies and strategies whether they are industry-specific or horizontal;
° short term interchanges with the Policy Branch could provide many benefits not only for the above objective but also to provide better understanding of each other's operations, strategies and policies.
- B. ° Could provide input if there were more in-house committees - coordinated consultations to deal with specific issues;
° scope for increased exchanges within Branch;
° more frequent and closer inter-actions needed with policy areas of Department (little current inter-action).
° more regular and formalized exchanges with related line departments needed;
° need to promote and clearly identify specialized expertise/services available from Divisions within Department and to R.O.'s.
° SS should be more accountable for ensuring industry views taken forward;
° should emphasize need to systematically input sector knowledge (including trip reports, etc.) and possibly use microcomputer net;
° Competitiveness Profiles useful tool.
- C. Two respondents indicated better organization and communication of knowledge i.e., computerized data bases and information systems; two indicated more publication of prescriptive, or analytical sector documents; one indicated that some evidence of demand would lead quickly to supply improvements.
- D. A multitude of answers to this question.

Face to face consultation or the rotation or secondment of personnel was suggested. Sectoral papers are the main method. Critiquing papers done by other groups and personal exchanges with these groups helps.

The main difficulty is in trying to explain complicated and technical subjects to generalists who are not even familiar with the basic terminology of the industry. Even if one (or more) of these generalists does get to understand something of the sector he or she will be gone the next time the group has to deal with the SS and the problem returns.

- E. Answers were all in the negative sense - the recipients lack inclination, lack knowledge of the "jargon". There is a need for more people to take care of the more mundane things.

16. What are the major impediments to your doing a better job as a sector specialist?

- A.
 - ° Too few real SS's;
 - ° work overload especially with too much "micro-management" and non-essential tasks;
 - ° too little responsibility;
 - ° lack of sectorial knowledge by middle management.

- B. Size of sector, lack of time and resources; lack of budget for international exposure and analysis; consultative process needs to be given higher priority; decision making scope too limited - due to layers of management; need to clearly define mandate and role of department and respective responsibilities of ISB's, R.O.'s and Divisions and develop sense of corporate purpose; lack support funding for sector (IRDP funding no longer available to associations); need regular briefings on key horizontal policy issues; some information could be computer networked, in other cases, such as PRISM, data already collected not easily available; paperburden; due need to cover-off for non-technical SS, little chance to see industry (specific case); individual productivity suffers due to administrative inefficiency factors (time required to engage consultant, difficulty with central filing, etc.).

- C. Two respondents mentioned the administrative overload, lack of support staff, information systems, support services as being the major impediments. Two mentioned the level of technical knowledge. Other comments included inadequacy of program tools, lack of industrial policy, departmental reputation/creditability with industry and other departments, inability to interface on project bases, lack of a role in high-tech export promotion.

- D.
 - ° Overwhelming paper burden;
 - ° time and money constraints. The time constraints are because of demands for tasks unrelated to the sector many of a purely administrative or bureaucratic nature;
 - ° reduced contacts with industry;
 - ° downsizing, from a Branch to 1/5 of a Branch and the appointment of levels of management without sectoral or even industrial experience means that the sector does not get enough management time and the attention that it does get can be nothing but reactive;
 - ° tasks not even related to our mandate, e.g., Energy paper critique required because there is no energy group within the department.

- E. Lack of programs and services to trade on, lack of contact with industry. Need to access technical and investment information. Many people occupying positions who are not inclined or are unable to do a proper job for which they are employed resulting in those seeking assistance to gravitate to sector specialists who are capable and willing to provide help. Interference/overlap from other departments (e.g. DEA).

11. Are you satisfied with your prospects for advancement, if not how could things be improved?

- A. ° None was satisfied with his prospects for advancement;
° everybody blamed the unattractive SM category;
° lack of promotion from within; and,
° lack of management's skills to manage people.
- B. Three "reasonably":
- ° lack of concern/effort by Human Resources re career path;
 - ° need more opportunities in HQ for laterals or project assignments;
 - ° need active training program including private sector exposure;
 - ° career depends on own initiative - if good don't need to worry;
 - ° personally satisfied and expect to be limited due specialist orientation.

One "improvements could be made" and two "absolutely not":

- ° few opportunities for CO-2, even less for CO-3;
 - ° SM and above increasingly parachuted in;
 - ° absolutely disenchanted, need more access to competitions which are often under the table;
 - ° need for exchanges, secondments, postings;
 - ° need to enforce fair employment practices;
 - ° appraisal process unfair;
 - ° CO's stuck/penalized due to expertise.
- C. Two officers indicated satisfaction. Others basically commented on the lack of commitment on the part of management to establish career development programs that would lead sector branch officers into the departmental management stream. Two respondents suggested a career stream for sector specialists that would go above the CO-3 level, parallel to SM/EX, to recognize the performance of superior sector specialists that do not wish to be in management.
- D. There was one officer who replied "better than average". All others were dissatisfied with advancement prospects. Comments included:
- ° Not enough CO-3 positions in Sector Branches;
 - ° there seems to be no interest in promoting existing CO-2's yet lots of new CO-3 positions are being created (Pulp and Paper 2, Biotech 2, AIM);
 - ° the better the SS performs, the less chance there is of advancement;
 - ° most of the officers in the regions with whom SS's have to deal are classified higher than the SS (this will be a particularly thorny issue if these officers having lost regional development roles are made sector specialists);
 - ° should be a policy of promotion from within all the way to the D.G. level. This would be good for morale and would lead to greater competence in the Branch.
- E. Less and less managers with experience are chosen by senior management who do not appreciate what is required for a good sector manager. Recent promotions have gone to economist/writer types and minorities, not technical industry experienced types. Prospects are virtually nil with no growth in the service.

18. How much consultation has there been with regional offices on sectoral issues?

- A. Very little consultation occurs with Regional Offices since the consensus is that it is not needed by headquarters SS's and it is currently done only when necessary. The reason is that very little SS expertise exists in the regions and their usefulness is usually limited to small companies in a provincial context.

Some consultation occurs to support the R.O.'s operations but only because it is a mandatory procedure for obtaining approvals on IRDP and PEMD projects. However, there still exists a great deficiency in coordination because, in general, very few in the ISB's know what is going on in the R.O.'s and vice versa.

- B. Responses were primarily "very little" with one response of "adequate when mandatory but no longer the case" (sensitive sector), and one response of "fairly well".

Problems identified were no designated officer or interest in RO, poorly defined roles/responsibilities at both ends, and decrease in RO initiated consultations with advent of ACOA/WID.

Consultation very poor and not used effectively on both sides. They tend to be seen as competitors and we expect them to seek our advice not vice versa. Information must be shared.

- C. Consultation has generally been seen as adequate on an issue basis. The tendency for headquarters-regional meetings to take place at management rather than officer level was noted as a limiting factor.
- D. The amount of consultation varies with sector from very little (initiated only when region needs sectoral advice) to ongoing and constant. The Montreal office consults more than most regional offices. This could be a function of the amount of programme work coming from Montreal and of the competence of some of the officers in the Montreal office.
- E. Contact is made with the regional offices often with good to very good rapport.

19. How could things be improved?

- A. Although some genuine SS's exist in the regional offices, there is a consensus that they are few in number and that they would be more productive if located in Ottawa. An exception to this unanimous opinion is for those SS's that oversee an industry sector which is not found in another region of Canada. Otherwise, everybody feels that all SS's should be moved back to Ottawa.
- B. ° Need clearly defined roles/responsibilities for both ISB's and RO's;
° need to identify specific people in regions as contacts;
° require regular information contacts and semi-annual review meetings on issues;
° other departments set broad objectives nationally and have RO's work to support these objectives;
° create opportunities to meet e.g. on major projects;
° attitudes must change and need team effort to meet overall objectives - now tends to be duplication/conflict;
° need regular joint industry tours in regions;
° pro-active two-way communication (seminars, regular briefings, circulation of papers, request for inputs);
° we tend to expect RO's to seek our advice and see them as competitors. Information must be shared and two-way communication sought;
° "we expect industry to be flexible and respond to and lead change - yet we can't do so ourselves".
- C. One respondent indicated that there should be an effort to integrate the R.O. and ISB planning and objective setting; three indicated that regular face-to-face meetings to discuss generalities as opposed to specific issues; one believed that regional offices do not have a sectoral role.
- D. Ideas includes:
- ° More personal contacts with the regions by visiting companies together (cash constraint);
 - ° regularly scheduled consultation sessions;
 - ° having regional people report to Ottawa (man in the field concept);
 - ° mandatory sign off by the SS on all regional programme work.
- E. Most people passed on this question. One response was more contact but there is not enough reason.

20. In what way could regional sectoral expertise be helpful to you?

- A. There was a consensus and very strong opinions expressed that the value of regional sectoral expertise was close to nil and that the value of any Regional Sectoral Expert would be many times greater in Ottawa where he does not have to fight the above "consultation wall" and where the SS can obtain a much better national outlook on his industry sector.

All interviewees believe that Regional Officers generally do a good job for small companies but that an SS's experience and qualifications are not a prerequisite.

- B.
 - Provide support for organizing projects such as regional seminars;
 - provide useful regional view of national issues (HQ tends not to fully appreciate regional aspects and national issues have often evolved from regional ones);
 - better intelligence on business activity, major projects, provincial initiatives;
 - the broader the input to HQ, the more informed the policy decisions and the less likely any surprises;
 - provides one more level of expertise.
- C. Regional sectoral expertise is seen as useful in terms of knowledge transmitted on smaller, locally based companies and through insights on regional issues and concerns.
- D. Varied response depending on the sector:
- Increased grass roots, local and regional inputs;
 - provides liaison with regions. This would need sectoral experts like in the Health Care division. One officer in Saskatchewan devotes 25 per cent of his time to Health Care. He has, however, a Health Care background;
 - useful in providing local company input and in assessing local markets. could concentrate on smaller companies who are often neglected;
 - difficult to see where it could be helpful. It may be different in other Divisions, but there has been no example where regional sector expertise has been provided to us or required by us;
 - the industry is very localized and apart from things political, there is little regional development potential. All things should be considered sectoral.
- E. Because of the IRDP program delivery they are more up to date. Regional offices sometimes have more detailed information and help with the legwork.

21. Is private sector experience important to ISB management? If so, what kind and to what level of management?

- A. Except for the management of Policy Divisions, there was a consensus that all ISB Management should at least meet the SS minimum qualifications, including D.G.'s. All interviewees were also of the opinion that past ADM's & DM's who had sector experience were quite superior in leading the Department and dealing with senior company executives.
- D. Replies varied from "can be helpful" to "definite asset" to "yes". Private sector experience need not be direct however but could include government experience dealing with industry.
- ° comments that some management had come from departments/agencies with no industry contact and they clearly lacked necessary understanding of how business operates and what it requires;
 - ° very hard to provide direction without such a feel for industry;
 - ° some managers had dropped necessary activities as they did not understand issues or realize importance;
 - ° however, managerial ability remain most important requirement;
 - ° comment that it would make a good manager better and have no bearing on a bad manager;
 - ° most important at the SM and Director level, although some would extend to D.G.
- C. Two believed that personal attributes and management skills and knowledge of how to move things through the bureaucracy are far more important than private sector experience. All others believed that an industry department lack credibility unless private sector experience (or in one case, demonstrated empathy for business) is present in quantity at all levels of management.
- D. One officer (the one without industry experience) thought that a private sector orientation and sensibilization to private sector issues is more important than actual industry experience. They must, he said, be advocates for industry.

Other replies said that private sector experience for ISB management is: extremely important, very important to the ADM or even DM level, essential to the Director and preferably D.G. level, absolutely vital (to project competence). While experience relevant to a sector(s) in the Division, Directorate, Branch is preferable, it is not essential. The previous Acting D.G. performed extremely well although he had no specific Resource Processing Industries background.

- E. This question elicited the strongest and most consistent response from everyone. Everyone said that the managers must have applicable private sector knowledge relating to the sector. Government operates on the basis that they are "transportable" - but they are not the equivalent of VP's, Presidents and CEO's in the private sector where this happens. The majority thought that the directors should also have private sector experience and some included the director general level.

22. What should be the role of the SS in the DIST Mission objective of "encouraging the development and effective application of new technologies?"

- A.
 - More interaction with Government Labs & universities;
 - increased importance on the SS to identify strategic technologies;
 - a more focussed approach (like MITI in Japan);
 - catalyst for more collaboration between companies and universities and Government Labs;
 - generating a better understanding of what Government Labs and universities have to offer.

- B. Responses were influenced by the nature of the sectors covered - overall they tended to purchase technology which is available from equipment or packaging suppliers rather than carry out extensive R&D. While innovation is important it moves at a slower rate than in the "high-tech" sectors. The nature of change in the service sectors is also different from the manufacturing sector.
 - need to be aware of the state of application of technology to compare internationally, to identify gaps and opportunities and to pro-actively promote necessary changes via information dissemination, technology transfer, or programs;
 - associations can be useful in increasing awareness particularly in large sectors;
 - competitiveness profiles can stimulate interest and subsequent project proposals;
 - key role is to ensure sector is made aware of developments (information brokerage role);
 - need to stress cost/competitiveness/efficiency aspects.

- C. One respondent believed that the Sector Branch role should be very limited in supporting development and application of technology. Others felt Sector Branches should have central role in terms of contributing to policy and program formulation, in selecting technology areas, in developing approaches to raising technological level in sector firms and in delivering programs, if established.

- D. This question was not included in the questionnaire when group D was interviewed.

- E. SS's should facilitate the acquisition of technology/joint ventures/transfer of technology by direct consultation with foreign sources, advising companies of sources of technology and by advising of technology in other sectors that could be applicable. However, some thought that some kind of assistance program is needed to develop a focus and win more industry cooperations.

23. What kind of programme is required by DIST (to replace IRDP) to achieve the Mission objective? Should the programme be aimed at companies, universities, industry/university consortia, etc.?

- A. ° An assistance program that is focussed on strategic markets and/or technologies;
° should not be trying to be everything to everybody like IRDP tried to be and failed...;
° it should place greater emphasis on R&D and Technology Transfers rather than capital assistance which could be dropped;
° Industry/University consortia and personnel exchanges should be encouraged and assisted;
° it should be limited to organizations with solid track records and not for start-ups nor for individuals.
- B. ° Some question as to how effective IRDP and other programs have been and whether a replacement necessary;
° suggestion of a PAIT type program;
° two suggestions for a program which could fund Association activities (particularly relevant to the services sector);
° more emphasis on providing services and information and less on formal program dollars;
° greater role for associations, universities, research institutes;
° emphasis on innovation, applied research;
° more emphasis on exposing companies to international developments, via missions, consultants;
° programs should be targetted and not everything to everyone like IRDP/PEMD, delivery conditions should be consistent across Canada and rules more definitive.
- C. A variety of ideas was expressed:
° no programs aimed specifically at companies, but if any, they should be sector specific to meet specific industrial policy objective;
° series of sector specific programs, managed by DG with ability to support consortia, universities, research institutes as well as companies;
° comprehensive program aimed at small firms, competitive with what U.S. state and other governments can offer;
° broad, general, flexible, low overhead technology development programs aimed at firms but encouraging collaboration with universities.
- D. This question was not on the questionnaire when group D was interviewed.
- E. Everyone made reference to the old IRDIA program as being an excellent way to provide assistance. IRDIA was easily administered, not selective, was "painless" and required no extra accounting by companies. There were differences of opinion with respect to the aim of program support ranging from specific company assistance to the promotion of broad institutional/technology centres, joint ventures, and assistance for large scale development projects. Programs were also suggested to gather more intelligence for industry and to support production and process development to develop unique expertise.

One group (B) put two additional questions to its sector specialists.

24. Are you gathering knowledge regarding the strengths and weaknesses of international competitors? If so, how?

Answer was yes but half of the sector specialists indicated it was limited or inadequate, despite essential importance.

Sources: post intelligence, UN/OECD, U.S. Department of Commerce data, publications, conferences, interviews of U.S. government/companies and associations (one respondent), foreign publications and associations.

Products: video on international trends in sector, U.S./Canada sub-sector competitiveness profiles, market opportunity reports and ad hoc dissemination of information.

25. Industrial development may be promoted by developing closer linkages between the manufacturing and retail/distribution sectors. Do you see this as beneficial and if so how could such linkages be encouraged?

Response: From Services Side of Branch:

- ° clear advantages for manufacturers emerging from bar coding and EDIFAX: quicker and better information re domestic market could improve manufacturer responsiveness, gear production to sales, cut costs and delivery times. EDIFAX would allow tracking of production costs through production/distribution chain;
- ° bar coding needs to be viewed as way to improve competitiveness;
- ° promotion, working with manufacturing sectors/associations required;
- ° in the case of transportation: delivery logistics and costs (often 25-50 per cent of selling price often ignored by manufacturers of significance not appreciated. Total costs and impediments need to be addressed to develop cost effective ways to deliver.

From Goods Side of Branch:

- ° Agreement that linkages are extremely important/critical;
- ° need to respond to or anticipate needs of retail/food service, better understand market dynamics;
- ° formal meetings, special processor/retail forums, bringing in overseas retailers could be used to foster exchanges on trends/developments/new products or methods;
- ° increased "internationalization" of buying practices by retail/wholesale made closer Canadian linkages necessary if Canadian manufacturers to hold share;
- ° need to maximize information flow from distribution sector to manufacturers so as to tailor output to demand;
- ° that cost approach needs to be used by Canadian manufacturers to demonstrate to retailers that once all costs, including delivery considered, Canadian source often more competitive;

- ° in the case of textiles, many retailers are also importers and this can lead to adversarial situation. Anticipated duty remission program for manufacturers could result in more orderly market;
- ° work to establish linkages feedback/awareness of potential information e.g. (bar codes) can be fostered within Branch;
- ° general agreement that too little is done to foster linkages and these will be of major significance to increasing Canadian manufacturers share of market.

Group D was the first Branch interviewed. It was the only one to be asked the following question.

26. What is the role of ISB management in the collection and dissemination of sectoral intelligence?

The replies showed different interpretations of the question:

- ° Manager should promote the national/international perspective not regional;
- ° Role is sectoral promotion. Technical review and guidance. Senior managers (Directors and DG) reviews reports, etc. for horizontal issues and coincidence with other sectors;
- ° If the manager (all levels) is competent he can provide another source of intelligence gathering and at industry levels that the officers do not get to meet as frequently. He will also demonstrate to industry his competence to act as the industry advocate. If manager has no background he cannot gather and disseminate any intelligence and in fact can do a disservice to the department in terms of perception by the industry;
- ° At present none. Management does not amass intelligence except on some horizontal issues. There is virtually no debriefing for staff on any meeting involving senior management.

CO 2

INDUSTRY SECTOR INTELLIGENCE

ADM: CGSRP
BRANCH: Resource Processing Industries
DIVISION: Petroleum and Industrial Chemicals
DEPARTMENT: DRIE
LOCATION: Ottawa
DATE: March 1983
POSITION NUMBER: 14233 (CH-2005)
14234 (CH-2011)
14235 (CH-6993)

PREAMBLE

This sub-sector covers industrial chemicals, petro-chemicals and heavy inorganic chemicals. There are 550 firms operative in this sub-sector, employing 30,000 persons and shipping \$6 billion of products world-wide.

SUMMARY

Under the direction of the Manager, Petroleum and Industrial Chemicals Division, the incumbent develops and maintains a comprehensive and up-to-date knowledge base of assigned industries, contributes to the development of sectoral and horizontal policies and strategies, contributes to the conduct of the industrial and trade development activities of the Division and performs other related duties. The incumbent is responsible for providing the leadership and technical guidance in federal government efforts to optimize the economic health and progress of the assigned industries.

DUTIES

Develops and maintains a comprehensive and up-to-date knowledge base of assigned industries in order to possess the necessary expertise to rapidly and accurately interpret and evaluate the possible implications of commercial and technological developments, to formulate policies and strategies, to initiate effective industrial and trade development programs and to provide informed guidance and direction to the assigned industries and the Government by:

- arranging for the compilation and analysis of statistical, technical and other information;

- undertaking a continuous review of various sources of commercial intelligence such as scientific and technical publications, newspapers, etc.;
- participating in conferences, technical symposia and seminars;
- establishing and maintaining effective working relationships with the assigned industries (in collaboration with Regional Offices), national trade associations and labour unions, and governments at all levels;
- representing the Department and/or the Division on government/industry and interdepartmental committees; and
- preparing reports, profiles and studies identifying strengths, weaknesses, opportunities and constraints of assigned industries.

Contributes to the development of policies designed to promote industrial and market development of the assigned industries by:

- providing inputs to the Policy and Planning Branch in the development of sectoral policies and strategies;
- providing recommendations to the Policy and Planning Branch on horizontal policies and strategies affecting the assigned industries; and
- participating in policy review and formulation teams.

Contributes to the conduct of the industrial development activity of the Division within the guidelines of overall Departmental policy to enable the assigned industries to improve their efficiency and productivity, remain competitive in domestic and foreign markets and increase their contribution to the national economy by:

- initiating, developing and directing appropriate research projects, including in-house studies and surveys, industrial tours and investigations by consultants to obtain statistical, technical and other information.
- preparing a wide variety of information, assessment, forecasts and recommendations for the assigned industries in such areas as management, production processes, industrial technologies, capital investment, etc.;
- initiating, contributing to the development and overseeing the implementation of industrial development programs relating to the assigned industries;
- providing analytical support and industry specific knowledge to the Incentives and Adjustment Branch (for major or sensitive projects)

and the Regional Offices (other projects) in the evaluation of submissions under general incentives programs such as EDP, ILAP and RDIA;

- providing advice, analysis and data to the Regional Offices in the development of industrial development strategies for their respective regions; and
- advising industries and governments at all levels on industrial matters affecting the assigned industries.

Contributes to the conduct of the trade development activity of the Division within the guidelines of overall Departmental policy to ensure that trade expands and flourishes by:

- assisting the Department of External Affairs in establishing goals, objectives and targets for the expansion of trade in the assigned industries;
- reviewing and assessing changes in international trade and trading arrangements and recommending appropriate action;
- initiating and contributing to the development and implementation of trade development activities such as trade fairs and missions, market surveys and trade studies in cooperation with External Affairs and the Regional Offices;
- advising industries and governments at all levels on trade matters affecting the assigned industries; and
- providing a supportive role to the Regional Offices in the evaluation of submissions under PEMD.

Other duties include briefing senior departmental officials on the status of the assigned industries, drafting letters and speeches for the Minister and other senior officials, preparing Memoranda to Cabinet, reviewing and commenting on studies made by other Divisions in the Branch, acting for the Manager during his absence and undertaking assignments as required by the Manager.

REMARKS

The work involves the research, identification, formulation and implementation of Divisional activities and priorities by industry and functional activity to ensure orderly growth of the assigned industries in the context of Departmental objectives. Some activities are characterized by lack of definite objectives and guidelines. The work also involves extensive consultations and negotiations with other federal departments and agencies. The many linguistic, nationalistic and other unique characteristics of some of the industries require the

modification of existing or the development of new methods and approaches to the solution of problems. When travelling, the incumbent is required to make on-the-spot decisions on behalf of the Department and/or the Branch.

The successful completion of this mandate requires a thorough knowledge of the products, manufacturing processes, structures, markets, policies and problems of the various assigned industries as well as an understanding of the implications of such forces as local and foreign market demands, technological advances, the availability of funds, foreign ownership of Canadian based companies, tariffs and duties at home and abroad, transport costs, advanced management techniques and other data required for the optimal development of the industries. It also requires an understanding of all major on-going activities of other federal departments and agencies having an impact on the assigned industries and their state of affairs in order to provide effective guidance and advice to others. In addition, it requires the ability to weigh the implications of different spheres of decisions and activities originating from Government, and their political impact, from the private sector and from the consuming public.

Manager

Date

Incumbent

Date

SECTOR SPECIALIST STUDY - ISB PROJECT

Surface Transportation and Machinery Branch

Total 5 interviews (1 manager)

Barry Watson Mech. Eng. Degree
954-3443 20 years industry
 18 years government

Service Industries and Consumer Goods Branch

Total 6 interviews (0 manager)

Rick Cooper B. Comm.
954-3087 3 years with U.N. agency
 17 years government (including 3 at post with External)

Aerospace, Defence and Industrial Benefits Branch

Total 8 interviews (1 manager)

Pierre Lalonde BS E & E, MBA
954-3288 8 years industry
 14 years government

Information Technologies Industry Branch

Total 6 interviews (1 manager)

Ron Walsh B Eng. MBA
954-3314 2 years industry
 17 years government

Resource Processing Industries Branch

Total 5 interviews (1 manager)

Ian Marrs BSc, MSc Chemistry, Diploma Chem Eng.
954-3072 20 years industry
 7 years government

INDUSTRY DEVELOPMENT OFFICER (IDO)

INDUSTRY SERVICE CENTRES (ISC)

SURVEY

REGIONAL SECTOR OFFICER PROJECT TEAM

JANUARY 25, 1988

THE OFFICER IN THE 1ST REGIONAL OFFICE

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ITC/DRIE SECTOR SPECIALISTS HAVE TRADITIONALLY BEEN THE SOURCE OF INDUSTRY SECTOR KNOWLEDGE, INTELLIGENCE AND EXPERTISE FOR THE DEPARTMENT AND FOR THE FEDERAL GOVERNMENT. WHILE THERE HAS ALWAYS BEEN AN INFORMED OR REASONED ADVOCACY EXPECTED OF THE "INDUSTRY" DEPARTMENT, IN RECENT YEARS AND AS PROPOSED FOR THE NEW DEPARTMENT OF INDUSTRY, SCIENCE AND TECHNOLOGY, THIS CLIENT RELATIONSHIP HAS AND IS EXPECTED TO HAVE CONTINUING AND GREATER IMPORTANCE. A PRIMARY ACTIVITY OF THE NEW DEPARTMENT IS: THE SYSTEMATIC DEVELOPMENT AND MAINTENANCE OF COMPREHENSIVE INTELLIGENCE ON INDUSTRY, SCIENCE AND TECHNOLOGY DEVELOPMENTS IN CANADA AND WORLDWIDE.

THE DEPUTY MINISTER HAS AGREED THAT A WORKING GROUP WOULD BE ESTABLISHED TO EXAMINE IN MORE DETAIL THE QUESTION OF SECTOR EXPERTISE AND SPECIALIZATION IN THE DEPARTMENT.

ACCORDINGLY, A TASK FORCE MADE UP OF SEVERAL PROJECT TEAMS HAS BEEN ESTABLISHED TO EXAMINE THE SUBJECT.

OBJECTIVE OF THE TASK FORCE

TO DEVELOP WORKING DEFINITIONS AND DESCRIPTIONS ON SECTOR EXPERTISE OR SECTOR SPECIALIZATION, THE ASSOCIATED FUNCTIONAL SUPPORT REQUIREMENTS, ROLES AND RELATIONSHIPS BETWEEN SPECIALISTS IN HEADQUARTERS AND THE REGIONS OF IST FROM A MANDATE AND MISSION PROSPECTIVE.

THIS REPORT COVERS THE FINDINGS AND OBSERVATIONS OF THE PROJECT TEAM SURVEYING THE SECTOR OFFICER ACTIVITIES IN THE REGIONS.

1. INTRODUCTION

THE PROJECT TEAM WAS MADE UP OF REPRESENTATIVES FROM ALL REGIONS ACROSS CANADA (APPENDIX 1). EACH TEAM MEMBER MANAGED THE INTERVIEWS IN HIS REGION AND PREPARED THE INDIVIDUAL REGIONAL ROLL-UPS (APPENDIX 2).

ON JANUARY 18-19, 1988 THE TEAM MET IN PLENARY IN TORONTO TO DISCUSS THE REGIONAL RESULTS AND TO AGREE ON THE NATIONAL ROLL-UP.

AN IN-DEPTH DISCUSSION TOOK PLACE AT THE BEGINNING OF THE PLENARY TO EXCHANGE VIEWS ON THE MANNER THAT THE VARIOUS REGIONS WERE ORGANIZED, THE SIZE OF THE VARIOUS ESTABLISHMENTS AND THE EFFECT THAT ESTABLISHMENT SIZE HAD ON THE ACTIVITY OF THE SECTOR OFFICER. THE SIZE OF ESTABLISHMENTS VARIED FROM A LOW OF 25 IN A SMALL REGION TO OVER 200 IN A LARGE ONE. PARTICULARLY IN SMALL REGIONS, THE ESTABLISHMENT SIZE PUT A MAJOR CONSTRAINT ON THE NUMBER OF SECTOR OFFICERS WORKING WITH THE CLIENT.

THE SMALLER REGIONS, PARTICULARLY IN THE MARITIMES, WERE FOUND TO HAVE A CONSIDERABLY HIGHER PROGRAM CASE LOAD, PROPORTIONATELY, THAN THE LARGER REGIONS. THIS WAS ALSO AGGRAVATED BY ERDA'S, JOINT PROGRAMS AND THE TOPPING UP OF PROGRAMS SUCH AS THE AEP ETC. WHICH IN ACTUAL FACT HAS TENDED TO INCREASE THE CASE LOAD. ON THE OTHER HAND, ONTARIO AND TO SOME EXTENT, SOME OTHER REGIONS HAVE SEEN A REDUCTION IN CASE WORK AS THE ELIGIBILITY FOR CAPITAL ASSISTANCE IN TIER 1 AREAS WAS ELIMINATED

1. INTRODUCTION (CONTINUED)

AND ALSO AS UNEMPLOYMENT LEVELS CONTINUE TO DROP CAUSING TIER CHANGES DOWNWARD FROM II TO I. CASE LOADS AND SERVICE TO MANAGEMENT HAS LEFT LITTLE TIME FOR SECTOR OR PRO-ACTIVE WORK IN MANY REGIONS.

WHILE THERE IS REASONABLE SECTOR EXPERTISE IN THE LARGER REGIONS AND POCKETS OF NICHE EXPERTISE IN OTHER REGIONS, THE PROJECT TEAM CONSIDERED IT INAPPROPRIATE TO REFER TO THESE OFFICERS AS "SECTOR SPECIALISTS" AS MOST OF THEM ARE NOT. THEY ARE PROGRAM DELIVERY OFFICERS AND GENERALISTS. BECAUSE OF THE MULTITUDE OF FUNCTIONS AN OFFICER MUST COVER, IT WAS CONSIDERED THAT A MORE SUITABLE DESIGNATION WOULD BE AN "INDUSTRY DEVELOPMENT OFFICER (IDO)". THIS TERM IS USED THROUGHOUT THE PRESENTATION.

IT WAS CONSIDERED THAT THE INDUSTRY, TRADE AND TECHNOLOGY CENTRE NAME WAS TOO SIMILAR TO SEVERAL PROVINCIAL MINISTRIES AND TOO HARD TO ANNUNCIATE, ACCORDINGLY, THE TERM, "INDUSTRY SERVICE CENTRES (ISC)" IS USED THROUGH THIS PRESENTATION.

SEVENTY-ONE INTERVIEWS WERE HELD OUT OF A TOTAL REGIONAL SECTOR OFFICER POPULATION OF ABOUT 280. IT IS CONSIDERED THAT THIS PROVIDES A GOOD REPRESENTATION. THE SAMPLING INCLUDED OFFICERS FROM THE SECTOR DIVISIONS, THE DISTRICT OFFICES, MARKETING, TOURISM AND SMALL BUSINESS.

THE REGIONAL INDUSTRY DEVELOPMENT OFFICER
SURVEY QUESTIONNAIRE

A. THE CURRENT ROLE OF THE INDUSTRY DEVELOPMENT OFFICER IN
THE REGIONAL OFFICE

1. HOW WOULD YOU DEFINE AN IDO IN A REGIONAL OFFICE AT THIS TIME?
2. DO YOU CONSIDER YOURSELF A SPECIALIST IN ANY SPECIFIC SECTOR?
IF SO, WHAT SECTOR OR SECTORS?
3. WHAT IN YOUR VIEW IS THE LEVEL OF SECTOR EXPERTISE IN THE REGION?
4. WHAT IS YOUR INTERFACE WITH INDUSTRY NOW? WHAT ARE THE REASONS FOR THESE CONTACTS? AT WHAT LEVEL? FREQUENCY OF CONTACT?
5. HOW DO YOU VIEW YOUR INTERFACE WITH SECTOR ASSOCIATIONS?
FREQUENCY OF CONTACT?
6. WHAT IS THE INTERFACE WITH OTHER LEVELS OF GOVERNMENT?
FREQUENCY OF CONTACT?
7. WHAT IS YOUR INTERFACE WITH ACADEMIA?
FREQUENCY OF CONTACT?
8. WHAT OTHER ORGANIZATIONS ARE CONTACTED AS A ROUTINE IN CARRYING OUT THE PRESENT MANDATE?
FREQUENCY OF CONTACT: _____ ?
9. WHAT ARE THE CURRENT IMPEDIMENTS TO YOUR DOING A GOOD JOB AS AN IDO E.G. EXPERIENCE, WORK LOADING, TRAINING, ORGANIZATIONAL?
10. HOW DOES THE BUSINESS PERSON VIEW THE REGIONAL IDO? WHAT DOES HE EXPECT FROM THE IDO?

P SECTOR KNOWLEDGE

1. HOW DO YOU MAINTAIN YOUR SECTOR KNOWLEDGE?
2. WHAT PERCENTAGE OF YOUR TIME DO YOU SPEND ON MAINTAINING SECTOR KNOWLEDGE? TO WHAT EXTENT DO YOU THINK THIS WILL CHANGE?
3. HOW IS YOUR SECTOR KNOWLEDGE AND DATA BASE MADE AVAILABLE TO OTHERS FOR SUCH THINGS AS POLICY DEVELOPMENT, ADVICE, ETC.?
4. HOW MUCH CONSULTATION DO YOU HAVE WITH HEADQUARTER'S SECTOR SPECIALISTS ON SECTORAL ISSUES?
5. IN WHAT WAY COULD HEADQUARTER'S SECTORAL EXPERTISE BE HELPFUL TO YOU? DO YOU RECEIVE INFORMATION FROM HQ SECTOR SPECIALISTS ON A REGULAR BASIS WITHOUT REQUESTING IT FOR A SPECIFIC PURPOSE?
6. HOW COULD THIS SECTORAL EXPERTISE BE MADE AVAILABLE TO YOU?
7. COULD THIS PROCESS BE FACILITATED AND IMPROVED BY:
 - CONSULTATIONS, BRIEFINGS, JOINT ACTIVITIES, ETC.?
8. HOW MUCH TOTAL SECTORAL EXPERIENCE IS THERE IN THE REGIONAL OFFICE?
DOES YOUR DIVISION HAVE ADEQUATE SECTORAL DATA?
9. WHAT IS THE AVAILABILITY OF SPECIALIZED SUPPORT GROUPS WITHIN THE REGION TO ASSIST AND SUPPORT THE IDO?

THE NEW ROLE OF THE ISC IDO IN THE IST (REGIONAL OFFICE)
MILIEU

"IST WILL ASSIST IN INTEGRATING AND STRENGTHENING CANADA'S INDUSTRIAL, SCIENTIFIC AND TECHNOLOGICAL BASE."

1. WHAT IN YOUR VIEW WOULD BE THE ROLE OF THE IDO UNDER THE IST MANDATE OF ENCOURAGING VARIOUS FUNCTIONS SUCH AS:- INDUSTRY DEVELOPMENT, ETC. E.G. CONSULTATIVE, ADVISORY, REACTIVE, PRO-ACTIVE, ETC.
2. HOW DO YOU PERCEIVE THE ROLE OF AN IDO UNDER THE NEW MANDATE AS COMPARED TO THE PRESENT?
3. WILL CURRENT IDO SKILLS NEED UPGRADING OR CHANGING? IN WHAT WAY?
4. DO YOU HAVE THE NETWORK OF CONTACTS AND LINKAGES TO OPERATE IN THIS NEW ENVIRONMENT AS A CONNECTOR/FACILITATOR?
5. WHAT KIND OF PROGRAMS/SERVICES/INFORMATION ARE REQUIRED BY THE ISC IDO TO ACHIEVE THE OBJECTIVE? SHOULD COMPANIES, UNIVERSITIES, SMALL BUSINESS, INDUSTRY/UNIVERSITY CONSORTIA, ETC. BE ELIGIBLE FOR ALL OF THESE OR SHOULD THEY BE FOCUSSED AT CERTAIN ENTITIES? SHOULD THESE PROGRAMS BE ACTIVITY RELATED RATHER THAN RECIPIENT RELATED? E.G.- PROGRAMS - PEMD, DIPP, IRDP; - SERVICES - FAIRS, MISSIONS, SEMINARS, PROSPECTING, PRODUCTIVITY STUDIES; - INFORMATION - MARKET CONDITIONS, TRENDS, TECHNOLOGY DEVELOPMENTS, ETC.?
6. WHAT SHOULD BE THE ROLE OF THE ISB IN THE COLLECTION AND DISSEMINATION OF SECTORAL INTELLIGENCE AND INFORMATION TO THE ISC?

P TRAINING AND EXPERIENCE

1. WHAT IS YOUR BUSINESS/INDUSTRY BACKGROUND EXPERIENCE AND TRAINING? YEARS OF EXPERIENCE? RESPONSIBILITY LEVEL ACHIEVED BEFORE ENTERING P.S.?
2. DOES YOUR JOB DESCRIPTION REASONABLY DESCRIBE YOUR WORK?
3. IN CARRYING OUT THE IST MANDATE IN AN ISC:
 - HOW IMPORTANT WILL FORMAL TRAINING BE? (RATE ON SCALE OF 1:10)
 - HOW IMPORTANT IS RELEVANT PRIVATE SECTOR EXPERIENCE? (RATE ON SCALE OF 1:10)
4. WHAT WOULD BE THE IDEAL BACKGROUND FOR AN IDO?
5. WHAT, IN YOUR OPINION, SHOULD BE THE MINIMUM ACCEPTABLE QUALIFICATIONS?
 - POST SECONDARY EDUCATION : _____ YEARS.
 - INDUSTRY OR EQUIVALENT EXPERIENCE: _____ YEARS.
6. ARE YOU SATISFIED WITH THE PROSPECTS FOR UPGRADING YOUR SKILLS IN THE PRESENT MILIEU TO MEET THE NEW MANDATE REQUIREMENT? IF NOT, HOW COULD THESE BE IMPROVED?
 - E.G.:- ROTATION/LATERAL TRANSFERS BETWEEN HQ AND ITTCS.
 - UPGRADING BY SPECIALIZED TRAINING
 - WHAT ARE THESE REQUIREMENTS?
 - SECONDMENTS TO INDUSTRY OR AGENCIES TO GAIN SPECIFIC EXPERIENCE, ETC.

ROLL-UP OF REGIONAL RESPONSES
INDUSTRY DEVELOPMENT OFFICER (IDO)
INDUSTRY SERVICE CENTRES (ISC)

THE REGIONAL SECTOR SPECIALIST
RESPONSES

A. CURRENT ROLE OF THE INDUSTRY DEVELOPMENT OFFICER (IDO)

1. IDO IS A KNOWLEDGEABLE PERSON ASSIGNED TO PROMOTE THE INTERESTS OF A SECTOR, E.G. MARKETS, TECHNOLOGY, INVESTMENT, INNOVATION; THROUGH ADVOCACY AND POLICY INPUTS.

"PROJECT TEAM CONSIDERED NAME SECTOR SPECIALIST INAPPROPRIATE
- SHOULD BE INDUSTRY DEVELOPMENT OFFICER."

2. MANY OFFICERS DID NOT CONSIDER THEMSELVES SPECIALISTS - RATHER THEY WERE GENERALISTS.
3. LIMITED SELECTIVE EXPERTISE IN THE SMALLER REGIONS AND REASONABLE EXPERTISE IN THE LARGER REGIONS. MATTER OF SIZE OF ESTABLISHMENT.
4. INTERFACE IS REACTIVE; - PROGRAM DELIVERY, INFORMATION AND SOME INSTANCES OF ADVOCACY. OFFICER IS THE CONDUIT TO INDUSTRY ON DAILY BASIS.
5. LIMITED CONTACT WITH MORE INTERFACE IN SMALLER REGIONS WITH SPECIALIZED ASSOCIATIONS. OTTAWA ISB SHOULD GENERALLY TAKE LEAD POSITION BUT REGIONS SHOULD WITH REGIONAL ASSOCIATIONS.
6. DAILY TO WEEKLY CONTACT IN SMALLER REGIONS WITH PROVINCIAL GOVERNMENTS DELIVERING JOINT PROGRAMS ALSO WITH OTHER FEDERAL DEPARTMENTS AS INFORMATION IS MORE APPROPRIATE.
7. LIMITED INTERFACE WITH ACADEMIA EXCEPT ON BIOTECHNOLOGY, MICROCOMPUTERS AND KNOWLEDGE BASED PROJECTS.

A. - CONTINUED

8. SECOND MOST IMPORTANT INTERFACE IS WITH INDUSTRIAL COMMISSIONERS, CHAMBERS OF COMMERCE, FINANCIAL INSTITUTIONS, TRADING HOUSES, ETC. - ON DAILY TO WEEKLY BASIS.
9. IMPEDIMENTS TO PERFORMANCE:
 - ORGANIZATIONAL,
 - WORK LOADING,
 - ISOLATION FROM OTTAWA,
 - LACK OF CONTINUITY, CONSISTENCY, CLARITY,
 - LACK OF STRENGTH OF OTTAWA SPECIALISTS.
10. BUSINESS PERSON LOOKS ON SECTOR OFFICER AS ENTRÉ TO GOVERNMENT, SOURCE OF FUNDS, AN AUTHORITY FIGURE, DOES NOT EXPECT HIM TO BE A SPECIALIST.

B. SECTOR KNOWLEDGE

1. THROUGH SELECTIVE READING, CONSULTATION, ATTENDANCE AT TRADE FAIRS, AND MISSIONS.
2. CURRENTLY ABOUT 10% BUT WOULD HAVE TO INCREASE IF DATA AND SECTOR KNOWLEDGE NOT FED TO REGIONS UNDER NEW MANDATE.
3. THROUGH AD-HOC CONSULTATIONS, NO FORMAL MECHANISMS - REACTIVE.
4. ONLY WHEN REQUIRED BY REGIONAL OFFICER. HQ NEVER INITIATE ACTIVITIES - TEND TO ISOLATE REGIONS.
5. BY FEEDBACK ON MARKETS, TECHNOLOGIES, OPPORTUNITIES, TRENDS, ETC.
6. THROUGH CONSULTATIONS, NEWSLETTERS, REPORTS, STATISTICS, ESTABLISHMENT OF COMMON DATA BASES, ETC. ISB'S TEND TO BE SILENT (WITH SOME NOTABLE EXCEPTIONS).
7. DEFINITELY BUT NEED MECHANISMS IN PLACE TO FACILITATE, - REGIONAL AND SECTORAL CONSULTATIONS AND BY JOINT ACTIVITIES ON SECTOR PROFILES ETC.
8. MINIMAL TO REASONABLE - HARD TO QUANTIFY DUE TO WORK LOADING AND PRE-OCCUPATION WITH PROGRAM DELIVERY. GENERALLY REGIONS DO NOT HAVE ADEQUATE SECTOR DATA. NO SYSTEMATIC WAY OF CAPTURING AND DISSEMINATING SECTOR DATA AND KNOWLEDGE. NEED FACILITY TO IDENTIFY AND TAP INFORMATION SOURCES.
9. REGIONAL OFFICERS NEED IMPROVED COMMUNICATIONS, DATA BASES AND SECTORAL EXPERTISE.

C. NEW ROLE OF THE ISC IDO IN THE DIST RO MILIEU

"DIST WILL ASSIST IN INTEGRATING AND STRENGTHENING CANADA'S INDUSTRIAL, SCIENTIFIC AND TECHNOLOGICAL BASE."

1. ROLE WILL BE MORE PRO-ACTIVE FOCUSING ON PLANNED OBJECTIVES. ADVOCACY.

(ISC'S WILL HAVE TO ESTABLISH OBJECTIVES ON ACTIVITIES ON A REGIONAL BASIS IN CONCERT WITH OTTAWA.)

2. THERE WILL CONTINUE TO BE MORE OF THE SAME AS MANY OF THE PROGRAMS REMAIN AND THE REACTIVE PORTION REMAINS. THERE IS A NEED FOR HQ AND REGIONS TO WORK TOGETHER ON JOINT ACTIVITIES.

3. DEFINITELY. EMPHASIS ON PROSPECTING, MORE MARKET PROMOTION, ENTREPRENEURIAL DEVELOPMENT, ETC., OFFICER WILL HAVE TO ASSUME ROLE OF CHANGE AGENT.

BRIEFING AND APPROPRIATE TRAINING WILL BE ESSENTIAL.

4. OFFICER CAN BUILD ON GOOD LINKAGES NOW IN EXISTENCE.

5. REQUIREMENTS WILL BE FAR MORE BACKGROUND DATA - DATA BASES AND ACCESSING OF INFORMATION BANKS. COMMUNICATIONS BETWEEN REGIONS AND HQ NEED TO BE IMPROVED - INTERNAL NETWORKING. CAUTION TO BE EXERCISED AGAINST DEVELOPING TOO MANY SMALL PROGRAMS.

C. - CONTINUED

6. ISB SHOULD BE TAKING LEAD POSITION IN CO-ORDINATING, IN CONSULTATION WITH REGIONS AND ESTABLISHING REGIONALLY ORIENTED PRIORITIES WITH EMPHASIS ON JOINT ACTIVITIES. IN CERTAIN INSTANCES, REGIONS COULD/SHOULD TAKE LEAD.

- PROTECT AGAINST HIERARCHICAL POSITION WHERE HQ ASSUMES DOMINANT POSITION.

ISB SHOULD KEEP REGIONS BRIEFED ON SECTORAL CIRCUMSTANCES ON A CONTINUING BASIS.

D. TRAINING & EXPERIENCE

1. EXPERIENCE PROFILES VARY MARKEDLY FROM A MINIMUM OF SECTOR AND INDUSTRY EXPERIENCE TO SIGNIFICANT EXPERTISE. THE DEPARTMENT'S CREDIBILITY IS A COMPOSITE OF THIS. OFFICERS ENTERING GOVERNMENT FROM INDUSTRY TENDED TO HAVE EXCELLENT CREDENTIALS - DIRECTORS OF SALES, PRODUCTION MANAGERS - GENERAL MANAGERS.
2. MANY OFFICERS WERE NOT AWARE OF THE CONTENT OF THEIR JOB DESCRIPTIONS. THE GENERIC JOB DESCRIPTIONS TEND NOT TO PROVIDE THE "FLAVOUR" OF THE JOB CONTENT EXPECTED.
- 3&5. CURRENT OFFICERS WILL REQUIRE UPGRADING WITH THE SPECIFIC REQUIREMENTS BEING DETERMINED ON A CASE BY CASE BASIS, RECOGNIZING THE NEW EMPHASIS WILL BE ON TECHNOLOGY, BUSINESS, COMPETITIVENESS, ETC. AND OFFICERS WILL HAVE TO RELATE TO THIS KNOWLEDGEABLY.
4. WITH RECRUITS TO THE OFFICER STAFF, RELEVANT INDUSTRY EXPERIENCE IN MARKETING, PRODUCTION AND BUSINESS WITH RELEVANT POST SECONDARY EDUCATION VERY HIGHLY DESIRABLE. ON HIGH TECHNOLOGY POSITIONS SUCH AS COMPUTERS, COMPOSITE MATERIALS, BIOTECHNOLOGY, IF REGIONS ARE TO MAINTAIN CREDIBILITY, THESE POSITIONS WILL HAVE TO BE STAFFED WITH KNOWLEDGEABLE, HIGHLY TRAINED PEOPLE.
6. GENERAL DISSATISFACTION WITH DEPARTMENTAL TRAINING;- HAS TO BE RE-EXAMINED IN CONTEXT OF CALIBRE, USEFULNESS, OBJECTIVENESS,
 - EMPHASIS ON ON-THE-JOB TRAINING THROUGH JOINT ACTIVITIES (REGIONS-HQ),
 - REGIONAL OFFICER PARTICIPATION IN OVERSEAS FAIRS AND MISSIONS,
 - SHORT TERM ROTATION (6-8 WEEKS),
 - SECONDMENTS IN SPECIFIC INSTANCES.

ISB'S MUST PLAY A KEY ROLE IN PROVIDING DATA, REPORTS, INFORMATION TO REGIONS TO MAINTAIN REASONABLE KNOWLEDGE BASE.

4. DETAILED DISCUSSION

THE QUESTIONNAIRE USED IN THE REGIONS WAS MADE UP OF FOUR PARTS AS FOLLOWS:

- THE CURRENT ROLE OF THE INDUSTRY DEVELOPMENT OFFICER,
- SECTOR KNOWLEDGE,
- THE NEW ROLE OF THE INDUSTRY DEVELOPMENT OFFICER,
- TRAINING AND EXPERIENCE.

THE DISCUSSION ON RESPONSES WILL HAVE THE SAME IDENTIFICATION CODE AS USED IN THE QUESTIONNAIRE.

A. THE CURRENT ROLE OF THE INDUSTRY DEVELOPMENT OFFICER IN THE REGIONAL OFFICE

1. HOW WOULD YOU DEFINE AN IDO IN A REGIONAL OFFICE AT THIS TIME?

AS INDICATED IN THE INTRODUCTION, IN PLACE OF THE TERM "SECTOR SPECIALIST" THE DESIGNATION INDUSTRY DEVELOPMENT OFFICER WILL BE USED. MOST OFFICES REPORTED THAT THEY WERE ORGANIZED ON A GENERALIST BASIS WITH OFFICERS LOOKING AFTER MANY SECTORS AND/OR FUNCTIONS. HOWEVER, THIS DOES NOT IMPLY NO SECTOR EXPERTISE AS SOME OFFICERS THROUGH LONG EXPOSURE, INTEREST, TRAINING, OR AN ITC BACKGROUND HAVE DEVELOPED EXPERTISE IN SPECIFIC AREAS SUCH AS FISHERIES, AGRICULTURE, FORESTRY, MINING, PLASTICS, SOFTWARE, AND MARINE INDUSTRIES. THERE IS TOURISM EXPERTISE IN ALL REGIONS.

A.1. (CONTINUED)

"THE INDUSTRY DEVELOPMENT OFFICER IS A KNOWLEDGEABLE PERSON BY RELEVANT TRAINING OR INDUSTRY EXPERIENCE ASSIGNED TO PROMOTE THE INTERESTS OF A SECTOR BY PROMOTING EXPORT AND DOMESTIC MARKETS, TECHNOLOGY, INNOVATION, INVESTMENT AND INDUSTRY DEVELOPMENT THROUGH SUASION, ADVOCACY, POLICY INPUTS AND THROUGH PROGRAM DELIVERY (BOTH FUNDED AND NON-FUNDED)."

IN VIEW OF THE LIMITED NUMBER OF OFFICERS IN THE REGIONS AND THEIR LOADING, SECTOR EXPERTISE IN MANY INSTANCES IS NOT CURRENT OR NON EXISTENT. ITC TYPE OFFICERS WHO HAVE BEEN TRANSFERRED TO THE REGIONS FIND THEY TEND TO GO OBSOLETE FROM A SECTORAL EXPERTISE VIEWPOINT BECAUSE OF THE REGIONAL CONSTRAINTS, WORK LOADING AND OBJECTIVES.

ACCORDINGLY, IT IS CONSIDERED THAT THE EXPECTATIONS OF THE CLIENT SHOULD NOT BE HEIGHTENED BY THE USE OF THE TERM SECTOR SPECIALISTS UNTIL THE REGIONAL SECTORAL EXPERTISE HAD BEEN ENHANCED CONSIDERABLY.

2. DO YOU CONSIDER YOURSELF A SPECIALIST IN ANY SPECIFIC SECTOR? IF SO, WHAT SECTOR OR SECTORS?

IN SMALLER REGIONS, OFFICERS TENDED TO REFER TO THEMSELVES AS GENERALISTS BECAUSE OF THE WAY THE OFFICES ARE ORGANIZED, THEIR PROGRAM DELIVERY WORK LOADING OR THEIR OWN LACK OF SECTOR EXPERTISE. THIS DOES NOT IMPLY THAT THERE IS NO EXPERTISE. AS INDICATED IN 1 (ABOVE) THERE ARE POCKETS OF

4. A.2. (CONTINUED)

EXCELLENT EXPERTISE, SOMETIMES QUITE SPECIALIZED SUCH AS AUTOMOTIVE, OFFSHORE DEVELOPMENT, ATLANTIC AND PACIFIC FISHERIES, FISH PROCESSING, PEAT HARVESTING, AGRICULTURE, TO NAME A FEW;

THERE IS REASONABLE EXPERTISE IN THE LARGER REGIONS BECAUSE OF THE ADDITIONAL HUMAN RESOURCE AVAILABLE, AND THE NEED TO BE MORE RESPONSIVE ON HIGH TECHNOLOGY SUBJECTS SUCH AS BIOTECHNOLOGY, MICROCOMPUTERS, COMPOSITE MATERIALS, AEROSPACE AS WELL AS OTHER SECTORS.

3. WHAT IN YOUR VIEW IS THE LEVEL OF SECTOR EXPERTISE IN THE REGION?

THE GENERAL ROLL-UP RESPONSES ON SECTOR EXPERTISE WERE MINIMAL TO REASONABLE AS INDICATED IN 2 (ABOVE) WITH NICHE POCKETS OF EXCELLENT EXPERTISE. ONE ADDITIONAL THEME KEPT RE-OCCURRING AND THIS WAS THAT EXECUTIVE DIRECTORS TENDED TO IMPOSE DIFFERENT CULTURES ON THE VARIOUS OFFICES BY THE MANNER IN WHICH THE REGION WAS ORGANIZED, AND THE SETTING OF OBJECTIVES WHICH HAD A DEFINITE IMPACT ON THE DEVELOPMENT AND MAINTENANCE OF SECTOR EXPERTISE. (THERE WAS CONSIDERABLE DISCUSSION ON THE DREE CULTURE VS THE ITC CULTURE.)

4 A. (CONTINUED)

4. WHAT IS YOUR INTERFACE WITH INDUSTRY NOW? WHAT ARE THE REASONS FOR THESE CONTACTS? AT WHAT LEVEL? FREQUENCY OF CONTACT?

OFFICERS IN THE REGIONS INTERFACE WITH INDUSTRY ON A DAILY BASIS RESPONDING TO REQUESTS FOR INFORMATION, PROGRAM DELIVERY AND ALSO IN SEEKING INFORMATION. THERE IS A MINIMUM OF ADVOCACY DUE TO WORK LOADING AND OBJECTIVES IN PLAY.

THE LEVEL AT WHICH CONTACTS ARE MADE TENDS TO DEPEND ON COMPANY SIZE. THE FOLLOWING PROVIDES SOME INDICATION:

SMALL BUSINESS - PRESIDENT (NO DELEGATION);
MEDIUM-SIZED BUSINESS - PRESIDENT, VICE-PRESIDENT,
GENERAL MANAGER (SOME
DELEGATION EVIDENT);
BIG BUSINESS - STARTING WITH THE CEO DOWN TO THE
PROJECT MANGER, SALES MANAGER ETC.
(EXTENSIVE DELEGATION AND
AVAILABILITY OF SPECIAL FUNCTIONS).

5. HOW DO YOU VIEW YOUR INTERFACE WITH SECTOR ASSOCIATIONS? FREQUENCY OF CONTACT?

LEVEL OF INTERFACE WITH ASSOCIATIONS DEPENDS ON THE SECTOR AND ITS IMPORTANCE IN THE REGION. THERE ARE EXCELLENT SECTORAL/REGIONAL ASSOCIATIONS WITH WHOM THE REGIONAL IDO'S WORK CLOSELY RE-ENFORCING THEIR

4. A.5. (CONTINUED)

MUTUAL REQUIREMENTS. THIS IS PARTICULARLY IMPORTANT ON SPECIAL AND UNIQUE PROBLEMS IN THE SMALLER REGIONS BECAUSE OF ISOLATION FROM OTTAWA. CONTACTS MAY BE ON A WEEKLY OR MONTHLY BASIS.

6. WHAT IS THE INTERFACE WITH OTHER LEVELS OF GOVERNMENT? FREQUENCY OF CONTACT?

THE INTERFACE WITH OTHER LEVELS OF GOVERNMENT VARIES FROM DAILY TO MONTHLY. THE MARITIME AND WESTERN REGIONS WORK VERY CLOSELY WITH PROVINCIAL GOVERNMENTS ON JOINT PROGRAM DELIVERY, REGIONAL OBJECTIVES AND BECAUSE PROVINCIAL GOVERNMENT EXPERTISE AND DATA IS SUPERIOR TO THAT AVAILABLE FROM HQ IN MANY INSTANCES.

THIS IS ALSO EXTENDED TO EXTENSIVE CONTACTS WITH OTHER FEDERAL DEPARTMENTS AND AGAIN BECAUSE OF THE AVAILABILITY OF SUPERIOR DATA AND EXPERTISE.

7. WHAT IS YOUR INTERFACE WITH ACADEMIA? FREQUENCY OF CONTACT?

WHILE THERE IS INTERFACE WITH ACADEMIA THIS, IN GENERAL, IS IDENTIFIED AS MONTHLY OR MINIMAL. CONTACT IS ON SPECIAL RESEARCH AND HIGH TECHNOLOGY. THERE IS AN APPRECIATION IN THE REGIONS THAT THERE WOULD/SHOULD BE MORE INTERFACE IF HUMAN RESOURCES WERE AVAILABLE.

4. A. (CONTINUED)

8. WHAT OTHER ORGANIZATIONS ARE CONTACTED AS A ROUTINE IN CARRYING OUT THE PRESENT MANDATE? FREQUENCY OF CONTACT?

THE REGIONS RELY EXTENSIVELY ON CONTACTS WITH SUCH ORGANIZATIONS AS INDUSTRIAL DEVELOPMENT COMMISSIONERS, BANKS, FINANCIAL INSTITUTIONS, TECHNOLOGY CENTRES, ETC. TO KEEP THEMSELVES "AU FAIT" ON VARIOUS SUBJECTS. THESE CONTACTS ARE DAILY TO WEEKLY AND ARE SECOND ONLY TO THE INTERFACE WITH INDUSTRY.

9. WHAT ARE THE CURRENT IMPEDIMENTS TO YOUR DOING A GOOD JOB AS AN IDO E.G. EXPERIENCE, WORK LOADING, TRAINING, ORGANIZATIONAL?

THE IMPEDIMENTS GENERALLY INDICATED WERE WORK LOADING (PROGRAM DELIVERY AND SERVICE TO MANAGEMENT) AND TRYING TO BE RESPONSIVE TO INDUSTRY. DRIE'S REGIONAL OFFICE ORGANIZATION AND PRIORITIES HAVE SERVED AS AN IMPEDIMENT TO THE ACQUISITION AND BUILD UP OF SECTORAL EXPERTISE ON THE PART OF MANY OFFICERS. ON THE OTHER HAND, MUCH SECTORAL KNOWLEDGE AND EXPERTISE HAS BEEN GAINED AS A RESULT OF DIRECT AND INDIRECT INTERFACE WITH A REGION'S CLIENTELE. USUALLY THE ISB IS NOT A PLAYER IN THIS PROCESS.

THE LIMITATION OF HUMAN RESOURCE TO RESPOND TO ALL THE DEMANDS MADE ON THE INDUSTRY DEVELOPMENT OFFICERS IS A PROBLEM OF HIGH ORDER.

4. A.9 (CONTINUED)

TRAINING HAS BEEN ACHIEVED ON THE JOB. THIS IS SLOW, COSTLY AND NOT A CREDIT TO THE DEPARTMENT BECAUSE OF THE CLOSE INTERFACE CONSTANTLY WITH THE CLIENT.

10. HOW DOES THE BUSINESS PERSON VIEW THE REGIONAL IDO? WHAT DOES HE EXPECT FROM THE IDO?

THE BUSINESS PERSON'S VIEW OF THE REGIONAL INDUSTRY DEVELOPMENT OFFICER TENDS TO DEPEND ON COMPANY SIZE. WHILE THE FIRST DEMAND IS FOR INFORMATION, THIS TENDS TO BE FOLLOWED CLOSELY FOR FUNDING. SMALL BUSINESS TENDS TO SEE THE IDO AS THE ENTRÉ TO GOVERNMENT AND AN AUTHORITY FIGURE. FUNDING NEED NOT BE AN OVERRIDING REQUIREMENT. WITH THE MEDIUM-SIZED COMPANY INFORMATION IS SECOND TO FUNDING. WITH BIG COMPANIES, THEY HAVE THE GENERAL INFORMATION AND LOOK FOR FUNDING OR FOR SPECIFIC TECHNOLOGY AND MARKETING INFORMATION. THEY TEND TO LOOK TO OTTAWA RATHER THAN THE REGIONS FOR THIS. (THEY NEED EXPERT COUNSEL.)

BUSINESS PEOPLE ACKNOWLEDGE THAT THE IDO CAN FIND AND PROVIDE ANSWERS TO SPECIFIC INFORMATION REQUIREMENTS THROUGH HIS VAST CONTACTS IN AND OUTSIDE GOVERNMENT. WE ARE ALSO VIEWED AS BEING HIGHLY ACCESSIBLE AND TRUSTWORTHY.

4. B. SECTOR KNOWLEDGE

1. HOW DO YOU MAINTAIN YOUR SECTOR KNOWLEDGE?

SECTOR KNOWLEDGE IS MAINTAINED OR ACQUIRED MOST EXPEDITIOUSLY THROUGH INTERFACE AND DISCUSSION WITH INDUSTRY, INDUSTRY SECTOR BRANCH PEOPLE, VISITS TO FOREIGN FAIRS, PARTICIPATION IN MISSIONS, SELECTIVE READING OF TECHNICAL LITERATURE, REPORTS AND STUDIES, AND JOINT ACTIVITIES. REGIONS HAVE BEEN EXCLUDED FROM PARTICIPATION IN FOREIGN ACTIVITIES EXCEPT IN UNUSUAL CIRCUMSTANCES AND AS A RESULT, THE IDO DOES NOT HAVE AN APPRECIATION OF HOW THE FOREIGN CLIENT THINKS, THE TECHNOLOGIES HE'S LOOKING FOR, THE TRENDS, THE OPPORTUNITIES. READING THE LITERATURE TENDS TO BE LESS THAN SATISFACTORY. CERTAIN REGIONS HAVE INITIATED THEIR OWN MISSION PROGRAMS TO MOTIVATE OFFICERS AND ENHANCE THEIR TRAINING.

2. WHAT PERCENTAGE OF YOUR TIME DO YOU SPEND ON MAINTAINING SECTOR KNOWLEDGE? TO WHAT EXTENT DO YOU THINK THIS WILL CHANGE?

GENERALLY, THE AMOUNT OF TIME DEVOTED TO MAINTAINING SECTOR KNOWLEDGE RAN FROM 5 TO 10%. THIS ESTIMATE DOES NOT INCLUDE A FACTOR FOR KNOWLEDGE ASSIMILATED BY OSMOSIS DURING DISCUSSIONS WITH INDUSTRY. THE GENERAL IMPRESSION IS THAT IF REGIONS ARE TO FULFILL THE REQUIREMENTS OF THE IST MANDATE THAT THE TIME WILL HAVE TO INCREASE AND THAT THE ISB'S WILL HAVE TO PLAY A SIGNIFICANT ROLE IN THE PROCESS.

B. (CONTINUED)

3. HOW IS YOUR SECTOR KNOWLEDGE AND DATA BASE MADE AVAILABLE TO OTHERS FOR SUCH THINGS AS POLICY DEVELOPMENT, ADVICE, ETC.?

AT THIS TIME, THE EXISTING SECTOR KNOWLEDGE IS MADE AVAILABLE THROUGH REQUESTS FOR INFORMATION, PREPARATION OF COMMENTARY AND BRIEFINGS. BECAUSE OF WORK LOADING, THIS IS GENERALLY A RESPONSE TO SPECIFIC DEMAND ON A "NEED TO KNOW" BASIS.

4. HOW MUCH CONSULTATION DO YOU HAVE WITH HEADQUARTER'S SECTOR SPECIALISTS ON SECTORAL ISSUES?

CONSULTATION AT THIS TIME WITH HQ IS ON A "NEED TO KNOW" BASIS, AND ONLY IF THE IDO HAS CONFIDENCE IN THE ISB SOURCE. AS A RESULT, A VERY SIGNIFICANT AMOUNT OF CONSULTATION TAKES PLACE WITH PROVINCIAL GOVERNMENTS AND OTHER FEDERAL GOVERNMENT DEPARTMENTS AND AGENCIES. THIS IS REGRETTABLE AS THE ISB SUFFERS IN THAT IT IS NOT AWARE OF THE EXCHANGES AND DOES NOT BENEFIT FROM THE EXCHANGES. THEY, IN MANY INSTANCES, ARE NOT AWARE OF THEIR DEFICIENCIES.

5. IN WHAT WAY COULD ISB SECTORAL EXPERTISE BE HELPFUL TO YOU? DO YOU RECEIVE INFORMATION FROM HQ SECTOR SPECIALISTS ON A REGULAR BASIS WITHOUT REQUESTING IT FOR A SPECIFIC PURPOSE?

ISB EXPERTISE WOULD REDUCE THE AMOUNT OF EFFORT THE IDO MAKES KEEPING HIMSELF CURRENT, THUS FREEING UP

4. B.5. (CONTINUED)

TIME FOR PRO-ACTIVE PROJECTS, AND WHATEVER SPECIAL RESEARCH THESE WOULD REQUIRE. IN GENERAL, THERE IS ALMOST NO INFORMATION FED BY ISB'S TO THE REGIONS EXCEPT WHEN REQUESTED, WHERE SPECIAL PERSONAL RELATIONSHIPS EXIST OR AN ISB SECTOR SPECIALIST HAS A PROCLIVITY FOR COMMUNICATING INFORMATION. OBVIOUSLY THE REVERSE SIDE OF THE COIN SUGGESTS A NEED FOR CONSULTATION FROM THE CROSS-FERTILIZATION OF IDEAS, DEVELOPMENT OF CONFIDENCE, ETC. AN UPGRADING OF ISB EXPERTISE IS ESSENTIAL IF THE CURRENT SITUATION IS TO BE REVERSED. ISB'S TEND TO ISOLATE THE REGIONS. THIS IS BELIEVED TO BE INADVERTENT BUT IT ALSO COULD BE BASED ON INSECURITY DUE TO WEAKENED SECTORAL EXPERTISE.

6. HOW COULD THIS SECTORAL EXPERTISE BE MADE AVAILABLE TO YOU?

THE ISB SHOULD BE THE COORDINATOR AND PURVEYOR OF INFORMATION THUS HELPING TO SET OBJECTIVES, AGREE ON JOINT ACTIVITIES OF MUTUAL BENEFIT AND INTEREST. JOINT ACTIVITIES MIGHT INCLUDE STAGING OF SEMINARS, PARTICIPATION IN FOREIGN FAIRS AND MISSIONS, DEMONSTRATIONS, STUDIES, PROFIILES, ETC. AND THE DEVELOPMENT AND SHARING OF COMMON DATA BANKS. THE ISB'S AND REGIONS COULD CO-OPERATE IN KEEPING THEM CURRENT. THERE COULD BE EVALUATIONS ON MARKETS, TECHNOLOGIES, TRENDS, OPPORTUNITIES, RESEARCH REPORTS, ETC.

4. B. (CONTINUED)

7. COULD THIS PROCESS BE FACILITATED AND IMPROVED BY:
- CONSULTATIONS, BRIEFINGS, JOINT ACTIVITIES, ETC.?

THIS COULD BE FACILITATED BY THE EXPEDIENTS OUTLINED IN 6 (ABOVE). THERE IS A NEED TO DEVELOP A SPIRIT OF MUTUAL RESPECT BETWEEN HEADQUARTERS AND THE REGIONS TO COUNTER THE ANTIPATHY AT THE WORKING LEVELS, BOTH AT THE HQ AND REGIONAL LEVEL.

8. HOW MUCH TOTAL SECTORAL EXPERIENCE IS THERE IN THE REGIONAL OFFICE? DOES YOUR DIVISION HAVE ADEQUATE SECTORAL DATA?

THERE ARE VARYING DEGREES OF SECTORAL EXPERTISE IN THE REGIONS DEPENDING ON THE SIZE OF THE ESTABLISHMENT AND THE WORK LOADING AS PREVIOUSLY DISCUSSED. PROFOUND CHANGES HAVE TAKEN PLACE IN THE REGIONS BECAUSE OF A DYNAMIC ECONOMIC SITUATION, DECISIONS MADE ON DOWN-SIZING, CHANGES IN PROGRAMS AND TOPPING HAVE ALL SKEWED THE PICTURE.

THESE HAVE ALL IMPACTED NEGATIVELY ON THE LEVEL OF SECTORAL EXPERTISE IN THE REGIONS.

ALMOST WITHOUT EXCEPTION, THERE WERE INDICATIONS THAT THERE WAS INADEQUATE DATA OR IT WAS OBSOLETE IN THE DIVISIONS. WORK LOADING WORKS AGAINST BEING ABLE TO MAINTAIN COMPLETE AND CURRENT INFORMATION. WITH COMPUTERS, THIS SHOULD BE WORKED JOINTLY WITH THE ISB'S.

4. B. (CONTINUED)

9. WHAT IS THE AVAILABILITY OF SPECIALIZED SUPPORT GROUPS WITHIN THE REGION TO ASSIST AND SUPPORT THE IDO?

MANY OF THE SPECIALIZED SUPPORT REQUIREMENTS SUCH AS FINANCIAL ANALYSIS, AES, FAX, ARE IN PLACE, COMMUNICATIONS ARE REASONABLE EXCEPT FOR THE REQUIREMENT FOR TELEX TO COMMUNICATE WITH INDUSTRY. SUPPORT STAFF IS AT A PREMIUM. THERE IS A PRESSING NEED FOR SHARED DATA BANKS WITH THE ISB, LIBRARIES ON INFORMATION, AND THE ABILITY TO ACCESS OTHER LIBRARIES AND DIRECTORIES ON EXPERTISE AVAILABLE IN HQ AND OTHER REGIONS.

THE MOST IMPORTANT SPECIALIZED SUPPORT REQUIRED IS THE ISB SECTOR SPECIALIST/EXPERT KNOWLEDGE BASE. THIS IS MANDATORY.

C. THE NEW ROLE OF THE ISC IDO IN THE IST (REGIONAL OFFICE) MILIEU

1. WHAT IN YOUR VIEW WOULD BE THE ROLE OF THE IDO UNDER THE IST MANDATE OF ENCOURAGING VARIOUS FUNCTIONS SUCH AS:- INDUSTRY DEVELOPMENT, ETC. E.G. CONSULTATIVE, ADVISORY, REACTIVE, PRO-ACTIVE, ETC.

WHILE THE PROJECT TEAM HAD NO INFORMATION ON THE NEW ORGANIZATIONAL STRUCTURE, IT WAS ASSUMED THIS WOULD CHANGE MATERIALLY IN ORDER THAT THE IDO WOULD HAVE SCOPE FOR PRO-ACTIVE ACTION IN GATHERING INFORMATION

4. C.1. (CONTINUED)

AND DATA AND TO, - IN ASSOCIATION WITH THE ISB'S - ESTABLISH PRIORITIES AND SET OBJECTIVES TO PROMOTE INDUSTRIAL OPPORTUNITIES IN INVESTMENTS, MARKETING AND TECHNOLOGY DEVELOPMENT OR ACQUISITION. AS IN THE PRESENT SITUATION, THE IDO WOULD WORK WITH SMALL TO MEDIUM SIZE INDUSTRY AND LOOK TO THE ISB'S TO DEAL TO A LARGER EXTENT WITH THE LARGE COMPANIES. BASED ON THE NEED TO ENCOURAGE INDUSTRIAL EXCELLENCE, THE ROLE WOULD BE ONE OF SUASION, ENCOURAGEMENT, AND ADVOCACY TO FACILITATE INDUSTRIAL DEVELOPMENT AS OUTLINED IN THE IST MANDATE.

2. HOW DO YOU PERCEIVE THE ROLE OF AN IDO UNDER THE NEW MANDATE AS COMPARED TO THE PRESENT?

SOME OF THE EXISTING PROGRAMS WILL REMAIN AND THE RESPONSIVE LOADING WILL REMAIN UNLESS THE ORGANIZATIONAL STRUCTURE AND THE WORK PLANS CHANGE MATERIALLY. ASSUMING THAT THE STRUCTURE WILL CHANGE, THE IDO ACTIVITY WILL CHANGE AND THE OFFICER WILL BECOME A CHANGE AGENT ADVISING INDUSTRY ON AND OF NEW TECHNOLOGIES, MARKETS AND INVESTMENT OPPORTUNITIES AND FACILITATING THE FULFILLMENT OF THE CLIENT'S INDUSTRIAL DEVELOPMENT OBJECTIVES. THE CHANGE WILL BE TO ADVOCACY, WORKING CLOSELY WITH INDUSTRY. MORE ISB RESOURCE SHOULD BE IN THE FIELD TO FACILITATE THIS. THE IDO'S SKILLS AND CAPABILITIES WILL HAVE TO BE ENHANCED CONSIDERABLY.

4. C. (CONTINUED)

3. WILL CURRENT IDO SKILLS NEED UPGRADING OR CHANGING?
IN WHAT WAY?

IF THE CAPABILITIES OF THE IDO ARE TO BE ENHANCED, SIGNIFICANT UPGRADING AND ADDITION TO CURRENT CAPABILITIES WILL HAVE TO BE MADE. THIS WILL INCLUDE INVESTMENT AND TECHNOLOGY PROSPECTING CAPABILITY, ELICITING INFORMATION, EVALUATING TECHNOLOGY REQUIREMENTS AND ACQUISITION OF SAME, ENHANCEMENT OF PRESENTATIONAL SKILLS FOR USE AT SEMINARS, CONSULTATIONS, MISSIONS, ETC.; IMPROVED ORGANIZATIONAL SKILLS, AND MOST IMPORTANTLY, BEING ABLE TO COMMUNICATE WITH BUSINESS WITH A CLEAR UNDERSTANDING OF THEIR TERMS OF REFERENCE.

4. DO YOU HAVE THE NETWORK OF CONTACTS AND LINKAGES TO OPERATE IN THIS NEW ENVIRONMENT AS A CONNECTOR/FACILITATOR?

ALL THE REGIONS CONSIDERED THAT THE RESPONSIVE WORK AND THE PROGRAM DELIVERY THEY HAVE BEEN DOING HAS GIVEN THE IDO A BASIC NETWORK OF CONTACTS AND LINKAGES ON WHICH TO BUILD. THE LINKAGES THAT WILL HAVE TO BE BUILT INCLUDE STRONG LINKS WITH ACADEMIA, INTERNATIONAL TRADE ORGANIZATIONS IN THE U.S.A., EASTERN ASIA AND EUROPE. MOST IMPORTANTLY, THE LINKAGES INTO HQ WILL HAVE TO BE RE-ENFORCED SUBSTANTIALLY.

4. C. (CONTINUED)

5. WHAT KIND OF PROGRAMS/SERVICES/INFORMATION ARE REQUIRED BY THE ISC IDO TO ACHIEVE THE OBJECTIVE?

STARTING WITH THE PREMISE THAT PROGRAMS SUCH AS THE DIPP, PEMD, NEDP, ETC. WILL REMAIN, IT WAS CONSIDERED THERE WOULD BE A NEED FOR A PROGRAM TO FACILITATE INNOVATION. THIS SHOULD FOCUS ON SIGNIFICANT TECHNOLOGICAL DEVELOPMENT.; AN INNOVATION PROGRAM FOR SMALL ENTERPRISES MAY BE REQUIRED AS WELL TO BRIDGE THE GAP BETWEEN WHERE IRAP LEAVES OFF AND THE FINAL DEVELOPMENT. FUNDING MAY BE REQUIRED TO ACHIEVE INDUSTRIAL DEVELOPMENTS WHICH ARE A NATIONAL PRIORITY AS MAY BE DETERMINED FROM TIME TO TIME. REGIONAL O&M BUDGETS SHOULD BE ADEQUATE TO PERMIT PROMOTIONAL STUDIES, PRODUCTIVITY AND TECHNOLOGY STUDIES, ETC.

6. WHAT SHOULD BE THE ROLE OF THE ISB IN THE COLLECTION AND DISSEMINATION OF SECTORAL INTELLIGENCE AND INFORMATION TO THE ISC?

THE ISB HAS A PIVOTAL ROLE IN PROVIDING DATA AND INFORMATION TO THE ISC. THIS WOULD INCLUDE DATA BANKS, ETC., CONSULTATION, PRIORIZING AND OBJECTIVE SETTING ON ACTIVITIES TO BE UNDERTAKEN (INCLUDING JOINT ACTIVITIES). THE ISB SECTOR SPECIALIST SHOULD BE THE CONSULTANT TO THE IDO, AND THE CO-ORDINATOR. CURRENT ORGANIZATIONAL ARRANGEMENT MAY HAVE TO BE MODIFIED TO FACILITATE THIS. IT SHOULD BE RECOGNIZED THAT THERE ARE INDICATIONS THAT THERE ARE MANY INSTANCES WHERE THE REGIONS WOULD TAKE THE LEAD DUE TO REGION CONSIDERATIONS, BETTER EXPERTISE, ETC.

4. D. TRAINING AND EXPERIENCE

1. WHAT IS YOUR BUSINESS/INDUSTRY BACKGROUND EXPERIENCE AND TRAINING? YEARS OF EXPERIENCE? RESPONSIBILITY LEVEL ACHIEVED BEFORE ENTERING P.S.?

OFFICER EXPERIENCE PROFILES VARY MARKEDLY FROM A MINIMUM OR NO SECTOR AND INDUSTRY EXPERIENCE TO SIGNIFICANT EXPERTISE. THE DEPARTMENT'S CREDIBILITY IS A COMPOSITE OF THIS. OFFICERS WHO ENTERED GOVERNMENT FROM INDUSTRY TENDED TO HAVE EXCELLENT CREDENTIALS. THEY WERE DIRECTORS OF SALES, MANAGERS OF RESEARCH, PRODUCTION MANAGERS AND GENERAL MANAGERS. INDUSTRY PEOPLE HAVE A HARDER TIME ENTERING GOVERNMENT BECAUSE THEY ARE NOT FAMILIAR WITH THE BOARDING PROCESS. PEOPLE IN THE PS KNOW HOW TO PLAY THE GAME AND CAN PENETRATE THE SCREEN MORE READILY. SIGNIFICANT AND RELEVANT BUSINESS EXPERIENCE ON THE PART OF PEOPLE ENTERING THE DEPARTMENT FROM WITHIN THE PS IN GENERAL IS NOT GOOD AND THIS DEFICIENCY IS A HANDICAP WHEN INTERFACING WITH INDUSTRY.

2. DOES YOUR JOB DESCRIPTION REASONABLY DESCRIBE YOUR WORK?

JOB DESCRIPTIONS IN GENERAL WERE OF A GENERIC NATURE AND ARE WRITTEN SO BROADLY THAT THEY DO NOT PROVIDE A REAL FLAVOUR OF THE WORK ACTUALLY BEING DONE. THE ANSWER TO THE QUESTION WAS YES BUT THIS DID NOT MEAN VERY MUCH.

4. D. (CONTINUED)

3. IN CARRYING OUT THE 1ST MANDATE IN AN ISC:

- HOW IMPORTANT WILL FORMAL TRAINING BE? (RATE ON SCALE OF 1:10)

- HOW IMPORTANT IS RELEVANT PRIVATE SECTOR EXPERIENCE? (RATE ON SCALE OF 1:10)

ON THE IMPORTANCE OF FORMAL TRAINING - THE RESPONSES VARIED FROM THE OCCASIONAL 4 TO 10, MOST RESPONDED THAT THIS REQUIREMENT RATED A 7. IT WAS CONSIDERED THAT IN CERTAIN INSTANCES, RELEVANT EXPERIENCE AND ON-THE-JOB TRAINING COULD BE A REASONABLE ALTERNATIVE PROVIDED THIS WAS IN BUSINESS, COMPUTERS, TECHNICAL, RESEARCH. THE IMPORTANCE OF RELEVANT PRIVATE SECTOR EXPERIENCE WAS RATED HIGHER AT 8. THE OFFICER VIEW WAS THAT WITH THE EMPHASIS ON TECHNOLOGY, INDUSTRY, ETC., THE OFFICER HAD TO KNOW THE PRINCIPLES BEING DISCUSSED, THE ENGINEERING TERMS BEING USED AND HAD TO HAVE EXPERTISE ON WHICH TO MAKE JUDGEMENTS IN TALKING TO CLIENTS.

4. WHAT WOULD BE THE IDEAL BACKGROUND FOR AN IDO?

THE IDEAL BACKGROUND WAS CONSIDERED TO INCLUDE A RELEVANT UNIVERSITY DEGREE WITH INDUSTRY EXPERIENCE IN MARKETING/SALES (2-3 YEARS) PLUS TECHNICAL SALES, PRODUCTION MANAGEMENT OR RESEARCH DEPENDING ON THE JOB CONTENT. BUSINESS EXPERIENCE WAS CONSIDERED AN ESSENTIAL.

4. D.4.(CONTINUED)

THE TEAM CONSIDERED THAT THE IDO HAD TO BE ABLE TO ESTABLISH CREDIBILITY QUICKLY WITH THE CLIENT ON THE BASIS OF EXPERIENCE. HIGHLY DESIRABLE ATTRIBUTES IDENTIFIED INCLUDED ABILITY TO ELICIT INFORMATION, DEMONSTRATE GOOD JUDGEMENT, AN ABILITY TO DO MULTIPLE TASKS (FURTHER SEVERAL PROJECTS AT THE SAME TIME) AND TO BE ABLE TO SORT THE GRAINS AWAY FROM THE CHAFF AND MAKE JUDGEMENTS/DECISIONS. THE QUICK STUDY ARTIST WOULD GET FOUND OUT QUICKLY AND WOULD HAVE A DIFFICULT TIME RE-ESTABLISHING HIS CREDENTIALS.

5. WHAT, IN YOUR OPINION, SHOULD BE THE MINIMUM ACCEPTABLE QUALIFICATIONS?

- POST SECONDARY EDUCATION : _____ YEARS.
- INDUSTRY OR EQUIVALENT EXPERIENCE: _____ YEARS?

THE ROLL-UPS INDICATED THAT THE MINIMUM ACCEPTABLE QUALIFICATIONS WERE:

- POST SECONDARY EDUCATION - 4 YEARS.
- RELEVANT INDUSTRY OR EQUIVALENT EXPERIENCE - 5 YEARS.

IN THE MAIN, IT WAS CONSIDERED THAT A 10 YEAR APPRENTICESHIP OF RELEVANT POST SECONDARY EDUCATION AND RELEVANT OR EQUIVALENT INDUSTRY EXPERIENCE WAS MANDATORY IF THE OFFICER WAS TO GET UP TO SPEED QUICKLY, BE A CREDIT TO THE DEPARTMENT AND BE

4. D.5.(CONTINUED)

ACCEPTABLE TO INDUSTRY. THIS WAS CONSIDERED PARAMOUNT WHEN DEALING WITH THE HIGH TECHNOLOGY CLIENTS, MEDIUM SIZE TO BIG BUSINESS AND ASSOCIATIONS. THE DEPARTMENT SHOULD GO THIS ROUTE IF ITS REPUTATION IS TO BE REBUILT.

6. ARE YOU SATISFIED WITH THE PROSPECTS FOR UPGRADING YOUR SKILLS IN THE PRESENT MILIEU TO MEET THE NEW MANDATE REQUIREMENT? IF NOT, HOW COULD THESE BE IMPROVED?

E.G.:- ROTATION/LATERAL TRANSFERS BETWEEN HQ AND ITTCS.

- UPGRADING BY SPECIALIZED TRAINING
 - WHAT ARE THESE REQUIREMENTS?
- SECONDMENTS TO INDUSTRY OR AGENCIES TO GAIN SPECIFIC EXPERIENCE, ETC.

THERE WAS UNIVERSAL DISENCHANTMENT WITH TRAINING IN THE DEPARTMENT. PROJECT TEAM MEMBERS REPORTED SEVERE CRITICISM OF TRAINING COURSES BEING SUPERFICIAL, INCOMPETENT RESOURCE PEOPLE, COURSE MATERIAL BEING OF LOW QUALITY AND NOT RELEVANT, ETC.

THE PROJECT TEAM CONSIDERED TRAINING TO BE ONE OF THE MOST IMPORTANT ITEMS ON THE QUESTIONNAIRE. TRAINING COURSES SHOULD BE RE-EXAMINE TO ASSURE THEY ARE OF THE HIGHEST CALIBRE, CHALLENGING, OBJECTIVE, AND ADDRESS THE OBJECTIVE FULLY.

4. D.6.(CONTINUED)

EACH OFFICERS' ABILITIES SHOULD BE REVIEWED TO DETERMINE THE PARTICULAR TRAINING EACH OFFICER REQUIRED TO EQUIP HIM FOR THE CHALLENGE OF CARRYING OUT THE NEW MANDATE.

TRAINING COURSES WERE NOT CONSIDERED TO BE THE ONLY AVAILABLE TRAINING VEHICLE BY THE PROJECT TEAM. JOINT ACTIVITIES ON TEAMS, DOING STUDIES, EVALUATIONS, SURVEYS ETC. ARE IDEAL LEARNING MILIEUS WITH THE APPROPRIATE ASSOCIATES. THIS WAS CONSIDERED A HIGHLY DESIRABLE APPROACH.

CONTACT WITH THE FOREIGN CLIENT, A NEW SOURCE OF TECHNOLOGY, ETC., WAS CONSIDERED AN EFFECTIVE WAY OF GAINING EXPERIENCE AS WELL. TO THIS END, IDO PARTICIPATION IN FOREIGN FAIRS, MISSIONS, TECHNOLOGY PROSPECTING EXERCISES SHOULD BE PART OF THE MODUS OPERANDI.

ROTATION OF OFFICERS ON A SHORT TERM BASIS (A FEW WEEKS) TO SECONDMENTS FOR LONGER PERIODS MUST RECEIVE GREATER CONSIDERATION. ROTATIONS OF ISB OFFICERS TO ISCS AND IDO'S TO AN ISB WERE CONSIDERED IMPORTANT. AN IDO IN A REGION AFTER A TENURE OF 4-5 YEARS SHOULD BE A CANDIDATE FOR LATERAL TRANSFER TO AN ISB WHEN THE NEXT VACANCY OCCURS IF HE REQUESTS SUCH A MOVE. THERE HAS BEEN A TENDENCY FOR THE IDO TO GO OBSOLETE IN A REGION IN THE CONTEXT OF AN ISB OFFICER'S CAPABILITIES. THE ISB'S ARE CONSIDERED TO HAVE THE GREATER OPPORTUNITIES FOR PROMOTION.

SUMMARY

1. NAME FOR OFFICER SHOULD BE INDUSTRY DEVELOPMENT OFFICER.
2. SECTORAL EXPERTISE VARIES FROM REGION TO REGION - CORRELATION OF REGIONAL ESTABLISHMENT SIZE.
3. CURRENT REGIONAL WORK LOAD:
 - PROGRAM DELIVERY AND RESPONSE - LITTLE PRO-ACTIVE WORK;
 - LIMITED PRO-ACTIVITY IN LARGER REGIONS;
 - PROGRAM DELIVERY LOADING HAS INCREASED IN SMALLER REGIONS (MARITIMES);
 - STACKING OF IRDP/AEP/CBDP;
 - LOCAL PROGRAMS, ERDA'S, ETC. AND TIER IMPLICATIONS.
4. CONTINUITY IN TRADE PROMOTION A PROBLEM (CONTINUITY MANDATORY).
5. ORGANIZATION ARRANGEMENTS SHOULD STRIVE FOR MORE UNIFORMITY, CONSISTENCY, CONTINUITY.
6. SIGNIFICANTLY MORE INTERFACE IN SMALL REGIONS WITH PROVINCIAL GOVERNMENTS, MINISTRIES, OTHER DEPARTMENTS AND TRADE OFFICES.
7. IMPEDIMENTS/CONSTRAINTS:
 - WORKLOAD;
 - ORGANIZATIONAL;
 - ISOLATION FROM OTTAWA;
 - OTTAWA NOT FOUNT OF ALL KNOWLEDGE;
 - OTTAWA DATA BASES NOT NECESSARILY REPRESENTATIVE NATIONALLY;
 - NEED TO ACCESS OTHER INFORMATION SOURCES E.G. PROV. GOVERNMENTS.
8. CLIENTS IN MANY INSTANCES DO NOT NECESSARILY REQUIRE SPECIALISTS - RATHER A SOURCE OF INFORMATION, ACCESS TO GOVERNMENT AND A TIMELY RESPONSE.

SUMMARY - PAGE 2

9. IST ROLE ADVOCACY, PRO-ACTIVITY, MISSIONARY;
 - OFFICERS MUST BE TRAINED AND PROPERLY EQUIPPED TO CARRY OUT MANDATE;
 - COMPANIES NEED INFORMATION/DIRECTION/COUNSEL;
 - ALSO FUNDING TO FACILITATE PROSPECTING;
 - O&M BUDGET COMMENSURATE WITH THIS MANDATE.

10. IDO NEEDS MORE SUPPORT BY HQ SPECIALISTS;
 - CO-ORDINATION AND SHARING OF ACTIVITIES;
 - SHARING OF DATA BASES (SECTOR KNOWLEDGE A TOOL);
 - DIRECTORY OF EXPERTISE IN REGIONS AND HQ.

11. ISB ROLE:
 - CO-ORDINATION;
 - FEEDBACK TO REGIONS ON INTERNATIONAL VIEWPOINT AND CIRCUMSTANCES;
 - CLEARING HOUSE FOR POLICY ISSUES ON DEVELOPMENT, ETC;
 - PROVIDE DATA, STATISTICS, REPORTS TO REGIONS;
 - ESSENTIAL INPUTS TO MAINTENANCE OF SECTOR KNOWLEDGE BY INVOLVEMENT IN JOINT ACTIVITIES (E.G. SECTOR PROFILES), DATA BASES, COMMITMENT TO INFORMATION TRANSFER;
 - PROVIDE EXPOSURE TO INTERNATIONAL MARKETING, TECHNOLOGY TRENDS, AND OPPORTUNITIES.

12. TRAINING AND RETRAINING A TOP PRIORITY:
 - EMPHASIS ON TECHNOLOGY, MARKETING, BUSINESS;
 - TAILORED TO INDIVIDUAL REQUIREMENTS;
 - EMPHASIS ON DEVELOPING STRATEGIC TECHNOLOGY CAPABILITY:
 - COMPOSITE MATERIALS,
 - MICROELECTRONICS,
 - BIOTECHNOLOGY.
 - ROTATION AND JOINT ACTIVITIES;
 - TEMPORARY ASSIGNMENTS/SECONDMENTS.

MOTIVATION AND MORALE OF OFFICERS HAS TO BE ADDRESSED.

6. OBSERVATIONS - REGIONAL PROJECT TEAM

1. THE SECTOR OFFICER AT THIS TIME SHOULD BE REFERRED TO AS AN INDUSTRY DEVELOPMENT OFFICER AS IT IS MORE APPROPRIATE TO HIS WORK AND, AT THE SAME TIME, WILL NOT BUILD UP THE EXPECTATIONS OF THE CLIENT.
2. WHILE THE WORK OF THE OFFICER IN THE REGION TODAY IS DIRECTED TO CASE WORK, SERVICE TO MANAGEMENT AND RESPONSE TO THE CLIENT, THE REGIONAL OBJECTIVES AND ACCORDINGLY, THE ESTABLISHMENTS SHOULD BE ADJUSTED TO FACILITATE A CONSIDERED LEVEL OF PRO-ACTIVE WORK AND PERMIT TIME FOR JOINT ACTIVITIES WITH HEADQUARTERS AND THE DEVELOPMENT OF SECTOR DATA.
3. THE MARKETING FUNCTIONS REQUIRE REVIEW TO ASSURE CONTINUITY OF OBJECTIVES AND UNIFORMITY OF PROGRAMS AND APPROACH.
4. THERE MUST BE CONTINUITY, UNIFORMITY AND CONSISTENCY IN ORGANIZATIONAL ARRANGEMENTS, OBJECTIVES AND PROCEDURES.
5. THE RECOGNITION OF THE SIGNIFICANCE OF REGIONAL ECONOMIES OUTSIDE OF CENTRAL CANADA IS ESSENTIAL IF IT IS TO BE A NATIONAL DEPARTMENT.
6. THE DEVELOPMENT OF SECTORAL INTELLIGENCE IN THOSE SECTORS CRITICAL TO INDIVIDUAL REGIONS MUST BE AN ESSENTIAL ELEMENT OF THE RESPECTIVE INDUSTRY SERVICE CENTRES' ACTIVITIES AND COMPLIMENTARY TO ISB SECTOR SPECIALISTS.

6. OBSERVATIONS - (CONTINUED)

7. THE INTEGRITY OF NATIONAL INTELLIGENCE MUST BE FOUNDED UPON SOUND REGIONAL INTELLIGENCE. CONSULTATIONS WITH REGIONAL SPECIALISTS ACCORDINGLY MUST PRECEDE THE FORMULATION OF THE NATIONAL CONCENSUS IN THOSE SECTORS WHICH MOST AFFECT REGIONS.
8. REGIONS ARE UNDERTAKING CONSIDERABLE CONSULTATIONS WITH PROVINCIAL GOVERNMENTS, OTHER FEDERAL DEPARTMENTS AND OTHER AGENCIES TO FILL A DATA VOID CAUSED BY LACK OF EXPERTISE ON THE PART OF ISB SECTOR SPECIALISTS.
9. IST'S MANDATE WILL REQUIRE ADVOCACY, PRO-ACTIVITY AND A LOT OF MISSIONARY WORK IF IT IS TO BE FULFILLED. INDUSTRY SECTOR BRANCHES WILL HAVE TO ASSUME A COORDINATING ROLE IN THE DEVELOPMENT OF OBJECTIVES, INTELLIGENCE, DATA BASES COMMON TO EVERYBODY, WORK PROGRAMS, AND JOINT ACTIVITIES IN ORDER TO USE ALL AVAILABLE RESOURCE TO BEST ADVANTAGE OF BOTH HEADQUARTERS AND THE REGIONS.
10. ISB SECTOR SPECIALISTS WILL HAVE TO ASSUME THE ROLE OF SUPPLYING REGIONAL OFFICERS WITH INFORMATION ON NEW TECHNOLOGIES, TECHNOLOGY TRENDS AND OPPORTUNITIES, INTERNATIONAL MARKET INTELLIGENCE, MARKET OPPORTUNITIES AND COMPETITIVENESS REVIEWS, INVESTMENT OPPORTUNITIES AND DATA IN GENERAL TO REDUCE THE DUPLICATION OF THESE FUNCTIONS IN THE REGIONS AND TO AUGMENT THE REGIONAL WORK.

6. OBSERVATIONS - (CONTINUED)

11. KNOWLEDGEABLE SECTOR SPECIALISTS AND INDUSTRY DEVELOPMENT OFFICERS ARE THE KEYSTONES TO THE DEPARTMENT BECOMING A "FLAGSHIP" DEPARTMENT. AN INVENTORY OF EXISTING SECTORAL EXPERTISE IN THE DEPARTMENT WILL HAVE TO BE MADE AND CATEGORIZED. CAPABILITIES OF OFFICERS CURRENTLY AVAILABLE WILL HAVE TO BE REVIEWED TO DETERMINE THE TRAINING REQUIRED TO BRING THEM UP TO A MINIMUM STANDARD.
12. EXISTING TRAINING COURSES WILL HAVE TO BE REVIEWED TO MAKE THEM RELEVANT TO THE NEW MANDATE.
13. RECRUITMENT OF NEW PEOPLE TO FILL MANY OBVIOUS CAPABILITY GAPS WILL REQUIRE THAT THEY HAVE CERTAIN RELEVANT POST SECONDARY TRAINING SUCH AS BUSINESS ADMINISTRATION, ENGINEERING, ADVANCED SCIENCES OR RESEARCH AND RELEVANT INDUSTRY EXPERIENCE OR EQUIVALENT IN FUNCTIONS SUCH AS MARKETING, TECHNICAL SALES, EXPORT SALES, RESEARCH OR PRODUCTION IN ORDER TO GET THEM UP TO SPEED QUICKLY.
14. MOTIVATION AND MORALE OF OFFICERS HAS TO BE ADDRESSED.

PROJECT TEAM

<u>NAME</u>	<u>PROVINCE</u>
ANTON CHIPERZAK	ONTARIO (PROJECT MANAGER)
ERIC ROBICHAUD	NEW BRUNSWICK (EASTERN COORDINATOR)
PAT STAMP	NEWFOUNDLAND
GILLES GAGNON	QUEBEC
KATHRYN MCGAVIN	MANITOBA
JOHN WIEBE	BRITISH COLUMBIA (WESTERN COORDINATOR)
RICK STEPHENSON	BRITISH COLUMBIA
MIKE BRENNAN	CALGARY, ALBERTA
A. SVETKOV	REGINA SASKATCHEWAN
AL BAGNALL	PRINCE EDWARD ISLAND
JOHN ARSENEAU	HALIFAX, NOVA SCOTIA

SECTOR SPECIALIST STUDY

EXTERNAL INTERVIEWS

AN INDUSTRY PERSPECTIVE

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PRESENTATION TO ADVISORY COMMITTEE
ON SECTOR SPECIALIST REVIEW

JANUARY 1988

C. CHARETTE
R. BULA

COMMON THEMES FROM INDUSTRY

- BUSINESS DEFINITION MORE STRATEGIC
- CLEAR AND CONCISE BUSINESS GOALS AND DIRECTION
- HUMAN RESOURCES AND PRODUCTS BEING RATIONALIZED
- SENIOR MANAGEMENT CLOSE TO EMPLOYEES AND CLIENTS
- SUCCESS DEPENDENT ON WELL ORGANIZED TEAMS WITH WELL DEFINED PURPOSE AND RESOURCES
- DEVELOPMENT OF SPECIALTY PRODUCTS AND SERVICES TO MEET NICHE OPPORTUNITIES
- INTELLIGENCE OF COMPETITION AND TECHNOLOGY SUPPORTING ARGUMENTS FOR SECTOR SPECIALIZATION
- SPECIALISTS ACQUIRED FROM THE FIELD OR DEVELOPED QUICKLY FROM WITHIN
- RESPONSIBILITY (AND REWARD) GROWING FOR THE SS AS HIS ROLE EVOLVES TO ONE OF BUSINESS MANAGER (EX. BANK OF NOVA SCOTIA)

CONCLUSIONS

- DEVELOP SOME SECTOR SPECIALIZATION WITHIN STRATEGIC SECTORS, AT HEADQUARTERS.
- DEVELOP STRONG WORKING LINKS WITH THAT GROUP TO INDUSTRY, REGIONAL OFFICES AND ASSOCIATIONS.
- DEVELOP THE SECTOR SPECIALIST TO INCLUDE A BUSINESS CONSULTANCY CAPABILITY AND ROLE.
- DEVELOP AN ENVIRONMENT WHERE THE SS CAN UTILIZE HIS SKILLS AND KNOWLEDGE TO ENHANCE HIS CREDIBILITY WITH INDUSTRY AND ASSOCIATED CLIENTS.
- STRATEGIC DIRECTION OF ORGANIZATION AND KNOWLEDGE OF CORPORATE GOALS AND OBJECTIVES MUST BE CLEARLY UNDERSTOOD BY THE SS AND SUPPORTING GROUPS BEFORE THE QUALITY OF EFFORT AND FINAL PRODUCT IS CONSISTANTLY COMPETITIVE.
- AN ENVIRONMENT THAT RECOGNIZES MERITORIOUS WORK WILL ALSO FOSTER RADICAL THINKING PROVIDING ENTREPRENEURIAL SPIRIT AND BREAK THROUGH SOLUTIONS TO UNIQUE OPPORTUNITIES.
- THE SS MUST BE CUSTOMER ORIENTED AND MARKET FOCUSSED TO REMAIN COMPETITIVE WITH THE PRODUCTS OFFERED.
- TO BE EFFECTIVE, THE SS REQUIRES A PROPERLY MANAGED INFORMATION BASE THAT IS CONTINUOUSLY UPDATED AND IMPROVED.
- TO MEET THE REQUIREMENTS OF INDUSTRY, THE SS MUST BE OUTPUTS ORIENTED.
- CREATE AN ENVIRONMENT THAT CONTINUES TO ATTRACT HIGHLY MOTIVATED AND KNOWLEDGEABLE PEOPLE ABLE TO PRACTICE WHAT THEY KNOW BEST.

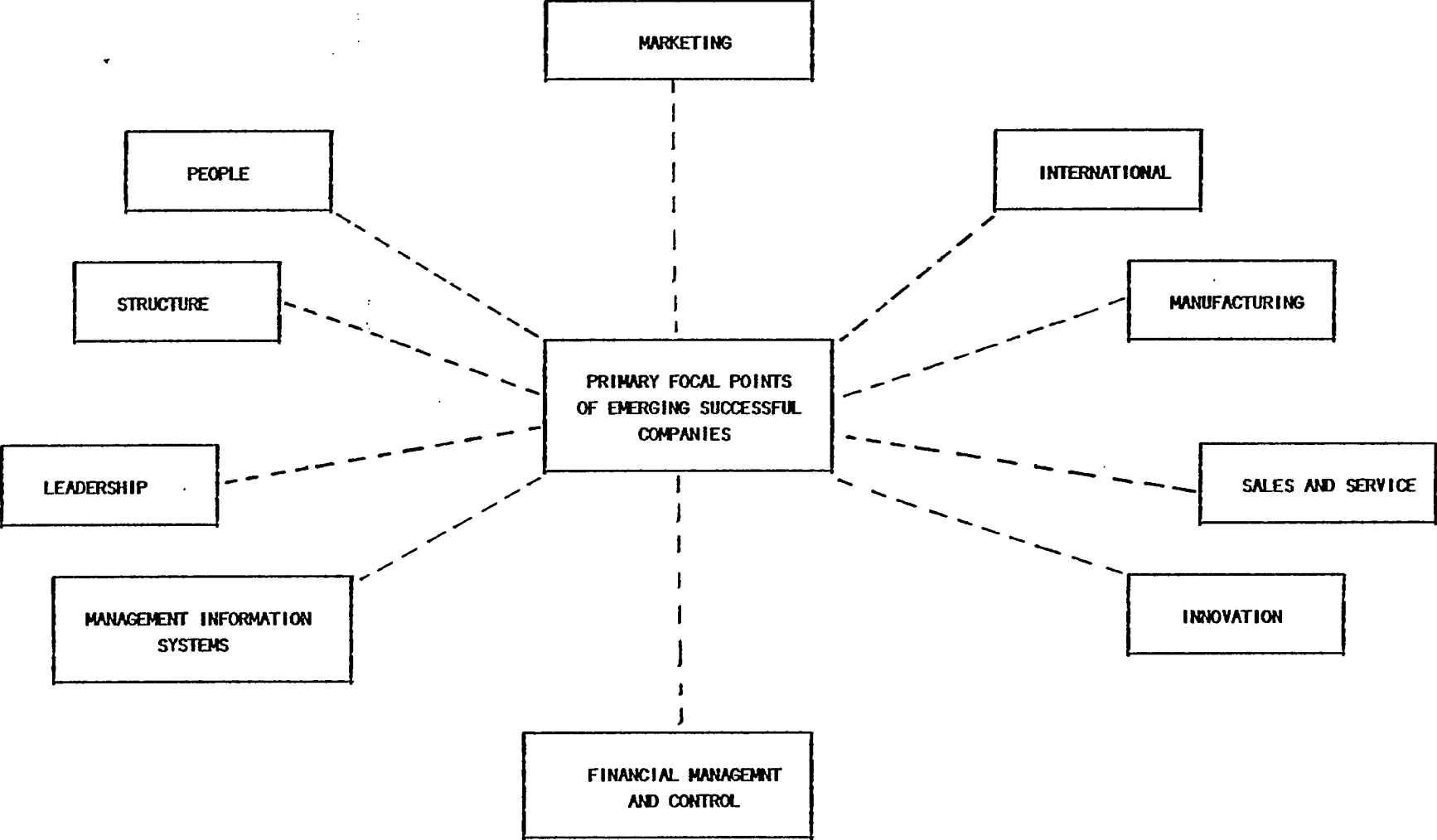
- MAINTAINING AND IMPROVING THE CAPABILITIES OF THE SECTOR SPECIALIST IS THE RESPONSIBILITY OF THE INDIVIDUAL BUT IS SUPPORTED BY THE ORGANIZATION.
- THE TASK TEAM APPROACH UTILIZING THE MATRIX ORGANIZATION WILL PROVIDE HIGHER QUALITY PRODUCTS AND MAXIMIZE THE EFFECTIVENESS OF HUMAN RESOURCES APPLIED TO AN OPPORTUNITY.

AN INDUSTRY PERSPECTIVE

OBSERVATIONS MADE DURING THE INTERVIEWS CONFIRMED THE EVOLVING PROCESS THE LEADING COMPANIES ARE UNDERTAKING TO IMPROVE THE WAY THEY DO BUSINESS.

WITH THAT A REVIEW OF KEY ORGANIZATIONAL ELEMENTS WILL SHOW THE DIRECTION INDUSTRY IS PERSUING. THIS INFORMATION SHOULD BE CAREFULLY CONSIDERED AS THE DEPARTMENT WORKS TO BE MORE EFFECTIVE WITH INDUSTRY.

DIRECTION OF INDUSTRY



(Source: Tom Peters)

MARKETING

FROM

- MASS MARKETS
- MASS ADVERTISING
- VIOLENT BATTLES TO SHIFT A SHARE POINT
- FUNCTIONAL INTEGRITY OF MARKETING PEOPLE

TO

- MARKET CREATION
- NICHE FOCUS
- INNOVATION FROM MARKET INVOLVEMENT
- THRIVING ON MARKET FRAGMENTATION
- DIFFERENTIATION OF ANY PRODUCT

INTERNATIONAL

FROM

- GLOBAL BRANDS WHICH ARE MANAGED FROM HEAD OFFICE
- INTERNATIONAL AS A SIDE LINE
- FOR BIG FIRMS ONLY

TO

- FOCUS ON NEW MARKET CREATION
- DEVELOPMENT DONE OFFSHORE FROM THE START
- ESSENTIAL STRATEGY FOR FIRMS OF ALL SIZES

MANUFACTURING

FROM

- EMPHASIS ON VOLUME
- REDUCE COSTS
- FUNCTIONAL INTERGRITY

TO

- PRIMARY MARKETING TOOL
- SOURCE OF QUALITY RESPONSIVENESS AND INNOVATION
- SHORT RUNS, FLEXIBILITY
- PEOPLE SUPPORTED BY AUTOMATION
- PART OF PRODUCT DESIGN TEAMS

SALES AND SERVICE

FROM

- "MOVE THE PRODUCT"
- SECOND CLASS CITIZENS

TO

- HEROES, CHAMPIONS
- STRONG CUSTOMER RELATIONSHIPS (ALL LEVELS)
- MAJOR SOURCE OF VALUE ADDED
- PRIME SOURCE OF NEW PRODUCT IDEAS

INNOVATION

FROM

- DRIVEN BY R&D
- BIG PROJECTS THE NORM
- SCIENCE - RATHER THAN CUSTOMER DRIVEN
- LIMITED TO NEW PRODUCTS
- CLEVERNESS OF NEW DESIGN MORE IMPORTANT THAN FITS AND FINISHES

TO

- SMALL STARTS IN AUTONOMOUS AND DECENTRALIZED UNITS
- EVERYONE'S BUSINESS
- DRIVEN TO MAKE SMALL AND NOTICEABLE CUSTOMER IMPROVEMENTS

PEOPLE

FROM

- NEED TIGHT CONTROL
- TRY TO SPECIALIZE AND DIMINISH ROLE

TO

- PEOPLE PRIME SOURCE OF VALUE ADDED
- CAN NEVER TRAIN TO MUCH
- INVOLVE EVERYONE IN EVERYTHING
- GREATER RESPONSIBILITY AND ACCOUNTABILITY
- CREATE STAKE HOLDERS
- RECOGNITION OF MERITORIOUS CONTRIBUTIONS

STRUCTURE

FROM

- HIERARCHICAL
- FUNCTIONAL INTEGRITY MAINTAINED

TO

- FLAT ORGANIZATION
- BARRIERS BROKEN DOWN
- FIRST LINE SUPERVISORS GIVE WAY TO SELF-MANAGED TEAMS
- MIDDLE MANAGERS ACT AS FACILITATORS RATHER THAN TURF GUARDIANS

LEADERSHIP

FROM

- DETACHED
- ANALYTICAL
- CENTRALIZED STRATEGY PLANNING
- DRIVEN BY CORPORATE STAFFS

TO

- LEADER PROMOTER OF CHANGE
- CLARIFIES VISION/DIRECTION
- ILLUSTRATES VALUES
- STRATEGY DEVELOPED IN TEAMS BUT FROM BOTTOM-UP
- ALL STAFF FUNCTIONS SUPPORT THE LINE

MANAGEMENT INFORMATION SYSTEMS

FROM

TO

- CENTRALIZED FOR SAKE OF CONSISTENCY
- INTERNALLY AIMED

- INFORMATION PACKAGED FOR MAXIMUM USE BY THE CUSTOMER
- CUSTOMER/SUPPLIER LINK-UPS AS A STRATEGIC WEAPON
- MANAGED BY THE LINE
- DECENTRALIZED SYSTEM

FINANCIAL MANAGEMENT AND CONTROL

FROM

TO

- CENTRALIZED SYSTEM
- FINANCE STAFF ACTS AS RULER

- DECENTRALIZED
- MOST FINANCE PEOPLE TO THE FIELD AS BUSINESS TEAM MEMBERS
- HIGH SPENDING AUTHORITY AND ACCOUNTABILITY DOWN THE LINE

INDUSTRY OBSERVATIONS
APPLICABLE TO THE DEPARTMENT

RECOMMENDATIONS

THE ENVIRONMENT WITHIN THE DEPARTMENT

- WORK TO DEVELOP A CLEAR AND CONCISE UNDERSTANDING OF DEPARTMENTAL DIRECTION AND PURPOSE WITHIN ALL EMPLOYEES (EX. WOOD-GUNDY, U.N.I.D.O.)
- CREATE DEPARTMENT VALUES AND PRINCIPLES BY WHICH WE THEN MANAGE OURSELVES AND PRACTICE THEM (EX. PRICE-WATERHOUSE)
- ENSURE EVERYONE IS KNOWLEDGEABLE OF THE BUSINESS WE ARE IN, OUR CLIENTS, OUR PRODUCTS - SERVICES AND THEIR EXPECTED CONTRIBUTION TO THE TOTAL EFFORT (EX. PRICE-WATERHOUSE)
- DEMONSTRATE THE IMPORTANCE WE PLACE ON OUR PEOPLE THROUGH PERSONAL DEVELOPMENT AND RECOGNITION OF MERITORIOUS EFFORT (EX. ALL INTERVIEWEES)
- CREATE AN ENVIRONMENT THAT DEMANDS INNOVATION, RISK MANAGEMENT AND SUPPORT FOR FAILURES IN THE WORK WE DO. (EX. BANK OF N.S., PRICE-WATERHOUSE)
- INSIST ON QUALITY IN EVERYTHING WE DO AND SHOW SUPPORT FROM THE TOP DOWN. (EX. PRICE-WATERHOUSE)
- MANY PEOPLE ARE SELF-MOTIVATED BUT THE DEPARTMENT MIGHT DO A BETTER JOB OF RECOGNIZING THOSE WHO ARE PERFORMING EXTRA-ORDINARY WORK AND THOSE WHO ARE NOT. INDUSTRY IS BEGINNING TO UNDERSTAND THE IMPORTANCE OF EMPLOYEE INVOLVEMENT, CONTROL OVER THE OUT COME AND RECOGNITION (EX. PRICE-WATERHOUSE, WOOD-GUNDY, U.N.I.D.O.)

THE STRUCTURE OF THE DEPARTMENT

- OVER TIME, DEVELOP THE DEPARTMENT TO BE MORE EFFECTIVE AND RESPONSIVE TO CLIENT NEEDS BY FLATTENING THE PROCESS THROUGH WHICH IDEAS AND SUGGESTIONS MUST FLOW TO ACQUIRE APPROVAL. (EX. WOOD-GUNDY)
- DEVELOP A WORKING MATRIX SYSTEM THAT INVOLVES ALL FUNCTIONAL GROUPS SUPPORTING LINE ACTIVITIES/PROJECTS. INVOLVE EVERYONE IN EVERYTHING. (EX. BANK OF NOVA SCOTIA, WOOD GUNDY "ON THE JOB" EXPERIENCE AND TRAINING TO DEVELOP SKILLS, NO SPECIALIZED COURSES)
- DEVELOP ALL FUNCTIONS TO BE MARKET ORIENTED AND CUSTOMER FOCUSED IN THEIR ACTIVITIES

THE PROCESS WITHIN THE DEPARTMENT

- DEVELOP SELF-MANAGED TEAMS TO RESOLVE KEY ISSUES AND OPPORTUNITIES. THE MAKE-UP OF SUCH TEAMS INCLUDE FUNCTIONAL PEOPLE, INDUSTRY SPECIALISTS AND IF APPROPRIATE TO THE TOPIC, CUSTOMERS AND RELATED ASSOCIATION PEOPLE (EX. BANK OF NOVA SCOTIA)

- DEVELOP GREATER SPAN OF CONTROL (RESPONSIBILITY AND ACCOUNTABILITY) WITHIN THE INDIVIDUAL EMPLOYEE AND SPECIAL EMPHASIS TEAM (EX. PROV. OF ONTARIO, WOOD-GUNDY, PRICE-WATERHOUSE)

- ALLOW EMPLOYEES AND TEAMS THEIR INPUT TO THE STRATEGIC DIRECTION, GOALS AND OBJECTIVES SETTING PROCESS. IN DOING THIS EACH INDIVIDUAL DEVELOPS HIS OWN PERSONAL OBJECTIVES IN LINE WITH THE DEPARTMENT OBJECTIVES AND GOALS (EX. SALOMON BROTHERS, U.S. DEPT. OF COMMERCE)

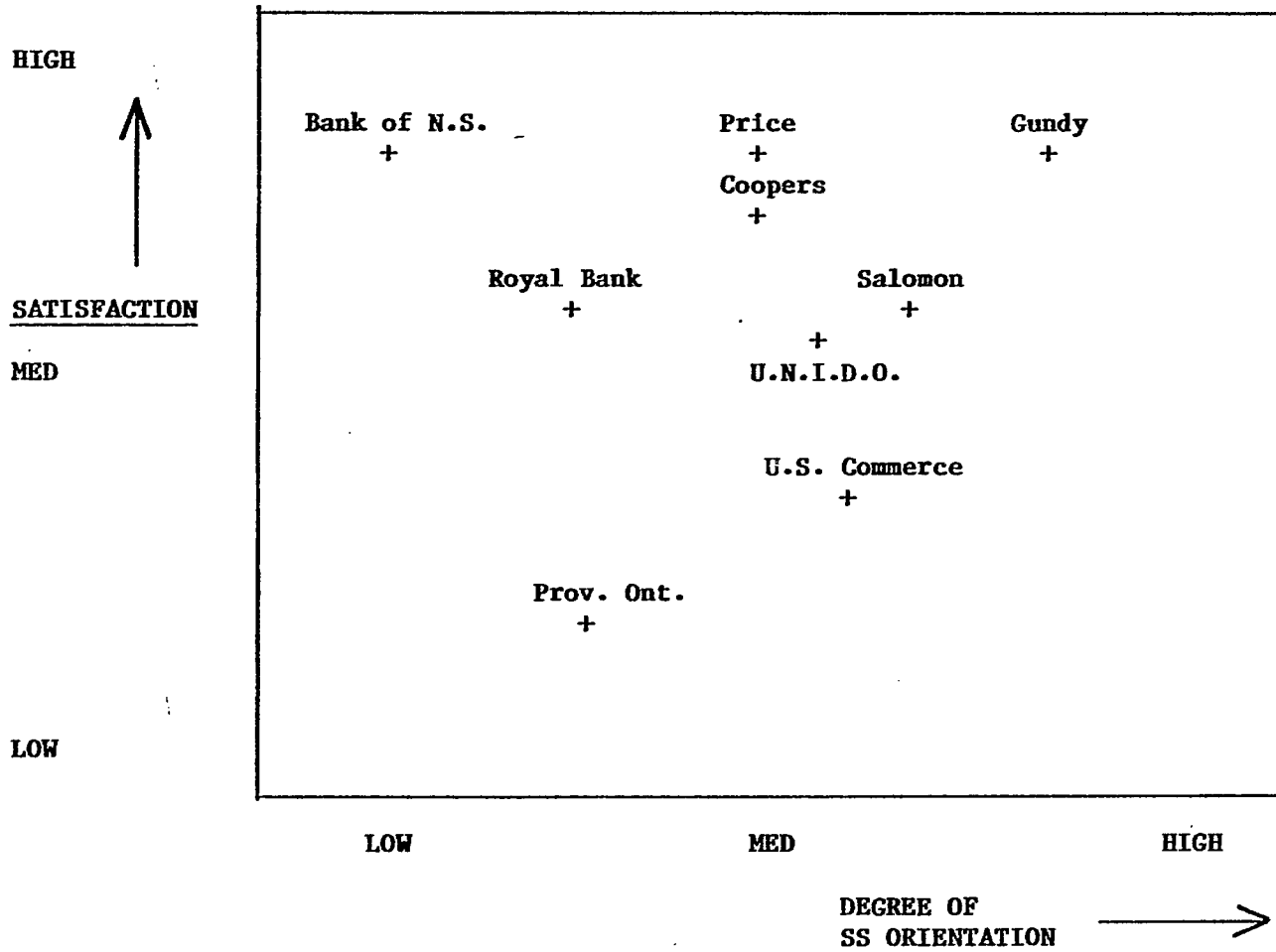
- PROVIDE SPECIFIC TRAINING TO ALL EMPLOYEES THAT WILL DEVELOP FUNCTIONAL AND BUSINESS ORIENTED SKILLS, IN SUPPORT OF LINE ACTIVITIES (EX. PRICE-WATERHOUSE)

RECOMMENDATIONS SPECIFIC TO THE SECTOR SPECIALIST

- DEVELOP A CONTINUOUS PROCESS THAT WITH TIMELY INFUSION OF NEW PEOPLE OR BY CROSS-TRAINING, ALLOWS CONSISTENCY AND QUALITY OF EFFORT AND PRODUCT TO FLOW OUT TO THE INDUSTRY (CLIENT) THROUGH THE SECTOR SPECIALIST (EX. U.S. DEPT. OF COMMERCE)
- DEVELOP SECTOR SPECIALISTS IN KEY (STRATEGIC) SECTORS AND INDUSTRY GENERALISTS FROM FUNCTIONAL STAFF TO MANAGE OTHER SECTORS AND PROJECTS (EX. BANK OF NOVA SCOTIA, PRICE-WATERHOUSE)
- DEVELOP SPECIALISTS FOR KEY SECTORAL AREAS AND HAVE THESE PEOPLE LOCATED IN H.Q. AND THE APPROPRIATE REGIONAL OFFICE WHERE SECTOR ACTIVITIES ARE GREATEST (EX. BANK OF NOVA SCOTIA)
- BOTH SPECIALISTS (H.Q. AND REGIONAL) WORK TO ESTABLISH POLICY
- CREATE A FLUID NETWORK BY WHICH THE SS IS ACCESSIBLE TO ALL SECTOR CLIENTS DIRECTLY OR THROUGH A WORKING RELATIONSHIP WITH POSTS, REGIONAL OFFICES AND ASSOCIATIONS/UNIVERSITIES. (EX. U.S. DEPT. OF COMMERCE, U.N.I.D.O., PRICE -WATERHOUSE)
- THE SS MUST REMAIN VISIBLE AND ACTIVE IN INDUSTRY TO PROVIDE CREDIBLE INPUT TO THE DECISION MAKING PROCESS OF KEY PLAYERS. ASSESSMENT OF PERFORMANCE OF THE SS BY THE EMPLOYER IS BASED UPON HIS PRESENCE AND EFFECTIVENESS IN INDUSTRY AND WITH CLIENTS (EX. PRICE-WATERHOUSE)

- WHILE THE SS MUST BE KNOWLEDGABLE OF SECTOR AND INDUSTRY CLIENT ACTIVITIES, THE ROLE OF THE SS MUST EXPAND TO INCLUDE A BUSINESS CONSULTANCY ROLE. FORMAL TRAINING TO ACHIEVE THIS NEW LEVEL OF EXPERTISE MUST BE SUPPORTED BY THE DEPARTMENT TO BE ACCOMPLISHED QUICKLY AND EFFECTIVELY. MAINTAINING THIS KNOWLEDGE BASE AND COMPETENCE IS THE RESPONSIBILITY OF THE SS (EX. WOOD-GUNDY)
- SECTOR SPECIALISTS CAN IMPROVE THEIR KNOWLEDGE AND EFFECTIVENESS THROUGH INDUSTRY EXCHANGE PROGRAMS OR SHORT TERM REGIONAL OFFICE OR POST DUTY (EX. U.N.I.D.O.)
- SECTOR INTELLIGENCE GATHERING IS THE MOST IMPORTANT INPUT TO THE DEPARTMENTS SUCCESS. TO SUPPORT THIS PROCESS AND THE QUALITY OF OUR PRODUCTS AN INTERNAL MANAGEMENT INFORMATION SYSTEM TO COLLECT AND DISSEMINATE DATA MUST BE ESTABLISHED WITH H.Q., WITH TERMINALS AT REGIONAL OFFICES AND POSTS. A FULL TIME SUPPORT GROUP ASSEMBLES AND PACKAGES DATA AS DIRECTED BY THE SECTOR SPECIALIST. (EX. U.S. DEPT. OF COMMERCE, BANK OF N.S.)
- THE SECTOR-SPECIALIST MUST TAKE ON AN ENHANCED LEADERSHIP ROLE IN INDUSTRY AND ASSIST LARGE AND SMALL FIRMS WITH TECHNOLOGY DEVELOPMENT, MARKET NICHE EXPLORATION AND NEW OPPORTUNITIES FOR IMPROVED COMPETITIVE POSITION. (EX. PROV. OF ONTARIO, U.N.I.D.O.)

PERCIEVED COMPANY SATISFACTION RESULTING FROM SS ORIENTATION



SECTOR SPECIALIST STUDY

An interview process with key companies from the banking, financial services, management consulting communities as well as other government agencies, was prepared so that senior level people within those organizations might give us their views to a host of specific questions related to the topic of Sector Specialists.

In general an understanding of what sector specialist means to the company in the way of:

- ° His role and focus within the organization
- ° Expectations of both his employee and client as he occupies the role of Sector Specialist;
- ° Methods employed to maintain the "specialist" rating; and
- ° Products produced and assessment of his contribution.

From the management consulting area, Price Waterhouse and Cooper-Lybrand were visited. From the banking community, Bank of Nova Scotia and the Royal Bank were interviewed. From the investment houses, Wood-Gundy and Salomon Brothers were approached. Finally, from government, the Province of Ontario, U.S. Department of Commerce and United Nations Industrial Development Organization completed the list of contacts made.

EXECUTIVE SUMMARY

Background

The findings from interviews conducted with private sector companies and other government bodies regarding the capacity and development of sector oriented people, formed a sound base of understanding and confidence for the need and value of a specialized resource pool to support the objectives and goals of the organization.

From this work a number of common themes surfaced that form an important building block for our new organization to consider during the change process.

Common Themes Extracted From Interviews

- ° Many firms are struggling to define the scope of the business they are in and that which they want to persue in the future. With that resource requirements are being reviewed and directed in more strategic fashion. Ultimately product rationalization and expectations of people are challenged and if need be, altered to meet corporate goals and objectives.
- ° This change process is putting significant stress and anxiety within organizations and the need for clear and concise corporate direction to sustain order and growth, is high.
- ° To accommodate change, senior management recognizes the need to be as close to their employees as they must be to their clients.
- ° Success in the market place is dependent on the ability of well organized business teams to focus their resources and strengths on select market opportunities providing differentiated products and services of highest quality. Specialty areas are discovered by developing the knowledge and skill base within the organization or by acquiring the information through industry contacts or consulting firms.

- ° Most firms are developing strategic plans to allow them to focus their strengths in specific areas. Consequently specific skills in people are being developed to deliver well designed products and services (sector specialist).
- ° Sector specialists are typically well known in the industry and interface with the key players routinely, providing advanced skills and services to both the client and employer sufficient to promote both organizations.
- ° To achieve the goals of strategic planning larger corporations are developing small pools of specialized sector resources with broad and varying span of control and responsibility depending on the opportunity being pursued.

Conclusion - An Industry Perspective

- ° Develop some sector specialization within strategic sectors, at headquarters.
- ° Develop strong working links with that group to industry, regional offices and associations.
- ° Develop the sector specialist to include a business consultancy capability and role.
- ° Develop an environment where the SS can utilize his skills and knowledge to enhance his credibility with industry and associated clients.
- ° Strategic direction of the organization and knowledge of corporate goals and objectives must be clearly understood by the SS and supporting groups before the quality of effort and final product is consistently competitive.

- ° An environment that recognizes meritorious work will also foster radical thinking providing entrepreneurial spirit and break through solutions to unique opportunities.
- ° The SS must be customer oriented and market focussed to remain competitive with the products offered.
- ° To be effective, the SS requires a properly managed information base that is continuously updated and improved.
- ° To meet the requirements of industry, the SS must be outputs oriented.
- ° Create an environment that continues to attract highly motivated and knowledgeable people able to practice what they know best.
- ° Maintaining and improving the capabilities of the sector specialist is the responsibility of the individual but is supported by the organization.
- ° The task team approach utilizing the matrix organization will provide higher quality products and maximize the effectiveness of human resources applied to an opportunity.

U.S. DEPARTMENT OF COMMERCE

International Trade Administration - U.S. and Foreign Commercial Service

This group pays particular attention to developing export opportunities for small to medium sized companies in the U.S. Very specific skills developed within the sector expert in Washington, allows the district office to draw upon those services on behalf of the client. Experts follow the major projects and play an active role with the regional office and client and in addition, will critique the opportunity for market potential, cost comparison to competitive offerings, giving a clearer picture of competition and expected performance in the world market. Recommendations are a key product of the sector specialists work and carry significant weight in the region.

Many of the services prepared by the Department are designed to be cost recoverable and are thus purchased by the client. (ex. T.O.P. - Trade Opportunity Program, HOT TOPS, Agent and Distribution Services.)

Sector specialists are well educated, industry experienced people who have in most cases developed significant credibility in their field. The Department believes the job of remaining an expert should be shared and with that the specialist is given time and budget sufficient to attend shows, seminars, be active in the field through client visits, association papers and development sabbatical periods. In return the specialist must contribute to his development by staying on top of key industrial aspects of his sector including latest technologies, key players and business activity. Other government programs to support individual development include short term post duty, exchange with industry and higher education.

While the sector expert is often pre-occupied with administrative paperwork and project management (up to 80 per cent of his time), the demands of the field offices and clients take priority; with that the specialist is given proper staffing to support those efforts and substantial data base properly manned to enable quick access and manipulation of accurate and timely data.

The sector specialist at headquarters is also referred to as the country desk expert and plays a major role in policy development.

For the most part these people are self-motivators but it is also recognized that the reward and recognition system is not ideal for the creation of an improved working environment and attitude.

Assessment of his value and worth is described as difficult but management relies upon significant and measurable results contributing to specific industrial development and input from district offices and industry groups to form an opinion.

Investment Houses

Investment houses provide specific products and services to the retail and institutional markets. Both groups of clients have presumably, cash pools from which to draw and invest for short and longer term returns.

While investment houses act as counsellors and facilitators to their clients, their products range from information and supporting arguments regarding a particular group of investment options, advice on specific investment vehicles and finally development of the specific vehicle to best match the capabilities and expectations of the client.

Most investment houses have two categories of people (research and sales) that interact with industry and client and in doing so, deliver the products designed for the client. Research people are highly educated (masters and doctorate most common) with 10-15 years of industrial experience. These people are hired based on their specialty and pre-established credibility in the field. To remain knowledgeable and competitive with their field, researchers routinely maintain their contacts with senior management across an industry.

Research people are paid a salary plus a bonus and are driven by the quality of their research and product since both contribute to the credibility this individual needs to survive.

The commissioned sales person acts as a facilitator (the conduit) of information and relies heavily on the products and services of his company, most notably the quality of the research. Sales people are well educated and have 3-5 years experience in industry. They deliver research and acting as an agent sell stock equity to the public or underwrites on behalf of the corporation. These people are driven by deals and judged by the results of the stock purchase sale to the client. This group has a high burn-out rate and consequently a steady flow of young high energy performers.

Most investment houses are offering fundamental training in functional areas and some are initiating specialized training programs (ex tax counselling). For the most part, training is focussed on the researcher to enhance the depth and quality of the range of products offered by the investment house. In addition to this approach, the bulk of the responsibility for skill and knowledge base development, rests with the individual. As a result many personal hours are spent in extra reading and outside courses. As well the researcher is active with industry associations and contributes routinely with papers and articles for wide distribution.

The outputs of both the research and sales person are easily and often monitored. The sales person's efforts are measured by the amount of incoming revenue he generates annually. The researcher (and the institutional sales person) is measured by the number of call backs and purchases from the client which are a direct measure of the quality of the product offered. In addition frequent polls are taken within the investment house community that rank companies and people with which both pieces of information are then widely distributed.

Whether it is the researcher focussed on the industry clientele or the sales-person primarily paying attention to the retail market, both are geared to produce measurable and saleable results enhancing the earnings of the client and investment house while extending the value and worth of themselves in the market place. Both are brought together to work with the client in formulating a deal.

United Nations Industrial Development Organization (U.N.I.D.O.).

U.N.I.D.O., an independent agency of the United Nations, has headquarters in Geneva and with offices strategically located world wide, raises awareness to the potential industrial development opportunities that exist in any one of its member states.

With 145 member states represented, the network for information and technology flow between members and to affiliated organizations and private sector industries and groups, is massive with strong and effective linkages to each.

Representation in all of the key industrial sectors is dependent on the geographical location. Sector specialists and expertise are developed at Geneva and respond to the specific enquiries from the field offices, by developing the logic and supporting arguments to support an opportunity. Specialists are trained to provide the regional office with a business perspective in addition to sourcing a technology and possible partners suitable to the project.

Sector specialists tend to pay attention to development within their own area and are motivated by the challenge to explore and contribute to the ideas and queries that come in from the field. Specialists are often seasoned and well educated professional people who enjoy living and working in Geneva, travelling and acting as a consultant to projects and business proposals. Recognition for meritorious effort is not properly addressed in the opinion of U.N.I.D.O. and no hopes for improvement were offered.

Ministry of Industry, Trade & Technology (New York Office)

Primary focus of this provincial department is investment and development of opportunities in Ontario with Canadian or foreign partners and technologies. Of lesser importance to M.I.T.T. is trade development.

Relative to the "Industry" component, the provincial office maintains specific contacts with the strategic manufacturing industrial groups to ensure their competitiveness globally. Within Queen's Park there are 14 sector people who work closely with the 18 Ontario and 6 U.S. offices.

Each sector officer has basic knowledge of the sector he represents but because he may also carry many smaller sub-sector responsibilities, his knowledge and effectiveness with any one specific sector is diminished. The officer maintains strong industry contacts and relies heavily upon the network within government (provincial and federal) to keep himself knowledgeable of key industry issues.

In the near term, this government will be dedicating more of its energy to developing its people in more sector specific tasks with the skills necessary to encourage successful investment. To be supportive of their client needs, M.I.T.T. sector people will be developed to have a good working knowledge of the competitive technologies available world wide. To support this, a more elaborate information-intelligence base will be established together with stronger more active links to the posts and associated business communities they represent.

Currently, M.I.T.T. specialists are motivated and assessed on the volume of business opportunities and the involvement they have with key industrial players in Ontario. The demand for business oriented people with industrial experience will continue to grow and with that a recognized need for a more comprehensive reward and recognition package to attract and maintain the best people.

BANKS

Corporate Banking

While the primary function of the corporate bank is to arrange financing for their corporate clients, the more aggressive banks are taking an entrepreneurial approach to packaging the key components of a business deal for the client. With a future outlook to an industry or business, these groups are involving themselves with specific sectors, developing their own intelligence of technologies employed, the key players and the tactics required to fulfill a successful business arrangement. The role of the corporate bank in this business environment is growing with each business venture and with that the need to establish sector knowledge and expertise with practice in joint venture and timely risk assessment.

Corporate banks are engaging their resources primarily with the larger corporate clients (top 500) who are capable of extending themselves and supported by substantial human resource pools able to ride out the up-front costs associated with major business ventures.

The primary human resource pool within the Corporate Bank is a mixture of accounting and business degree professionals. While these people do not carry specific industry experience, their changing role within the corporate bank demands they enable themselves to be quickly brought up to speed with a client, that industry and the value of the particular business opportunity. Where appropriate sector expertise will be called upon from within the bank (if it exists) or from industry at a cost. As the banks continue to focus on specific sectors (gold mining, forest products, cable television, movie business) some sector specific expertise is being developed on a full time basis. This approach is designed to enhance the timeliness and quality of product the bank can offer the client, while maximizing returns for the bank.

Client managers and representatives are deals oriented and motivated by the size of the deals and the time to completion. These people rely heavily on the resources they can acquire from within and maximize the potential of

regional offices and the internal computerized (rapid notification system) network that displays potential business opportunities brought in from the field daily.

People are assessed and rewarded based on the size and number of deals secured each year plus the image and presence they display within industry. Of particular interest to the bank is whether they are made aware of a business opportunity "first or fifty-first".

Development of corporate banking people follows typical in-house programs but the bank recognizes the shortfalls of these programs in creating a competitive group able to advance the bank's role in business. However, the role of remaining knowledgeable and in touch with activity in market place rests with the individual alone.

International Trade Development

Specific focus to trade development of the banks usually means short term export opportunities development for small to medium sized businesses. Often shown in the form of export financial assist programs, the off the street client relies on the bank to be quick and responsive to the needs of the smaller company. Since the measure of banking success in this area is the number of deals and the amount of revenue created, the trade development officers is rarely knowledgeable of the specific client sector and will make decisions based on the clients debt, assets and profitability situation together with some risk management applied for the particular opportunity.

The officers are usually young commerce or business graduates and in most cases will work in an area for 2-3 years before moving on with the bank and their development. The transient approach does give the industry client some difficulty since developing a track record with the same officer is not possible creating some frustration for the client in re-establishing credibility with a new officer.

While the regional trade development officer acquires some industry knowledge and an appreciation for the business climate through his clients, more formal banking related training is available to him at headquarters where many spend some time in their developing years.

Trade development officers are driven by the quantity of business deals they can acquire and their performance is judged on the basis of their exposure in industry and the results of their work (bottom line).

Most investment houses are offering fundamental training in functional areas and some are initiating specialized training programs (ex tax counselling). For the most part, training is focussed on the researcher to enhance the depth and quality of the range of products offered by the investment house. In addition to this approach, the bulk of the responsibility for skill and knowledge base development, rests with the individual. As a result many personal hours are spent in extra reading and outside courses. As well the researcher is active with industry associations and contributes routinely with papers and articles for wide distribution.

The outputs of both the research and sales person are easily and often monitored. The sales person's efforts are measured by the amount of incoming revenue he generates annually. The researcher (and the institutional sales person) is measured by the number of call backs and purchases from the client which are a direct measure of the quality of the product offered. In addition frequent polls are taken within the investment house community that rank companies and people with which both pieces of information are then widely distributed.

Whether it is the researcher focussed on the industry clientele or the sales-person primarily paying attention to the retail market, both are geared to produce measurable and saleable results enhancing the earnings of the client and investment house while extending the value and worth of themselves in the market place. Both are brought together to work with the client in formulating a deal.

Management Consultants

Consulting houses are best organized to examine industry, marketing/management and client issues, problems and opportunities. Acting as a special emphasis team, they will for a fee and on a project basis focus their resources to enhance the productivity of the client.

As specific products the management consultant will provide research sufficient to make recommendations that are intended to resolve the issues at hand. Further, implementation of those recommendations might also be a product of the management consultant if the scope of the project is described as thus.

With some industries maturing and the advancement of newer technologies and specialty niches being pursued, the mix of clientele for management consulting houses is changing. Selective focussing into some industries (e.g. Financial Services, Health Care, Forest Products), is providing more lucrative opportunities for consultants and with that changing requirements of the people they employ. In addition more functional services are being prepared and offered to the client including value of money analysis, executive search and out-counselling.

Management consultants are well educated and most often MBA professionals with 3-5 years of industry experience. To satisfy the client and meet his demands, the consultant must be able to adapt quickly to the clients situation understanding the pertinent details sufficient to enable him to talk the language and prepare a logical business approach with recommendations to meet the opportunity in a time-frame that is often tight.

Some consulting houses are developing their functional people to sector specialized activities (functional auditors new developing marketable auditing counseling skills for these clients) or are acquiring those with very specific skills and knowledge background. Some of the larger houses are developing more presence within key growth sectors and with that developing sector specialization within their people.

While this group of people is highly motivated from within themselves, the pace and competitive environment within the consulting market is one that sees many consultants make career changes at about 45 years of age.

Management consulting houses are beginning to invest more in the development of their people and offer a menu of internal courses and seminars designed to enhance their basic skills and provide them the fundamentals of specialized services. In addition the companies place considerable responsibility upon the consultant to contribute to his own development through outside courses, industry reading and establishment of knowledge sources of information from within industry.

Assessment of a management consultant follows a rigorous examination of many aspects of the individuals work and business skills especially those displayed to the client. Of particular interest are skills and results associated with managing a project (including budget and human resources) to completion, promotional work, clients acceptance and implementations of the consultants recommendations and generation of new work for the firm. In addition a measure of the consultant's image in the industry is sought and contributes to the overall performance evaluation process.

APPENDIX

SCOPE FOR DISCUSSION

- To determine how the source monitors, analyses and reports on industrial sector
- What is a commodity product specialist, his (her) function, kinds of analysis and for what purpose, kinds of clients and advice, and reports produced
- Background and experience required
- Are they grouped by functional specialty (e.g. marketing finance or by industry grouping
- What networking is done, daily contacts/purposes
- Sources of intelligence
- Publication, consultancy, trade and data sources
- Review and outlooks produced on specialty basis i.e. R&D trends, technology changes and impacts
- Interaction with the organization, branch offices etc.
- Purpose is to develop alternative concepts on the general subject of sector expertise or analysts and specialists

EARLY THOUGHTS ON SECTOR SPECIALIST ANALYSIS

- ° What range of products are supplied by company?
- ° How are those products produced and by whom?
- ° Who is the recipient of those products and how are they delivered?
- ° How is the quality of those products measured?
- ° How does your company interact with your clients and on what frequency?
- ° Are your representatives (officers) specialists or generalists?
- ° Pros and cons for either category.
- ° What are the objectives of the officers (and how are those objectives viewed by the clients) and for what is he accountable?
- ° How does the officer relate within the organization structure (district vs head offices)?
- ° What is his role and relationship with that structure and the client? (scope, job description)
- ° What process is available for the officer to upgrade his knowledge and skills?
- ° When is strategic sector analysis derived and how? What role does the officer play in this effort?

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PURPOSE OF EXTERNAL VISITS

TO DEVELOP AN UNDERSTANDING OF THE ENVIRONMENT IN WHICH PRIVATE SECTOR SPECIALIST UNDERTAKE THEIR BUSINESS AND ACHIEVE THEIR OBJECTIVES.

IN A WAY THAT

- ILLUSTRATES THE DIFFERENCES THAT EXIST BETWEEN OURSELVES AND OTHERS
- HIGHLIGHTS ALTERNATIVES WORTHY OF OUR CONSIDERATION

SO THAT THE DEVELOPMENT OF NEW DEAPRTMENT (D.I.S.T.) WILL BE GIVEN EVERY CHANCE FOR SUCCESS SINCE THE DEVELOPMENT OF ITS' PEOPLE IS UPPER MOST IN OUR MINDS.

PRODUCTS

(AN UNDERSTANDING OF THE PERCEPTION
HELD BY THE SECTOR SPECIALIST)

- CORPORATE DIRECTION
- AVAILABLE CORPORATE RESOURCES
- COMPANY PRODUCTS AND SERVICES
- ROLE WITHIN THE COMPANY
- CORPORATE EXPECTATIONS OF SPECIALIST
- HIS SPECIFIC PRODUCTS IDENTIFIED
- RELATIONSHIP WITH OTHERS INTERNALLY
- RESPONSIBILITY FOR PERSONAL KNOWLEDGE BASE
- CUSTOMER EXPECTATION OF SECTOR SPECIALIST
- METHODS OF CUSTOMER INTERACTION
- ASSESSMENT OF QUALITY OF EFFORT
- INNOVATIVE TECHNIQUES TO REMAIN COMPETITIVE
- PERSONAL MOTIVATION

EARLY ANALYSIS

- HIGHLY SKILLED PEOPLE ATTRACTED TO THESE COMPANIES PRIMARILY TO PRACTICE WHAT THEY KNOW BEST AND FOR MAXIMUM PERSONAL REWARD
- VERY LITTLE INTERFERENCE IN DOING THAT JOB (BROAD SPAN OF CONTROL) AND FOR THE MOST PART OPERATE ON THEIR OWN
- RESOURCE BASE WITHIN THE VARIOUS COMPANIES IS SOUND AND KEPT UP TO DATE (DAILY IN SOME INSTANCES)
- MAXIMUM CREDIBILITY OF SECTOR PEOPLE THE LIFE BLOOD OF THE COMPANY
- RESPONSIBILITY FOR PERSONAL EFFECTIVENESS SUPPORTED BY THE COMPANY IN SOME INSTANCES, BUT CLEARLY REMAINS WITH THE SPECIALIST
- CORPORATE EXPECTATIONS OF THE SPECIALIST EXTREMELY HIGH (STATUS QUO NOT TOLERATED)
- SPECIALIST HAS A CLEAR UNDERSTANDING OF CORPORATE DIRECTION AND THIS OFTEN MATCHES HIS OWN

ORGANIZATIONS INTERVIEWED

Bank of Nova Scotia	Exec - V.P. N.A. Corporate Banking Bruce Burmingham
The Royal Bank of Canada	Manager International Trade Keith Middelton
Wood-Gundy	V.P. Training Rick Smith
Price-Waterhouse	Partner Ted Netten
Coopers-Lybrand	Partner John Farrow
Salomon Brothers	V.P. Bernard Picchi
Province of Ontario	Director Eastern U.S.A Desmond Benfield
United Nations Industrial Development Organization	Director Bob Justice
U.S. Dept. of Commerce	Director Alan Neuschatz

SECTOR EXPERT (SPECIALIST) STUDY

Discussion/Documentation - Terms of Reference

INTRODUCTION

The ITC/DRIE industry sector specialists have traditionally been the main source of industry sector knowledge, intelligence and expertise for the department and for the federal government. While there has always been an informed or reasoned advocate role expected of the "industry" department, in recent years and as proposed for the new Department of Industry, Science and Technology, this client relationship has and is expected to have continuing and greater importance. A primary activity of the new department stated in the DIST Task Force documentation is: the systematic development and maintenance of comprehensive intelligence on industry, science and technology developments in Canada and worldwide.

BACKGROUND

On October 28th, Regional Executive Directors made presentations on proposed provincial centers of Industry, Technology and Trade. The general basis for the organizational structures were group activities which centered on key or important industrial sectors in each province. Additional support for these sectoral groupings would come from trade, technology and investment and other functional specialists.

The discussion among the Regional Executive Directors, ADMs and the Deputy Minister on industrial intelligence and industry sector knowledge concentrated on a common concern over the question of industry sector expertise or specialization, as follows:

- ° What is a sector specialist?
- ° What are the linkages for a sector specialist to perform his or her functions well?
- ° If you are a sector specialist - what are the special relationships and roles you must establish with your clients and is this dependent upon where the client is and where the product is produced?
- ° How does a sector specialist inter-act with his or her peers, (i.e. others with special knowledge of the industry sectors) and how is this technical or specialist excellence maintained?

Mr. Rogers agreed with the ADMs and RXDs that a working group would be established to examine in more detail this question of sector expertise or specialization. At the suggestion of Mr. Mackay the investigation would focus on sector specialist CO2s and CO3s.

OBJECTIVE

To develop working definitions and descriptions on sector expertise or sector specialization, the associated functional support requirements, roles and relationship between specialists in headquarters and provincial centers of ITT from a DIST mandate and mission perspective.

Questions For Consideration In Sector Specialist Interviews

1. - How would you define a sector specialist (SS)?
2. - What is the role of an SS?
3. - What should be the role of an SS?
4. - How important is formal training?
5. - How important is private sector experience?
6. - What would be the ideal background for an SS?
7. - What should be the minimum acceptable qualifications?
8. - What is your background?
9. - How do you maintain sector knowledge?
10. - What percentage of your time do you spend on maintaining sector knowledge?
11. - How frequently do you consult with industry?
12. - What other sources do you use?
13. - Is the Division adequately staffed?
14. - What is the availability of specialized support groups such as financial analysis, etc., within the Branch/Department?
15. - How can you/could you make more of your sector knowledge available to others for such things as policy development?
16. - What are the major impediments to your doing a better job as a sector specialist?
17. - Are you satisfied with your prospects for advancement, if not how could things be improved?
18. - How much consultation has there been with regional offices on sectoral issues?
19. - How could things be improved?
20. - In what way could regional sectoral expertise be helpful to you?
21. - Is private sector experience important to ISB management? If so, what kind and to what level of management?
22. - What should be the role of the SS in the DIST Mission objective of "encouraging the development and effective application of new technologies"?
23. - What kind of programme is required by DIST (to replace IRDP) to achieve the Mission objective? Should the programme be aimed at companies, universities, industry/university consortia, etc.?

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