

STRATEGIES FOR LAND DISPOSITION AND MANAGEMENT RESULTING
FROM PORT DEVELOPMENT PROPOSALS IN THE AREA
OF KING POINT, YUKON

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Disclaimer

The views and opinions contained in this document are entirely those of the author and should not be taken to represent policies or positions of the Department of Indian Affairs and Northern Development, any other department or agency of the federal or territorial governments, or any other interest group or organization.

FOREWARD

This document was prepared under contract from the Department of Indian Affairs and Northern Development. The scope of the work requested covers the factors and issues that would limit or define DIAND's ability to manage the development and operation of a port in the north. Inasmuch as this issue has been the subject of considerable study over the past few years, a conscious effort was made not to duplicate such work. Both the funding level and the deadlines for the project precluded anything more than a brief review of such past work.

The purpose of this report was to bring together all the relevant factors and constraints - most of which had been identified in the past - and from them formulate recommendations on how DIAND might deal with the issue of port development on the Beaufort Shore. Legislative, regulatory and policy options and constraints were examined along with physical and environmental factors. From this a series of critical issues were identified and used as the basis for assessing the current Monenco/Interlog development proposal. The assessment concluded that the proposal as presented was unacceptable due to the area of land and lease term requested.

The overall conclusions of this report however, do suggest that DIAND should support private sector port development on the Beaufort Shore in King Point area. Several recommendations are made to assist DIAND in its task of defining its role and controlling or managing the development process so as to ensure all legitimate concerns and interests are met. The recommendations do not anticipate DIAND being directly involved in the provision and management of port facilities or infrastructure.

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I BACKGROUND

Over the last ten to fifteen years, studies and on-site data gathering have confirmed that year round shipping in the Canadian Arctic is not only feasible, but may in fact become a reality. There is some agreement that initial hydrocarbon production wells may have their product moved by ship until production volumes and price are sufficient to support pipeline transmission. Some of the wells in the Mackenzie delta area may have sufficient production volumes to justify a small diameter pipeline from the beginning. Significant future shipping volumes are likely to require deep draft (up to twenty meters) vessels, although medium draft (up to twelve meters) may be used initially or for small volume operations. Depending on the volume of production, the cost of port facilities and other factors, medium draft vessels may be able to provide adequate levels of service for a relatively long period of time.

Such vessels cannot currently be handled on a regular basis at existing port facilities in the western Arctic. Tuktoyaktuk serves as the primary operational port for western Arctic petroleum exploration activity and for resupply along the western Arctic coast. Its location in the delta of the Mackenzie River severely limits its usefulness as a medium or deep draft port. Within the harbour itself, depths range from five to twenty-two meters, which with sufficient dredging would likely permit access by medium and deep draft vessels. A far more serious limitation is the extensive, shallow continental shelf beyond the delta. Average depth of water up to 18 kilometers offshore is only six meters, making the cost of constructing and maintaining a dredged approach channel up to twenty meters deep prohibitive. McKinley Bay is currently used for support to exploration in the eastern half of the Beaufort area, and may be used to support future exploration or production in that area.

As early as 1973, in response to Alaska offshore petroleum development, and later to Canadian offshore exploration, the Beaufort shore has been examined by governments and private corporations to identify potential medium and deep draft port locations. At least seven such studies have been undertaken all of which identify the King Point area as one, if not the best, location. Herschel Island, Stokes Point and McKinley Bay have been identified for short term, medium draft potential, but, as will be noted in more detail later, none of these are appropriate for long term deep draft operations.

Port development discussions for the western Beaufort have been hampered by two factors - a general lack of detailed environmental, wildlife and geological information, and a long-standing desire in some quarters to see as much of the Yukon north coastal wilderness as possible preserved in its natural state. There has been recognition

that some development will likely be required and that to the extent possible, this should be limited to one location. King Point appears to be generally accepted as the most likely candidate for this location. Figure 1 shows the location of King Point on the Beaufort Shore.

In 1978, pending resolution of native land claims and the designation of a specific park/wildlife area, 15,000 square miles of land was withdrawn temporarily from disposal under the Territorial Lands Act. Subsequently, a national park was created west of the Babbage River and the Yukon Territorial Government (YTG) established Herschel Island as a Territorial Park. Except for shallow/medium draft, limited scale, and temporary purposes, Stokes Point and Herschel Island should no longer be considered for port operations and no new significant port development west of the Babbage River will be permitted. This has left King Point as the most likely alternative for long term, deep draft port development in the western Beaufort.

In 1983 Monenco Limited and Interlog Consultants Ltd. (Monenco/Interlog) proposed the development of a single multi-user port at King Point, and subsequently updated and expanded the information in mid-1985. While no final decision has been reached to date, earlier port development proposals at Stokes Point and King Point by Gulf Canada Resources Inc. have been rejected, and a proposal by Peter Kiewit Sons Co. Ltd. is currently on hold. Recent reductions in oil prices have made industry officials reluctant to predict just when major new exploration may be undertaken, or when the production phase could begin for those fields with confirmed reserves. This in turn, reduces the pressure on the Department of Indian and Northern Affairs (DIAND) to commit itself to the developments proposed for King Point. Notwithstanding, Monenco/Interlog is still seeking DIAND approval of their proposal.

In view of the long standing interest in a permanent, deep water port on the western Beaufort shore, and the limitations imposed on several viable sites, it would seem reasonable for the Department to choose or designate a site where future medium/deep draft port development can occur, if needed by the industry. This would permit more detailed planning for specific development options to be undertaken with the knowledge and assurance that there would not likely be any unreasonable delays in DIAND approvals for the necessary leases. It seems likely that there will be a period of several years before final construction decisions will be made - thus giving time to undertake additional planning and data gathering, both by proponents of port development, DIAND and others with an interest in how the port will evolve and what impact it will have. It is also likely that a port, once established, would eventually play a role in other activities such as resupply and possibly general purpose export/import of goods through the western Arctic.

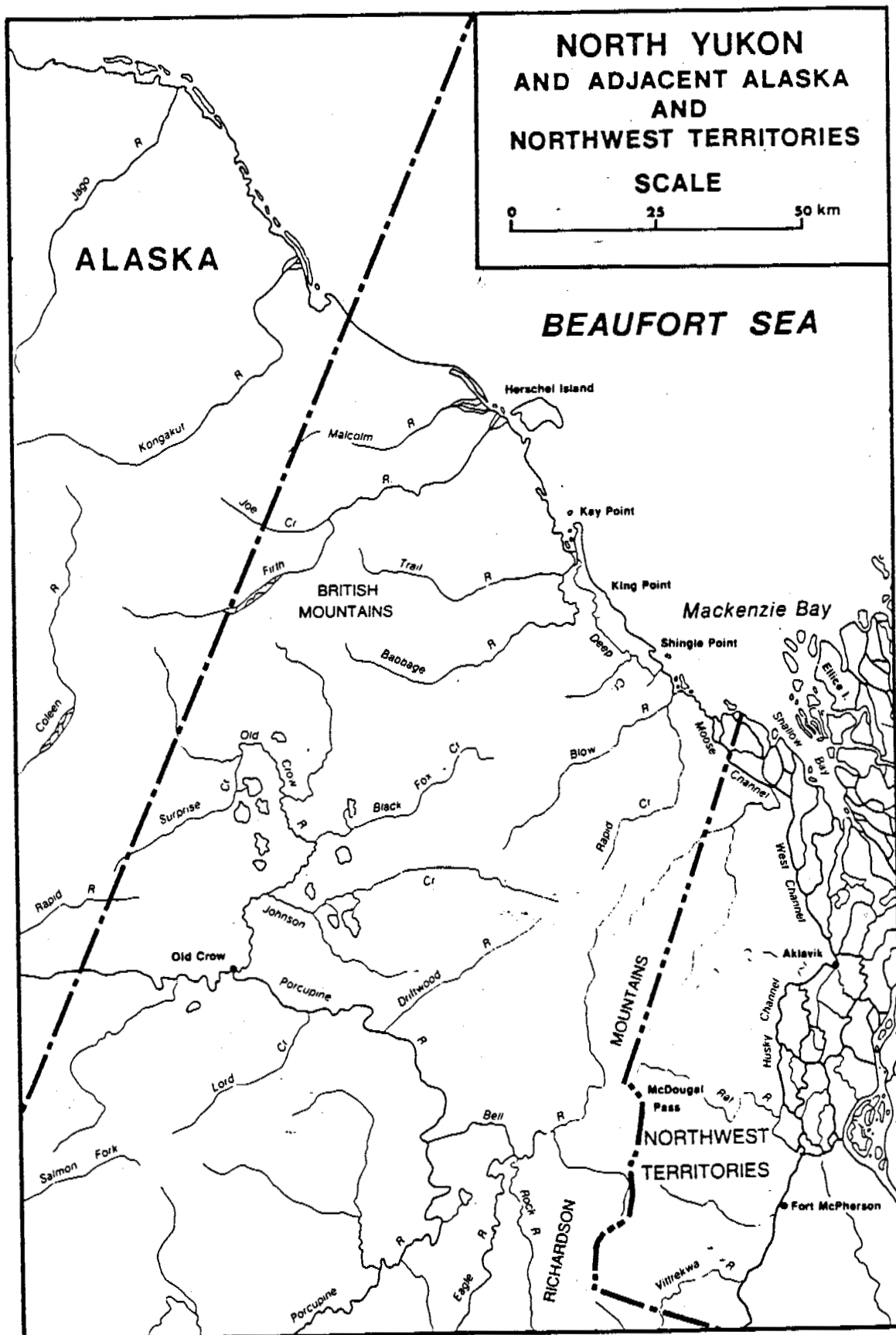


Figure 1

The ability to introduce new regulations, modify existing ones and amend or introduce legislation does of course exist. However, the review that follows concentrates on an examination of whether, and under what conditions, port development can occur without the need to adjust the legislative, regulatory and policy frameworks that exist. The examination indicates that port development on the Beaufort can take place without the need for such amendments, therefore none are proposed. The following review assumes that DIAND would generally prefer to retain control and responsibility for development in the north, including port development, providing such control or responsibility is legitimately retained.

II LEGISLATIVE AND REGULATORY ISSUES

There are several statutes and regulatory provisions that have an impact on where port development can occur on the Western Beaufort Sea shore and others which relate to the planning and management of projects of this size. The following comments are not an exhaustive review of all potential legislative and regulatory impacts, rather they are a summary of those impacts which require (or desire) specific conditions to be met. It should be noted that there are other general requirements embodied in legislation that may have to be met, but which are not specifically identified in this discussion (for example, provisions in The Financial Administration Act). A good general discussion of the legislation is contained in the "Port Policy for the Canadian Arctic Coast" by Ken Beauchamp.

The most significant legislative and regulatory obligations to DIAND are found in the Department of Indian Affairs and Northern Development Act, the Territorial Lands Act, the Western Arctic (Inuvialuit) Claims Settlement Act and the Yukon Act, all of which are administered by DIAND. The Public Lands Grants Act, which can be used by DIAND as well as most other federal departments may also be relevant, depending on the final management and land disposition options chosen. The Public Lands Grants Act is the statute used by DIAND to authorize seabed leases.

The significant port related legislation is contained in the Canada Ports Corporation Act, the Harbour Commissions Act (1964), the Public Harbours and Port Facilities Act, all administered by Transport Canada, and the Fishing and Recreational Harbours Act, administered by the Department of Fisheries and Oceans. All of these statutes permit, among other things, the making of regulations or by-laws concerning the development, operation and management of ports and concerning the setting and collection of fees for the use of ports or port facilities.

Department of Indian Affairs and Northern Development Act

This statute creates DIAND as the agency having control, management and administration of lands, water and natural resources situated in the territories except those belonging to the territorial governments, individuals or other federal departments and agencies. The Canada Oil and Gas Act (also administered by the Minister of Indian Affairs and Northern Development) establishes Canada's claim to, at a minimum, natural resources contained on Crown lands covered by water up to two hundred nautical miles from shore. Canada's administration of the offshore land is not as explicitly referenced as it is for onshore lands, therefore the disposition of waterlots for purposes other than the direct exploitation of natural resources is undertaken under authority of the Public Lands Grants Act and its accompanying

regulations (primarily the Public Lands Leasing and Licencing Regulations). Overseeing the actual exploration for oil and gas in the Arctic and elsewhere is the responsibility of the Canada Oil and Gas Lands Administration. This agency's mandate does not directly extend to port development and operation, although there could be some overlaps if a port facility was combined with one or more production wells.

The Yukon Act and the Northwest Territories Act

These statutes create the two Territories and define their roles, responsibilities and authorities. Within the boundaries of the two territories, land management outside established communities is generally the responsibility of DIAND, particularly for land development and activities with potential environmental impacts, however the YTG plays a major and essential role in the planning and development of any lands in the Yukon Territory.

Recently, discussions have been initiated with a view to delegate more authority and to transfer control of certain activities from the federal government. This has led the Yukon Territorial Government in particular to begin the process of establishing or confirming its areas of interest. It has recently undertaken the development of a comprehensive Transportation Policy for the Yukon, and is in the process of hiring a senior negotiation officer for the forthcoming discussions. In view of these facts, it will be essential to ensure that the role of the major YTG is recognized in DIAND's proposed development scenario(s) for King Point.

Territorial Lands Act

This is the key statute affecting the sale, lease or other disposition of land within the territories. A variety of regulations have been developed to further clarify the processes and circumstances under which land or surface rights can be acquired (the Territorial Lands Regulations), the land management philosophy (Territorial Land Use Regulations), or quarrying (the Territorial Quarrying Regulations).

Western Arctic (Inuvialuit) Claims Settlement Act

This statute authorizes the transfer of certain lands and rights to the Inuvialuit in recognition of their aboriginal claims, creates a new national park on lands and offshore islands between the Babbage River and the Alaska border, and establishes the requirement that development proposals east of the Babbage River, excluding offshore waters must be subject to environmental screening and review by institutions or processes established under this statute. Where a development includes significant potential risk to offshore harvesting activities of the Inuvialuit, the environmental screening process can be extended to

offshore areas, but it is limited in its scope to the impact on harvesting. This general exclusion of offshore water could in the extreme, lead to a situation in which a single development project such as a port, with breakwaters or dredged channels, would be subject to two potentially different environmental screening processes - one under this Act and one resulting from DOE requirements under the Environmental Assessment and Reviews Process (EARP). This situation should be avoided if at all possible. This Act ensures that the Inuvialuit will play a major role in any future development of lands in their settlement region.

Ports Legislation - General

The specific ports legislation is generally restricted in its application to those sites, facilities or properties under the control, management or administration of the Minister of Transport or the Minister of Fisheries and Oceans. While the latter, through the Fishing and Recreational Harbours Act does administer some "commercial" transportation facilities, these are incidental to those provided for recreational boaters and commercial fishermen. This statute has no realistic application to port development at King Point.

Any development in a navigable water that consists of structures, cables or other potential obstructions to navigation, must be reviewed and approved by the Canadian Coast Guard under the Navigable Waters Protection Act and the Navigable Waters Works Regulations. These deal with ensuring that navigable waters are not obstructed and if they are, that such obstructions are properly marked. These requirements are generally not difficult to meet and seldom, if ever, constitute an obstacle to development. Similarly Canada has agreed to apply Termpol, a review of port infrastructure to determine the potential pollution impacts or risks resulting from the provision or operation of terminals. This would be undertaken regardless of which development scenario or which department managed the port development process.

The Canada Ports Corporation Act

This statute is a recently enacted (1982) update of the National Harbours Act which enabled restructuring of the National Harbours Board. Now known as the Canada Ports Corporation, it is a Crown Corporation responsible for the management and development of fifteen ports, most of which are Canada's largest or which serve as significant gateways for exports, imports or both. The new Act permits the creation of subsidiary Crown Corporations at specific sites, provided certain operational and financial criteria are met. The Local Port Corporations (LPC's) are then delegated a portion of the parent corporation's authorities.

This provision for creating LPC's was made to reflect an intent to have a greater degree of local input, authority and responsibility at those ports able to operate largely on their own. The Act provides for the addition (or removal) of ports to the list of those subject to the Act if in the Minister's view, the management of the port would be improved. Canada Ports Corporation ports are generally required to be well-established, financially viable and of national (or at least regional) significance. The ports usually contain a mix of privately-owned and operated facilities and publicly-owned and operated facilities.

Harbour Commission Act (1964)

This general statute was passed into law in 1964 to enable the creation of Harbour Commissions without the need for an individual statute for each port. The existing individually incorporated Harbour Commissions were placed under this Act - only Toronto and Hamilton were permitted to continue their operations under their own enabling legislation. Subsequent to 1964, five additional ports have become Harbour Commissions under the Act (Port Alberni and Nanaimo in B.C. and Thunder Bay, Oshawa and Windsor in Ontario). There have been no new Commissions created since the late 1960's. The Harbour Commissions differ significantly from Canada Ports Corporation ports in two ways - first, they are not Crown Corporations as defined in the Financial Administration Act and other legislation referring to Crown Corporations, and second, the Commissioners (similar to a Board of Directors) are either three or five with the federal government appointing the majority. Unless the municipalities bordering the Commission cannot agree, the minority one or two Commissioners are appointed by the municipality(ies). These two factors provide considerably more autonomy to the Harbours Commissions than to Local Port Corporations and at the same time guarantee significant local input to the development and management of the port. Employees are hired by the Commission itself and are not public servants (as the Ports Canada employees are). The Harbour Commissions Act (1964) permits a Commission to also administer non-federal properties on behalf of provincial or municipal governments and to hold properties in its own name.

The statute was amended in a minor fashion when the Canada Ports Corporation was created, to include specific reference to a national ports policy and to specifically permit the Governor-in-Council to change the type of administration at a port or to create a Harbour Commission at any port "where there is demonstrated local interest in the management thereof and that are expected to be financially self-sufficient...". It is generally accepted that "local interest" consists of interest on the part of the (or all) municipal governments bordering the proposed Commission. It is exceedingly unlikely that a Harbour Commission would be considered at a location without a municipal government, thus it would be inappropriate for King Point.

Although both the Harbour Commission Act (1964) and the Canada Ports Corporation Act provide that a Harbour Commission or Local Port Corporation may be created at any port, and that such a body will have significant local input to its management, there is a generally accepted limit to this power. The Minister's authority to create or alter the administration of a port is limited to those ports over which the Minister has authority - thus his ability to create a Harbour Commission for example, at a port for which the Minister of Fisheries and Oceans, or the Minister of Indian Affairs and Northern Development, has been granted administration, management and control would be difficult. The question of his authority to create such a body at a private port for which no federal Minister has responsibility is not clear, although this is not a problem in the Beaufort since the Minister of Indian Affairs and Northern Development has been explicitly delegated responsibility for federal lands in the north. Section 3.1 of the Act states that "The Governor-in-Council may, on the recommendation of the Minister, by proclamation establish a Harbour Commission for any harbour or port of Canada if the Governor-in-Council is of the opinion that the establishment of a Commission at the harbour or port will enable improvement of the administration thereof." It is important to note the use of the phrase "for any harbour or port of Canada". The use of "of" rather than "in" implies that only those harbours or ports owned by, or in some way belonging to Canada will be considered. Privately-owned ports appear to be excluded.

Public Harbours and Port Facilities Act

At the time of the creation of the Canada Ports Corporation, revisions were made to the legislation governing the development and operation of ports and harbours managed directly by Transport Canada. Part XII of the Canada Shipping Act, which dealt with the creation of Public Harbours and authorized the Public Harbour Regulations, was consolidated into the Government Harbours and Piers Act which was then renamed the Public Harbours and Port Facilities Act. The Public Harbours Regulations and the Government Wharves Regulations were authorized under the new Act and remained essentially unchanged. The Act also incorporated the ports policy statement and the Minister's right to alter the administrative regime of any port. Additional regulation-making powers were created along with an authorization for the establishment of enforcement officers. In a related administrative adjustment, full program responsibility for capital and maintenance funds at these ports was moved to Transport from Public Works. The statute retained the Minister's residual port responsibility - that is, the responsibility for developing and managing ports or port facilities "... other than those that are under the control and management of ..." the Canada Port Corporation, a Harbour Commission, another Minister, or not transferred to a province or a person. The Act also permits the Governor-in-Council (on the recommendation of the Minister) to "...

terminate the application of this Act to any public harbour, if the Governor-in-Council is of the opinion that the termination will enable the improvement of the administration of the port or facility."

The Act specifically permits the Governor-in-Council to declare any area covered by water (and within the jurisdiction of Parliament) to be a Public Harbour, and the Minister to appoint at Public Harbours or Public Port Facilities, a Harbour Master or Wharfinger. The only restriction on such appointments is that the person must be qualified, in the opinion of the Minister. Further, the Minister may, for such public harbours as he designates, establish Public Harbour Advisory Councils to advise and make recommendations directly to the Minister on the development and operation of the public harbour. This provision assumes the existence of one or more nearby communities from which the members may be drawn.

The powers in the Act have been widely misunderstood and misinterpreted by those seeking to solve operational problems (such as at Tuktoyaktuk) and those seeking authorities under which port development and operation may be controlled. The declaration of an area to be a public harbour is a relatively simple exercise, although it has been several years since any new public harbours have been declared. Transport Canada does not have any approved policy on the declaration of public harbours, nor any consistent rationale for such action. A draft Departmental discussion paper suggests three possible reasons: safety (as in the control of ship movement within the harbour), management (to permit appointment of a Harbour Master), and revenue. Some of the most recent declarations (such as Nanisivik, N.W.T.; and Nanticoke, Ontario) appear to have been primarily motivated by the revenue potential from Harbor Dues.

The declaration of a public harbour initially only defines the geographic area over which the Public Harbour Regulations can be applied. The Government Wharves Regulations have not been amended to permit their application within a public harbour. The Public Harbour Regulations currently (and traditionally) only deal with issues on the surface of the water - no property rights or ownership issues arise. As the regulations exist, they cannot be used to control development within the harbours or to limit vessel operations except to such matters as speed, manoeuvring within channels, etc. The revised Act does permit much more detailed regulation making, but these authorities have yet to be exercised. There is some question as to how effective such regulations would be in controlling private development on privately held or leased land within the harbour. A much more complex question relating to the enforcement of the regulations exists. As written, the Act can only be enforced by local enforcement officers to whom the Act grants powers exceeding those available to most police agencies. This provision was introduced to the statute during a period

when it was hoped that all ports would be managed under one authority since provision had to be made to permit port police that existed at several of the larger ports to continue. Until the enforcement officer concept was introduced, the regulations were administered by Harbour Masters, Wharfingers and Departmental employees. Since the Act came into effect in 1982, no permanent enforcement officer has been appointed and Harbour Masters and Wharfingers simply collect revenue, advise users of regulations and report any contravention of regulations.

A more serious limitation on the use of Public Harbour declaration as a management tool or as a means to control port development is that Harbor Masters and Wharfingers are fees-of-office appointees. They are not employees, or public servants. They are appointed personally by the Minister, serve at his pleasure, and are legally accountable only to him - not to departmental officials. They do not receive a salary, but are instead permitted to retain a small portion of the fees they collect in lieu of remuneration. They do not have the authority to enforce regulations. Where administrative or management difficulties arise with port users, tenants or local interest groups, a regional Departmental official is required to resolve the issue. Fees-of-office appointees generally have no responsibility for lessees or for administering leases. They deal primarily with the transient users of the port.

Summary of Legislative and Regulatory Issues

The rights and obligations in various statutes guarantee the YTG and the Inuvialuit significant input to any planning and development activity on the Yukon Beaufort shore. DIAND must observe the planning processes in place for the development of territorial lands; particularly those related to land use planning; specifically, the provisions of the Territorial Land Use Regulations, and the agreements with YTG, and the affected native groups regarding federal Northern Land Use Policy. Where the necessary commission, committees or planning teams have not yet been created, they should be, or temporary arrangements made to ensure the intent of the processes is met.

In view of the past practice of the Department, waterlot leases should continue to be made under the Public Lands Grants Act, and land use permits should continue to be used where the activities proposed are temporary, or incidental to some other activity (such as construction of a road).

The Western Arctic (Inuvialuit) Claims Settlement Act has constrained the port development options by recommending the reservation of a significant area of land for National and Territorial parks, within which port development would be prohibited or severely limited in

in scope. It has further potentially complicated the decision-making process by requiring certain development proposals to be subject to special environmental screening and reviews. For consistency, the entire port development process should be treated as a unit and be subject to a single environmental screening process.

The ports legislation administered by Transport Canada is potentially useful as a tool to resolve the management issues surrounding port development at King Point, but there are two criteria that must be met, either of which is likely to be undesirable or unacceptable to DIAND. First, for the Minister of Transport to properly apply certain of the port legislation, the administration, management and control of the federal property (waterlots as a minimum and ideally, the upland required for infrastructure) should be transferred to the Minister of Transport. It is likely that there would be areas of overlapping responsibility between DIAND and Transport Canada under such a transfer, thus, if possible, it should be avoided. The ports legislation administered by Transport (particularly the Public Harbours and Port Facilities Act) only grants the Minister explicit authority over public harbours and certain port facilities. Port facilities are defined to be "... any wharf, pier, breakwater or other work or installation located in, on or adjacent to navigable waters, and including any land to which it is attached." This would appear to exclude any properties or facilities away from the water or not directly supporting the port infrastructure. Therefore, DIAND would likely have to manage the remaining upland property. Second, the extent to which Transport Canada would be able to effectively deal with northern issues, native concerns, the Western Arctic (Inuvialuit) Claims Settlement Act, the past practices, policies and expectations surrounding the development of land in the north is not clear.

III POLICY CONSTRAINTS

Policy constraints are those aspects of departmental objectives, preferences or actions that can affect a decision such as the decision to permit or not permit the Monenco/Interlog proposal to proceed. They may be based on specific government policies or objectives, on a Departmental interpretation of such statements, on specific (usually additional) policies or objectives within a Department, on interpretations of legislation, on past practices or on political or administrative needs. It should be recognized that while most Departmental policy is documented in statements or even manuals, there is a significant amount of policy that is not. The policy may be unwritten because: it is long established, well known and accepted; or because it represents a subject in transition (often with a proposed policy or a discussion paper outlining what is hoped to be approved as policy); or because the issue arises so infrequently that every case is examined individually, or because a decision has been made not to draw attention to an issue by formalizing a policy.

Within any individual department, there is usually no major confusion or difficulty generated from vague or unwritten policies. The major problem arises in situations requiring a decision based on an assessment of another department's position on an issue (a position determined by or affected by all departmental policies and objectives, including those that have not been formalized). Such problems arise in situations where more than one department may be involved in a project or activity and where an outside proponent may have to deal with more than one agency with its project. The evaluation of the Monenco/Interlog proposal and the larger question of port development and management both have such interdepartmental considerations.

For the purposes of this analysis, it is accepted that all departmental policies and objectives that apply, will be met or observed as necessary, whether they are formal or informal.

The first policy issue that must be considered is which federal department, agency or other organization should be responsible for managing the development of northern ports in general and King Point in particular. The result of this assessment will determine which agency should be accountable for approving or controlling the future operation of the facilities.

While there are several federal departments with major interests and responsibilities in the north, the matter of port development and operation could reasonably be assigned to DIAND or Transport Canada. Both have adequate legislative authority, and both have related expertise - DIAND in the needs and problems associated with the north in general and with conflicts between development needs and

preservation of the wilderness; and Transport (both in the Department and its agencies) in the development and operation of ports, port facilities, and airports.

DIAND's internal policies tend to promote private sector development and operation while those in Transport generally assume significant public sector development and operation, even though there are many private facilities at Transport Canada ports and airports. Transport Canada's general reaction to purely private facilities or ports is to permit them to develop as they wish, whether they are single user (like Nanticoke, Ontario) or serve several users (as in Port Cartier, Quebec) or are operated by a provincial or municipal body (such as ferries in Newfoundland or the port of Valleyfield, Quebec, run by a municipal corporation).

The Transport Canada ports legislation generally assumes that the Minister of Transport has the control, management and administration of the property (or at least the Federal Crown Property) within a harbour or port, even though the statutes permit the Minister to alter the administrative regime at a port or to declare an area to be a public harbour. The policy implied is that the affected federal properties would likely need to be transferred from DIAND to Transport before Transport would accept responsibility for developing a port. Without specific public facilities (provided by Transport), the Department's approach to port development would likely be that of a lessor - leasing the necessary properties to private developers for their use. Although there is no Departmental policy relating to the provision or development of associated upland properties, Transport traditionally expects that to be undertaken by the private sector. At most Departmentally-run ports, there is very little, if any associated backup land and facilities.

Three further complicating issues are affected by unofficial policies: the declaration of areas to be Public Harbours; the classification of Arctic Ports; and the transfer of a port from one administrative regime to another. There is no policy on the declaration of Public Harbours, although a discussion paper on the issue has been circulating for two or three years. Thus the Department has no consistent rationale for deciding that a specific area should be a Public Harbour. Similarly, a discussion paper proposing an Arctic Port Classification System has been circulating in which sites would "qualify" for certain facilities, equipment and staff, depending on such factors as traffic levels, sealift activity, population, etc. The rationale behind permitting the Minister to move a port from Departmental administration, Local Port Corporation or Harbour Commission status to any of the others, was based on two assumptions. First, that ports, as they develop can become capable of supporting their operations from revenue, and they can "graduate" to an administrative regime that provides more freedom, local input, etc. Second, that the Minister would make such adjustments between ports under his control at the request of the local community.

DIAND's past experience in permitting port developments at Tuktoyaktuk, McKinley Bay and Herschel Island have been reasonably successful, notwithstanding some problems that arose concerning the day-to-day operation of Tuk harbour and the potential difficulty in accommodating new users at McKinley Bay. The experience gained from these operations and the assessment (and subsequent rejection) of other port development proposals has strengthened DIAND's ability to consider and address diverse and often competing northern needs. The development of a Seabed Leasing Policy has further clarified the issues DIAND sees as important and provides an explanation of the factors that will be considered in granting seabed leases for port development. The use of the Seabed Leasing Policy, the Public Lands Grants Act and the Public Lands Leasing and Licensing Regulations in conjunction with the Territorial Land Use Regulations and the Territorial Land Regulations may be seen to be more awkward and perhaps less responsive to port development than the Transport Canada legislation. However, the combination is more comprehensive than the ports legislation and is consistent with the past private development framework used in the north, for example, in permitting development of mines with "public" or multi-user ancillaries such as roads.

Although the King Point project is port development it is primarily a private sector proposal to serve private sector users, therefore, internal policies suggest that it would be better administered by DIAND - at least until such time as federally-funded public facilities are contemplated, or the government decides to take over day-to-day management of the port. As a privately developed and operated facility, the fundamental government role will be that of lessor, ensuring government interests, objectives and priorities are considered. The role is not that of a port developer/operator. Therefore, DIAND is the proper lead department for the development.

IV PHYSICAL AND ENVIRONMENTAL ISSUES

Although considerable work has been undertaken to support preliminary site selection, there are still some factors which require additional study, such as sedimentation of dredged channels, near shore ice conditions, dredgeability of certain sediments, stability of submarine trench slopes, foundation conditions (both on and offshore) and the impact of altering the lagoon either by dredging or backfilling, for example. All are assumed to be resolvable with appropriate engineering design.

The most recent soils work is contained in the M.J. O'Connor and Associates study entitled Investigation of Subsurface Conditions at King Point Yukon Territory, April 1986. The study was undertaken to acquire sufficient data to evaluate the potential impacts of port development at King Point. It examined the subsurface soil conditions both onshore and offshore in the vicinity of King Point by examining previous soils work and by undertaking additional samples. The analysis includes data on 43 test holes and a brief review of the six port development scenarios proposed to date (Kiewit Phase I and Phase II, Dome Short Term and Long Term, and Monenco/Interlog Phase I and Phase II). The study found that "the development of the King Point area as a multi-user port facility and/or a base for quarrying operations is considered to be generally feasible...". This conclusion was qualified slightly, in that potential problems such as those noted above, relating to sedimentation and subsurface geology were identified. As planning for port development proceeds beyond the conceptual stage, these issues will have to be addressed.

With potential development on the Beaufort Shore limited to areas east of the Babbage River, the distance to deep water becomes a major constraining factor (see Figure 2). The -20 meter isobath comes closest to shore (approximately 2.4 kilometers) at King Point, before it turns northward along the edge of the Mackenzie Trough. Deep water access within three kilometers of shore is only possible to about three kilometers west of Sabine Point. Although it is possible to dredge longer distances, or to build a causeway, the increasingly acute angle to the shore combined with a predominantly west to east longshore current suggest that progressively more serious sedimentation problems will occur the further east a port is located. A significant additional geological factor is the unstable ice-rich cliffs between Kay Point and King Point. A port development not only needs adequate upland, it needs relatively stable upland. It has been recommended that major development avoid the cliff erosion areas. The sites where the impact of cliff erosion is minimal are the Barrier Beaches at King Point and the unnamed drowned valley east of King Point. A final factor that should be taken into account in locating a port is the distance from the proposed Kiewit quarry site. The King Point to Sabine Point area is closest.

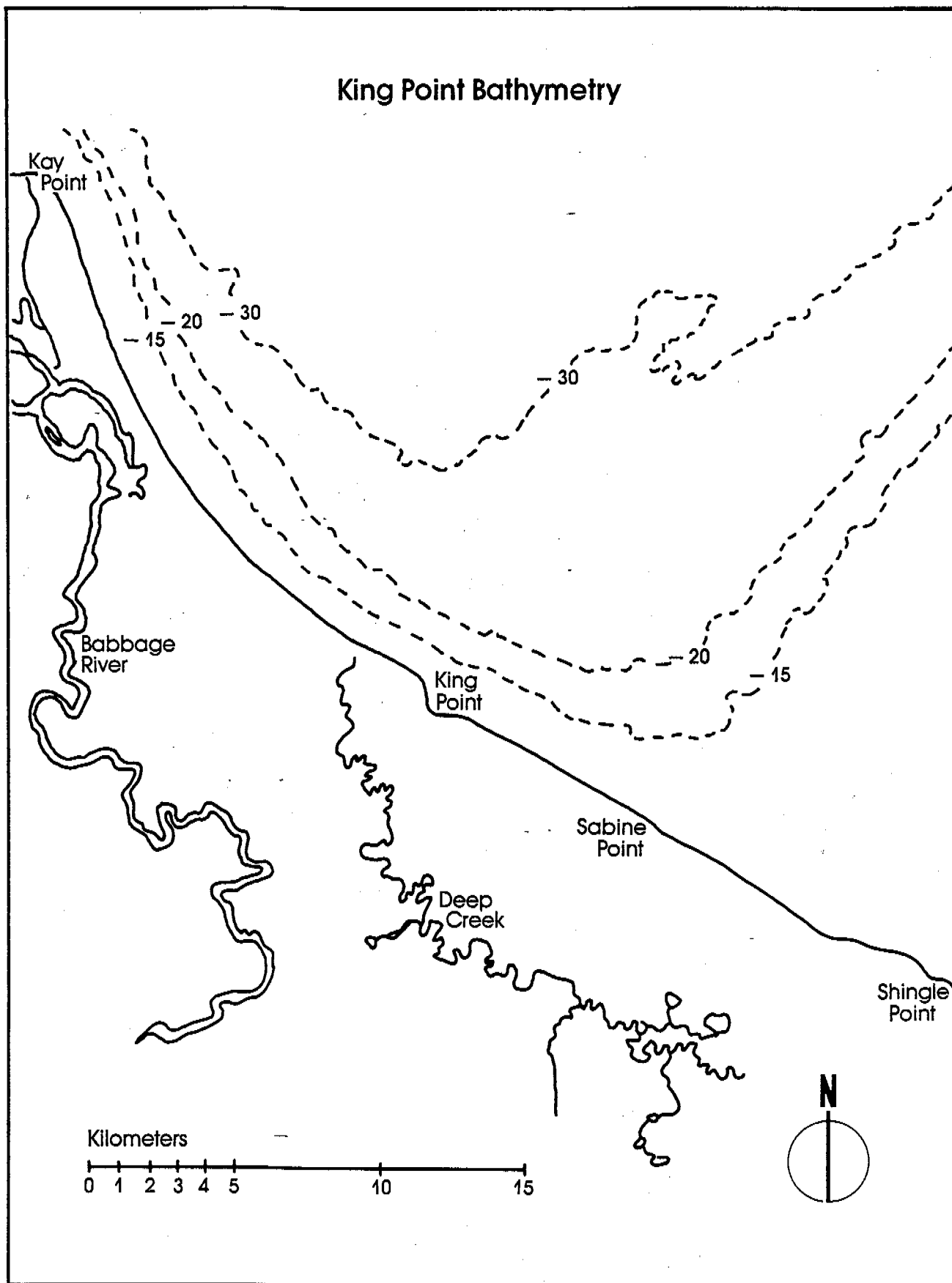


Figure 2.

There have been few serious or major environmental/ecological constraints or impacts identified in the environmental assessments and other studies that have considered or included King Point. There are concerns related to long causeways/breakwaters and their impact on fish and marine mammal movement along shore, but the data to date suggest relatively minor disruptions can be expected. Port, airport and quarry development at King Point or in its vicinity may have a minor impact on a portion of the Porcupine caribou herd since some members of the herd have been spotted nearby (south of King Point). This appears to be an infrequent occurrence affecting a very small part of the herd. The closer development is kept to the shore, the more likely the herd will not be affected. Only minor and infrequent impact is anticipated on other flora and fauna, with the possible exceptions of bowhead whales and migratory birds, particularly whistling swans, snow geese and dabbling ducks. David Livingstone in "King Point and the Northeast Yukon: Development Within a Conservation Framework" (March, 1986) concludes on page 232, that with respect to birds "Disturbance associated with industrial development at King Point - loss or degradation of habitat, direct mortality, noise and human activities would be widespread and could seriously disrupt feeding, nesting, rearing and staging activities of most species in the area." Elsewhere, (page 81) in discussing general environmental impacts, he states that "in counterbalance, one should remember that the King Point area itself does not appear to offer particularly significant habitat for most species", and on page 127 that "the application of the mitigative measures proposed above should limit impacts associated with a quarry and harbour at King Point to acceptable levels". It is clear that additional baseline data must be collected before unambiguous conclusions can be drawn.

Summary

The physical and environmental issues or constraints associated with development of King Point appear to be addressable, based on the (limited) data currently available and considering that development plans to date have been only conceptual. It is important to note that while the individual impacts on species, or from specific portions of a project may not cause major problems, the cumulative effect of all the related development may be more serious. The bathymetry of the area significantly reduces the desirability of port development east of Sabine Point, which, when considered with the constraints imposed west of Kay Point and between Kay Point and King Point, leaves a length of coastline of perhaps 8-10 kilometers starting just west of King Point and ending just west of Sabine Point as the only realistic option for long term deep water port development. The exact location and extent of development will not be known until more detailed planning is undertaken, but King Point appears to be the most appropriate choice. In the interim, all opportunities should be taken to supplement current data on the environmental, climatic and physical regime.

V ISSUES TO BE ADDRESSED BY DIAND

The issues DIAND must address are those over which it has some measure of control or choice. Those over which it has no control must be accepted as constraints. The issues to be addressed are discussed below.

A. Should DIAND control development or should this responsibility be transferred (or shared)?

The fact that the proposed port facility will be in the Yukon Territory and will at least initially, serve the local (Beaufort Sea) needs as opposed to primarily importing or exporting commodities for redistribution, suggests that the port would not be considered part of a transportation network or system as contemplated in Transport Canada's objectives. Its importance to the Beaufort Sea exploration and production operations provides a solid argument for control remaining with DIAND. The potential for further development onshore as a result of the port operation also suggests control should remain with DIAND for consistency. The most likely government role - that of lessor, not port operator - also suggests control should remain with DIAND. DIAND's responsibility recognizes the interests, needs and major role of the Yukon Territorial Government, the Inuvialuit and the Council of Yukon Indians (CYI). Transferring control of development to the YTG would be technically feasible, but currently faces two potential problems: the YTG does not have jurisdiction over offshore lands; and in the longer term a King Point port would likely become more general - purpose, serving regional needs, including parts of the Northwest Territories. Such facilities would generally be controlled or managed federally as opposed to provincially or territorially.

B. Should development be focussed at King Point or some other location?

The elimination of properties west of the Babbage River for long term development, combined with the physical constraints imposed by the bathymetry east of Sabine Point effectively limits potential development to a small area centred on King Point. In view of the numerous studies that have identified King Point as one of the most desirable port development locations, DIAND should officially adopt the position that long term, deep draft port facilities, if needed, will be developed at King Point. This will enable the Department as well as all concerned to concentrate efforts on the detailed planning and data gathering that will be necessary to produce specific plans.

C. How should property be allocated?

This is potentially the most difficult issue to address since the timing and the amount of property to be made available can dramatically influence the scale of port development and the ability to expand to meet future needs. The amount of property put under the control of a developer will determine the degree to which a monopoly situation is created or encouraged.

D. To whom and for how long should property be allocated?

Closely related to C, this question requires careful consideration to ensure that undue restrictions (or advantages) are not created. The fundamental principle to be followed should be that properties be leased as required for specific development, with strict time frames on the start and completion of the facilities and furthermore that leases should be for the minimum feasible term. Development should follow an approved master plan to ensure orderly development and to guarantee the input of interested parties such as the YTG, the Inuvialuit and the CYI.

E. How should costs of common-use facilities be shared?

Such costs (dredged channel, for example) pose no difficulty so long as the port is being operated as a multi-user facility. The costs will be incorporated in the service charges established by the operator. In the event that another operator wishes to establish its own exclusive-use facility (wharf and warehouse for example), it should be left to the two parties to determine a fair and reasonable sharing of common-use facilities provided by the initial operator. Only where such agreement cannot be reached should DIAND permit itself to become involved in resolving the dispute. DIAND should establish a methodology for such resolution that is clearly fair, but is at the same time sufficiently undesirable that resolution between the individuals is encouraged.

F. Should the government participate financially in the project?

The greater the contribution by others to the project, either by the provision of some facilities or by cash, the lower the risk that the developer must face. Inasmuch as no firm commitments have been received from the potential users, and forecast petroleum production is being pushed further into the future, DIAND should minimize its involvement in the financing of the project. Contributions from the YTG or from other Departments such as DRIE, will of course be a function of their mandate and objectives.

G. Should DIAND participate in the ongoing future management of the port?

As with financial contributions, the greater DIAND's role (or the role of others) in the management of the port, the greater is the likelihood that such involvement could be seen to contribute to the failure of the venture (should it fail). This could leave such participants in a position of liability for some of the losses. As with the sharing of the cost of common facilities, DIAND's management of the port should be seen as a "last resort" which while fair, would be undesirable to the developer. The developer will then be encouraged to ensure that the interests of all parties involved in or affected by the development are considered in a fair and equitable fashion. DIAND may wish to establish a small advisory committee to ensure that concerns of interested parties are voiced and resolved.

H. How should future commitments created by the development be handled (for example, maintenance dredging, placement of navigation aids, etc.)?

It is essential that the implications of all aspects of the development, regardless of who undertakes them, are fully identified and provided for. The planning stage must therefore include the participation of agencies such as the Canadian Coast Guard and the Transport Canada Airports and Civil Aviation Groups to ensure that their standards and requirements (if any) are met. Similarly, if the design of a breakwater/causeway includes openings to enable fish and mammals to pass, it may be necessary to provide for monitoring of the effectiveness of such a design. As the lead Department responsible for land use and development, DIAND should ensure that such implications are in fact considered. DIAND may wish to designate an official to coordinate such input and to ensure that all government concerns are addressed in the planning stages.

As the brief discussions indicate, the issues begin to resolve themselves, or at least suggest positions to be taken as the questions are answered sequentially. A number of related issues such as the nature and timing of Inuvialuit or Territorial Government involvement, have not been raised as specific issues because the method of handling them is clearly defined in DIAND legislation or policy.

VI MANAGEMENT OPTIONS

In order to fairly and effectively assess current and future port development proposals, the primary issues and constraints identified in sections II to V must be addressed, and, there are a number of ways in which this can be done. The first step that must be taken in order to simplify the problem is to summarize DIAND's role options, which are:

1. undertake all development itself;
2. transfer control of the property to Transport Canada and permit that Department to develop and manage the port;
3. share development with the private sector; and
4. permit and encourage the private sector to undertake all development and subsequent management.

The first option is clearly allowable under the Departmental mandate and legislative authority. It provides the greatest degree of control to the Department and enables DIAND to ensure full and complete consultation with the territorial government, the Inuvialuit and other interest groups. It also provides the maximum flexibility for both short term and long term management of the facilities (they could be leased, run directly by the Department, run by advisory committee, etc.). This option is also the simplest to administer. On the negative side, the general policy objectives of the government include encouraging private sector operations and reducing the level of government involvement in operations which could (or should) be developed in the market place. It is the most expensive (from a Departmental perspective) option. It would require extensive negotiation and detailed planning with potential users and operators of the facilities. DIAND's limited experience in port development and operation could put it at a distinct disadvantage in this process. Finally, such direct involvement would likely be seen to overlap the port development and management responsibilities of the Minister of Transport since the expenditure of public funds would be required to provide the infrastructure.

The second option permits port development and management to be undertaken within a Department which has specific expertise in port development and operation. The legislative and policy issues suggest that such responsibility would not be acceptable to Transport Canada without the transfer of administration, management and control of the waterlots and likely some of the necessary upland. The development and management of an airport would also fit clearly within Transport's mandate, although the new Air Group component appears to now have more flexibility in carrying out its mandate. It would probably not be

necessary to transfer land management for the airport site to Transport. While this is a technically feasible solution, there are several negative impacts. First, the Transport Marine Group generally does not manage major areas of upland property associated with ports. DIAND could easily be faced with managing all properties related to the port/airport developments such as roads, quarries and so on. The status of assurances to the Inuvialuit and others, that currently exist providing for input to the management, development or use of northern lands is uncertain under a scenario in which the management and control of land is transferred to another Minister. Another Minister would clearly conduct his responsibilities within the obligations imposed by the statutes, but the priority or depth of understanding of some of the requirements may not be as great as with DIAND. Monitoring DIAND's commitment as implemented by another Department would be a complex and sensitive matter. Developers, users or lessees could find themselves dealing with two Departments in the event they have a quarry and a wharf for example. It is unlikely that Transport Canada's port and airport development priorities would coincide with those of DIAND or of potential users of the facilities. Transport's priority lies with ensuring the development and operation of a network of ports and airports to serve the greatest common good. It generally has little involvement with private facilities. DIAND's priority to ensure adequate and orderly development and use of northern lands is more receptive to the needs of remote northern communities and users.

The third option (sharing development with the private sector) is also feasible under current legislation and policies and has the advantage of recognizing that there are common use and exclusive use components to port development. DIAND's role could range from minor (such as additional studies on sedimentation, dredging, foundation, and environmental impacts) to major (actually providing the common use infrastructure such as dredged channels, turning basin, breakwaters, roads, runways, water/sewage/garbage/utilities etc.). Participation of this sort would enable DIAND to control the timing, scale and location of development while at the same time encourage private development. It would also enable the Department to ensure all necessary consultations and studies were undertaken prior to development proceeding, since the majority of the Department's contribution would have to be "up front" or earlier than that of the private sector. There is considerable risk that such up front investment might not be followed by the private sector investment as originally planned. This option may also be seen to have DIAND in a position of operating under Transport's mandate in that public funds would be used to provide certain of the infrastructure.

The fourth option (total private sector development) is feasible within the legislative and policy framework under which DIAND operates. It has the added advantages that DIAND's financial involvement (and risk) is minimized; that it is the most consistent with current government policy and objectives relating to greater involvement of the private

sector; and minimizes public sector control and "red tape". The option can, if not carefully implemented, create a monopoly situation which could be seen to exploit users. It does not automatically provide for input or advice by users, government or other interested parties. Both of these problems can be addressed (for example, with adequate safeguards providing for other future users, and with an advisory/consultative process managed by DIAND). Similarly conditions of public access and government use of facilities would have to be specifically addressed or negotiated.

In spite of the potential difficulties associated with the fourth option, it generates the fewest difficulties and problems. DIAND must, however, include appropriate safeguards and conditions on the development and operation of the port and its related facilities to ensure that the potential difficulties can be minimized, or specifically addressed in the lease(s).

VII ASSESSMENT METHODOLOGY

The discussion of legislative, regulatory and policy requirements has broadly set the stage upon which the Monenco/Interlog proposal, and its ultimate operations, must play. The Kiewit proposal could also be assessed against these criteria, but because its status is less certain, it will not at this time be assessed. Since there are no definable phases or levels of service, it is really only necessary to determine how well the Monenco/Interlog proposal fits within the framework of constraints and requirements that have been identified and whether or not the proposal is consistent with what is required. Therefore, it will be examined against five issues that are essential to the framework of constraints and requirements. These are:

1. Type of development proposed

It is generally accepted that a single purpose/single user development is less desirable than one which can meet the needs of several users, or one in which several users can have their own separate developments. Any proposal which requires the creation of a monopoly, or an exclusive long term right to be sole developer, is less desirable than one in which multiple developments can be permitted. A proposal which provides a single purpose facility is less desirable than one which proposes a comprehensive or multi-purpose facility. Finally, the proponent's understanding of the complexity of such a project can be judged, to a certain extent, by the scope and cost of the project. One which is well thought out with realistic provision for future growth and expansion is more desirable than proposing a single "once and for all" development. Realistic costing of the project, considering the uncertainty surrounding the geology of the area, sedimentation rates and even the number of potential users, is difficult, but can be judged in comparison to previous proposals or current projects elsewhere in the north.

2. Type and extent of tenure required

The tenure requested is a key issue affecting any proposal. For this review, the type of tenure required, whether lease, licence or permit, as well as the length of time such tenure is required, will be considered. When reviewing a lease term, a twenty year lease with a twenty year renewal is essentially the same as a forty year commitment. In general, shorter lease terms will be more attractive to a lessor than longer ones, and terms that can be approved within DIAND's delegated authority will normally be more desirable to DIAND than those requiring Treasury Board

approval. This would enable DIAND to remain in control of the entire leasing process, and should enable faster approvals to be made. The area of land desired will affect DIAND's willingness to commit it for development. A proposal to lease only that amount of land required for immediate needs will be more attractive to the lessor than one requesting extensive land unrelated to current needs. While both area and term are key negotiables in any proposal, the assessment of the Monenco/Interlog proposal will be based on their requested area and term.

3. Timing and user commitment

A decision to permit specific development will be affected by both the timing proposed and the extent to which the proponent (and his potential customers) are prepared to commit themselves to the project. They both indicate the degree of confidence each party has in the feasibility and future operation of the facility. A project with evidence of strong commitment by the proponent (e.g. the spending of funds to prepare plans and specifications, or the active planning or marketing of the proposal, even at a conceptual stage), and by the users (e.g. a letter of intent to use such facilities or a request for services) will be more desirable than one which is being heavily promoted by the proponents, but which has relatively little time, money and effort involved. DIAND should feel comfortable that what is being proposed is both needed and adequate for users' purposes.

4. Type and value of federal (or other government) assistance required

Any proposal which will be conditional on federal or provincial/territorial funding, grants, loans or contributions, whether cash or in kind, will be less attractive than one that will be built entirely from private resources. Prior to finalizing approvals, DIAND should ensure that the proponents have disclosed the full extent of government participation that is anticipated.

5. Type of management proposed

The ultimate success or failure of a major development such as a port will depend as much on its management as on any other factor. A management team knowledgeable in such matters, with specific past experience, and with enough flexibility to accommodate a variety of approaches, situations or problems is much more attractive than one without these factors.

The Monenco/Interlog proposal does address all of these issues, thus these factors are considered to be sufficient to suggest to DIAND whether it should permit the development as proposed, or in some modified form, or to reject it entirely.

VIII ASSESSMENT OF MONENCO/INTERLOG PROPOSAL

A number of different assessment methodologies are available, ranging from numerical ranking to special review committees. For the purposes of this exercise, the proposal will be examined against five criteria or characteristics which have been shown to be components of the issues facing DIAND in its role as manager of land use and development in the north. The extent to which the proposal addresses the basic issues related to the concerns or meets the constraints and obligations faced by DIAND will be identified and a general conclusion relating to the criteria will be stated. The five conclusions will be discussed collectively and an overall recommendation concerning the proposal will be made.

Type of Development Proposed

Monenco/Interlog propose the development of a multi-user deep water port and exploration base at King Point to serve the needs of Canadian and American exploration firms in their future offshore exploration programs and in the longer term, in their construction and operation of production wells. The proposal further requests that a 64 square kilometer development zone for port and airport construction be established. The firm anticipates an exclusive use area, as evidenced by their request to lease the entire 64 square kilometer development area. While it is clearly their intent to provide facilities and services to all potential users, it would appear they do not anticipate independent shared use of the area (for example, Gulf or Dome constructing its own wharf and storage facilities and sharing the channel, turning basin and other common facilities). The proposed development is comprehensive in that Monenco/Interlog are prepared to serve all interested users, and they plan to construct or provide roads, utilities, offices, accommodation, airport and other facilities that would be required.

The cost of the proposal is estimated at \$95.7 million 1983 dollars, allocated as follows:

Civil Engineering	\$52.9
Site Survey (Environmental)	1.5
Utilities/Communications	8.4
Airport	16.1
Power Plant	3.0
Ancillary Structures	12.2
Other	1.6
Total	<u>\$95.7</u>

Although not formally specified, it appears that this represents the Phase I costs only. The costs are not broken down by phase or by detailed project (e.g. dredging, wharf, runways, roads, etc.),

therefore, it is difficult to determine with any confidence whether or not they are reasonable estimates. So long as the proponents provide all financing, this problem is relatively minor. It must also be borne in mind that the estimates are based on conceptual rather than specific plans.

The impact of the proposal on other ports or transportation systems does not appear to have been considered in detail. The proponents do state (but provide no supporting evidence) that the current transportation methods (air, barges, shallow draft supply vessels) and ports (Tuktoyaktuk, McKinley Bay, etc.) would be inadequate to handle commodity movements associated with full scale production of petroleum products from the Beaufort Sea fields, but the interaction between a King Point port and the existing facilities in the interim is ignored.

The proposed development seems to be generally acceptable, as to location, multi-user concept, provision of a comprehensive port/airport operation and the suggestion of a fairly large "development zone". The request for exclusive occupancy of the zone could cause problems. The cost estimates require considerable refinement and more detail. The specifics of Phase I and the proposed future phases (including timing) need clarification.

Type and Extent of Tenure

The proposal requests a 99 year lease of the entire 64 square kilometer development zone and "permission to develop access to the port through a dredged entrance... and to provide protective berms and breakwaters". Monenco/Interlog appear to believe that the channel/breakwater would require a land use permit rather than a lease. The waterlot request would only provide them with permission for what appears to be the Phase I approach needs (i.e. out to -12 meters). A future request for considerably more area would be expected if the development is to occur as shown in their drawings. (i.e. to -20 meters in the approach channel and turning basin).

The request for a lease to secure their occupancy of the property is reasonable and may be necessary to secure financing. A seabed lease under the Public Lands Grants Act would establish a stronger right to the dredged areas than would "permission". The request for a 99 year term, combined with the area requested would create a definite monopoly on port development in favor of Monenco/Interlog and would require Treasury Board approval. On the basis of past port development projects submitted by Transport Canada, there is reason to believe that Treasury Board may be reluctant to approve a lease for such a long-term, especially considering the area requested.

Timing and User Commitments

The proposal strongly suggests that a commitment from DIAND confirming (or at the very least agreeing in principle with) the proposal is a necessary pre-condition for the firm to successfully market the development. Aside from references to preliminary discussions with a number of potential users, the proponents do not appear to have anyone except possibly Peter Kiewit prepared to use the facilities. The proponent has indicated that most potential users believe that this type and scale of facility is not required yet.

Evidence of Monenco/Interlog commitment to the project is modest. The time, effort and funding committed to date in preparing their proposal and following its progress is no doubt considerable, but in comparison to the estimated cost of the project, it is very small. It is both reasonable and understandable that the firm does not wish to spend significant funds refining or developing their plans without some sort of assurance that DIAND is prepared to consider the proposal favourably. The firm appears to be prepared to undertake such expenditures once DIAND gives approval to do so.

The timing for detailed planning and actual start of the project is not clear. The level of commitment by both the proponent and the potential users of the facility is not as strong as might be expected for a project of this scope and magnitude.

Type and Value of Federal (or Other Government) Assistance Needed

The proposal makes no reference to a requirement for federal or other government assistance, either services (ice-breaking, navigation aids etc.) or financial.

To the extent that this remains valid, the project is more desirable. As the planning is refined, DIAND should not be surprised to see the firm propose that certain portions of the project be taken over, or provided by DIAND or another Department, or that financial assistance be granted for a portion of the project costs. Although there is no evidence that the proponents have such a strategy, similar shifts in approach have occurred in the past in large port development projects.

Type of Management Proposed

The proposal suggests a "private development and under private control", while recognizing that DIAND, and Transport Canada may be considered "governing authorities". There is no suggestion regarding Inuvialuit involvement or government involvement in the actual operation of the port or airport.

The management structure proposed is relatively inflexible and does not anticipate "public" participation, other than by possible minority shareholding in the firms.

Conclusions

The Monenco/Interlog proposal as presented should be rejected on the grounds that it requests 64 square kilometers be leased for 99 years. This is clearly far more property than is required for either their first phase or their total development as described in their proposal. Accepting the proposal and granting the lease would create a major monopoly situation which in future years could generate significant operational problems.

However, the majority of Monenco/Interlog's needs can be met within DIAND's constraints and objectives if the recommendations in the next section are implemented. The recommendations propose that future development be limited to the King Point area; a special development zone be removed from the withdrawal order, that the necessary committees and plans be established or prepared; and DIAND give a strong signal to the proponents and the industry that it is prepared to consider and support private sector development of a port/airport/quarry at King Point. It is further suggested that DIAND clearly indicate that it will support appropriate leases for such development if the detailed planning indicates the development can be undertaken.

The rejection of the proposal need not be absolute - it may be more desirable from a public relations point of view to negotiate a revised proposal with Monenco/Interlog in which a smaller area and shorter term are requested in return for some degree of protection of land for future growth needs, and to provide strong signals from DIAND to the industry that the department will consider port development in the King Point area. The process could also include identification of data that must be collected and analyzed before final approval of leases is given.

IX RECOMMENDATIONS

General

The following recommendations can be summarized briefly by the following points. DIAND should acknowledge that there will likely be a need for a medium to deep draft port west of Tuktoyaktuk and that as a result of the numerous previous studies and the creation of a park west of the Babbage River, the preferred site is King Point. DIAND should therefore undertake and/or encourage more detailed planning for the eventual development of King Point. The preferred development scenario should be one in which private sector demand drives private sector development; assuming adequate planning has taken place or is underway. DIAND will then facilitate such planning and development. To minimize the risks associated with the creation of a monopoly, a "minimal lease" approach should be used, thus, a larger multi-user facility serving all clients will emerge as a result of scale economies and management efficiency rather than as a result of an exclusive lease. The option remains for DIAND, other federal bodies or the Yukon to undertake some or all of the true common-use facilities such as the dredged channel, turning basin, roads, airport, etc., should it be seen to be desirable to do so. All of the recommendations assume that at least DIAND and the YTG, and the Inuvialuit are in agreement and support the approach.

Port Location

Sufficient past work has been undertaken to conclude that if a decision is made to permit port development on the western Beaufort shore, it is likely to take place in the King Point area. In order to ensure that the concerns and problems that have been raised relating to the site are fully examined and rectified, it is necessary to provide a strong signal to those concerned that DIAND is prepared, under certain conditions if necessary, to consider favorably such port development. The final decision to lease specific lands will of course depend on more detailed planning, specific proposals, additional environmental impact data and suggested mitigative measures to overcome problems. The following recommendations will ensure that these factors, as they relate to port location, are addressed.

1. Formally establish as Departmental policy that DIAND will support only one new port development on the Beaufort west of Tuktoyaktuk.
2. Designate the King Point area as a Development Zone for future airport development, port development, quarries, etc.
3. Initiate the processes and organizations necessary to prepare specific, formal land use and development plans, to include the proposed King Point port in the Northern Land Use Planning process, and to provide for YTG, Inuvialuit and other interest group input.

4. Undertake, specify or permit additional detailed technical and environmental data gathering and analyses that have been recommended, or that are requested as a result of new planning initiatives.
5. Existing facilities and operations at Herschel Island, Stokes Point or other sites west of Kay Point should be phased out and incorporated into King Point as it develops in order to keep port activities localized in one area and to reduce industrial/commercial activity in the National and Territorial parks.

Planning and Development

Although the planning processes and responsibilities are fairly well defined in the legislation and in DIAND policy, the following recommendations identify key issues that should be considered. All have been raised by previous writers or groups that have examined the Beaufort area and/or the past King Point development proposals. Addressing the issues should help minimize potential criticism of the planning process.

1. Establish as Departmental policy that in the event two portions of a project would be subject to different evaluation criteria (particularly on environmental issues), that the entire project be subject to the more stringent of the two criteria.
2. Issue land use permits or other authorizations to enable Monenco/Interlog, or others, to undertake drilling or other technical data gathering as required.
3. Establish as Departmental policy that DIAND will receive a copy of all technical data and analysis and further ensure that all involved are aware that such data will be available to anyone requesting it.
4. The economic impact of a King Point port on port operations at Tuktoyaktuk and on barge traffic along the Mackenzie should be examined.
5. The need for Canadian Coast Guard icebreakers and other government support services should be examined.
6. The need for and impact of a road link (winter only or year round) to the Dempster Highway should be examined.
7. DIAND should designate a senior officer to coordinate all federal departmental requirements relating port/airport development and operation.

Land Disposition

At some point in time, the Withdrawal Order will have to be amended to recognize the Department's acceptance of port/airport/quarry activities in the King Point area. The earlier this is done, the stronger will be the signal DIAND sends to the industry and interest groups. It is recognized that additional data will be required before long term leases are approved, and that this data gathering and analysis could take two to three years. The benefits of amending the Withdrawal Order are considered to exceed the problems or opposition that might arise, particularly if appropriate safeguards, conditions or explanations accompany the notification of amendment to the Order. The following recommendations highlight factors related to land disposition.

1. Amendment of the Withdrawal Order, reinstating at a minimum, the 8 km x 8 km development area proposed by Monenco/Interlog, plus the Kiewit quarry area plus necessary road access.
2. Designate the reinstated area as a proposed port/quarry/airport development area with boundaries to be redefined as necessary on completion of a formal Land Use Plan, environmental assessments and other technical analysis.
3. Adopt a minimal leasing policy in which land or waterlots are only leased on an "as required" basis, for the minimum area needed to undertake the specific project.
4. Leases should be used only where security, tenure or exclusivity is required by the lessee and/or his financiers.
5. All other activities (such as roads) should be authorized by land use permits, licences of occupation or other methods not requiring the creation of an interest in the property.
6. Lease terms should be kept as short as possible, preferably coinciding with the term of financing, the depreciation schedule selected by the lessee, or some similar term enabling the recovery of costs and a degree of profit.
7. Deadlines for start/finish of construction, by phase or even by individual project, should be part of the leases. Performance bonds or penalties for not starting or completing within the time frame should be included.
8. Land use permits, licences or other authorities for roads and dredged channels in particular should obligate the user to all future maintenance costs over the life of the authorized use of the property.

9. Leases should require the lessee to meet all requirements specified by other agencies regarding protection of navigable waters, safety, environmental protection, and operational requirements for such things as aids to navigation and aerodrome standards.
10. Leases should specify when, how and if the lessor has the right to designate all or part of the leased area as public, multi-user or subject to additional outside control, and under what conditions the lessor may use the facilities.

Site Management

DIAND's role in site management is assumed to be minimal, since the facility will be a private investment to serve private sector users. Since the thrust of all the recommendations is toward granting the right to build a port or facilities (as opposed to the only port or facilities), there is a potential for conflict between the initial developer/operator and future developers. To the extent possible, DIAND should encourage resolution of such conflicts between the parties, but in recognition of the potential difficulties that non-resolution could create, an arbitration mechanism should be established. An advisory body of interested or affected parties could help ensure that the developer/operator of the port facilities adequately respond to the concerns of parties other than DIAND or the users. The following recommendations address these issues.

1. The site and facilities should be initially considered to be private operations, with minimal Departmental input or control.
2. Adjacent leases should be granted only after a review of existing lessee growth/expansion plans.
3. The granting of leases adjacent to existing leases for similar purposes (for example to Dome, next to a Monenco/Interlog facility) should be conditional on agreement between the two lessees concerning the sharing of costs or the fees for using common facilities (such as dredged channel, turning basis, aids to navigation and roads).
4. The lessor (i.e. the Minister or his representative) must have the right to examine/audit the lessee operations in the event that unresolved disputes over fees or costs arise.
5. The lease(s) should include arbitration or dispute - resolution mechanisms, particularly where the dispute relates to the management of the site, or the use by others of certain "common" facilities.

6. An advisory committee may be established with representatives of the Territorial government, the Inuvialuit, CYI, or other parties with a legitimate interest in the development and operation of the site.

Funding

The following recommendations are straightforward and self-explanatory, and generally recognize that DIAND will not likely significantly or actively participate in the funding of the project.

1. The project(s) should be considered as private sector initiatives to the extent possible, and funded privately.
2. Departmental expenditures, if any, should be directed towards the common good, for example, in the preparation of land use plans, refinement of general technical data on currents, sedimentation, geomorphology, wildlife studies or for the provision of common use facilities.
3. The Department should remain neutral on lessee requests for funding or financial assistance from other federal programs such as airport construction and operation or industrial development grants.

X NEGOTIATION/IMPLEMENTATION STRATEGY

The following points should be used to develop the framework for the Departmental negotiating strategy. Until the Departmental position on many of the issues and recommendations noted in this study is known, a full negotiation strategy cannot be prepared. The following points have been identified in order to illustrate the key factors that should (or might) be included in a negotiating strategy.

1. Confirm YTG/Inuvialuit/CYI agreement with the approach.
2. DIAND/YTG should as far as possible speak with one voice that is acceptable to the Inuvialuit, CYI and others with significant interests in the project.
3. Require demonstration of the need for a port.
4. Industry and proponents to be notified that all long term (greater than 6 yrs), medium or deep draft development will take place at or near King Point. A development zone will be removed from the withdrawal Order if the proponents agree to the recommended approach for port development and operation.
5. Land Use Plan(s) will further limit/define location and/or type of development (dredge or fill the lagoon, or build a causeway).
6. A fundamental issue is that the development should be private. DIAND contribution, if any, (or Government Contribution such as from CCG) should be on only multi-user portions, e.g. channel, turning basin breakwaters, nav aids, ice-breaking, dredging, roads and airport.
7. A fundamental position is that DIAND will ensure the resolution of disputes and may possibly take over some facilities (common user) in the future, but under no circumstances should this lead to a "guarantee" of profit or even cost recovery. DIAND arbitration should be last resort and while fair, should be sufficiently undesirable to encourage private resolution.
8. It is fundamental that if the operation meets user, DIAND, YTG, Inuvialuit and other legitimate concerns, it will be left alone.
9. "Minimal lease" strategy to be followed. Current lessee to have some type of option or assurance an adjacent property, for future development as identified in the Land Use Plan.

10. Other users to have the option to lease desirable property to meet their operational needs if they cannot or do not wish to deal with Monenco/Interlog. They will be obliged to reach agreement on any common facilities they may need to use such as the channel, turning basin, roads, airport and utilities.
11. Lease terms should be as short as practicable, for example 20-40 years (not 99 years). Once facilities are paid for or amortized, a new term (presumably at higher rent) could be considered. To the extent possible DIAND should try to keep lease terms within its delegated authority to avoid having additional conditions imposed on the development or to avoid significant delays in approval of leases.

Appendix I

Allocation of Common Use Facility Costs

Allocation of Common Use Facility Costs

The following discussion illustrates one possible method of treating potential common-use facilities provided by the initial developer, but later to be used by others. It is intended to demonstrate that arbitration of property-use disputes can be both fair and undesirable (thus encouraging resolution between the parties). It also illustrates a means whereby arbitration can take place without the problems associated with determining market value or replacement value of assets.

As long as the initial developer at King Point is the only one providing and operating infrastructure, the allocation of costs associated with common use facilities is not a problem; they can be included in the normal fees charged for the use of the infrastructure, or collected as a general surcharge. If a second developer or a major user wishes to build its own storage facility, or wharf, the question arises of how the costs associated with other facilities or services he uses should be shared. Under ideal circumstances, the two parties would negotiate a fee and come to agreement, however, since one of the parties has provided the facility initially, and may well suffer a loss of potential business due to the second development, it is not unreasonable to suggest that he may see the market value of the common facilities as greater than the second developer would. DIAND may well be required to arbitrate the situation.

The major problem to be faced is that the market value of a facility for which no alternative exists (or would be permitted) is virtually impossible to determine objectively. It is therefore proposed that in its negotiations, DIAND explicitly established two facts: first, it will arbitrate such disputes if necessary, and second, the solution will be based on past costs, not on current value. This will produce a solution that is fair, while at the same time likely to be undesirable enough to encourage the developer to negotiate a cost that is acceptable to the second party.

DIAND's resolution of such problems should be absolute and binding on all parties and should be based on the book value of the asset at the time of negotiation. This will require that for common use facilities (at a minimum), the actual capital cost (including financing costs), and the amortization schedule used by the firm, be provided to DIAND. There should also be provision for DIAND or its representative to have access to the books of the lessee to confirm such costs.

The following example will illustrate the application of the principles outlined above. Assume the costs of dredging an entrance channel and turning basin to -12 meters are \$12,000,000, fully paid in year 0. In year four a second operator wishes to establish his own wharf in the harbour. In year six, the original operator wishes to serve larger vessels, requiring dredging the channel and turning basin to -20 meters and construction of breakwaters to protect the deeper channel. This

costs \$25,000,000. In year eight a third operator establishes his own facilities to serve vessels requiring -20 meters depth. The second operator continues to only require channels 12 meters deep. The problem is how much should the second operator pay the first for his right to use the dredged areas, and how much (and to whom) should the third operator pay. For the analysis assume straight line amortization over 25 years and all costs to be at year end.

The annual maintenance costs will be shared equally (or proportionally) according to the need or use of the channel. For example two users of a 12 meter channel share maintenance dredging equally. One user requiring -12 meters and two requiring -20 meters would share the costs as follows, assuming an average original depth of -8 meters: user A pays 11.1%, users B and C 44.4% each. If all three required a depth of -20 meters, the cost would be shared equally, but user A only requires -12 meters (a dredging need of 4 meters compared to B and C who have a dredging need of 12 meters) which is 1/3 of that needed by the others. He would therefore pay 1/3 of the 1/3 share, with the balance divided equally between the other two parties. It may be reasonable to divide such costs proportionally according to the length of available wharf for example, if there would be disproportionate use of the channel by one party or the other.

The following tables illustrate the capital costs, book value and the price that should be paid by each new entrant.

Table I. Costs and Book Values (\$000) - One Operator.

<u>Year</u>	<u>Capital</u>	<u>Amortization</u>	<u>Book Value</u>
0	\$12,000	\$ 480	\$12,000
1	-	480	11,520
2	-	480	11,040
3	-	480	10,560
4	-	480	10,080
5	-	480	9,600
6	25,000	480	34,120
7	-	1,480	32,640
8	-	1,480	31,160
9	-	1,480	29,680
10	-	1,480	28,200
Total	\$37,000	\$8,800	\$28,200

In year four, the second operator would pay the first, \$5,040,000 and accept responsibility for half the annual maintenance costs. The year six expenditure is not shared, since the second operator only requires -12 meter depth not -20 meter. His share of annual maintenance would drop to 16.67% from 50%, since the depth he needs is only 1/3 that of the first operator. With no other operators, the capital would appear as follows:

Table II. Costs and Book Values (\$000) - Two Operators.

Year	Operator One		Operator Two	
	Capital	Book Value	Capital	Book Value
0	\$12,000		-	-
1	-	\$11,520	-	-
2	-	11,040	-	-
3	-	10,560	-	-
4	(5,040)	5,040	\$5,040	-
5	-	4,800	-	\$4,800
6	25,000	29,560	-	4,560
7	-	28,320	-	4,320
8	-	27,080	-	4,080
9	-	25,840	-	3,840
10	-	24,600	-	3,600
Total	\$33,960	\$24,600	\$5,040	\$3,600

The introduction of a third operator in year 8 requires him to compensate both the existing operators since they both contributed to the cost of the current channel. His payment for the original -12 meter dredging would be such that the current book value for it is equally (or proportionally) shared by all three users. His payment for the additional dredging would be such that he and the original operator equally (or proportionally) share the current book value. Thus he would pay \$1,360,000 to each of the other two for the original channel, and a further \$11,500,000 to the first operator for the additional depth. The costs and book value would then be as in Table III.

Table III. Costs and Book Values (\$000) - Three Operators.

Year	Operator One		Operator Two		Operator Three	
	Capital	Book Value	Capital	Book Value	Capital	Book Value
0	\$12,000	-	-	-	-	-
1	-	\$11,520	-	-	-	-
2	-	11,040	-	-	-	-
3	-	10,560	-	-	-	-
4	(5,040)	5,040	\$5,040	-	-	-
5	-	4,800	-	\$4,800	-	-
6	25,000	29,560	-	4,560	-	-
7	-	28,320	-	4,320	-	-
8	(12,860)	14,220	(1,360)	2,720	\$14,220	-
9	-	13,560	-	2,560	-	\$13,560
10	-	12,900	-	2,400	-	12,900
Total	\$19,100	\$12,900	\$3,680	\$2,400	\$14,200	\$12,900

The total book value remains as in Table I ($\$12,900,000 + \$12,900,000 + \$2,400,000 = \$28,200,000$) and the total original capital paid remains the same ($\$19,100,000 + \$3,680,000 + \$14,220,000 = \$37,000,000$). In the event that DIAND is required to assume control of the port in year 10, the same payment would be made regardless of how many operators exist ($\$28,200,000$); only the distribution among them changes.

Two things should be noted - first, there has been no attempt to account for the changing value of money over time due to inflation; and second, the annual or periodic maintenance costs are not capitalized. In the first item, inflation is ignored since the operator pays for the capital in one of two ways - by cash or by a loan of some type requiring (usually) fixed repayments which do not rise over time. This is particularly true if a long term bond issue is used. If it is seen to be necessary or desirable to account for inflation, this can easily be done, but it will reduce the "unattractiveness" of the imposed solution. In the second case, a dredged channel is unique in that it can have an infinitely long useful life providing periodic redredging occurs, and at each renewal, the "value" of the asset increases since its replacement cost is a function of current unit dredging costs. Thus some people would argue for the inclusion of the periodic redredging as a capital expense. The analysis used in these examples treats only those expenses which deepen, or widen the dredged area as capital; redredging is considered to be entirely a maintenance issue. Each contributor to the capital cost is expected to assume his fair proportion of the future maintenance of the asset as and when it is required.

In practical terms, it makes no difference whether subsequent operators pay a cash lump sum of their contribution, or agree to annual payments. The impact should be the same. If the work is financed by a long term loan, the sharing could be accomplished by sharing the annual principal and interest payments on the same basis that the lump sum was calculated.

This methodology can be shown to be fair since it deals with actual expenditures made while avoiding adjustments for risk, inflation and profit. It is extremely likely that if such development proceeds, that the market value (not only the replacement value) of the assets created will rise over time. This will be recognized by both parties and should provide for ample room to negotiate a reasonable value. An imposed solution based on this suggested method would be more and more undesirable as the spread between original cost and replacement cost or market value increases. It also provides a "bottom line" that the existing operator(s) can calculate themselves in advance).

The example used is purposely complex in order to illustrate the principles. DIAND should require as a condition of any lease granted to construct facilities at King Point, a cost breakdown of those components which are likely to be considered multi-user in the event that another developer/operator wishes to consider King Point. Access to the lessee's books will be necessary to verify the figures. All costs should be net costs to the lessee. If for example, an unconditional DRIE grant is made to the project representing 20% of total costs, the cost of the potential common facilities should be reduced by 20%. If a grant is made to cover 80% of the dredging costs (or the airport or some other potential common use facility), then only the 20% actually incurred by the operator should be considered in calculating the cost to be paid by future developers/operators.

In the event that DIAND desires to assume control of some or all of the common use facilities (rather than being forced to do so to resolve ongoing disagreements), nothing precludes the Department from negotiating compensation based on current market value or on some other equitable basis.

Appendix II

Documents Reviewed

Documents Reviewed

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|---|---|
| 1. Marine Support Base Stokes Point, Y.T.
July, 1982 | Gulf Canada Resources
Inc. |
| 2. Application for Land Use Permit,
Stokes Point, Yukon, Supporting
Documentation
February, 1983 | Gulf Canada Resources
Inc. |
| 3. Proposal for Beaufort Quarry
Kiewit/ACZ
June, 1983 | Peter Kiewit Sons Co.
Ltd. and ACZ Marine
Contractors |
| 4. King Port Development
June, 1983 | Monenco Ltd. and
Interlog (U.K.) Ltd. |
| 5. Preliminary Report, Rock Exploration
Kiewit Quarry, King Point, Yukon.
October, 1983 | Hoggan Engineering and
Testing (1980) Ltd. |
| 6. Kiewit/ACZ Beaufort Quarry
Development
December, 1983 | Peter Kiewit Sons Co.
Ltd. and ACZ Marine
Contractors |
| 7. Tuktoyaktuk Community Plan
June, 1984 | Community Planning and
Development Division,
G.N.W.T. |
| 8. King Point and the Northeast
Yukon - Development,
Environmental Impacts and a
Management Framework - Draft,
2 Volumes
October, 1984 | David Livingstone |
| 9. Port Policy for the Canadian
Arctic Coast
March, 1985 | Ken Beauchamp for
Canadian Arctic
Resources Committee |
| 10. King Port - Land Use
Application and Development
Proposal, Volume 2
June, 1985 | Monenco Ltd. and
Interlog Consultants |
| 11. King Port - Application to
Lease Crown Land for
Commerical Purposes, Volume 1,
September, 1985 | Monenco Ltd. and
Interlog Consultants |

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| 12. Beaufort Sea Oil Ports:
An Assessment of Development and
Management Alternatives
September, 1985 | Nigel Tucker, for
Transport Canada Marine
Policy and Coordination |
| 13. Investigation of Subsurface
Conditions at King Point, Yukon
Territorial, 2 Volumes
March, 1986 | M.J. O'Connor and
Associates Ltd. |
| 14. DIAND Files and Internal
Correspondence | |
| 15. Relevant Statutes and
Regulations | |