

## **INTRODUCTION**

NASCA is pleased to submit these comments on Seabed Utility Corridors to the ESSIM Working Group. NASCA opposes constraining our facilities in corridors, especially those that already contain other non-telecommunication utilities. The one possible exception would be if corridors were created in which all other threats to the submarine cable were eliminated by law, where that law was strictly enforced by the coastal state, and where the telecommunications industry worked closely with the coastal state in defining the corridor.

Concentrating utilities in corridors increases risk to all utilities. That is especially true in the case of submarine telecommunication cables.

In addition, it seems that the prime impetus for concentrating utilities in this manner is to appease the commercial fishing industry. While NASCA understands the history and importance of the commercial fishing industry to Maritime Canada we believe that when the two industries communicate effectively, they can co-exist with minimal effects on each other. In addition, we would be remiss not to point out that submarine cables have been in existence longer than commercial gas or diesel powered trawling and should be given equal weight in discussions related to sharing the sea bed.

NASCA shares the aversion of ESSIM to “spaghetti” development of linear utilities. However, this has not been and is not expected to be a problem arising from the telecommunications industry. It should be pointed out that the majority of utility development on the Gulf of Mexico is related to oil and gas facilities and not submarine cables. Indeed, we know of only one submarine cable in the Gulf of Mexico and that is used for communications between oil rigs and shoreside facilities. In the North Sea the Oil and Gas and Submarine cable industries has a long history of cooperation with the commercial fishing industry. The UKCPC (a smaller version of the ICPC in the UK, analogous to NASCA) meets regularly with commercial fishing organizations, as does UKOOA (an oil industry group). NASCA believes that a cooperative relationship between various user groups is required rather than mandated utility corridors that put one industry subservient to another.

NASCA sincerely hopes ESSIM finds this contribution useful in its deliberation on this important matter. In this submission we will confine our comments to only submarine telecommunications cables.

## **REGULATORY FRAMEWORK**

NASCA is concerned that ESSIM has ignored the special consideration given submarine cables in UNCLOS. While there is no doubt that under international law Canada has rights to establish “reasonable safety zones” around seabed installations and structures to ensure the safety both of navigation and of the installations and structures, submarine telecommunications cables are not included in UNCLOS as installations or structures. Moreover, it appears that this provision is intended to allow states to establish safety zones around existing structures, not to establish safety zones and then mandate that structures be located within them.

## **Nova Scotia's Policy on Utility Corridors**

The Province of Nova Scotia policy seems to have favored a small segment of an entire industry rather than the entire industry. That is commercial trawl and dredge fishing seems to have taken priority over submarine telecommunications cables, perhaps without consideration of the benefits that cables have brought to the region, and without prior consultation with the submarine cable industry. This despite the fact that submarine cables are at greater risk from commercial trawling than vice versa and that submarine cable owners have long standing programs to communicate with other seabed users. While submarine telecommunications cables have much in common with other linear structures, they by no means share the same market, landing sites, routing and installation criteria and as such should not be shoehorned into the petroleum industry model.

### **Submarine Telecom Cables**

The installation of a submarine cable causes a short-term environmental disruption related to burial, which is easily mitigated. As such, many jurisdictions have not required environmental assessment related to the installation and operation of a submarine cable.

NASCA agrees that the application of the NWPA to works between 12 and 200 nautical miles appears to be inconsistent with its application within the 12-nm Territorial Sea in that the Act is not applied beyond 12 miles and would argue that it should not be applied beyond 12 nautical miles. The NWPA would also seem inconsistent with UNCLOS and traditional international law related to submarine telecommunications cables that afford them with special protections in the High Seas.

NASCA believes strongly that whatever overarching regulation is applied to submarine telecommunications cable it is done so consistently, with known start and end dates and durations and with coordination between the numerous agencies involved so that multiple permitting efforts that overlap in their scope, but not in their sequence, are not required.

## **PLANNING CONSIDERATIONS FOR UTILITY CORRIDORS**

### **1. Zoning and Utility Corridors**

NASCA agrees that whatever method is used to address sea bed user conflicts it should be done collaboratively. NASCA members have been collaborating with other sea bed users for many years in an effort to avoid conflicts. Commercial fishermen are often consulted in advance of a cable route being selected to ensure that productive fishing grounds are avoided to the greatest extent possible. Other than the geologic features cited, they are the major driver of the cable route selected. The telecommunications industry has an excellent track record of selecting routes that can be buried to the

maximum extent possible and avoiding conflicts with other sea bed user groups, as this is to the benefit of all.

### **3. Intersectoral Spatial Conflicts**

While NASCA would agree that there has been an increase in the number of cable installed into Nova Scotia in the past 5 years, we would argue that they have not been the cause of the faults cited in the paper. Those faults occurred on cables that were installed up to 30 years ago. In addition, other than the brief period in which a cable vessel has limited maneuverability during cable installation, a submarine cable, once installed, creates no hazard to navigation.

***Cable Exclusion/Safety Zones:*** NASCA members may request but can not mandate a safety zone around a buried cable. In areas where a cable is unburied, NASCA members often warn other sea bed users of that fact and request that they use additional caution.

***Legal Liability:*** NASCA members would prefer to have their cable remain in service and not broken by any vessel, however breaks sometimes do happen. When the responsibility for the break can be established many NASCA members will attempt to have the responsible party pay for the cost of the repair and the restoration of traffic during the outage. However, those who break cables are often loathe to admit it and vigorous in their desire to pay as little of the actual cost as possible.

***Fisheries Compensation Issues:*** While several NASCA members are also members of Fisheries/Cable Liaison organizations NASCA objects to these organizations being mandated by local governments in an effort to protect one industry at the expense of another. Any private agreement should be entered into freely, without coercion from a local government and without a permit hanging in the balance. It is our impression that the catch per unit effort in some fisheries, such as the scallop fishery, has been improving in recent years, and it's unclear whether cables have had any negative impact on such fisheries during this period.

***Application of Canadian Environmental Assessment Act:*** The CEAA should be consistently and fairly applied across all industries that have an effect on the sea bed, including trawl and dredge fishing. Singling out an industry that installs a 50 mm wide cable once every 5-7 years on average and ignoring another that impacts the sea bed on a daily basis is patently unfair.

### **4. Potential Environmental Impacts**

The environmental effects of a submarine telecommunications cable are minimal, short-lived and easily and quickly mitigated. NASCA has access to numerous Environmental Impact Statements that can be provided to ESSIM if required that support this statement.

### **5. Linkages with Marine Conservation Corridors**

The mere presence of a submarine cable does not create a conservation corridor. If it were the case that the presence of a submarine telecommunication cable effectively eliminated

commercial fishing along its route no cable faults could be attributed to commercial fishing. As our members can attest this is not the case.

We have not seen evidence that Scotian fishermen avoid cable routes. Indications are that the two seabed uses may be compatible in the region, given modern cable technology and installation methods, and provided that appropriate communications are established. In other regions fishermen often express a preference to avoid the establishment of cable corridors (where fishing might be excluded), provided that cables can be buried to the extent feasible so that fishermen do not “lose” fishing grounds. If ESSIM attempts to establish utility corridors, we expect that the intent would be to exclude fishing from those corridors. Consequently such intended corridors might be over steep or rough seabed – such seabed is less favorable for trawling, but it is also unsuitable for seabed utility routes, putting pipelines and cables at greater risk. The co-existence of cables and fishing, on smooth sea bed, with cables buried and spread out, is a model which has proven effective in many places

## **6. Combining Linear Developments**

While the presence of HVDC cables and telecommunications cables do not interact with each other from an electrical view point, HVAC cables may react adversely with telecommunications cables unless they are purely crossing at a 90 degree angle.

There are very few cable landings in North America. Many have been there for 30 or more years. They are typically near population centers and most have numerous cables exiting from the landing. However, none of them have a corridor that contains all the cables. At each the cables exit the landfall in a wedge shape to keep the appropriate separation required to avoid a catastrophic group failure and to provide for space to implement repairs in the event of a cable failure.

Combining oil and gas and telecommunications into one corridor may mean that they are both compromising on the design for each other, thereby increasing cost and reducing the protection afforded to the cables and pipelines by being in a compromised area.

## **8. Maritime Security**

If the terrestrial fiber optic network can be called the Information Superhighway then the submarine cables of the world should be properly thought of as the Information Sea Lanes. It was submarine telegraph cables that took the place of steamships carrying letters across the oceans. Modern fiber optic cables are another step in that evolution. Confining telecommunications cables to a corridor for their route across the continental shelf increases the risk to each cable. The terrorist threat in this case equates to the U-boat wolf packs that patrolled the Atlantic and destroyed shipping activity to England in WWII.

## **9. Fishing Industry Liability Insurance**

?? In the absence of utility corridors, would increasing liability insurance costs to the fishing industry from linear developments be just grounds for compensation?

There is no evidence to suggest that that such cost increases arise from the presence of telecommunication cables. One can fish safely even around an unburied cable. A buried cable should have essentially no effect on fishing.

?? What role should negative externalities affecting the fishing industry play in future decisions to implement a utility corridorization approach?

There is no evidence to suggest that that the presence of telecommunication cables has created significant negative externalities for commercial fishing. A buried cable should have essentially no effect on fishing.

## **10. Coastal Community Factors**

Many coastal communities benefit from modern communications and many fisheries depend on income from exports that are facilitated by the modern, inexpensive communications afforded by communications cables.

## **KEY CHALLENGES AND QUESTIONS**

### **1. Regulatory:**

?? Canadian federal and Nova Scotia provincial statutory provisions for seabed utility corridors are absent. Do utility corridors need a federal statute to function legally and effectively?

NASCA believes that there is no need or justification for mandatory corridors for telecommunication cables.

?? Would a utility corridor implemented through policy coordination and a Voluntary Compliance Code of Practice be effective?

NASCA is opposed to any type of corridor, be it mandated through regulation or voluntary.

?? What are the permitting implications for pipeline or cable proponents that are unable or unwilling to enter the utility corridor?

NASCA believes that there is no need or justification for mandatory corridors for telecommunication cables.

### **2. Economics:**

?? What implications do utility corridors have for linear project economics and industrial development?

First and foremost, corridors would put the security of telecommunication cable at risk. The cost of cable repair is very large, and the service disruptions to telecommunication users could be significant.

In addition, NASCA believes that relegating submarine telecommunications cables to corridors will increase project costs and may lead to onshore real estate speculation in the areas adjacent to the offshore corridor. The currently installed cables land at sites where a cable landing station already exists. If the corridor does not follow the optimum route for the cable the cable owner can expect greater costs related to increases in cable length, installation time and burial. Confining a future cable to a corridor that may not align with a landing station increases the amount of rights of way that are required to get from the corridor to the landing station. If there are sensitive areas (either environmental or cultural) along the route there is a possibility of greater disturbance than if the corridor had not been taken. The alternative to the disturbance is a reroute around the sensitive area. All this comes at an additional cost to the cable owner. In addition, speculation may occur in the areas adjacent to the corridor that inevitably leads to increased costs to the cable owner.

?? Are utility corridors compatible with future industrial developments in the offshore?

Future developments of submarine cables are neither compatible nor incompatible with corridors. The recent developments in submarine cables have centered on increasing the amount of traffic that can be carried on a single cable without changing the outward appearance of a cable or its behavior on the sea bed.

### **3. Geology:**

?? Are Scotian Shelf seabed geological features already delimiting utility corridors by default?

Not for telecommunication cables. The typical cable route selection entails finding a route that is most secure and gets off the continental shelf in the shortest distance. The security issues addressed in the selection process include, but are not limited to, a review of the threat from fishing, and the ability to bury the cable based on the geology of the route. These factors are often balanced against each other to find the optimum route.

### **4. Process:**

?? What process should be used to determine the position of utility corridors and their operational/management practices?

NASCA does not believe that corridors are warranted, however if they are implemented current cable routes should be “grandfathered” and corridors established around them. Any future corridors should be selected in consultation with the Canadian submarine telecommunications industry and other sea bed users. NASCA would suggest that Industry Canada mediate this effort in the event there is a dispute.

?? How are environmental considerations addressed prior to corridor selection?

NASCA does not believe that corridors are warranted.

?? What factors determine corridor selection?

NASCA is opposed to corridors and can find no compelling argument to support them. We have commented previously in this response on the general process by which cable routes are selected.

?? Who chooses the corridor?

NASCA is opposed to corridors for submarine telecommunications cables. However, if they are implemented NASCA suggests that the Canadian submarine telecommunications industry selects the route and restrictions on the corridor.

### **5. Industry Compatibility:**

?? What are the compatibilities and complementarities of shared utility corridors for the telecom and oil and gas sectors?

There is no reason to combine telecom cables with pipelines or power cables.

?? How are unrepeaters festooned cable systems running parallel to rather than perpendicular to the coast administered vis-à-vis the corridor approach?

NASCA is unfamiliar with Canadian legislation that governs the delivery of telecommunications within and between Canadian Provinces. A festoon system as described above would likely deliver telecommunications in this way and not international telecommunications (though it could be possible). As we are opposed to corridors we see no reason that festoon systems should be prohibited.

### **6. Other Driving Factors:**

?? What non-conflict based factors should drive the implementation of a corridorization approach?

NASCA and its members believe that cooperation and compromise are more effective than conflict. NASCA and its members will continue to cooperate with other sea bed users and consult with them on any future systems. We do not believe there are any factors that should drive the implementation of corridors for submarine telecommunications cables.

?? Are there factors beyond spatial use conflicts (e.g., maritime security, negative externalities affecting fisheries liability insurance, and industrial development policy) that suggest utility corridors require development and implementation?

Not for telecommunications cables.

?? Are seabed utility corridors an optimum public interest solution?

Not for telecommunications cables. NASCA does not believe that punishing the submarine telecommunications industry to the benefit of another sea bed user group is in the public interest.

?? Are there alternatives to corridors?

Yes. Any potential conflict with commercial fishing can be minimized through consultation on route selection and through cable burial.

Please submit your comments on this discussion paper to:

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